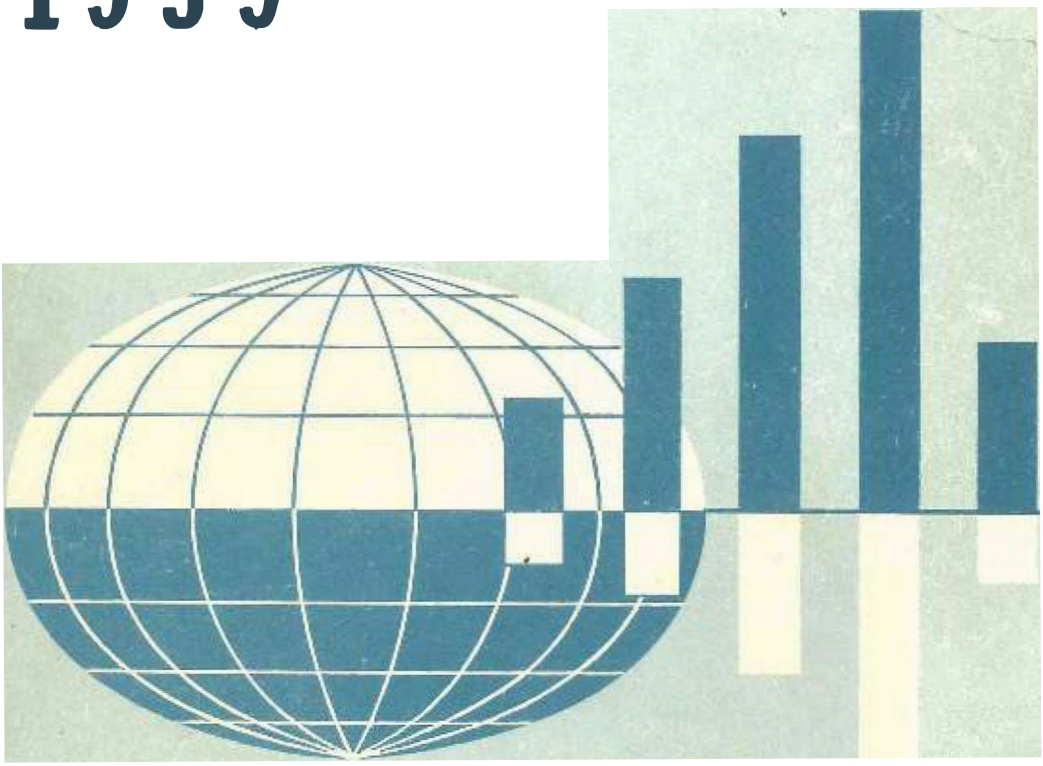
WORLD ECONOMIC SURVEY 1959



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FOREWORD

This report, *World Economic Survey, 1959,* is the twelfth in a series of comprehensive reviews of world economic conditions published by the United Nations. It is issued in response to General Assembly resolution 118 (II), in which the Secretary-General was requested to prepare an annual review and analysis of world economic conditions and trends. The report is intended to meet the requirements of the Economic and Social Council and other organs of the United Nations for an appraisal of world economic conditions which may serve as a basis for recommendations in the economic field; it is also designed to meet the needs of the general public.

The present report is the fifth in the series to contain a special study of an economic question of general interest. The *World Economic Survey, 1955* examined economic growth throughout the world and its problems during the first post-war decade. This general analysis has been extended in subsequent reports wherein several of the problems relating to economic growth and stability have been more intensively explored. The *World Economic Survey, 1956* contained an examination of post-war balance of payments problems of both the developed and the under-developed regions of the world. In the *World Economic Survey, 1957,* the question of post-war inflation in the world economy was analysed. In the *World Economic Survey, 1958,* attention was focused on international commodity problems and policies in both their long-term and their short-period aspects. Part I of the present study examines post-war investment trends and policies. Chapter 1 reviews investment experience in the industrial countries, particular attention being paid to the factors affecting the relationship between investment and economic growth. Investment policies of governments in both the public and the private sectors of the economy are also discussed. In chapter 2, post-war investment experience in the under-developed countries is examined together with the supply of resources for investment and the relationship of investment to growth. Both public investment and public policies to stimulate private investment in industry and agriculture are also reviewed. In chapter 3, new tendencies in investment planning in the centrally planned economies are discussed. There follows an examination of recent trends in investment, its allocation by sectors and its relationship to the growth in total output. The chapter concludes with a review of the place of investment in new plans of economic development.

Part II of the *Survey* contains an examination of recent events in the world economy. Chapter 4 provides an analysis of the recent situation in the industrially advanced private enterprise economies, special attention being paid to the major factors accounting for the continued growth of production and trade since the middle of 1958. Chapter 5 reviews recent events in the primary producing private enterprise economies in the light of the higher rate of absorption of raw materials in the industrially advanced economies. An assessment of the economic outlook at the beginning of 1960 is given for both these groups of countries; this is based largely on replies by Governments to a questionnaire on economic trends, problems and policies circulated by the Secretary-General in October 1959. Chapter 6 provides an account of recent changes in the centrally planned economies.

The Introduction to the *Survey* considers the significance for economic policy of acceptance of the goal of economic growth and discusses the questions arising from its reconciliation with the objective of economic stability.

The basic data used in the *Survey* are, in general, as published in governmental or inter-governmental sources, or as officially reported to the United Nations and its specialized agencies. The significance of the figures may vary from country to country, depending on the statistical concepts and methods followed and on the structure and development of the national economy. For this reason, the compilation of international statistical tables requires that attention be given to any important elements of non-comparability or qualifications attaching to the data; these are usually shown in the tables of this report or in the publications of the United Nations and of the specialized agencies that contain the basic data from which many of the tables have been prepared. Some of the data have been specially tabulated by the Statistical Office of the United Nations.

The *World Economic Survey* is prepared in the Department of Economic and Social Affairs by the Division of General Economic Research and Policies.

EXPLANATORY NOTES

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

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

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

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

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

A full stop (.) is used to indicate decimals

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

A slash (/) indicates a crop year or financial year, e.g., 1955/56

Use of a hyphen (-) between dates representing years, e.g., 1953-1955, signifies the full period involved, including the beginning and end years.

References to "tons" indicate metric tons, and to "dollars" United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million.

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

Certain abbreviations have been used: EEC for European Economic Community; EFTA for European Free Trade Association; GATT for General Agreement on Tariffs and Trade; IBRD for International Bank for Reconstruction and Development; IFC for International Finance Corporation; IMF for International Monetary Fund; OEEC for Organisation for European Economic Co-operation; UNRRA for United Nations Relief and Rehabilitation Administration. "Rhodesia and Nyasaland" stands for Federation of Rhodesia and Nyasaland; UAR stands for the United Arab Republic.

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

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INTRODUCTION

Introduction

OBJECTIVES AND POLICIES FOR ECONOMIC GROWTH

The decade of the nineteen sixties opened on a hopeful economic note. As reviewed in part II of the present *Survey*, the year 1959 witnessed new peaks in world production and incomes, following upon the recovery from the 1957/58 recession in the United States and from the cessation of growth in 1958 in western Europe. The upturn in industrial activity strengthened the markets for a number of primary commodities, thereby providing more favourable external conditions for financing the imports of capital goods essential to the continuation of economic development in the less developed countries. In the centrally planned economies, the rate of expansion of output continued virtually unchanged from the high levels of recent years, though the progress in agricultural production in relation to long-term objectives still lagged significantly behind that of industry, so that prospects for consumption in 1960 are less favourable than for investment.

In the industrial countries expectations at the beginning of the year were among the most optimistic of recent years, but they have been gradually revised downwards in the course of the first quarter, as earlier prospects for an extraordinary boom in the automobile and related industries in the United States failed to materialize and as a number of western European countries were once again obliged to impose tighter monetary policies to cope with developing inflationary tendencies. At the time of writing in the beginning of the second quarter of 1960, the prospects were still for a record year in 1960 but they were not so favourable as originally anticipated and the margin of uncertainty being attached to estimates of the duration of the current expansion was increasing.

The recovery of activity in the world economy at the close of the nineteen fifties provides a convenient basis for re-examining some of the issues relating to policies for economic growth in the nineteen sixties. Though the issues are far from settled, either in the economic literature or in official policy, it may be worth while to set forth the present stage of the debate.

The evolution of economic goals

The first major advance in the evolution of the economic goals of the world community was taken in relation to the achievement and maintenance of economic stability. Recognition of this responsibility has produced remarkable results with respect to those elements of economic stability that relate to global economic balance; the decade of the nineteen fifties has avoided the world-wide depression unemployment of the nineteen thirties as well as the intense inflationary pressures and the acute disequilibrium of the international balances of payments of the nineteen forties.

The objectives of economic stability

The goals of full employment, of price stability and of equilibrium in the balance of payments arose largely as responses to specific crises. The goal of employment derived from the widespread recognition of the destructive effect of the mass unemployment of the nineteen thirties and the growing realization that such unemployment was not inevitable under any economic system, but was, on the contrary, preventable by appropriate economic policy. In the leading industrial countries acceptance of this goal marked a major change-over in public policy thinking; the concept that government responsibility was largely limited to the passive role of enforcing the ground rules under which the private economy functions evolved into one assigning to government an active role in the maintenance of the nation's economic health. The concept of public responsibility was enlarged not only to embrace policies for the maintenance of employment but also to include a host of institutional measures to promote the social and economic welfare of the community. This period of the nineteen thirties witnessed the development of such programmes as social security and unemployment insurance and major financial and fiscal reforms, which have been of importance not only as ends in themselves but also as built-in stabilizers of economies based on private enterprise.

The evolution of the concept of government responsibility went hand-in-hand with a growing understanding of the economic forces operating in a private enterprise economy. The main body of economic analysis was expanded to include not only the theory of prices, resource allocation and distribution of income—where the main emphasis had been placed for two generations or more—but also the determinants of the total level of economic

activity; the concepts of propensities to save and to invest were added alongside those of marginal cost and marginal utility to the economist's basic tool-kit.

The study of the determinants of income and employment initially provoked the most violent debate, not only in the class-room, the professional journals and the daily newspapers, but also in the social and political arena. The passage of time, however, has produced such a degree of agreement that even what were once most controversial concepts have now become commonplace. Today everyone agrees that the ability of the market to generate sufficient effective demand for full employment cannot always be taken for granted, but that positive government policy may be necessary to achieve it and to maintain it once it has been achieved. Were all income generated exclusively in the production of consumption goods and used solely for the purchase of such goods there would never be a problem of effective demand falling short of the ability to produce. With part of income being saved, however, or devoted to government revenue or to imports, while on the other hand income is also fed by investment expenditure, government expenditure and exports, it is clear that a balance between income and expenditure may at times be struck at levels falling short of full employment. If that should occur, positive government policy would be necessary to expand effective demand, either directly by government purchases of goods and services or indirectly through policies designed to increase private outlays to the point where the total becomes adequate for full employment. Whatever differences may yet remain over the manner in which various factors bear on effective demand or over the nature and timing of specific policies, there seems no longer to be any fundamental disagreement in respect to the role of effective demand as a determinant of the level of economic activity and employment.

That effective demand may not only fall below, but may also exceed, the level required for full employment was borne home forcefully during and immediately after the Second World War. Under the pressure of urgent military requirements, aggregate effective demand for goods and services expanded enormously in all countries engaged in the war. Despite truly remarkable increases in taxation in many countries, it proved impossible for government revenue to match the increasing government expenditure, and private income available for consumption was inflated by growing budget deficits. On the supply side, though production had increased initially under the impetus of expanding demand, it was progressively curtailed by the loss of manpower to the armies, destruction of plant and equipment, disruption of transportation, and agricultural devastation. Even the United States and Canada, which were not only spared the war destruction, but indeed succeeded in achieving an extraordinary expansion of total output, could not escape intense inflationary pressure.

The pressure of excess effective demand, moreover, did not end with the termination of the war. Despite drastic cutbacks in military expenditure, pressure continued high as governments and business embarked upon large programmes of investment to make good the devastation of war, to reconvert plant and equipment to civilian use, and to replenish depleted inventories, at the same time as consumers sought to make good the damage to their levels of living incurred during the war. The pressure of an abnormally swollen demand upon a productive capacity that, in many countries, had been gravely crippled, threw the entire world economy out of balance. World-wide inflation of prices and wages was accompanied by acute disequilibrium in the international balances of payments. An economically greatly strengthened North America became the net world supplier of food, fuel, raw materials and equipment to accelerate the reconstruction of the war-torn economies in Europe and Asia and to aid in the economic development of countries that had been spared the ravages of war. Though some countries were able to finance their foreign deficits by running down war-accumulated assets, it was principally owing to the very large-scale foreign aid granted by the United States, first through the United Nations Relief and Rehabilitation Administration (UNRRA) and then under the Marshall Plan, that the world was able to finance its huge deficits on external account. This aid was all the more striking in that the expansion of net exports added to an already inflated demand for domestic investment and consumption in the United States, necessitating a level of taxes sufficiently high to offset both government expenditure and the export balance. In the centrally planned economies, too, reconstruction was at first considerably facilitated by UNRRA aid; but with the developing political tensions it came to be based almost exclusively upon the domestic efforts within each country, assisted only by trade with the Soviet Union within the framework of bilateral trade agreements.

Next to the rehabilitation of the war-devastated countries, the most critical post-war task facing the world economy was clearly the elimination of the world-wide inflationary crisis reflected in spiralling prices and acute disequilibrium on international account. On the supply side, this called for the recovery and expansion of industrial and agricultural output through a growing rate of investment, advances in technology and a rising trend in productivity; the upward trend in supplies made it increasingly possible to satisfy and liquidate the accumulated backlogs of demand which had been at the root of the inflationary pressures. On the demand side, top priority had to be given to a policy of fiscal and monetary restraint, though this was reinforced in some instances by direct controls on certain forms of investment. In the advanced industrial countries tax rates were generally kept sufficiently high to yield budgetary surpluses except for the period of Korean hostilities or during the brief periods of recession, while in

many of the under-developed countries reforms in tax structure and tax administration were instituted to finance economic development programmes. The excess liquidity inherited from the war was in some instances eliminated through currency reforms and in others absorbed through the upsurge in prices; and further expansion in the money supply was generally kept well within the limits of the rising trend in national product through a tight rein on the budget deficit and on the availability of credit to trade, industry and consumers.

Viewed on a world scale, the success in overcoming the crisis appears striking indeed. In a few short years galloping inflation disappeared as a world-wide process and became localized instead in a few countries; though prices continued to rise throughout the period, the rate of increase was sufficiently slower to necessitate the invention of the term "creeping inflation" to describe the new phenomenon. The achievement in domestic stability was paralleled, albeit with some time lag, in respect to international disequilibrium; though controls continued in effect much longer in foreign trade than in domestic industry and though the world has continued to rely on substantial non-commercial payments of the United States to replenish its foreign exchange reserves, acute international disequilibrium has ceased for many years to be an attribute of the world economy. Like internal inflation it is now acute only in a limited number of countries—though, as may be seen from developments in the United States following the 1957/58 recession, not even the economically most powerful country may be immune from sporadic attacks of external imbalance.

THE OBJECTIVES OF ECONOMIC GROWTH

Since goals of employment, of price stability and of equilibrium in the balance of payments arose primarily as responses to specific crises, it is not surprising that they were initially conceived in essentially static terms. The goal of full employment was designed to lift effective demand during a depression to the level required for the full utilization of existing resources, while the goal of price stability was aimed at preventing the pressure of excess effective demand against the available volume of productive resources during the post-war inflation. The goal of equilibrium in the balance of payments was viewed as a natural by-product of the achievement of a balance between aggregate effective demand and existing productive capacity in all countries, provided only that price levels between countries were kept in proper relation to one another by means of appropriate exchange rates.

The reinterpretation of the objective of full employment under the United Nations Charter so as to embrace the goal of economic growth marks a second fundamental change in public policy thinking. In the developed countries it substituted a dynamic goal of expansion for a static goal of avoidance of depression. In the under-developed parts of the world, it provided for the first time in history a vision of eventual escape from mass poverty. Increasingly it has become apparent that the realization of the goal of economic growth may render manageable the dominant economic problems, both national and international, which in a stationary economy might produce only conflict and frustration. The pressure of low income groups for economic protection, whether in the form of minimum wages or social security; the striving of all income groups for higher shares of the national income; the requirements of government for increasing revenues to meet the expanding claims on public services; and the demand of a growing population for rising levels of consumption in the face of a need to devote increasing resources to capital formation —such problems can be appropriately dealt with only if placed in the framework of an expanding economy.

Viewed in historical perspective, the record in the nineteen fifties of economic growth, like that of economic stability, appears uncommonly good. In the industrial countries the rates exceed those of the inter-war years and in many instances—though with some striking exceptions—they are above the average of the nineteen twenties. In much of the world's under-developed regions, though average levels of living still remain dangerously low, a serious beginning towards self-sustaining growth has been recorded. In the group of centrally planned economies, where levels of living are as yet well below those of the advanced industrial countries, post-war trends in production have accelerated sufficiently to produce some narrowing of the gap in relative, if not yet always in absolute, terms.

It is not within the scope of this *Survey* to analyse the determinants of economic growth; its roots lie as much in the social, cultural and political environment as in the purely economic sphere. Even in the domain conventionally designated as economic, the interrelationships between factors are so complex that it is difficult to disentangle cause from effect, let alone to measure the relative influences of particular factors. The ability of the economy to produce a surplus over current needs and to utilize this surplus effectively for financing the required capital formation and obtaining the necessary capital goods, the availability of a growing labour force with appropriate training, discipline and skills capable of utilizing the stock of productive equipment, the development of public and private leadership and policies for the effective organization and administration of a continuously expanding level of economic activity, the allocation of productive resources to research and innovation for the continuing improvement of the level of technology, and the expansion of markets to absorb the growing volume of goods that the economy becomes capable of producing—all of these factors constantly act and react upon one another as well as upon the rate of growth of the national product. Economists are as yet far from agreed as to which of these factors may be the

most strategic element for transposing a stagnant economy into a developing one. Where, however, development has become self-sustaining and the general social and cultural environment is reasonably favourable, there can be little question that the rate of capital formation is among the most strategic variables affecting the rate of economic growth. Other things being equal, the rate of growth of output per capita will depend in large part upon the rate of growth of the productive equipment placed at the disposal of the labour force.

As will be seen in chapter 1, there is a high correlation among industrial countries between the share of the national product devoted to capital formation during the nineteen fifties and the average annual rate of growth of output. The correlation is, of course, far from perfect, since other factors, including the rate of growth of the labour force, the rate of utilization of productive capacity, the composition of output and of capital formation, and the rate of advance in technology, also exert a significant influence upon the rate of growth. The important influence of the share of capital formation is, nevertheless, clearly evident.

Though the objective of economic growth now dominates public policy thinking in all countries, in almost none of the advanced industrial countries has this objective been defined in terms of a comprehensive policy for growth. In part this stems from a tendency to identify long-term economic policy with economic planning, which, it is feared, may endanger the system of private enterprise. As is evident, however, from the experience of a number of industrial countries, most notably France, Italy and Japan, even concrete long-term plans for economic growth need not carry any connotation of "controls"; they may instead serve a highly useful purpose in the context of a private enterprise economy in providing a comprehensive framework for the harmonization of economic policy. The formulation of a conscious policy for long-term economic growth need not involve any expansion of the scope of government responsibility now exercised in a private enterprise economy. In all economies governments perforce shape the rate of economic growth both by influencing the general environment within which the economy operates and more specifically by the increasing weight of government in the field of investment, whether it be in the form of direct public investment or in the form of fiscal, monetary and price policies affecting private investment. The formulation of a long-term policy for economic growth would not necessarily expand the scope of responsibilities at present being exercised by governments but would only provide a comprehensive and consistent framework for discharging them more efficiently.

Concern is also frequently expressed that a long-term policy for growth may lead to excessive rigidity in the economy owing to difficulties of forecasting changing needs and capabilities. Granted, however, that no one can count on the gift of prophecy, it may still be true that a long-term perspective, provided that it is approached in a pragmatic fashion and is constantly revised in the light of new experience, may contribute not only to a higher degree of consistency of economic policy but also to a greater degree of adaptability of the economic structure. Over the shorter term all governments recognize, albeit to a varying degree, the usefulness of the budget as an instrument in the formulation of a rational and consistent policy for economic stability. The planning of such annual budgets within the perspective of a longer-term framework, particularly if that perspective is periodically revised in the light of current trends, should similarly constitute a useful tool for the formulation of a consistent and flexible policy for economic growth.

Perhaps one of the weightiest objections to the formulation of a long-term policy for economic growth stems from concern that such a policy may prove to be overambitious in taxing productive capacity beyond its capabilities, thereby generating self-defeating inflationary pressures. Though there is as yet admittedly wide disagreement on the nature of the interrelationship between the objectives of economic growth and stability, there would seem, however, to be no inherent reason why a long-term policy for economic growth should be automatically biased in favour of inflation. Even full employment does not necessarily set an absolute upper limit upon the rate of economic growth that is attainable without inflationary pressure; rates of growth may be retarded or accelerated by government policy affecting the allocation of resources as between consumption and investment. Clearly a sound economic policy calls for the achievement and maintenance of both growth and stability; the objective of an optimum rate of economic growth is no more consistent with an excess than with a deficiency of aggregate effective demand in relation to supply. It would be wrong to assume, however, that the rate of growth cannot be accelerated even at full employment except by giving up all concern for economic stability.

GROWTH OBJECTIVES FOR UNDER-DEVELOPED COUNTRIES

The problem of formulating a long-term policy for economic growth in operationally meaningful terms assumes a far higher degree of importance in the underdeveloped than in the developed countries. Where the social and institutional framework of the economy is appropriately adapted, and market forces are sufficiently powerful, to provide the requisites for a self-sustaining rate of growth, governments may question the desirability of more than marginal intervention to influence either the rate or pattern of growth. This policy has proved less feasible, however, in most underdeveloped countries, where the problem is to create the conditions of social and economic progress for which market forces alone have thus far been inade-

quate. Here, as is reviewed in chapter 2 below, a more active government role in formulating economic goals has been necessary to overcome the influence of market forces making for stagnation. This confronts the world community with the striking paradox that it is the governments of the less developed countries, where the problems are far more complex and the tools for dealing with them far less potent, that may be obliged to assume the more active role in the promotion of growth.

The first prerequisite for economic development is, of course, the availability of a surplus over current consumption needs that can be devoted to the promotion of economic development. Even assuming such a margin is or can be made available, however, the problems of utilizing this margin effectively for increasing the productive capacity of the economy are manifold. Indeed, these problems may be more formidable than that of providing the surplus over consumption, since, where resources are idle, their effective absorption into productive use can itself provide the necessary margin over consumption.

The problems arise not only at the economic but also at the social and institutional levels. Where the structure of production, the state of technology, the social and economic institutions, and the health, education and training of the population may as yet be far from adequately adapted to the requirements for rapid growth, policies defined in purely economic terms may have relatively little meaning. Where the full utilization and development of resources are limited by adverse environmental factors, economic programmes need to be linked with appropriate social objectives if they are to be rendered operationally meaningful. In the absence of appropriate policies embracing essential institutional reforms and basic improvement in health, education and social welfare, economic goals of employment, growth and stability may be largely frustrated.

Even in the purely economic sphere, the problem of formulating national objectives is an exceedingly difficult one for under-developed countries. Basically, the difficulty stems from the compartmentalized, relatively pluralistic character of the typical economy; the degree of integration may well be lower between the major economic sectors within an under-developed country than between countries within the world economy. In the highly diversified economy of an advanced industrial country, with capital, entrepreneurship and labour all highly mobile, economic growth, no matter how rapid its rate, is essentially a gradual process. Where no abrupt changes are involved in the structure of production, national economic goals may have meaning even when defined in global terms. Such marginal adjustments as may be required in the allocation of resources in the private economic sector as between individual branches of economic activity, whether they relate to manpower, to raw materials or to plant and equipment, may, in accordance with a country's institutions and traditions, be left largely, even if not exclusively, to market forces. As long as the pricing system provides an effective tool for the co-ordination of economic activity, national economic objectives may serve as meaningful guide-lines for policy even when formulated in global terms.

These conditions are less likely to be met, however, in the typical economy of an under-developed country. Here economic growth involves a process of revolutionary rather than gradual change. The problem of economic development is not merely one of inducing marginal shifts in the allocation of resources among existing branches of economic activity; it is rather one of introducing large-scale fundamental changes into the economic structure so as to adapt it to the requirements of economic growth. In the absence of appropriate policies for the development of the overhead capital in transport, communications and public utilities that is requisite for economic growth, global goals of saving and investment may be of little significance. The inadequacy of the infrastructure may be a more immediate and more serious limitation upon the utilization and development of resources than is the low rate of saving; in the absence of appropriate preconditions for investment, an increase in the rate of saving may lead not to an increase in the rate of investment in productive equipment but merely to an unwanted accumulation of inventories or to an otherwise avoidable decline in the level of production.

The problem is not limited, however, to the development of an adequate infrastructure. It extends also to the development of a proper balance between the main sectors of private economic activity. The distribution of total output as between industries, it is self-evident, must be related in significant measure to the pattern of demand; indeed the two can differ only to the extent that the distribution of supplies may be modified through foreign trade. In so far as an increase in the rate of economic growth entails a long-term shift in the pattern of demand, it must be accompanied by a corresponding shift in supplies of commodities if the rate of growth is not to be inhibited by intolerable shortages in some areas and excess supplies or idle capacity in others. Except to the extent to which supplies may be affected by imports, this in turn involves a corresponding shift in the structure of production. The change in pattern will, of course, vary as between countries in a given period, as well as within a country over different periods of time. As concerns consumption, the major impact of the increase in per capita income accompanying economic growth is likely to be felt initially in outlays on essential foods; clearly economic development cannot proceed very far unless it is accompanied by a sufficient increase in production of the basic foods not only to supply the needs of the agricultural producers themselves but to provide the necessary surplus

for the labour force engaged in the rest of the economy. When once the basic needs in food have been met, however, consumer demand for non-staple foods as well as for industrial consumer goods is likely to increase at a higher rate than demand for staple foods. This is already likely to involve a more rapid increase in supplies of industry than of agriculture, heavily weighted as the latter must be by staple foods.

More basic, however, than the shift in demand among consumption goods is the necessary shift in expenditure from consumption to investment. Economic development of under-developed countries can become self-sustaining only through an appropriate increase in the proportion of income devoted to investment. Again, except for imports, this will necessitate a corresponding increase in the production of capital goods not only in absolute terms but also in relation to total output. In turn this will require a more rapid increase in the capacity to supply capital goods than in the capacity to supply consumer goods; and—once more abstracting from imports—this will involve a higher rate of increase in investment in industries producing capital goods than in industries producing consumer goods. Unless the appropriate shifts in the composition of supplies can be brought about, economic growth may be frustrated not by the inability to generate sufficient saving to finance the required rate of investment, but rather by the rigidity of the structure of production making it impossible to secure the supplies of the capital goods required for the investment.

Where capital and entrepreneurship are scarce and relatively immobile and where the mobility of labour is limited by inadequacy of productive capacity, the balance between the major sectors of economic activity required for economic growth and stability cannot be taken for granted. Remarkably efficient as is the pricing system in maintaining equilibrium "in the small", in relation to marginal shifts of demand and supply for individual commodities, it may not be sufficient by itself to maintain equilibrium "in the large", relating to gross changes in balance between the main sectors of economic activity. Not even the developed countries have found it possible to rely exclusively upon the pricing mechanism to achieve major changes in balance between the main sectors of the economy; they have all found it necessary to influence the balance by means of extensive legislation, especially in agriculture, transport and public utilities. If this has been true in countries with highly mobile resources and with a scientific technology that is perhaps as advanced in agriculture as in manufacturing, how much more difficult must be the problem of achieving a proper balance between the main economic sectors in under-developed countries where technology is frequently as primitive in industry as in agriculture, and where the mobility of resources is severely limited both by the inadequacy of productive capacity and by a host of social and cultural inhibitions.

As noted above, the composition of supplies may, of course, be modified through imports rather than through changes in production. This, however, does not remove the problem of the rigidity of the economic structure but only places it on another plane. Imports cannot be obtained free of charge; they must be paid for by drawing down reserves, by capital transfers or by exports of goods and services. The first two possibilities are of course limited, and capital transfers are, moreover, also dependent upon foreign decisions. Over the longer term, therefore, chief reliance must inevitably be placed on an expansion of exports to pay for increased import requirements. Here a twofold problem arises. The first involves a shift in the composition of output from production for domestic use to production for exports. For some countries with ample export capacity this may be relatively easy to achieve; for others, however, in which expansion of exports would itself necessitate considerable investment, such a shift may be just as difficult as, if not more so than, an expansion in the output of capital goods industries.

A second element, however, enters into the problem. An increase in exports depends not only upon a country's ability to expand its production of export goods but also upon its ability to sell them; whereas the increase in production may be determined exclusively at home, the increase in sales is dependent in addition upon decisions abroad. Where export goods face a rapidly rising world market, such as has been true, for instance, of some minerals, there may be no problem of financing expanded import requirements through higher output of exports. As was shown at length in the *World Economic Survey, 1958*,[1] however, world demand for most primary products upon which under-developed countries continue to depend has tended to lag behind the rate of growth of production in the developed countries. It has also tended to fluctuate far more violently than has the rate of total economic activity in the industrial countries. The solution to the problem of increasing export earnings cannot therefore depend exclusively on policies for expansion of output of export goods in the under-developed countries. It must depend also upon policies with respect to imports of goods in the developed countries. In so far as the industrially advanced countries can liberalize their imports of primary products and can contribute to a greater measure of stability in such trade, or alternatively, contribute to some compensation against such fluctuations, and—since even such measures may not suffice to solve commodity trade problems—in so far as they can adjust the structure of their own industrial production so as to facilitate imports of manufactured goods from newly developing countries, they can materially contribute to economic development of under-developed countries through an expansion of trade. In so far, however, as this trade fails to grow rapidly enough, the under-developed coun-

[1] United Nations, *World Economic Survey, 1958* (sales number: 59.II.C.1).

tries must either depend upon foreign aid to balance their external accounts, or else they must adapt their structure of production so as to reduce their import requirements. This, it may be noted, does not involve a reduction in the absolute level of imports but only a check on their rate of growth so that it will not exceed the possible rate of growth in exports. Otherwise, once again, investment may be limited not by a deficiency of the rate of saving but by inability to secure the supplies of capital goods upon which depends the rate of economic growth.

It follows that in an under-developed country the objective of economic growth, if it is to have operational meaning, must be accompanied by policies for achieving an appropriate dynamic balance between the rates of change of output in the main sectors of economic activity—between agriculture and industry, between consumer goods industries and capital goods industries, and above all between exports and imports. Given the rigidity of the economic structure in under-developed countries and the slow rate of capital formation which inhibits the mobility of resources, global targets for saving and investment can be meaningful only as part of a broader set of objectives designed to achieve the necessary balance in rates of growth of the main sectors of economic activity without which rapid economic development is impossible.

THE GOALS FOR CENTRALLY PLANNED ECONOMIES

The problems of formulation of meaningful economic goals come into sharpest relief in the group of countries whose economies are directed entirely on the basis of a central economic plan. Many of the problems are, of course, peculiar to the institutional system under which the plan is formulated and executed in these countries, but many others are rooted in economic considerations common to all countries regardless of their political and social institutions. Indeed, since the plans of these countries are designed as tools for the organization and administration of the economy rather than only as general guide-lines for broad economic policy, it is not surprising that the problems of achieving an appropriate dynamic balance between the main sectors of economic activity should have come into greatest prominence in relation to these countries rather than to those based on private enterprise.

The problem of achieving an appropriate balance between major sectors of the economy raises more than purely technical considerations capable of solution by engineering calculations alone; indeed, it goes to the very heart of the social and political criteria for choice between alternative economic policies.

If the optimum rate of growth of national income and production could be achieved by employing resources which have no alternative use there would be no problem of economic choice. But while this may be true of some resources, it is not true of all. To the extent to which resources may be used either for current consumption or for increasing the capacity to produce, governments are faced with the problem of choosing the preferred allocation of resources as between these alternative uses. In the absence of foreign aid, this hinges upon the extent to which the proportion of resources which the economy is able to save can be increased. If the saving rate remains unchanged, the output of consumption and investment goods will have to be increased in equal proportions and in turn this will require an equi-proportionate allocation of investment to both the investment goods and consumer goods sectors. Naturally this will tend to slow down the rate of growth of income; and where population is growing rapidly it may not even be possible to achieve any increase in per capita income whatsoever under such circumstances. If, however, the proportion of income which the economy is able to save is increased, investment can rise faster than consumption, and in turn this will mean a higher rate of increase in the output of, and a proportionately larger allocation of investment resources to, the investment goods sector than the consumer goods sector.

It should be noted that the objective of achieving a high rate of growth of income is not necessarily the same as that of maximizing the current level of income. Resources used in the investment goods sector to increase the rate of growth might, for instance, have a higher output yield in the consumer goods sector—the output per unit of capital might be higher in industries producing consumer goods than in those producing investment goods. In that case, not only current consumption but even current income might be reduced below otherwise attainable levels. Nevertheless, governments might consider some sacrifice of current income worth while, depending upon the magnitude of the resulting increment thus made possible in future income and consumption.

In similar fashion it may be noted that an objective of accelerating the rate of economic growth is not necessarily the same as maximizing the current rate of economic growth. If the investment goods sector is divided into industries producing equipment for consumer goods and those producing equipment for investment goods, it may be found for instance that the output per unit of resources is higher in the first group than in the second. Allocation of resources to the second group might thus reduce not only the current level of income but even the current rate of growth in income below otherwise attainable levels. Nevertheless governments may consider this sacrifice of current income and current rate of growth worth while, providing that the resulting acceleration of the future rate of growth thus made possible is sufficiently high. This consideration is generally recognized even in private enterprise economies in the concentration of investment at early stages

of development in the economic infrastructure, particularly in health and education, where, though the yield in terms of current output and current rates of growth may be relatively low, the yield in terms of acceleration of future rates of growth may be the highest of any sector of the economy. In the centrally planned economies, however, this has been the overriding consideration in the allocation of investment to heavy industry.

Until very recently the basic objective of the central economic plan in these countries was to achieve the maximum acceleration of the rate of economic growth. This meant devoting all resources above the barest subsistence minimum to investment rather than to consumption. Not only was the proportion of income devoted to consumption lowered, but even the absolute level of consumption was reduced in some instances in order to provide the maximum margin for investment. Equilibrium in the consumer goods markets was achieved by means of very heavy turnover taxes levied on the sale of consumption goods, sufficient to raise their prices in relation to wages paid out so as to equate demand and supply.

The objective of achieving the maximum acceleration of the rate of economic growth was pursued even if it meant sacrificing not only some of the potential for current levels of consumption but also some of the potential for the current rate of growth. Thus the chief concentration of investment was in heavy industry to provide the base for accelerating the rate of growth of income, despite the higher capital costs per unit of output in heavy industry. Indeed, as is explained at some length in chapter 3, initially the central plan was not formulated in a national income framework. Instead it was prepared in terms of goals for investment in "leading industries"—such as energy, communications, steel and chemicals—which were deemed essential for maximum acceleration of economic growth, with investment in complementary industries calculated on the basis of technical considerations, while both investment and output in consumer goods industries were to some extent determined on a residual basis.

As a result of concentration on leading industries, the rate of growth of national output was lifted to a comparatively high level in the centrally planned economies. This method of planning has, however, proved increasingly deficient in major respects, particularly in the industrially more advanced of these countries. It has gradually become clear that failure to formulate the economic plan in a comprehensive national income framework has frequently involved an unnecessary sacrifice of output in some areas, while capacity available elsewhere could not be utilized fully owing to inability to achieve the required increases in capacity in complementary industries. The comparative neglect of consumption in relation to investment, and especially of agriculture in relation to industry, has also proved increasingly costly. The resulting imbalance has often led to bottlenecks in production and to inflationary pressures, reflected either in shortages in supply in relation to incomes or in rising prices in relation to wages. The impact of this imbalance on productive efficiency was thus reinforced by its adverse influence on labour incentives in industry and agriculture.

In more recent years, as is examined in chapter 3, methods of planning have been substantially revised. Both in the Union of Soviet Socialist Republics and in eastern Europe, greater reliance is being placed on planning in a framework of national income, and increased weight is being attached to consumption in relation to investment, with the emphasis shifting from maximum to optimum rates of growth. At the same time, increasing attention is being devoted to improving the efficiency of the use of resources not only within industries but also between major sectors of the national economy and—to a more limited extent—even between countries. Partly in response to internal social pressures, partly on grounds of the need for greater efficiency and partly also perhaps because of the increase in supply of trained personnel, a tendency has also been set in motion in all these countries for a degree of decentralization of the economic plan. The number of items in the central plan is being reduced, making possible a higher degree of integration of the elements of the plan, while more and more of the detailed segments of economic activity are being transferred to regional and local responsibility.

Reconciling economic growth and stability

The acceptance of economic growth as the fundamental objective of the world community has led to a re-examination of problems of economic stability in relation to growth rather than in the static context in which they had been previously conceived. As is inevitable with respect to any major social issue, the debate has been wide-spread and intense, both in the economic literature and in the public forum. In its initial stages the debate has tended to focus on, and therefore perhaps even to exaggerate, the differences between contending views; in the light, however, of experience with the earlier and more violent debate centring around the analysis of depression unemployment, it may be confidently anticipated that the current debate, too, will contribute towards clarification of issues and ultimate reconciliation of opposing views.

The subject has often been viewed as if the issue were between proponents of growth without regard to stability and proponents of stability without regard to

growth. This highly over-simplified view, let it be said at the outset, distorts the issue. Everyone agrees on economic growth and stability as joint economic objectives of the world community. On the one hand, there is complete agreement that economic stagnation or large-scale unemployment is not an acceptable cost to pay for price stability or equilibrium in the balance of payments; there seems to be no difference of opinion over the need for compensatory fiscal and monetary policy to offset a recession in economic activity. On the other hand, it bears repeating that there is also no disagreement on the evils of large-scale inflation, whether open or suppressed, and that no one would today recommend large-scale inflation as a means for promoting economic growth. Though some economists have favoured gently rising prices as an incentive for capital formation, they too have emphasized that large-scale inflation would soon choke off any economic growth to which it might give birth. Furthermore, just as there is no disagreement on the essential role of monetary and fiscal policy in expanding effective demand in case it is inadequate, so there is no disagreement on their essential role in restraining demand if it is excessive.

The debate is thus not over the desirability of the objectives of economic growth and stability, but only over the interrelationships between them and over the policies necessary to achieve them. Here again, it may help to clear up confusion to note that the issue is not whether the objectives of growth and stability are at all reconcilable; the issue is rather whether there may ever be a need for reconciling them. No one maintains that growth and stability are in principle irreconcilable and that governments must inevitably choose between them; everyone believes that both objectives can and should be attained within all countries, whatever their economic institutions may be and regardless of the stage of their economic development. The question is only whether there is any possibility of conflict between the goals of growth and stability that may call for special measures to reconcile them, or whether price inflation and the related external imbalance can always be met by monetary and fiscal restraints without any danger to economic growth. The solution to this question in turn hinges upon the analysis of the possible sources of inflation.

Until recently the prevailing view seems to have been based on the assumption that all inflation, large or small, galloping or creeping, must, ultimately, be due to excess demand. According to this view, there simply cannot be any conflict between the goals of price stability and economic growth. A cumulative rise in prices can only be the result of "too much money chasing too few goods" and it must therefore be regarded as a signal to the authorities to check the flow of money so as to keep it in line with the flow of goods. Such restraint cannot slow down the rate of economic growth, since it merely eliminates the excess flow of money that is responsible for the rise in prices, while leaving the total sufficient to absorb the aggregate supply of goods at stable prices. If, on the other hand, the flow of money should be left unchecked, the excess would not give rise to any additional production but would simply lead to cumulatively rising prices. Moreover, the rate of increase in prices would be bound to accelerate, with creeping inflation turning into galloping inflation, bringing in its train all of the well-known adverse effects on both short-term stability of output and long-run economic efficiency.

More recently, however, a consensus appears to be developing around the view that inflation is too complex a phenomenon to be fully embraced in the formula of "too much money chasing too few goods". The position which has been taken in recent editions of the *World Economic Survey* is that the pressure of excess aggregate demand upon productive capacity is only one possible source of inflation. A rising trend in prices and wages may also be generated by forces other than excess aggregate demand for goods and services, and its existence cannot therefore be taken in itself as evidence that the level of employment or the rate of economic growth has already reached a ceiling. Indeed, as was first emphasized by those opposed to monetary and fiscal expansion in the great depression of the nineteen thirties, it is not impossible for a price-wage spiral to be set in motion even in the midst of very high levels of unemployment.

It follows that however vital a role must be reserved to monetary and fiscal policy for the prevention of inflationary pressures that stem from excess demand, such policies may not always be sufficient to reconcile the objectives of economic stability and growth. In an under-developed country, as will be noted later, inflationary pressures may accompany economic growth not only as a result of excess demand stemming from budget deficits or unwise use of credit but also from rigidities inherent in its economic structure. Even in industrial countries, bottlenecks in supplies of key items—such as steel—may play a role in setting off inflationary pressures in the course of a cyclical upswing, but in such countries, where capacity can be readily expanded, they are less likely to be of longer-term significance. In these countries the more important non-monetary factor making for long-term inflationary pressure is related to the institutional forces affecting the determination of prices. In an economy in which prices are established by conventional markups over wages, in which wages are determined around the collective bargaining table, and in which farm prices are supported by national legislation, the conflicting pressures of labour, business and farmers for higher shares of the national income predominate in the determination of the price level. Over these factors, the monetary authorities cannot be expected to exert more than a marginal influence; unless a country is prepared to pay the price that may be required in output and employment in order to elimi-

nate such pressures, there simply may not be enough leeway for restraining them by means of monetary policy. Where the pressures can be dealt with directly by measures appropriate to them, price stability, it is true, may be preserved without loss of output and employment, and there need be no conflict between economic growth and stability. Failing such direct, non-monetary measures, however, a conflict between economic growth and price stability is possible: either the money supply must then be accommodated to the pressure for higher money incomes, or else some of the potential production and employment which the economy is otherwise capable of enjoying must be sacrificed.

The magnitude of the loss of potential output would naturally vary from country to country and from period to period, depending upon how the pressures of labour, management and farmers are influenced by the state of the market. This in turn may depend not so much on the absolute level of employment or even on the percentage of the labour force that is employed, as on the rate of change in that percentage. Even if it should be true, as many seem to believe, or hope, that a small decline in the percentage of employment from the relatively high levels prevailing in the post-war period would suffice to weaken the non-monetary pressures on prices, it must still be borne in mind that these pressures might well be renewed subsequently, after the level of activity had been stabilized and the percentage of employment had ceased to decline. Indeed, if a more significant recession should ever develop, the upward pressure on prices might well begin, as it did in the nineteen thirties, as soon as output and employment began to recover, even while unemployment still remained relatively high.

To state that, in the absence of direct measures to deal with the non-monetary pressures on prices, there may be a conflict between the goals of economic growth and price stability which cannot be effectively resolved by monetary policy, is in no way to minimize the dangers of large-scale inflation for economic growth, nor to belittle the essential role of monetary and fiscal restraints in curbing inflationary pressures that do arise from excess demand. Nor is this position intended to deny that economic growth is possible under conditions of falling prices. If, as in the oft-cited case of the closing twenty-five to thirty years of the nineteenth century in the United States, farm prices are permitted to drop in response to a revolutionary expansion of farm production, if wages remain stable owing to a steady stream of migration and to the absence of a significant trade-union movement, and if in this context industrial costs are sharply reduced by a technological revolution, then rapid economic growth may well be accompanied by declining prices. But if, as has been recently true in the industrial countries, collective bargaining and traditional wage patterns combine to produce money wage increases in excess of the average rate of advance in productivity, if industrial prices are fixed by conventional markups over costs, and if national policy calls for a substantial measure of protection for agricultural prices, a policy of monetary restraint upon demand may not suffice to stabilize prices without adverse effects on economic growth. Where the behaviour of prices tends to replace the availability of productive resources as the most relevant indicator of the potential for economic growth, the outcome is likely to be some bias towards excessive restraint of demand in economic policy.

It is a striking testimony to the strength of private demand in the post-war period that, despite a policy weighted in favour of general restraint, it has continued to grow at a significant rate, albeit, in many countries, a declining one. In part this may be due to the fact that the active restrictions have been largely concentrated in the monetary sphere where they have thus far been rather less inhibiting than had been feared. Indeed, in many instances monetary restraints have borne most heavily upon residential construction and consumer durables while expenditure on plant and equipment has been checked to a lesser degree and only after a considerable time lag. It may well be, therefore, that the slowing down of the rate of growth in the course of the nineteen fifties should be attributed not so much to the presence of monetary restraints as to the inadequacy of overall policy for the realization of the full potential of economic growth.

RECONCILING GROWTH AND STABILITY IN UNDER-DEVELOPED COUNTRIES

It will be apparent upon reflection that the rigidity of the economic structure of under-developed countries renders more difficult not only the formulation of their goals of economic growth *per se* but also the problem of reconciling these goals with those of economic stability.

The problem of inflation in under-developed countries is in any event an exceedingly complex one. The first difficulty—that of generating an adequate rate of saving to finance the expanded investment needed for economic development—is self-evident. Not even in the most advanced industrial countries has it proved easy to achieve a rapid increase in the proportion of income devoted to saving on the scale that is indispensable for economic development. Though in a number of countries of Latin America the rate has now been lifted to a level at which economic development can be self-sustaining, in the less developed countries of Asia and especially of Africa large increases in the proportion of income that is absorbed in investment are still necessary. The problem of providing adequate saving to finance investment cannot be avoided in under-developed countries, even where the investment may be brought about by employing resources that would otherwise be idle so that no curtailment in the total volume of consumption is necessary. Except where the work is without pay, as in community development projects, the increment in saving resulting from the additional income is likely to be small in relation to the increment in investment.

Most of the increased income is likely to add to the pressure of demand against the supply of consumption goods, and unless these too can be increased in line with the addition to investment, the result will be an inflationary gap at prevailing prices between the demand for and supply of consumption goods.

Not only is the problem of providing adequate saving to finance investment more difficult but also the danger of generating a cumulative price spiral from any initial inflationary impulse is likely to be greater in many under-developed countries. This may seem paradoxical in view of the fact that wage costs, which provide much of the momentum of the price-wage spiral in developed countries, are a much less important element of national income in under-developed countries. This is more than likely to be offset, however, by the greater sensitivity of prices to excess liquidity that is characteristic of many under-developed countries, reinforced in many instances by long histories of violent inflation.

The inflationary dangers stemming from the increase in the share of capital formation necessary for investment highlight the need for a vigorous fiscal and monetary policy as a major component of any sound policy for economic development. Yet monetary and fiscal policy is not the total answer to the problem of inflation in under-developed countries. In such countries, pressure of excess demand may also reflect the rigidity of the structure of production, rather than inadequate saving or excess liquidity. Inflationary pressure may arise not only because of an excess of total demand in relation to total supply but also because of bottlenecks in the supply of some key commodities. Shortages of energy, of an essential raw material or of a staple food may give rise to cumulative price increases long before the investment has placed any strain on productive resources generally or even on the availability of savings. Were there sufficient mobility of resources to eliminate the bottlenecks, the rate of saving and total productive capacity might well be adequate to finance a higher rate of investment and economic growth. But given the bottlenecks in key commodities, the resulting inflationary pressure may well be so intense as to prevent the full utilization and rapid development of the available resources.

The role of supply bottlenecks in inflationary pressure is not uncommon even in industrial countries. Bottlenecks in key commodities have been known to generate cumulative increases in prices in the midst of unemployment and under-utilization of productive capacity in the total economy. This was, for instance, a factor contributing to the rise in price level during the depression of the nineteen thirties; it was a factor contributing to the rise of prices in the United States in 1941/42 when output was being rapidly expanded but unemployment was still relatively high; and it was again a factor during the upswing in investment in a number of industrial countries in the 1955-1957 expansion. In such countries, however, excess demand is not likely to persist for long unless it applies to the economy as a whole; excess demand in individual sectors is likely to be eliminated through the pricing mechanism by a shift of resources from sectors where supply is excessive to those where it is inadequate. In under-developed countries, on the other hand, the economics of bottlenecks may be decisive even in long-term growth. Given the compartmentalization of output in the economy and the inadequacy of the rate of capital formation that is so essential for mobility of resources, it may not be possible for the pricing mechanism to meet the excess demand where it exists by means of the transfer of excessive resources from other sectors. In such circumstances, sectoral excess demand may persist indefinitely, even though productive resources that could otherwise be used are idle. Thus the inability to adapt the structure of production may prevent the economy from achieving the total production levels otherwise attainable from its available resources. The economy may be compelled to sacrifice output which it urgently needs and which it is fully capable of producing, only because the structure of production is too rigid to avoid bottlenecks in supply of key commodities. In an under-developed country, it thus appears, inflation is more than a problem of fiscal and monetary policy alone—it is nothing less than the problem of sound economic development.

Just as the rigidity of the economic structure is of major significance for the problem of inflation, so it is of the utmost importance for the balance of payments of under-developed countries.

Nothing that has been said heretofore should be taken to minimize the importance of pressures of excess demand for the balance of payments. That this was the basic source of disequilibrium in the international balance of payments in the early post-war years has already been emphasized. There is also no question that the pressure of excess demand, whether from budget deficits or from too liberal credit policies, has been a major factor in the balance of payments difficulties in one country or another and in one year or another throughout the post-war period. There can, of course, be no disagreement that keeping aggregate demand in balance with total productive capacity is a necessary condition for preserving a balance between export earnings and import requirements, without which the entire process of economic development must sooner or later grind to a halt. The question, however, is not whether monetary and fiscal measures are necessary, but whether they are also likely to be sufficient to preserve balance in the international accounts of the under-developed countries. On the one hand, given the rigidity of their economic structure and the low rate of accumulation of capital which keeps their productive resources highly immobile, resources released from domestic consumption through an increase in saving may not always be transferable to expand the output of their

export goods. On the other hand, given the prevailing trends in foreign trade and the policies of industrial countries bearing on imports from under-developed countries, higher output of export goods may not always produce higher export earnings. In the absence of adequate mobility of resources in under-developed countries and sufficiently liberal foreign trade policies in the developed countries, an increase in the rate of saving may be dissipated in the form of a loss of production or an accumulation of unsalable stocks instead of contributing to higher export earnings.

The question as to whether internal balance between the supply of saving and investment demand is sufficient to ensure external balance between export proceeds and import requirements is by no means a new one. It was discussed at considerable length during the first half of the nineteen fifties in another context, under the heading of "dollar shortage". Even the advanced industrial countries of western Europe—particularly the United Kingdom—questioned whether in the light of their requirements for imports and the prospective trends of world demand for their exports they might not be faced with a persistent gap in their international accounts despite all they might accomplish in the monetary and fiscal sphere to maintain a balance between the supply of saving and investment demand. Happily this problem now appears to have been solved. In a context of rising income made possible by high rates of capital formation and considerable advances in productivity, resources have been rendered sufficiently mobile to increase both the volume and range of export goods in adequate quantity not only to finance import requirements but even to replenish foreign exchange reserves. Unfortunately these conditions do not as yet prevail in the under-developed countries. With low levels of per capita incomes, with technology largely in a primitive stage, and with a rate of capital formation too low to provide the necessary mobility of resources, the economic structure remains too inflexible to ensure that internal balance between saving supply and investment demand will also be sufficient to expand the volume and range of export commodities sufficiently to finance import requirements.

It is appropriate for the world community to emphasize the need for sound monetary and fiscal policy as a prerequisite for sustainable economic development. It is no less important, however, to bear in mind that even the soundest monetary and fiscal policy, in under-developed countries, may not always suffice, without outside help, to generate an adequate margin of resources above minimum consumption needs that can be effectively used to sustain stable economic development without inflation and without pressures on the balance of payments. It follows that the challenge of sound economic development cannot be left to the under-developed countries alone to shoulder; it must be shared by the entire world community.

Part I

INVESTMENT TRENDS AND POLICIES IN THE NINETEEN FIFTIES

Chapter 1

INVESTMENT TRENDS AND POLICIES IN THE INDUSTRIAL COUNTRIES

Factors in economic growth

The post-war period has witnessed a growing awareness among governments of the vital importance which their policies may have in influencing investment and—through investment—the rate of economic growth. It is true that there are many aspects of the relationship between capital formation and economic growth which are still far from clear, and it must be admitted that both theory and empirical research have lagged seriously in this field. Nevertheless governments in developed and under-developed countries alike are profoundly concerned with the factors which make for rapid economic growth in one country and a less satisfactory state of affairs in another, and are interested, in particular, in the role played by investment in this respect.

An examination of the past record of economic development, going back to the Industrial Revolution, and even earlier, indicates that the process of growth is a highly complex phenomenon in which the social, political, cultural and technological elements are at least as important as the economic. Nevertheless certain economic features appear to stand out in most cases. A fundamental precondition of economic growth appears invariably to have been the ability of agriculture to generate a marketable food surplus for the consumption of those engaged in the process of building up the capital stock—people who were not themselves directly producing consumer goods. This in turn had important implications for the prevailing system of agrarian organization—in general, the traditional system inherited from the past was ill adapted for the creation of an agricultural surplus. The capacity for growth thus depended to a considerable extent upon the degree of success achieved in modernizing forms of land tenure and techniques of cultivation.

Granted that agriculture was capable of yielding a growing surplus, an upsurge in the rate of economic development was normally associated with a marked stepping up of the rate of increase of population as well as of output per head. The advance in productivity in turn accompanied high rates of accumulation of capital and of technical progress, and rapid shifts of the labour force from low-productivity to high-productivity employment—particularly from agriculture to industry. In the newly settled areas, however, there was a period of considerable expansion in agriculture, which made it possible to supply part of the food required by the Old World as industrial development proceeded.

It is extremely difficult, in looking back upon these developments, to distinguish cause from effect—and still more so to indicate prime causes. The rapid expansion of population was partly a response to the fact that real income began to rise faster than the labour force, but the population "explosion" of the time was itself an element in the acceleration of economic growth, since an adequate supply of labour was required to man the new factories. Yet it would be wrong to suppose that population growth *per se* could invariably exert an inpendently favourable influence upon economic growth.

Similarly, the technical progress typified by the innovations of the Industrial Revolution undoubtedly played a major role in the development of high-productivity manufacturing; but technical progress itself embodies the response of ingenious minds to the economic dynamism of the day and cannot therefore be treated as an entirely independent element in growth any more than the population surge was. Thus the bunching of inventions during the latter part of the eighteenth century is not likely to have been accidental, but rather the outcome of a change in the economic and social environment which was favourable to technical progress and innovation.

That capital accumulation had a special part to play in the process of development does not seem to be in doubt. It was characteristic of the whole world before the Industrial Revolution, as it is of the under-developed countries at the present time, that the means of production employed were very primitive. The elaboration of more powerful and more refined productive techniques made it necessary to set aside a larger proportion of resources from current consumption for the purposes of building up capital than had been considered possible in the past.

Capital accumulation was as inseparably linked to the process of technical change as both were to the general economic and social climate of the time. The entrepreneur installing new fixed capital would not simply reproduce the equipment previously employed, but would set his technicians to work to improve and re-design, and to take advantage of any important advances in science. Inventions were called forth by the process of capital accumulation and in turn reacted upon that process through their effects on investment opportunities: thus investment and innovation yielded a joint product,

and the contribution of each could scarcely be distinguished from that of the other.

Economic progress depended on much more than the technology of power-driven machinery. Equally important were developments in the skill of the workers and in the resourcefulness and efficiency of organization and administration, which in turn depended upon the quality of education and technical training. The human factor in economic development was and is no less to be reckoned with than the material factors.

It will therefore be seen that, while capital accumulation is vital in the process of economic development, it is not the only factor. Capital must be combined with labour, and the adequacy of supply of labour, as well as its skill, stamina and morale are therefore crucial. Entrepreneurial and managerial skills are also required in full measure, as are technical creativity and dynamism. Moreover, the whole process requires a sympathetic political and social environment, possessed of sufficient elasticity and flexibility to permit adaptation to a rapid tempo of innovation and change.

If, despite the large variety of factors which contribute to economic development, rates of growth of per capita real income in various countries are found to be associated quite strongly with rates of growth of the per capita stock of capital, this is presumably due to the fact that, on the whole, where capital per worker is highest, labour skill, managerial efficiency and technical dynamism are also greatest; or, at any rate, that to the extent that this is not so, the effect of contrary factors is not sufficiently powerful to destroy the correlation between increases in output and in capital stock.

Granted a reasonably favourable political and social environment, and adequate labour and managerial skills, it is always possible in practice to accelerate the rate of growth by increasing the share of resources devoted to productive investment. That does not imply that equal additions to the capital stock will continue indefinitely to bring about corresponding additions to the volume of output. New capital formation is probably at its most efficient when there are reserves of labour which can be combined with it. But once full employment is reached, and unless the supply of labour can be expanded, additional capital investment involves increasing the intensity of capital, and this may mean raising capital requirements per unit of output. The cost to the economy in terms of immediate consumption forgone may begin to increase rapidly once the rate of growth has been raised beyond a certain point.

It should be noted that the curbing of consumption required to step up the rate of growth to any desired level does not have to continue indefinitely. Once the economy has adjusted to the new rate of growth, consumption will benefit along with investment. Initially, the acceleration of the growth rate requires that the capacity of the capital goods industries be made to increase more rapidly so as to provide the additional equipment needed. This in turn means that the capital goods industries must themselves use more of their own output than hitherto—for their own expansion—while proportionally less can be supplied to the consumer goods industries. In the first instance, therefore, the rate of growth of consumption is slowed down. The faster growth of capacity of the capital goods industries, however, now makes it possible for the volume of equipment supplied to the consumer goods industries to rise more rapidly than before. In short, the initial sacrifice of consumption, and the ploughing back of capital goods into the capital goods sector itself, lead in the end not merely to a higher level of consumption than would otherwise have prevailed, but to a more rapid rate of increase in that level.

The balance struck between investment and consumption is, of course, not simply a matter of the technical relationships between sectors of the economy. The ability of an economy operating at full employment to raise its rate of growth may depend not only upon the physical capacity of its investment goods industries but also upon the extent to which, within the given political and social context, additional savings can be mobilized either by the private or the public sector, or, indeed, abroad. Any imbalance between planned saving and investment will result either in inflation on the one hand or deflation on the other. Moreover, any inequality between domestic demand and supply will involve net borrowing or net lending abroad, as the case may be.

There are still many uncertainties as to the means whereby rapid economic growth might be encouraged. Nevertheless past experience does provide some guidance along these lines. It will be the object of the present chapter to review the most important lessons of postwar investment experience in the industrially developed countries and to examine the various governmental policies that have been adopted in this field.

The historical perspective

The rate of growth of output in the industrial countries as a whole during the nineteen fifties has been broadly comparable to the rate achieved during the major period of upswing of the nineteen twenties. As will be seen in table 1-1, several countries recorded significantly higher rates of expansion in the nineteen

Table 1-1. Rate of Growth of Output[a] and Share of Investment in Output,[b] 1923-1929 and 1950-1958

Country	Rate of growth of output		Share of investment in output	
	1923–1929	1950–1958	1923–1929	1950–1958
	(percentage per annum)		(percentage)	
Belgium	7.0	2.9	...	15.4
Canada	4.9	4.0	20.6	23.4
Denmark	1.5	2.3	10.1	17.6
Germany (Federal Republic)	2.8	7.4	17.8	20.8
France	2.3	4.3	9.8	17.2
Japan	5.1	7.9	17.4	21.7
Netherlands	4.1	4.5	19.4	21.6
Norway	3.4	3.0	13.2	28.4
Sweden	4.2	2.9	11.9	19.9
United Kingdom	2.9	2.2	9.8	14.0
United States	3.3	3.3	15.0[c]	14.2[c]

Source: Post-war data from United Nations, *Yearbook of National Accounts Statistics, 1959* (sales number: 60.XVIII.3); for the United States, from United States Department of Commerce, *United States Income and Output* (Washington, D. C., 1958) and *Survey of Current Business* (Washington, D. C.), February 1960; pre-war data for the Federal Republic of Germany, Norway, Sweden and the United Kingdom and output data for the Netherlands from Angus Maddison, "Economic Growth in Western Europe, 1870–1957", Banca Nazionale del Lavoro, *Quarterly Review* (Rome), March 1959; investment data for the Netherlands and output data for Belgium and France from Colin Clark, *The Conditions of Economic Progress*, second edition (London), 1951. Investment data for France from Simon Kuznets, "International Differences in Capital Formation and Financing", *Capital Formation and Economic Growth* (Princeton University Press, Princeton, 1955). Data for Canada from Department of Trade and Commerce, *Private and Public Investment in Canada, 1926–1951* (Ottawa, 1951) and O. J. Firestone, *Canada's Economic Development, 1867–1953*, Income and Wealth Series VII (London, 1958); for Denmark, from K. Bjerke and N. Ussing, *Studier over Danmark's Nationalprodukt, 1870–1957* (Copenhagen, 1958); for Japan, from K. Ohkawa and associates, *The Growth Rate of the Japanese Economy since 1878* (Tokyo, 1957); and for the United States from J. W. Kendrick, *Productivity Trends in the United States*, forthcoming publication of the National Bureau of Economic Research, Inc. (New York).

Note: In some cases pre-war data cover less than the full period from 1923 to 1929. Post-war data for the United States relate to the period 1950 to 1959. There are certain minor conceptual differences in some of the estimates, but these do not appear to have any major effect on the comparability of the data.

[a] Gross domestic product in constant prices.

[b] The ratio of gross fixed capital formation to gross national product, both in current prices.

[c] Gross private domestic fixed capital formation.

fifties than in the nineteen twenties.[1] For the group of industrial countries as a whole, however, the comparison between the two periods is greatly influenced by the fact that the United Kingdom and the United States recorded growth rates in the fifties that were no higher than in the twenties, largely because of a tendency for the rates to slacken significantly after 1955.

Available data also suggest that, in terms of current prices, the share of investment in total output in recent years has been higher than in the nineteen twenties not only in those cases where the rate of growth has been greater, but even in those countries where growth rates have been lower. In fact, of all the countries listed in table 1-1, only the United States shows a decline in the share of total resources allocated to investment, since the nineteen twenties. It will be observed, however, that the investment ratios set forth in table 1-1 are in current prices, while available indications are that the prices of capital goods have risen more than the prices of other components of output during the past thirty to forty years. If the investment ratios in table 1-1 could be calculated in volume terms, certain countries other than the United States might well show a drop in these ratios from the nineteen twenties to the nineteen fifties. A possible explanation for this phenomenon is that there may have been a decline in capital-output ratios in these countries, associated particularly with the development

[1] There are a number of ways in which the rate of growth of output may be calculated. In this study, it has been calculated as the constant annual rate of growth given by a logarithmic straight line joining the terminal years. An alternative measure —the logarithmic trend rate of growth—while superior in some ways in indicating long-run tendencies in output, was not employed here in view of the large margins of error involved in calculating trends for the relatively brief periods under consideration in this chapter. It will be obvious, however, that the economic circumstances obtaining in the terminal years will significantly affect the calculated growth rates—the effect varying inversely with the length of the period. This difficulty applies particularly to estimates of growth rates in the post-war period, considered as representing long-run tendencies. A beginning year selected soon after the end of the Second World War, includes, to a varying degree, the elements of recovery and reconversion. In recent years, on the other hand, many of the industrial countries have experienced a decline in the degree of utilization of capacity, thus imparting a downward bias to the calculated growth rates. In view of the fact that the 1958 recession was particularly marked in the United States and that data for 1959 became available for that country in time for incorporation in the study, most calculations pertaining to the United States have been based upon the period 1950-1959. It should be noted, however, that the selection of one particular measure of the rate of growth rather than another does not alter the basic conclusions reached in the present chapter.

of considerable economies in the use of industrial buildings.[2]

In some countries, however—notably Denmark, France, Norway, Sweden, and the United Kingdom—the post-war investment ratios have been so much higher than during the nineteen twenties that there must also have been increases in real terms. In Denmark and France these increases accompanied significantly higher post-war growth rates. In Norway, Sweden and the United Kingdom, on the other hand, markedly higher investment ratios were associated with somewhat lower rates of growth. This apparent paradox is explicable in terms of the low level of output in relation to capacity during the greater part of the nineteen twenties which tended to depress investment; output did not rise significantly above previous peaks until 1926 in the case of Sweden, 1927 in the United Kingdom and 1928 in Norway. In addition, special factors have contributed to the high post-war investment ratio in Norway, and these will be discussed below.

Although in many of the industrial countries the post-war recovery could, from certain points of view, be considered to have been completed by 1950, there is no doubt that growth since 1950 does to some extent have a reconstruction element in it, which called for a significant volume of investment. This was particularly important in the Federal Republic of Germany and Japan, where post-war rehabilitation began much later than in the other countries listed. Even in some of the other countries, however, the early post-war reconstruction of industrial capital was to some extent at the expense of social capital, and investment in the replacement of dwellings may not have been completed until later. It is also likely that some of the post-war capital formation has been designed to make good arrears of investment dating back as far as the years of depression, when investment had fallen to very low levels, and to catch up with technological advances made possible by war-time research and development. All these factors have tended to raise the level of investment.

Apart from these essentially temporary influences, a number of factors of a more permanent character have also affected post-war growth rates and investment ratios. The commitment of governments to full employment policies and containment of cyclical fluctuations probably had a favourable long-term effect on the outlook for investment. So also did the enlarged post-war consumption horizon, particularly as regards the growing demand of the population for durable consumer goods. The greatly increased post-war outlays of government and business upon research have tended to enlarge the scope of profitable investment opportunities. And the higher share of defence expenditures in total output must also have exerted a considerable influence in so far as the investment content of defence expenditure is higher than for a corresponding volume of civilian goods and services.

There has been a wide range of variation in the rates of growth within the group of industrial countries. The annual movement of gross domestic output and gross fixed capital formation in each of the industrial countries over the period 1950-1958 is shown in chart 1-1. The cumulative growth rate for each of the two variables is indicated alongside the appropriate curve. The range of variation in the rate of growth of output extends from 7.9 per cent per annum for Japan at one extreme to 2.2 per cent per annum for the United Kingdom at the other. The extreme rates of growth of capital formation are more widely separated than those for output, but for most of the countries the two rates do not diverge by more than two percentage points. Moreover, with the exception of Belgium and the United States, the rate of growth of capital formation has exceeded that of output. Thus, in terms of demand for output, fixed investment has contributed more than proportionately to the annual growth in production in all but two of the industrial countries. At the same time, an increasing share of output has been allocated to an enhancement of productive capacity.

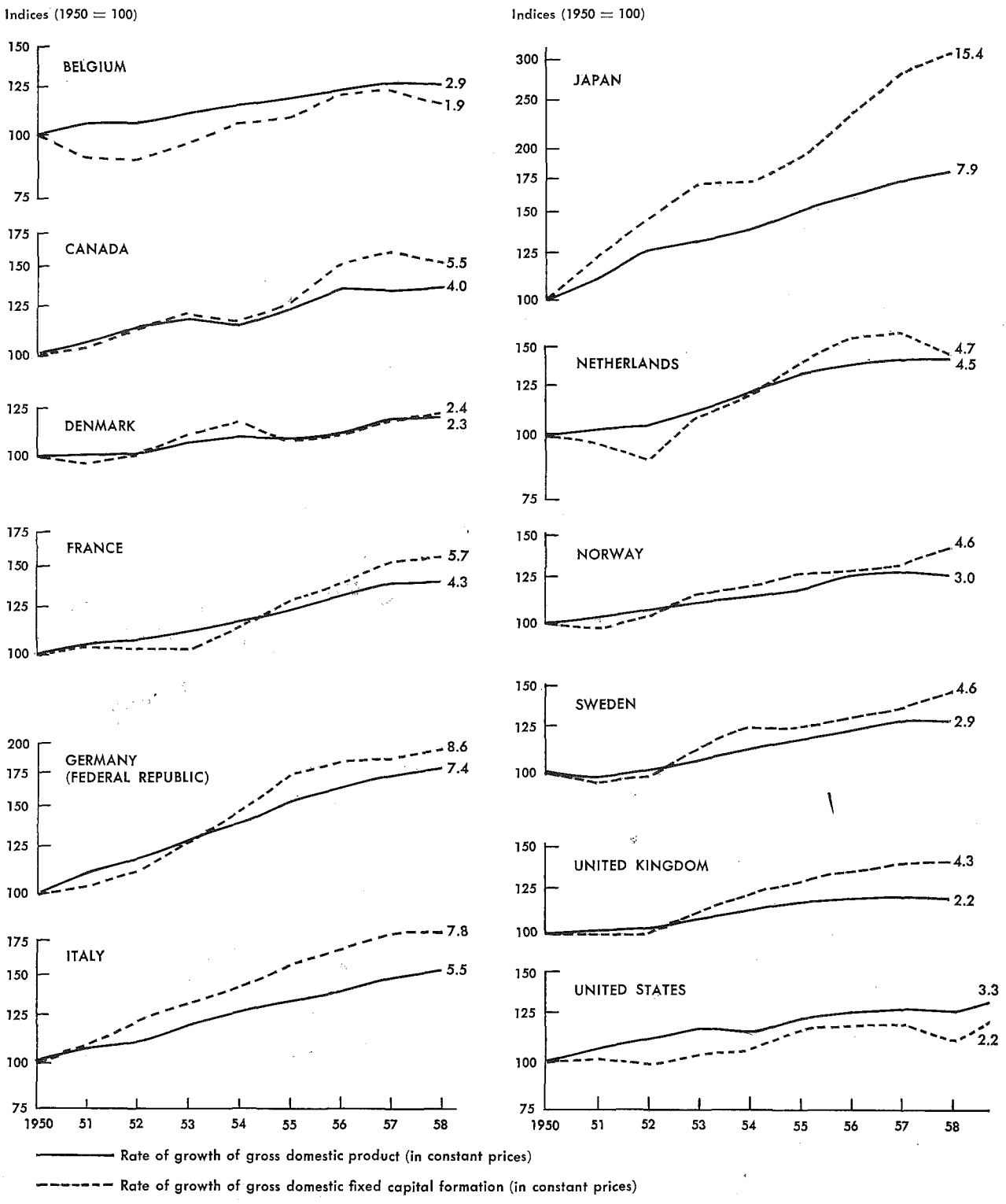
It is clear from the data shown in chart 1-1 that the growth in output and fixed investment has not proceeded smoothly and continuously since 1950. In most of the western European countries, real output rose sharply between 1950 and 1951/52 as a consequence of the outbreak of hostilities in Korea. Thereafter, it faltered for a brief period and again resumed its upward course until 1956/57 when the rate of growth of output slackened perceptibly. In North America, the rate of growth was halted first in 1953/54 and again in 1957/58 but was subsequently resumed. In Japan, the slower rate of advance between 1952 and 1954 represented only a minor departure from the high growth rate generally experienced by that country.

In most of the industrial countries the annual rate of capital formation has tended to fluctuate around the path traced by the growth in output. During the early part of the period, the retardation in investment growth in relation to output was associated with the Korean conflict. In many countries, the immediate consequence was a substantial rise in government claims on resources, involving a curtailment of investment expenditures in

[2] *See*, for example, International Association for Research in Income and Wealth, *The Measurement of National Wealth*, Income and Wealth Series VIII (London, 1959), table VI, pages 30 to 31; Rolf Krengel, "Anlagevermögen, Produktion und Beschäftigung der Industrie", Deutsches Institut für Wirtschaftsforschung (Sonderheft 42, Series A) (Berlin); D. G. Wooden and R. C. Wasson, "Manufacturing Investment Since 1929 in Relation to Employment, Output and Income", United States Department of Commerce, *Survey of Current Business* (Washington, D. C.) November, 1956; Philip Redfern, "Net Investment in Fixed Assets in the United Kingdom, 1938-1953", *Journal of the Royal Statistical Society*, Series A (General), part II, 1955 (London); and Royal Commission on Canada's Economic Prospects, *Output, Labour and Capital in the Canadian Economy* (Ottawa, 1957).

Chart 1-1. Growth in Real Output and Capital Formation, 1950-1958[a]

(Indices, 1950 = 100; semi-logarithmic scale)



Source: United Nations, *Yearbook of National Accounts Statistics, 1959*, and earlier issues.

Note: The compound annual rate of growth over the period appears alongside the appropriate curve.

[a] Data refer to 1950–1959 for the United States.

the private sector. The investment boom that marked the middle of the period derived much of its momentum from a shift in the pattern of consumption, particularly in western European countries, in favour of consumer durable goods. And, finally, towards the end of the period, the rate of investment slackened when output failed to maintain pace with the growth in productive capacity.

The greater amplitude of fluctuation in capital formation than in output characteristic of post-war experience in the industrial countries has prompted governments to focus upon the rate of investment as one of the crucial factors through which economic stabilization measures might be implemented. The policy measures consequently adopted by governments constitute a separate factor affecting the post-war investment experience of the industrial countries and will be considered in a subsequent section of this chapter.

The relation between investment and growth

THE INVESTMENT RATIO

The role of fixed investment in influencing the growth of output is a dual one. On the one hand, expenditure on buildings, plant and equipment represents one of the components of demand for current output in an economy, the satisfaction of which generates a concomitant flow of income. Thus an increase or a decrease in the rate of capital formation is directly reflected in the annual flow of goods and services. On the other hand, the erection of buildings and plants, and the installation of machinery and equipment create a capacity to produce goods and services over a future period of years. The precise relationship between the annual volume of capital formation and the growth of productive capacity will depend among other things on the type of fixed asset, the extent to which the latest production techniques are embodied, the durability and degree of utilization of the asset, and replacement requirements on account of wear and tear and obsolescence. Thus the growth of productive capacity in plant and equipment is related both to the annual volume of capital formation and its productivity.

It should be observed that at any given time there is a stock of capital in existence, resulting from past accumulation and reflecting the expectations of entrepreneurs regarding the pattern of demand in the future. Such expectations are only imperfectly realized in practice, and with changing levels of income it is not surprising to find the capital stock inadequately adapted to the accompanying changes in the pattern of demand. Some sectors of the economy may find themselves confronted by excess capacity while others experience shortages owing to insufficient productive capacity.

Thus new investment is important not merely because it adds to capacity in the aggregate, and because it provides the means whereby the latest technical innovations are introduced into the productive process. It is important also because it is the means whereby flexibility can be introduced into the capital stock, and adjustments made to the current and expected pattern of demand. Moreover, the larger the volume of investment in relation to the existing capital stock, the greater, in general, will be the responsiveness of available productive capacity to changes in market requirements.

It is for this reason that as between two countries of comparable levels of economic development in which the per capita rate of capital formation is the same, the one with the greater growth of population may have an immense advantage. For in so far as rapid growth of population leads to a correspondingly higher volume of investment, the average technological level of fixed capital assets will also tend to be higher and the degree of adaptation of capacity to the pattern of demand will be greater.

For each of the industrial countries, the average share of gross fixed capital formation[3] in gross domestic product over the whole period from 1950 to 1958 is shown in table 1-2. It will be seen that the range of variation among countries is very wide; the data suggest that Norway has allocated slightly more than twice as large a share of its annual output to gross fixed investment as the United Kingdom.

[3] During the following discussion, fixed capital formation is invariably defined in terms of gross flows. It differs from net fixed capital formation by the amount of capital consumption allowances or depreciation charges. In evaluating the role of investment in creating productive capacity, theoretical considerations suggest that investment, net of depreciation, is a better measure of capacity expansion. However, current methods of estimating depreciation charges fall far short of what is required on strictly economic grounds. Depreciation represents essentially an accounting measure of annual charges against income based on an estimated "normal" life of the asset and its original cost. This measure is primarily designed for purposes of taxation or for the internal financial requirements of an enterprise. In fact, however, the productive capacity of an asset is a function not of accounting methods but rather of market evaluations. An asset that has been fully depreciated may be retained in service during periods when demand pressures are high. On the other hand, an asset may be discarded for reasons of obsolescence long before it has been depreciated in accounting terms.

The gross capital formation concept also does not measure changes in productive capacity accurately, since it does not distinguish between replacement investment and net additions to the capital stock. For example, the gross concept takes no account of the possibility that a changing proportion of annual capital formation may be required for replacement rather than additions to the capital stock. However, the error involved in using investment as an indicator of growth in capacity is probably less if the gross measure is employed rather than the net. Practical considerations of availability of data, especially disaggregated by sectors of the economy, also dictate the use of gross rather than net investment in the following discussion.

Gross fixed capital formation, as used in the numerator of the ratio described above, aggregates the volume of expenditure on all types of durable physical goods, including residential housing and those employed in the administration of public affairs and in the provision of public services such as government buildings, schools, hospitals and roads. The construction of dwellings may be an important element in achieving a better allocation of resources if it enables labour to move to the areas where it is most needed. It may also have a beneficial effect upon the morale of workers and hence upon their productivity. Similarly investment expenditure for government administration and social services may help to provide a political and social framework that will promote economic efficiency. Nevertheless, for some purposes it is useful to segregate those expenditures incurred directly for the expansion of productive capacity and those whose impact upon capacity is much more indirect. Thus column 4 in table 1-2 indicates the average share of "productive" investment in gross domestic product for each of the industrial countries, after deducting the share of residential construction and general government investment in gross domestic product.

While the effect of the exclusion of "non-productive" investment is to reduce the absolute range of variation among the listed countries, their ranking is not significantly affected. The relatively large share of resources devoted to fixed investment in Norway, even after allowance for residential construction and general government capital formation, reflects in part the structure of production in that country. In Norway much more than in the other industrial countries, the pattern of output is heavily weighted and is in process of being shifted in favour of those types of goods and services, such as shipping and power generation, in which capital is of above average durability and in which, therefore, the capital-output ratio is high. In addition, government policy throughout most of the post-war period has been deliberately geared towards achieving a high level of capital formation.

It will also be noted that Japan devotes a relatively small proportion of its total output to housing, averaging less than 2 per cent over the period. To some extent, however, this relatively low figure reflects the lower ratio of prices of housing to prices of other investment goods in Japan than in the other industrial countries. Before considering the relationship of the share of capital formation in total output to the rate of growth, it may be appropriate, in fact, to examine the pricing question more broadly so as to establish how far disparities in investment ratios may be due to differences in the relative levels of prices of investment goods in the various countries. How far, in other words, does the fact that prices of capital goods are lower in relation to other prices in some countries than in others affect the ranking of countries in table 1-2?

Table 1-3 shows the ranking of countries in respect of the share of output devoted to total fixed capital formation, and separately for producer durables on the basis of national price relationships obtaining in 1950, alongside a calculation based upon an average Euro-

Table 1-2. Average Investment Ratio[a] and Growth of Output,[b] 1950-1958

Country[c]	Gross fixed capital formation (percentage of gross domestic product) (1)	Residential construction (2)	General government capital formation (3)	Gross productive investment[d] (4)	Growth of output (percentage per annum) (5)
Japan[e]	21.8	1.8	3.2	16.8	7.9
Germany (Federal Republic)	20.6	5.0	2.6	13.0	7.4
Italy	19.7	4.6	2.5	12.6	5.5
Netherlands	22.1	4.1	3.5	14.5	4.5
France	17.3	3.9	1.8	11.6	4.3
Canada	21.8	4.4	3.2	14.2	4.0
United States[f]	16.5	4.5	2.3	9.7	3.3
Norway	29.4	4.7	3.7	21.0	3.0
Belgium	14.6	4.1	1.5	9.0	2.9
Sweden	19.9	5.1	3.0	11.8	2.9
Denmark	16.8	2.6	1.8	12.4	2.3
United Kingdom	14.4	3.0	1.5	9.9	2.2

Source: United Nations, *Yearbook of National Accounts Statistics, 1959*, and earlier issues; data on general government capital formation for the Federal Republic of Germany and Japan from official national publications.

[a] Ratio of gross fixed domestic capital formation to gross domestic product, both in terms of constant prices.

[b] Gross domestic product in constant prices.

[c] Countries are arranged in descending order of average growth of output.

[d] Column 1 less columns 2 and 3.

[e] Investment ratio calculated on basis of data in current prices.

[f] 1950–1959.

Table 1-3. Gross Fixed Capital Formation in Producer Durables and Construction, 1950
(Percentage of gross national product)

Country	*Producer durables and construction*				*Producer durables*			
	National prices		*Average European prices*		*National prices*		*Average European prices*	
	Percentage	*Rank*	*Percentage*	*Rank*	*Percentage*	*Rank*	*Percentage*	*Rank*
Norway	26.1	1	25.0	1	13.5	1	10.7	4
Netherlands	19.8	2	19.4	4	11.2	3	11.1	2
Germany (Federal Republic)	19.5	3	20.4	3	11.1	4	10.5	5
United States	18.9	4	18.5	5	8.3	8	11.0	3
Belgium	18.6	5	21.6	2	12.0	2	13.5	1
Denmark	17.8	6	17.9	6	10.3	5	10.3	6
Italy	17.8	7	16.0	8	10.0	6	6.9	9
France	17.0	8	16.9	7	8.7	7	8.8	7
United Kingdom	13.8	9	13.2	9	8.1	9	8.3	8

Source: See footnote *4*.

pean price structure.[4] The correction for inter-country price comparability clearly does not significantly alter the range of variation in the investment ratio among these countries. With the exception of Belgium, the ordering of the countries is also relatively little changed. The shift in the ranking of Belgium from fifth to second place reflects the fact that, compared with other European countries, investment goods are relatively cheap in that country in relation to other goods. The comparison in terms of national prices therefore tends to understate the share of total output set aside for fixed capital formation in Belgium.

A similar comparison for producer durables alone—the component of investment most directly related to the provision of capacity for growth of output—reveals a greater shift in the ordering of countries. In correcting for price comparability, the ranking of Belgium, Italy, Norway and the United States is significantly altered. Italy, which ranks sixth in the share of investment in producer durables on the basis of national prices, falls to the last rank when its expenditure pattern is evaluated in terms of average European prices, while Norway shifts from the first to the fourth place. Belgium and the United States, on the other hand, rise in the ordering. These changes result from the fact that in 1950 producer durable goods were relatively expensive in Italy and Norway and relatively cheap in Belgium and the United States, when compared with the other industrial countries.[5]

Unfortunately, data in comparable prices are not available in the detail needed for the present study. It is, therefore, impossible to introduce the required corrections beyond the aggregative level or to deal with those industrial countries not included in the OEEC study. The following discussion will take account of any qualifications that are needed, so far as possible on the basis of the aggregate data.

What seems quite clear, however, is that the range of variation of the productive investment ratio shown in table 1-2 would be very much smaller if allowance were made for differences in the relative prices of investment goods and other goods in the various countries. After adjustment for this factor, and leaving aside the case of Norway, the range of variation is probably no more than five percentage points, instead of the twelve points (from 9 in Belgium to 21 in Norway) shown in table 1-2. As will be seen below, the smallness of this range is of considerable significance in the context of economic growth policies.

THE RELATION TO ECONOMIC GROWTH

It is now possible to consider whether inter-country differences in the productive investment ratio are related in any way to the rates of growth of output experienced by the industrial countries during the period from 1950 to 1958. The rate of growth of output in each of the countries is shown in column 5 of table 1-2. These growth rates appear to be positively related to the productive investment ratios shown in column 4. That is to say that those countries which had relatively high investment ratios during the period as a whole tended also to experience high rates of growth in output. That this relationship is not a perfect one is equally apparent. Norway, for example, which recorded the highest investment ratio, achieved a rate of growth in output only slightly higher than that of Belgium, the

[4] Based upon Organisation for European Economic Co-operation (OEEC), *Comparative National Products and Price Levels*, by Milton Gilbert and associates (Paris, 1958) and *An International Comparison of National Product and the Purchasing Power of Currencies*, by Milton Gilbert and Irving B. Kravis (Paris, 1954). In these special studies, the detailed expenditure patterns of eight western European countries and the United States in 1950 and extrapolated data for 1955 were evaluated by applying two separate price structures to each country. These calculations yield two sets of price data, one based on the price relationships obtaining in the United States and another on an average European price structure. Since the latter reflects more accurately the economic structure of most of the countries under discussion and also is conceptually more suitable for inter-country comparisons, it has been employed in calculating table 1-3. Moreover, since the data for 1955 show no significant alterations in the country rankings obtained in 1950, it may be assumed that inter-country price relationships calculated in terms of average European prices in 1950 are broadly representative of at least the major part of the period under review.

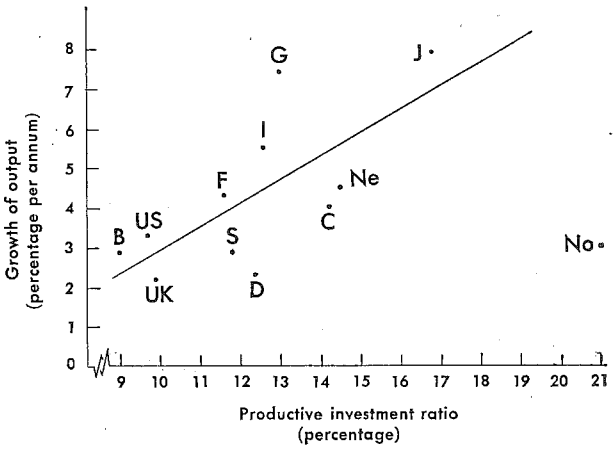
[5] A similar calculation in terms of the price relationships obtaining in the United States would raise the ranking of the United States even more as regards the ratio of investment in producer durables to gross national product.

country with the lowest productive investment ratio. In undertaking this comparison, however, allowance must be made for the understatement of the investment ratio in Belgium, noted earlier. Similarly the investment ratio in Norway is slightly more than twice that of the United Kingdom, while the difference in their respective rates of growth in output is substantially less.

The nature of the relationship between the growth in output and the productive investment ratio—reflecting resources devoted to the expansion in capacity—may be more clearly observed in chart 1-2. The data are there presented in the form of a scatter diagram, each point representing the experience of an individual country over the period. Most of the countries appear to fall near a line of "best fit"[6] running from the south-west to the north-east sector of the chart. The position of the line represents what the average experience of the industrial countries would have been if the investment ratio had been perfectly related to the growth in output.

Conclusions drawn from an inter-country comparison of the investment growth relationship over the period 1950-1958 are subject to at least one important qualification. This arises from the fact that the comparisons are based on a period of time which has been extracted from what is essentially a continuous long-run growth process. Since the configuration of economic growth will vary from one country to another, and indeed over time within a country, it is not unlikely that during a given period of time various countries will exhibit very different economic characteristics. If, however, it can be assumed that the cross-section of experience under discussion is fairly typical,[7] then one of the most important conclusions to be deduced from the relationships set forth in chart 1-2 is that countries achieving a high rate of growth did not have to devote a very much larger proportion of their resources to investment than other countries in order to bring about this result. The experience recorded in the chart suggests, for example, that on the average a country experiencing a 4 per cent annual rate of growth would show an investment ratio only about 2 per cent higher than a country experiencing a 3 per cent rate of growth. In other words, whatever else may have been required in order to accelerate the rate of growth—and much else may indeed have been required—a less than proportionate diversion of resources from other uses to investment seems to have served the purpose.

Chart 1-2. Relationship between Productive Investment Ratio[a] and Growth of Output, 1950-1958[b]



B—Belgium
C—Canada
D—Denmark
F—France
G—Germany (Federal Republic)
I—Italy
J—Japan
Ne—Netherlands
No—Norway
S—Sweden
UK—United Kingdom
US—United States

Source: Table 1-2.

[a] The ratio of gross fixed domestic capital formation, less residential construction and general government capital formation, to gross domestic product.

[b] For the United States the data refer to the period 1950–1959.

There are, of course, other factors apart from the inter-country differences in the investment ratio which enter into the determination of the pace of expansion. Some of these factors exert a direct influence upon the rate of growth of output—as in the case of structural changes in the economy—or on both output and investment simultaneously—as is true of the growth in the labour force. Still other factors, such as the degree of utilization of capacity, the composition of output and investment and the rate of absorption of technological progress, influence the productivity of capital in the first instance. It is to these factors that we must now turn for some explanation of the scatter of points about the line of "best fit" in chart 1-2, bearing in mind, however, that not every country is equally affected by the various factors discussed.

[6] In statistical terms this is known as the regression line obtained by the method of least squares. Norway was excluded from the calculation.

[7] Norway's experience during this period may be considered among the least typical because of the exceptional pattern of investment, discussed above.

Factors in the investment-growth relationship

DIFFERENCES IN THE RATE OF GROWTH OF THE LABOUR FORCE

The investment ratio is only one of the factors contributing to the growth of output—the role of labour is also crucial. The question as to how capital and labour are combined in the productive process and of their relative contributions to output is especially complex, since it involves an uncertain mixture of both technological and economic factors.

Nevertheless, it seems clear that differences in the rate at which the labour force is expanding in various countries are a major factor contributing to differences between them in the rate of growth of output. This is because investment is likely to be more productive when it takes the form of creating new capacity in association with additional labour than when it simply increases the intensity of capital used by a given labour force. In other words, part of the "scatter" of countries in chart 1-2 about the line of "best fit" may be regarded as due to inter-country variations in the rate of growth of the labour force.

This may be seen by examining chart 1-2 in the light of the data on the growth of the labour force shown in table 1-4. Unfortunately, labour force data are, in general, subject to great uncertainties. The data available do, however, appear to suggest a significant relationship between rates of growth of output and of the labour force. This relationship is clearest when countries grouped at the extremes are considered. For example, the Federal Republic of Germany and Japan, which experienced relatively high rates of growth of output, given their investment ratios also recorded high rates of expansion of the labour force; and the converse was true of the countries listed at the bottom of table 1-4.[8]

The combined effect of the investment ratio and rate of growth of the labour force does not appear to provide as satisfactory an explanation of the positions of Canada, France and Italy in chart 1-2 as of those of the other countries.[9] In the case of France the slow over-all growth of the labour force was associated with a rapid expansion of the industrial labour force owing to shifts of labour away from agriculture and this made it possible for France to secure a somewhat higher rate of growth than might have been expected simply on the basis of its investment ratio. A similar consideration underlies Italy's experience.

Canada, on the other hand, experienced a relatively rapid increase in the labour force and this ought presumably to have enabled that country to get more out of its investment than appears to have been the case. It will be seen below that in Canada the importance given to construction and the development of power and mineral resources required relatively large capital outlays in relation to output.

It is noteworthy that the rate of growth of output per worker is also positively associated with the investment ratio as may be seen from the last two columns of table 1-4. Thus the investment ratio would appear to have a bearing on the growth of labour productivity as well as upon the rate of growth of output. This suggests that even where countries are faced with a slow rate of expansion in the labour force, they may hope to secure gains in productivity and hence in output growth by raising the share of annual output devoted to productive investment.

[8] The simple correlation coefficient between the rate of growth of output and the investment ratio is 0.70 whereas the multiple correlation coefficient between the rate of growth of output on the one hand and the investment ratio and the rate of growth of the labour force on the other is 0.88. The addition of the labour force as an explanatory variable thus helps to account for a greater fraction of the variation in the rates of growth of output among countries.

[9] The position of Belgium above the line and—to a lesser extent—that of the United States may be due to the relatively low prices of producer durables in those countries, as pointed out previously.

Table 1-4. Rates of Growth of Labour Force and of Output Per Worker, 1950-1958

Country[a]	*Growth of output*	*Growth of labour force*	*Growth of output per worker*	*Productive investment ratio*
	(*percentage per annum*)			(*percentage*)
Japan	7.9	2.4	5.5	16.8
Germany (Federal Republic)	7.4	2.1	5.3	13.0
Italy	5.5	1.0	4.5	12.6
Netherlands	4.5	1.2	3.3	14.5
France	4.3	0.6	3.7	11.6
Canada	4.0	2.2	1.8	14.2
United States[b]	3.3	1.0	2.3	9.7
Norway	3.0	0.4	2.6	21.0
Belgium[c]	2.9	0.3	2.6	9.0
Sweden	2.9	0.4	2.5	11.8
Denmark	2.3	0.4	1.9	12.4
United Kingdom	2.2	0.9	1.3	9.9

Source: Growth of output and productive investment ratio from table 1–2; labour force data from Organisation for European Economic Co-operation, *General Statistical Bulletin*, No. 1, 1958 (Paris); Angus Maddison, "Economic Growth in Western Europe, 1870–1957", op. cit.; and official national publications.

[a] Countries are arranged in descending order of rate of growth of output.

[b] 1950–1959.

[c] 1950–1957.

DIFFERENCES IN THE EXTENT OF STRUCTURAL CHANGE

Structural change may help to speed up or slow down the rate of growth of output corresponding to a given investment ratio by causing a shift of resources from low-productivity to high-productivity sectors, or vice versa.

It is not possible within the limits of the present study to examine all the ways in which such structural changes may have come about, but one of the main changes has certainly involved, for some countries at least, a transfer of resources from agriculture, where the average value of output per man is generally low, to other sectors of the economy, where the output per man is relatively high. The scope for increases in productivity from this source is indicated in the following table, where both the magnitude of the relative shift in output and the difference in sectoral productivity are shown for a number of industrial countries.

Output and productivity in agriculture

Country	Share of agriculture in gross domestic product[a]		Ratio of productivity in agriculture to productivity in other industries[b]
	1950	1958	
	(percentage)		
Canada	13.2	7.3	0.7
Denmark	21.3	17.5	0.8
Germany (Federal Republic)	10.9	8.6[c]	0.7
France	16.2[d]	...	0.6
Italy	29.3	20.8	0.5
Japan	26.0	18.4	0.4
Netherlands	14.2	11.2	0.7
Norway	14.9	11.8	0.5
United Kingdom	6.0	4.4	0.8
United States	7.8	5.5	0.3

Source: United Nations, *Yearbook of National Accounts Statistics, 1959;* Food and Agriculture Organization of the United Nations, *The State of Food and Agriculture, 1959* (Rome), annex table 14.

[a] Derived from the national accounts where gross domestic product is distributed by industrial origin; for Japan, the percentages refer to net domestic product. Forestry, hunting and fishing are included in agriculture.

[b] For agriculture, productivity is calculated in terms of output per capita of the population dependent on agriculture; for other industries it refers to output per capita of the population dependent on such industries. In general, data refer to the period 1952–1954.

[c] 1957.

[d] 1952.

Clearly, the largest gains occurred in Italy and Japan and to a lesser extent in Canada and possibly the United States. In Denmark, the Netherlands and the United Kingdom, on the other hand, the shift from agriculture was considerably less important in influencing the rate of growth of output per worker for the economy as a whole.

THE DEGREE OF UTILIZATION OF CAPACITY

A further influence upon the scatter shown in chart 1-2 results from inter-country differences in experience regarding the utilization of capacity. Owing to the spreading of overhead costs, productivity tends to rise up to a certain point as the degree of utilization of capacity increases. This tendency has become even stronger in the post-war period than it was before the war owing to the rising share of overhead costs in total costs associated with such developments as the relative expansion in technical, research and administrative staffs, the size of which is normally insensitive, on the whole, to changes in the volume of output.

Available information suggests a marked increase in the degree of utilization of capacity between 1950 and 1958 in the Federal Republic of Germany, France, Italy and Japan, while in most of the other countries the pressure upon capacity was appreciably less in 1958 than in 1950, particularly in view of the recession in 1958. The percentage of unemployed labour, as may be seen in chart 1-3, declined substantially in the Federal Republic of Germany. In Italy and Japan, while the trend in the unemployment ratio was either horizontal or upward, other evidence points to the existence of considerable excess productive capacity at the beginning of the period which was subsequently brought into fuller utilization;[10] similar qualitative evidence exists in the case of France. It might be expected, therefore, that for any given ratio of investment to output, production should have increased faster in the four countries noted above than in the remaining countries. Reference to chart 1-2 will show that this is in fact the case; the Federal Republic of Germany, France, Italy and Japan are all found above the line of "best fit", meaning that production increased relatively fast, given the proportions of resources which they devoted to new investment. The other countries, except Belgium and the United States, are found below the line. As noted previously, adjustment for the relatively low prices of investment goods in Belgium would have the effect of shifting that country also below the line; the same factor affects the United States to a lesser extent.

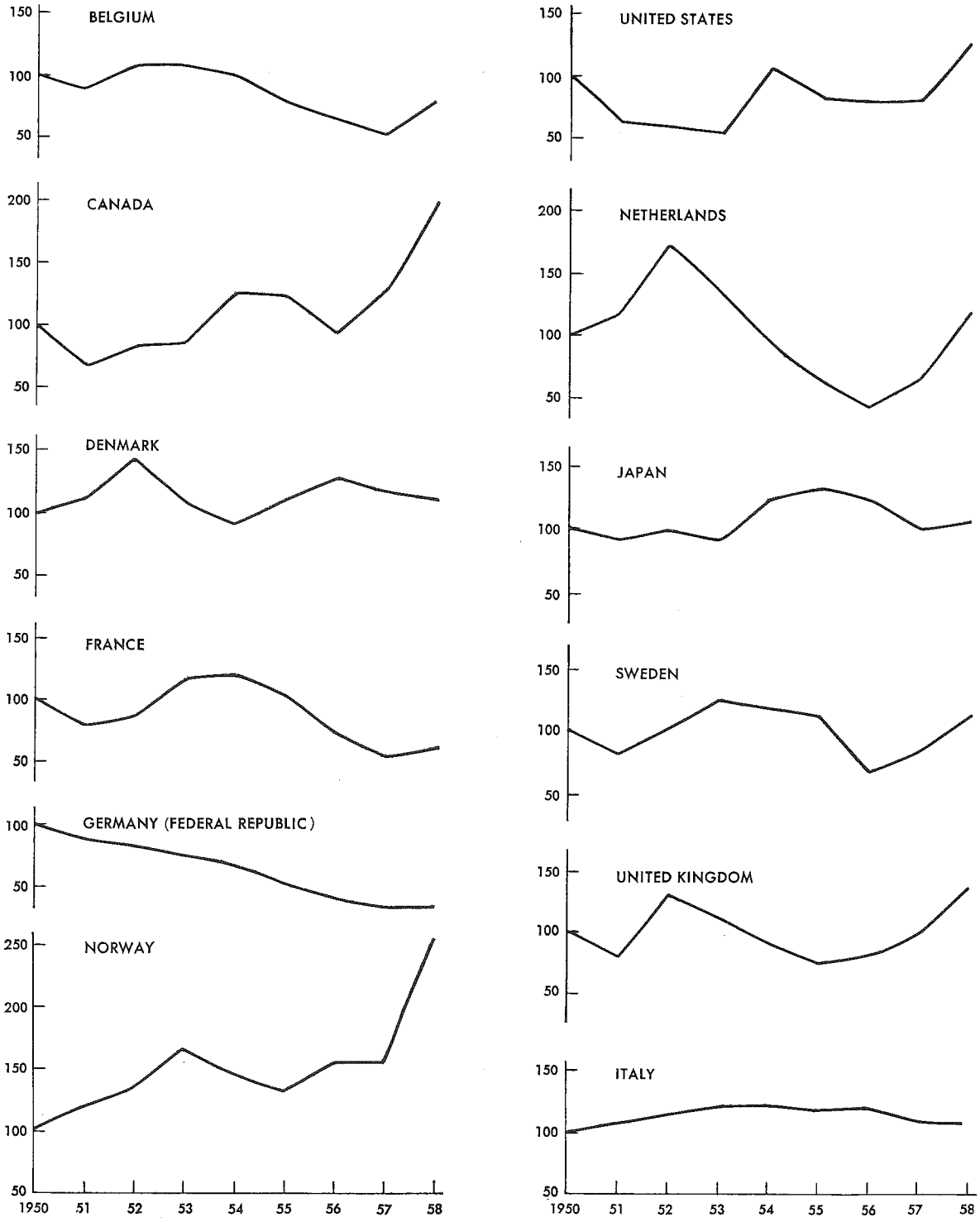
It should be noted that in Italy, and possibly to some extent also in the Federal Republic of Germany and one or two other countries, there was substantial structural unemployment in 1950—that is, unemployment resulting from the absence of complementary productive capacity rather than from inadequacy of effective demand. In these cases, the availability of such labour is likely to have had an expansive effect upon the productivity of new investment similar to that of a rapid rate of growth of the labour force. The main difference is that while a rapid growth of the labour force would tend to have a favourable influence upon capital productivity as long as it continued, the corresponding influence of structural unemployment would diminish as the unemployed were absorbed into industry.

An additional factor tending to bring about a high rate of growth of output in relation to capital require-

[10] In Japan, according to the Ministry of International Trade and Industry, the "capacity utilization ratio" in manufacturing rose almost continuously from 63 per cent in 1950 to 83 per cent in the first half of 1957.

Chart 1-3. Percentage of Unemployment,[a] 1950-1958

(1950 = 100)



Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* and official national publications.

[a] The percentage of unemployment relates generally to the ratio of registered applicants for work or surveyed unemployed to the total civilian labour force or to the civilian labour force available for hire. Unemployment percentages are not, however, comparable between countries owing to differences in definition.

ments in the cases of the Federal Republic of Germany and Japan was the fact that the recovery and reconstruction of these countries after the war did not gather speed until much later than in the other industrial countries. It may therefore be presumed that the period 1950 to 1958 includes considerably more of the reconstruction phase of their post-war economic development than in the case of the other countries under review. It was to be expected that the productivity of capital would be high during this phase because of the large gains obtainable from such factors as the reconstitution of inventories, the reintroduction of a smooth flow of supplies of raw materials and intermediate products and the readaptation at low cost of only partially destroyed buildings and even equipment.

While the countries possessing spare labour or equipment, or undergoing the early stages of reconstruction in 1950 were thus likely to benefit from high productivity of capital, countries utilizing their resources fully during the period were likely to find capital productivity depressed wherever there was imbalance in physical capacity or labour skills. It should be borne in mind that the various sectors of an economy are closely interrelated since the final output in any one sector depends to a greater or less degree upon the supply of intermediate goods and services from other sectors. Mutual interaction among the sectors imposes distinct boundaries upon the ability of any single sector to expand productive capacity profitably or to achieve a rate of growth in output that is independent of the growth in productive capacity in other economic areas of the economy. Since decisions to undertake capital formation are based on less than perfect foresight, imbalance in the structural growth of capacity and output is always possible—and is, in fact, likely to occur unless the pattern of demand happens to correspond closely to the pattern of output which can be supplied from existing capacity and labour skills at full employment. The consequences of imbalance may appear in the form of excess productive capacity in a particular branch of the economy over fairly long periods of time—as in the case of the declining textile industries in Belgium, France, Italy and the United Kingdom; or alternatively, the consequences of imbalance may be seen in difficulties experienced in expanding output in some sector in response to growing demand, because of limitations on productive capacity or skilled labour available in that sector—as occurred for a time in the basic coal and steel industries as well as in some sections of the engineering industry in several western European countries.

Where there is sectoral excess capacity owing to a shift in the pattern of demand, the average productivity of capital is less than it otherwise might be because part of new investment is associated simply with changing the structure of employment, and a correspondingly smaller proportion of investment is therefore available for the net creation of new capacity or for raising the volume of equipment used per head. On the other hand, where there are sectoral bottlenecks, the rate of growth of total output corresponding to a given investment ratio is held back to an extent depending upon the importance of the bottleneck sector as a supplier of primary or intermediate goods.

Imbalance between the pattern of demand and the pattern of supply may have been one of the most important single elements accounting for the fact that the countries where unemployment was low during the period under review were among those that secured the smallest rates of increase in output per head for a given ratio of investment to output. In the United Kingdom, particularly, there was considerable competition for the limited supplies available from the engineering industries as between the claims of defence, of exports, of durable consumption and of investment. Although all countries experienced this problem to a greater or less extent, it was in the countries where there was the least spare labour and capacity available that the imbalance was most severe.

While the productivity of a given structure of new investment is inevitably limited by the appearance of bottlenecks in one or more sectors of the economy, it is always possible in such circumstances to achieve a marked improvement in the productivity of new investment by increasing the share of resources devoted to the bottleneck sectors. The extent to which capacity was augmented in the metal and engineering industries which were a key bottleneck area in the post-war period is illustrated in table 1-5. The share of total gross capital formation flowing into these industries is shown for a number of industrial countries, along with the rate of growth in output experienced.

Table 1-5. Investment and Growth of Output in Metals and Engineering Industries,[a] 1950-1957

Country[b]	*Gross capital formation in percentage of*		*Growth of output*[c] *(percentage per annum)*
	Gross domestic product	*Gross productive fixed investment*	
Germany (Federal Republic)	2.3	17.8	12.8
France	1.9[d]	17.4[d]	9.2
United Kingdom	1.4	14.6	4.3
Netherlands	1.4	10.1	7.7
Norway	1.4	7.1	7.5
Canada	1.1	7.2	4.6
United States	1.1	10.7	4.3
Sweden	0.6[d]	4.8[d]	3.3

Source: Organisation for European Economic Co-operation, *General Statistical Bulletin;* and official national publications.

[a] The industry coverage of metals and engineering varies as between countries, but in general includes fixed investment in the basic metals, mechanical and electrical engineering, transport equipment and shipbuilding industries.

[b] Countries are arranged in descending order of the ratio of gross capital formation in metals and engineering to gross domestic product.

[c] Based on appropriate components of the index of industrial production.

[d] Refers to the average for the period 1952–1957.

It will be seen from the data shown in table 1-5 that France and the United Kingdom have compensated partly or wholly for their relatively low over-all productive investment ratio by allocating a relatively high share of investment to one of the most expansive economic sectors. Of the countries shown in the table, productive capacity in the metals and engineering sector appears to have expanded most in the Federal Republic of Germany and France. Significantly, the problem of sectoral imbalance in the post-war period did not present itself in serious form in these two countries and a relatively high rate of growth of output in metals and engineering was achieved. Although the table suggests a significant relationship between investment and the rate of growth of output in the metals and engineering sector, other factors, particularly the level of demand, have also had a considerable effect on the growth of output. Thus the low rate of growth of output in the United Kingdom, given the level of investment in the metals and engineering sector, was due largely to the stagnation of demand after 1955.

In some cases the productivity of new investment may appear to be low because investors plan deliberately for excess capacity. In Canada, for example, the basic structure of the railway network was established by the early part of the twentieth century. Given the vast distances to be traversed and the low density of population in that country, excess capacity in this basic facility may be said to have existed from the very beginning. During the post-war period, new major capital facilities such as overland natural gas transmission lines and the St. Lawrence Seaway were constructed. However, these cannot be expected to be more fully utilized until some years hence. Similarly, in Norway hydroelectric power developments have proceeded beyond present demands, taking into account anticipated demand in the future. Clearly these types of capital project can be expected to yield a flow of output over many years to come. At the same time, however, they tend to contribute to the relatively high capital cost of output that both countries have experienced over the recent period.

DIFFERENCES IN THE COMPOSITION OF INVESTMENT AND OUTPUT

Inter-country disparities in the capital cost of growth in output may be considerably affected by differences in the composition of new investment. The industrial structure of the productive capacity or stock of durable assets in a country is ultimately related to the interaction between the country's endowment of natural resources (including specialized labour skills) and the pattern of demand for its output that has evolved over the years. It is no accident, for example, that the major shipping nations of today are those adjacent to the sea and in which the seafaring tradition is strong, nor that the major world suppliers of certain agricultural products are countries where large land masses have been brought under extensive cultivation. Given the available resources, productive capacity in any sector of the economy is created in response to revealed and anticipated demand for output of that sector. The industrial structure of productive capacity and hence the required stock of durable assets will, therefore, differ among countries in accordance with differences in the pattern of demand for their output.

There is evidence to suggest that the volume of capital required to produce a unit of output varies significantly among the broadly defined sectors of the economy. Furthermore, the differences between sectors exhibit a marked degree of uniformity among the various industrial countries. The first column in table 1-6 shows the median incremental capital-output ratio for each of five major sectors as derived from the calculations made for

Table 1-6. Sectoral Differences in the Incremental and Average Capital-Output Ratios
(Indices, power and utilities = 100)

Sector	*Incremental capital-output ratio, 1950–1958 (median for eight countries)*	*Average capital-output ratios*			
		Canada 1955	*Germany (Federal Republic) 1955*	*Japan 1955*	*Norway 1955*
Power and utilities	100	100	100	100	100
Transport, communications and storage	65	60	91	41	37
Agriculture[a]	39	14[b]	29	16	55
Industry[c]	26	15	11	10	16
Manufacturing	24	18	...	11	...
Trade and services	18	11	13	13	13

Source: Incremental capital-output ratio based on data from United Nations, *Yearbook of National Accounts Statistics, 1959;* average capital-output ratios based on national sources.

[a] Including forestry and fishing.

[b] Structures and equipment only.

[c] Includes mining, manufacturing and construction.

eight industrial countries.[11] Since it is only the inter-sectoral relationships rather than the absolute values that are of relevance here, the ratios are presented in the form of index numbers, with that for the power and utilities sector equal to 100.

It is clear from the sectoral index numbers that the incremental capital-output relationship for manufacturing industry and for trade and services, on the one hand, is distinctly lower than that for the transport and for the power and utilities sectors, on the other. This is to say that among the industrial countries generally a given increase in output in the manufacturing sector over the period has been secured with a considerably smaller increase in the volume of durable assets than that required in either the transport sector or the power and utilities sector.

The relationships described above are defined in terms of increments in gross fixed capital and in output in each of the productive sectors, taken over the relatively short period of eight years. In order to check the significance of these results, calculations have been made of sectoral average capital-output ratios for the four countries for which reasonably comparable data could be assembled: since the average ratios take account of the entire stock of durable assets in each sector, they are likely to be much more stable than the incremental ratios. It will be seen from table 1-7 that the average and incremental ratios exhibit a marked similarity which, in all the circumstances, must be considered significant.[12] Moreover, a comparison of the average sectoral capital-output ratios for the years 1950 and 1955 has revealed a high degree of stability in the ratios.

Given the variations in inter-sectoral capital-output ratios, differences in the investment ratio among countries are influenced by the average composition of output over the 1950-1958 period, which is shown in table 1-7 for eight of the industrial countries. These data are placed alongside the sectoral capital-output ratios taken from the first column of table 1-6.

The average composition of output among the industrial countries, as presented in table 1-7, reveals with one exception a fairly narrow range of variation in the industrial and basic facility sectors—the latter represented by power and transport. The role of agriculture, forestry and fishing, however, varies more markedly among the industrial countries, as does that of the trade and services sector. The relative importance of output in high capital cost sectors such as shipping in Norway, on the one hand, and the relative importance of low capital cost sectors in the Federal Republic of Ger-

[11] The countries are: Canada, Denmark, the Federal Republic of Germany, Italy, the Netherlands, Norway, the United Kingdom and the United States. The median for each sector was actually based on a maximum of eleven possibilities since the ratio in some countries was calculated in terms of constant prices and in current prices. While the absolute values differed as between the constant and current price calculation, the inter-sectoral relationship was unmistakably revealed in both cases. The comparative significance of the index numbers may be taken to be greater, the larger is the difference between them.

[12] The similarity would be even more pronounced if the basis of estimation of the capital stock and the coverage of each sector could be standardized in the four countries. In Norway, for example, the value of livestock is included in the capital stock of the agricultural sector, whereas it is excluded in the other countries. In addition, however, the Norwegian ratio is relatively high because of the greater importance of fishing and whaling, an industry which has a relatively high capital-output ratio.

Table 1-7. Sectoral Differences in Capital-Output Ratio and Composition of Output,[a] 1950-1958
(Index, power and utilities = 100; sectoral composition in percentages)

Sector	*Index of incremental capital-output ratio (median for eight countries)*	*Sectoral composition of output*								
		Canada	*Denmark*	*Germany (Federal Republic)*[b]	*Japan*[b]	*Italy*	*Netherlands*	*Norway*	*United Kingdom*	*United States*
Power and utilities	100	3	2	2	9	3	...[c]	2	3	2
Transport, communications and storage	65	10	11	9		7	10	19	9	8
Agriculture[d]	39	12	23	11	23	27	14	15	5	7
Subtotal		25	36	22	32	37	...	36	17	17
Industry[e]	26	42	...	54	32	44	45[c]	39	49	38
Manufacturing	24	31	32	...	25	...	...	...	40	36
Trade and services	18	33	32[f]	24	36	19	31	25	33	45[f]
Subtotal		75	64	78	68[g]	63	76	64	82	83

Source: Index from table 1–6; sectoral composition from United Nations, *Yearbook of National Accounts Statistics, 1958* (sales number: 59.XVIII.3).

[a] Derived from the distribution of gross domestic product by industrial origin in current prices and excludes ownership of dwellings and public administration and defence.

[b] Average, 1950–1957, and based upon the distribution of net domestic product by industrial origin.

[c] Power and utilities included under industry.

[d] Including forestry, hunting and fishing.

[e] Including mining, manufacturing and construction.

[f] Including construction.

[g] Including public administration, and ownership of dwellings.

many, on the other, stand out in the comparison. It will be recalled that these countries experienced greatly divergent rates of growth of output in relation to their respective investment ratios during the period. While within these extremes the significance of differences is reduced, it would seem that the composition of output in Canada, Denmark and possibly the Netherlands has tended to exert an influence in favour of higher rather than lower capital requirements. The three countries are among the previously defined group in which the investment ratio appeared to be relatively high when related to the rate of growth in output actually achieved.

Another structural factor that might be expected to exert an influence upon the investment-growth relationship is the composition of investment by type of capital good—structures on the one hand and machinery and equipment on the other. Assets in the form of buildings and engineering construction are more durable than machinery and equipment, and therefore contribute to the flow of output over relatively longer periods of time. Thus, over the period 1950 to 1958, a given volume of investment in construction is likely to have had a smaller impact upon the rate of growth of output than an equivalent volume of investment in machinery and equipment. We may consider, therefore, the inter-country differences in the average ratio of construction to machinery and equipment in order to establish whether the differences that emerge contribute to an understanding of the divergences in the investment experience of the industrial countries since the war. The construction-equipment ratios for the industrial countries are shown in table 1-8, calculated in terms of both national prices and, for those countries where the data are available, in average European prices.

The average ratio of construction to equipment in terms of national prices ranges from 120 in Canada at one extreme to 42 in the Federal Republic of Germany at the other. This is to say that rather more than half of Canada's average annual volume of capital formation (excluding residential construction) has gone for construction, whereas, in the Federal Republic of Germany, the equivalent category of capital goods has absorbed only about a third of its non-residential fixed investment. The high ratio in Canada is not surprising in view of the large-scale engineering works put in place in recent years. The composition of investment in Canada may, therefore, have contributed to the relatively low rate of growth of output, given the investment ratio experienced by that country over the 1950-1958 period. Similarly, at the opposite extreme the composition of investment in the Federal Republic of Germany has exerted some influence on the post-war experience of that country since its rate of growth of output was found to be one of the highest of all the industrial countries. However, when the ratios of the other industrial countries are considered, the value of the construction-equipment ratio as an explanatory factor is seriously reduced. It will be seen from table 1-8 that, among the industrial countries generally, no apparent association between the ratio of construction to equipment on the one hand and the investment-growth relationship on the other emerges from the data. This conclusion also holds true of the ratio of construction to equipment calculated in average European prices. It will be noted that in terms of average European prices, the construction-equipment ratio is relatively high for Italy and Norway and, it would appear reasonable to suppose, in Sweden as well. The high ratio in Italy reflects in part the extensive construction programme undertaken in the southern region of that country. In Norway the ratio is high despite the large volume of investment in transport equipment, especially shipping; this is due to even heavier outlays on power and highway construction. The magnitude of the ratio in Sweden reflects the relatively high share of public construction in total non-residential investment over the period under review.

Table 1-8. Average Composition of Gross Investment: Ratio of Construction to Equipment,[a] 1950-1958

(Equipment = 100)

Country[b]	*In national prices (1950–1958)*	*In European prices (average of 1950 and 1958)*
Germany (Federal Republic)	42[c]	33
Italy	68	109
Netherlands	58	45
France	60[c]	61
Canada	120	...
United States	103	59
Norway	53[d]	75
Belgium	61	23
Sweden	101	...
Denmark	44	44
United Kingdom	52	30

Source: United Nations, *Yearbook of National Accounts Statistics, 1959*, and earlier issues; Organisation for European Economic Co-operation, *An International Comparison of National Product and the Purchasing Power of Currencies*, by Milton Gilbert and Irving B. Kravis, and *Comparative National Products and Price Levels*, by Milton Gilbert and associates.

[a] Ratio of gross fixed capital formation in non-residential construction to machinery and equipment, both in constant prices.

[b] Countries are arranged in descending order of the rate of growth of output.

[c] 1950–1957.

[d] 1952–1957.

THE ABSORPTION OF TECHNICAL PROGRESS

So far, we have discussed a number of more or less quantifiable factors which may have contributed to the divergence in the investment-output relation among the industrial countries. These factors appear to have had some relevance to post-war experience in all the industrial countries, and although the magnitude of the influence of any single factor has varied from one country to another, their impact has generally fallen upon the physical quantity of durable assets, on the volume of output, or on their sectoral distribution. In addition,

however, there has been a most important, but much less readily measurable influence at work—the application of new advances in science and technology to the productive process.[13]

Vast sums are spent today on pure and applied research with the object of finding more efficient apparatus and methods to be applied to the process of production. While it is open to every country to stay abreast of the most advanced state of technological knowledge, the actual rate of absorption of technological advances will vary from country to country. Apart from environmental differences surrounding the process of innovation, the ability of any single country to absorb technological advances will depend directly upon the proportion of annual gross additions to the total stock of reproducible assets. Thus the inherent quality of capital is intimately tied to the annual volume of gross capital formation in relation to the existing stock since it is this proportion which affects the rate at which advances in technology and science are introduced into the productive process.

The measurement of the annual rate of gross addition to the capital stock is made difficult by the paucity of data on the total stock of capital in the industrial countries. Even among those countries for which stock estimates are available, inter-country comparisons can be made only with serious qualifications since, apart from differences in price structures, the estimating techniques employed and the coverage vary significantly from country to country. As a mere illustration of the orders of magnitude involved, however, the annual percentage rate of gross additions to the capital stock for the most recent year available[14] has been calculated for a number of industrial countries. The annual rate of gross additions to capital stock are shown in the following table for nine industrial countries, listed in alphabetical order.

Since the absorption of technical progress is more immediately relevant to machinery and equipment than to structures, the rate of additions to the former category of durable assets is also shown in the table for a number of industrial countries. The equipment ratio in every instance is seen to be higher than that for total fixed capital, mainly because the average length of life of producer durable goods is less than that of structures.

Annual rate of gross additions to capital stock

Country	*Year*	*Total fixed capital*[a]	*Machinery and equipment*[b]
		(percentage ratio)	
Belgium	1950	7	9
Canada	1955	13	19
France	1954	6	...
Germany (Federal Republic)	1955	12	...
Japan	1955	12	...
Netherlands	1952	7	11
Norway	1953	8	15
United Kingdom	1953	7	...
United States	1955	8	15

Source: United Nations, *Yearbook of National Accounts Statistics, 1959;* International Association for Research in Income and Wealth, *The Measurement of National Wealth,* Income and Wealth Series VIII (London, 1959).

[a] Ratio of gross domestic fixed capital formation to net fixed reproducible capital stock.

[b] Ratio of gross investment in machinery and equipment to net stock of machinery and equipment.

The rate of gross additions to the total capital stock shown above varies from a low of 6 per cent per annum to a high of 13 per cent; the latter rate would, other things being equal, make it possible to absorb the benefits of technological progress twice as fast as the former. While, as noted above, these figures are subject to a substantial margin of error, a two to one range of variation does suggest a significant difference among countries in their ability to absorb this important element of economic growth.

The possible impact of such differences in the annual rate of gross additions to the total capital stock may be gauged by considering a purely hypothetical illustration. Let us assume that two countries, one with a rate of 13 per cent and the other of 6 per cent per annum, are suddenly confronted by the need to scrap and replace their existing capital stock in the shortest possible time. In the first country the total stock of capital could be renewed in a period of less than eight years, at the end of which time the average age of the capital stock would be four years. In the second country, on the other hand, the total replacement of the capital stock would require a period of roughly sixteen years at which time the average age of the capital stock would approximate eight years. The extreme values for the machinery and equipment ratios suggest similar conclusions.

Unreal as these hypothetical illustrations may be, the substantial difference between the age structures of capital stock that emerges from them serves to emphasize how important the annual rate of gross additions to capital might be. The difference between one capital stock that is four years old on the average and another that is eight years old is crucial from two points of view. On the one hand the relatively new capital stock will obviously embody much more of the latest technical progress than will the older stock. On the other hand the newer stock will be better adapted to the

[13] Attempts have been made to measure the importance of technological progress in the growth of output, but both the economic theory and the statistical techniques underlying these efforts are the subjects of extensive controversy.

[14] Differences among the countries in the year for which the percentage ratio is calculated represent an additional source of difficulty in the inter-country comparison since the volume of fixed investment—the numerator of the ratio—may vary significantly from one year to another. Where the capital stock has been estimated by the perpetual inventory method, it has been possible to approximate the 1955 ratio for those countries where the original calculations are given for an earlier year. The extrapolated ratios do not, however, differ significantly from those which appear in the accompanying table.

prevailing pattern of demand, if there have been significant changes in that pattern in the course of time.

In effect, our hypothetical illustration is not, perhaps, as unrealistic as might appear at first sight. Several countries, such as the Federal Republic of Germany, Japan and Norway, were faced by heavy destruction of productive capacity at the end of the war and by the need to reconstruct in the shortest possible time. It has, for example, been noted that the Federal Republic of Germany and Japan were able to introduce modern techniques in the shipbuilding industry earlier than most other countries because of their need to reconstruct war-damaged plant and equipment.[15] These two countries and Norway were also among those with the highest investment ratios during the period under review, and it may be presumed that their present stock of capital has a relatively low average age and embodies modern design and technology in relatively high degree. This undoubtedly contributed to one of the major paradoxes of post-war growth in the industrial countries—namely, that countries which were hit hardest during the war are among those which have prospered most since the war.

THE CAPITAL COST OF OUTPUT

The foregoing discussion has shown that the rate of growth is not a unique function of the proportion of resources allocated to investment. A great many factors enter—in varying proportions in different countries—into the determination of the efficiency with which capital is used to promote economic growth. It is, nevertheless, useful to summarize the over-all impact of these various factors, acting jointly, in a single measure. This measure, commonly referred to as the incremental capital-output ratio, implies a concept of capital costs per unit of output analogous to the more familiar concept of incremental labour costs per unit of output. It is calculated by dividing the investment ratio by the rate of growth of output. The resulting quotient measures the number of units of new investment associated with each unit of over-all growth in output during the period concerned. The results of these calculations for both total gross fixed investment and gross fixed productive investment appear in the following table, along with the rate of growth of output over the period 1950-1958.

It will be seen that while for each country the magnitude of the incremental capital-output ratio in terms of total fixed investment differs from that calculated in terms of productive investment, the ranking of the countries is almost identical for both ratios. Furthermore, of all the industrial countries, it is the Federal Republic of Germany that has experienced the lowest productive incremental capital-output ratio, since for each unit of increase in output there were only 1.7 units of new productive investment, whereas in Norway, at the other extreme, the corresponding ratio was 7.0. In other words, the productivity of new capital during the period appears at first sight to have been approximately four times as high in the Federal Republic of Germany as in Norway.

Incremental capital-output ratio and rate of growth of output, 1950-1958

Country[a]	Incremental capital-output ratio		Growth of output (percentage per annum)
	Total fixed investment	Productive investment	
Norway	9.8	7.0	3.0
Denmark	7.3	5.4	2.3
United Kingdom	6.5	4.5	2.2
Sweden	6.9	4.1	2.9
Canada	5.4	3.6	4.0
Netherlands	4.9	3.2	4.5
Belgium	5.0	3.1	2.9
United States[b]	5.0	2.9	3.3
France	4.0	2.7	4.3
Italy	3.6	2.3	5.5
Japan	2.8	1.9	7.9
Germany (Federal Republic)	2.8	1.7	7.4

Source: Table I–2.
[a] Countries are arranged in descending order of the productive incremental capital-output ratio.
[b] 1950–1959.

At the same time, the table suggests some relationship between the productive incremental capital-output ratio and the rate of growth of output, in the sense that, to some extent, high rates of growth and high productivity of new investment seem to go together. Clearly, the more efficiently a given volume of new investment is utilized, the greater will be the consequent flow of output. On the other hand, a high rate of growth is likely to have a beneficial effect upon several of the factors which help to raise the productivity of capital. The atmosphere of dynamism in the economy which accompanies a high rate of growth tends to attract new entrants into the labour force, as noted previously, to accelerate shifts of resources to rapidly expanding sectors, to encourage research and development and in general to promote the best adaptation of capital resources to both current and future demands.

There are clearly considerable differences between countries in the extent to which they have been realizing the potentials which they have for raising productivity and the rate of growth. Such differences have been due to a variety of causes but one of the most important of these has probably been the economic framework provided by government policy. It will be the object of the succeeding discussion to examine the relationship of government policies to investment and growth and, indeed, the participation of the government itself in the process of capital formation.

[15] United Nations, *Economic Survey of Europe in 1959* (sales number: 60.II.E.1), chapter I, page 31.

Investment policies of the government

THE APPROACH TO GOVERNMENT POLICY

The foregoing review of post-war experience has revealed important differences between countries in the level and pattern of investment. It has been pointed out that while these differences may not fully explain the rates of economic growth in various countries, the strategic role of investment in growth is unmistakable. It is through investment that new capacity for greater output is created and new technologies are introduced into the production process. It is through different rates of investment in various sectors that the structure of the economy is moulded and adapted to suit the varying requirements of growth.

As public policy becomes increasingly concerned with economic growth, the question arises as to the extent to which the level and pattern of investment can be, and has in fact already been, influenced by government policy measures.

In a predominantly private enterprise economy, it is not always clear what government policies are most relevant to investment, especially where the main function of public policy is conceived simply as the provision of a general framework within which private investment may be fostered. In that case, policies which are thought to inspire confidence and remove uncertainty are considered the most potent stimulus to investment, while measures designed specifically to influence investment in particular industries or localities may be relatively unimportant. Nor is the impact of a given policy always readily identified. Thus, under conditions of underemployment, policies for the stimulation of consumption may provide the most effective means for bringing a country out of a low-investment trap. On the other hand, under conditions of full employment the same policy may result in the diversion of resources from investment to consumption.

The difficulty of analysing the precise effects of government policies on investment does not imply by any means that policies to stimulate investment are difficult to find. If, in fact, the objective of growth is placed at or near the top of a governmental scale of priorities, the articulation of measures to bring about a high rate of investment should require no great innovation. Some such measures will be examined in a later section.

Perhaps the most striking feature of government economic policies in the post-war period, however, has been that the objective of economic growth, despite frequent mention by most governments, has not always been pursued with consistency of purpose. There has been a multiplicity of objectives, some of them complementing each other, while others have competed or conflicted with one another.

The usefulness of policy analysis sometimes lies not so much in prescribing what objectives should be pursued as in locating feasible ways whereby certain objectives can be attained without unduly sacrificing others. In this process an understanding of the interdependence of various objectives is essential. Thus, a more equal distribution of income may be an unassailable social objective in itself, but an intelligent decision on measures for its realization cannot be made without taking into account the possible impact on growth. For, apart from the fact that the achievement of an adequate rate of growth may be another social objective, it may in time tend to facilitate a more equal distribution of income.

Elements of complementarity or conflict also exist within the area of strictly economic objectives. The adoption by governments of the full employment target since the war is fully consistent with the objective of maintaining a high rate of growth. Indeed, full employment itself presupposes a rate of growth sufficient to absorb gains in productivity and the expansion of the labour force. It is also clear, however, that the full employment objective alone is inadequate as a growth objective, as has been indicated by the low post-war rates of growth in some of the countries which have adhered to this objective. In the first place, full employment is sometimes viewed as little more than an anti-cyclical short-run objective, involving principally the promotion of employment opportunities during recessions. A full employment policy is obviously consistent with a high consumption economy, and may indeed be facilitated by it if consumption is either less volatile than investment or more amenable to policy direction. In addition, a short-run full employment policy need not deal with fundamental problems affecting the structure of the economy or the mobility of resources, the solution of which may be essential for growth. Indeed, measures chosen solely with short-run employment objectives in mind may actually tend, in some circumstances, to delay structural adjustments that are highly desirable in terms of longer-run goals.

If full employment is not adequate by itself as a growth objective, the maintenance of internal or external balance is even less sufficient. There can be no dispute that inflationary excesses may impede growth, or that a well-rounded growth policy will always include fiscal and monetary measures designed to achieve a non-inflationary balance between demand and supply. Yet it cannot be assumed that growth will always be forthcoming once price stability is assured. There is always the danger, in fact, that where price inflation is due to factors operating primarily on costs rather than on demand, policies of general restriction upon the economy may have only limited success in securing price stability —and that only at the cost of depressing the rate of growth.

Preoccupation with the problems of internal balance

has in many cases been prompted at least in part by considerations relating to the external balance. It is well known that there has been a fairly close relation between internal demand and external balance;[16] and the link between internal and external balance has been progressively strengthened as trade restrictions have been eased and convertibility of currencies approached. Several of the western European countries, notably the Scandinavian countries and the United Kingdom, have operated very close to the limit of their resources during much of the post-war period. Since their foreign exchange reserves were extremely low, any temporary increase in their own demand relative to that of other countries—or decline in external demand relative to demand at home—was apt to bring about a foreign exchange crisis, which was rapidly compounded by speculative capital movements reflecting a drop in confidence. Investment was usually among the first items of domestic expenditure to be curbed in such circumstances. While this measure usually had the desired result, sooner or later, it clearly involved a conflict with longer-run goals—even from the point of view of balance of payments equilibrium. For the curtailment of capital expansion had its effect upon long-run exportable supplies as well as upon short-run import demand, and this was crucial, especially where the inability to supply goods for export was reflected in long order books and protracted delays in deliveries. More recently such phenomena have become less common in western Europe, but it is still too soon to say how far this is due to a fundamental improvement in the situation or how far it is merely the accompaniment of a slower rate of growth than had been customary in the earlier post-war years.

It is perhaps inevitable that most other economic objectives have also been predominantly short-run, if only because of the rapid tempo of events and the enormous pressure of day-to-day decisions upon those responsible for policy-making. In retrospect, the post-war years have seen a succession of crises of one sort and degree or another for most industrial countries. Government policies have been preoccupied with the acute problems attendant upon reconversion and readjustment in the immediate post-war years, with the exchange crisis towards the end of the nineteen forties, with the emergency of the Korean conflict, and with rearmament during the subsequent increase in international tension. Interspersed with problems of crisis proportions have been constant threats of inflation and balance of payments disequilibrium. In such circumstances it is not, perhaps, surprising that the objective of growth has often been relegated to the background.

It is true that official statements by governments stressing the need to encourage investment are not difficult to find. Yet consistent policies for the promotion of investment have been comparatively rare. Few governments have been prepared to take a definite stand on the relative emphasis to be placed on investment as compared with consumption. Meanwhile, measures to promote investment frequently coexist with other measures which tend to discourage it.

If there have been few deliberate and consistently maintained government policies for investment, this does not mean that governments have had no *de facto* investment policies. The weight of the government in the economy is so great, and the impact of its decisions is so far-reaching, that investment is inevitably much influenced by the government, whether intentionally or not. Perhaps the outstanding example of a policy whose effect on investment has hardly been intended is the stimulus to agricultural investment resulting from government support of farm prices at high levels. In fact, the stimulus to investment has been so strong that deliberate measures for reducing production, such as acreage restrictions, have frequently been frustrated.

Despite the absence of clearly defined governmental investment policies in many countries, it is possible to discern certain general tendencies and point to possibilities for future action. The approach to governmental investment policy in the centrally planned economies is to devise a comprehensive programme in which the exact level and pattern of investment over a number of years and the methods of implementation are set out in full. This approach is obviously not applicable in the private enterprise countries where a large share of investment remains under the control of the private sector. The closest approximation to such comprehensive programmes is to be found in the immediate post-war years, and during the Korean conflict, when investment in particular sectors in a number of countries had to be restrained and various priorities were established and enforced by systems of direct controls. Such direct controls were regarded as temporary expedients to be removed as soon as emergency conditions were over.

Comprehensive long-term investment programmes have been formulated in a number of countries, notably in France, Italy and Japan. These, however, are largely in the nature of desirable or feasible targets for policy reference rather than definite operative programmes with the full force of administrative implementation. The main advantages of such long-term programmes have been that they have helped to give a sense of direction to long-term policies and to enhance the flexibility of short-term policies; they have been instrumental in providing a general setting for expansion and specific adjustments for correcting sectoral imbalance.

The value of comprehensive long-term programmes in clarifying and guiding the direction of policy stems from the fact that it obliges the policy-maker to look forward beyond immediate daily requirements and to come face to face with the need to determine priorities within a multiplicity of plausible targets. It is some-

[16] See the evidence presented in United Nations, *World Economic Survey, 1956* (sales number: 1957.II.C.1), pages 43 to 53.

times feared that such a programme may imply a high degree of government control, and conversely, that its usefulness may largely be limited to cases where government control is pervasive. This probably explains why the interest in comprehensive long-term programmes has not been more widespread and why interest in fact waned during the nineteen fifties in some countries as measures of direct control had already been largely discarded. It is evident, however, that a comprehensive long-term programme does not in itself necessitate any particular degree of government control and that it is instead compatible with a variety of political and social assumptions. The consistency of such a programme with the workings of a predominantly private enterprise economy, and even with a liberal orientation of policy, has been amply demonstrated by the French and, in particular, the Italian and Japanese cases.

The usefulness of long-term programmes, whether comprehensive or not, to increase the flexibility of short-term policies is no doubt less apparent. A common concern has in fact been that long-term targets may become obsolete rapidly as time passes. Some of the projections made in the Scandinavian countries, as well as elsewhere, during the early post-war years, have deviated so far from subsequent events as to arouse the gravest doubts regarding the practical use of such exercises. This experience points clearly to the need for constant review of long-term targets as has, indeed, been stressed by the French programme. However, if the uncertainty of the future precludes rigid adherence to a predetermined programme, it does not necessarily provide an argument against the formulation of comprehensive long-term programmes as such. Indeed, such programmes can be used to remove part of the uncertainty surrounding the future if any degree of success at all is achieved in their implementation. In a more positive way, a long-term programme may actually contribute to the flexibility of policy instruments, and may constitute a prerequisite for the successful implementation of short-term programmes. The use of public investment for stabilization purposes, for example, is beset with the difficulty that while it is possible to curtail such investments, it is often impossible to augment them at short notice when required. The selection of appropriate projects, the actual preparation of blueprints, and the setting up of administrative machinery are usually time-consuming. Delays of this sort could be avoided at least to some extent by advance programming. This principle has been recognized particularly in the Austrian long-term public investment programme of 1954 to 1963.

In so far as a long-term programme usually postulates a certain rate of growth,[17] it tends to provide a favourable general setting for expansion. This general setting is more than a purely passive factor; it may help to raise the sights of all concerned. Owing to the interdependence of the economy, a programme for expansion in one sector presumes certain rates of expansion in others. The consultations which this interdependence brings about, and the quest for consistency by public officials and private businessmen alike—as in the formulation of the French programme—are likely to exert a favourable influence upon the rate of growth. This influence will be all the greater the more seriously the private sector regards the intentions of the government; where the government undertakes vigorous implementation of the programme, the private sector will not be slow in reacting, and may even try to anticipate the impact of government policy, thereby stepping up the rate of growth even before government measures have begun to take effect.

To the extent that expectations are nevertheless imperfect, imbalances or bottlenecks may, of course, develop. The speedy discovery of such imbalances may provide the occasion for new policy measures: the shifts of priorities among different sectors in the successive French and Italian programmes are to be understood in the light of the need for changing structural adjustments in a growing economy.

Closely related to the system of comprehensive long-term programmes is the technique of programming by national budgets as practised in the Scandinavian countries and the Netherlands. Here the emphasis has clearly been short-term. This has partly been the result of the sensitivity of these countries to external forces, the expansion of investment being constantly subjected to constraint for balance of payments reasons. Indeed, because of this preoccupation with short-term considerations, attention has often focused on areas other than investment. In the Netherlands, for example, problems of short-run stability have been handled through a large variety of policy measures affecting many sectors of the economy, based upon a detailed analysis of a quantitative model.

The main advantage of the national budget approach is the explicit recognition of the proper function of the budget as an instrument of policy. As a result, budgets

[17] The annual rates of growth contemplated in the long-range economic plans or programmes in France, Italy and Japan and the rates realized were as follows:

Country and period	*Rate of growth of gross domestic product (percentage per annum)*	
	Target	*Realized*
France		
1949 to 1952	4.8	5.0
1952 to 1957	4.5	7.5
1956 to 1961	5.0	3.4 (1956 to 1959)
Italy		
1954 to 1964	5.0	5.4 (1954 to 1958)
Japan[a]		
1954 to 1960	5.0	8.3 (1954 to 1959)
1957 to 1962	6.5	8.3 (1957 to 1959)

[a] Fiscal year beginning 1 April.

have largely been determined by the requirements of policy objectives rather than by age-old rules of thumb. Furthermore, an attempt has been made to quantify the application of policy measures, although the determination of interactions in the economy on the basis of existing data is necessarily subject to a large degree of uncertainty.

The absence of comprehensive long-term investment programmes in most industrial countries has not precluded a more modest approach to investment policy, especially where the development of particular regions or industries is concerned. As is well known, even in highly developed countries there exist some regions which are under-developed or depressed. The rationale of policies to assist such regions or industries involves much more than the need to tide over temporary local difficulties. In the first place, an under-developed region is not synonymous with a region barren in natural resources. The history of the development of the west in Canada and the United States is a familiar reminder of this point. It will also be recalled that deliberate policies by governments to assist in providing a network of transport and other facilities played an important role in this development. In addition, the development of certain natural resources may require an integrated approach such as only a government is in a position to provide. Thus the development of the Tennessee Valley, the St. Lawrence River and the Rhône Valley proceeded far beyond normal administrative boundaries and embraced a multiplicity of functions including flood control, irrigation, water supply, power generation, transportation and soil conservation.

Most regional development programmes have not, however, been motivated primarily by the existence of specific untapped or under-developed natural resources. Of greater concern has been the high degree of concentration of population and industry in certain cities and surrounding areas, combined with deterioration and decay in other parts of the country. It has been recognized that a better balanced economic development may not be forthcoming without deliberate efforts to make the declining areas attractive to investment. At the same time it has become apparent that resources should not be spread too thinly throughout entire regions; and that an effective regional strategy may therefore require the establishment of a number of new centres or "poles" of development, as they have become known in France, each sufficiently strong and dynamic to provide a focal point of expansion for its particular area. The great emphasis on the development of the south of Italy is an example of such efforts in regional development, as is the creation of development zones in France. In somewhat more modest form, the establishment of development areas in the north-west of Belgium, in the less industrialized regions of the Netherlands, in the north in Norway, and in areas with relatively high unemployment in the United Kingdom, provides further illustrations of this approach.

In analogous fashion, programmes for the development of particular industries are often guided by the concept that not all industries develop equally, but that some particular industries must lead the way. On the other hand, a case for government intervention may be made out on the grounds of exceptional depression in particular industries.

Widespread recognition has been given to the role of government in the development of "social overhead" facilities or "infrastructure". Mention has already been made of the strategic role of the government in Canada and the United States in initiating a strong impulse to economic expansion by providing basic facilities during the earlier phases of development. Even today, such new channels of commerce as the flow of Canadian iron ores in large quantities to mills in the United States would not have been economical without the facilities opened by the St. Lawrence Seaway. One advantage of government development of social overhead facilities is that it becomes possible to look ahead and, if necessary, to plan deliberately for excess capacity. This may be more economical in the long run especially when the rate of growth is expected to be rapid. Thus, it is not uncommon to design a bridge with explicit allowance for future growth of traffic or a water supply system capable of being adapted to meet the growing demands of urbanization. Careful planning of urban sites and traffic arteries in anticipation of growth may save great waste in relocation and demolition in the future.

The contribution to growth through the development of social overhead facilities should, therefore, be viewed in the light of the strategic forces of propulsion thereby generated for the economy as a whole. In this connexion it should be noted that the relatively high capital-output ratios usually reported for such investment do not in any way imply any inefficiency in contributing to the growth process and should certainly not be used as an argument for assigning a low priority to them in a development programme. The availability of adequate basic facilities may make all the difference between high and low productivity in other industries.

In practice, the provision of such facilities has often been viewed as highly postponable and has had to make room for other claims upon resources, notably during the Second World War and the Korean conflict, and even during periods of inflationary pressure or balance of payments difficulties. Because of the many crises of one type or another which countries have had to face during the past thirty years, there has been a general tendency to restrain social overhead investment. As will be indicated further below, the time may now have arrived when the opportunity of reduced pressure upon resources could be utilized to encourage such investment with a view to the promotion of growth for the economy as a whole.

If government strategy is concentrated on the provision of basic facilities, it is on the assumption that

other industries will more or less take care of themselves when the general framework is favourable. Some governments, however, have gone beyond this to promote the development of certain manufacturing industries frequently identified with the dynamic process of growth. These are the industries which have been most closely connected with modern technology and which have experienced high rates of growth in output and productivity. Despite the high level of industrial development already achieved in western Europe, a number of countries such as Denmark, Italy, the Netherlands and Norway have continued to view industrialization as a pillar of developmental policy, and have introduced industrial research and training programmes, special subsidies, tax reliefs and other measures to that end.

The long-run justification for pouring resources into declining industries may be less apparent. Even here, however, it cannot be assumed that investment in such industries will always be wasteful, especially if one of the causes of decline is a lack of new investment. This is akin to the problem of depressed areas discussed previously. Thus the competitive position of railways cannot be restored or strengthened without modern equipment; and similar considerations apply to the coal industry in Belgium or the textile industry in the United Kingdom. Programmes for the revitalization of these industries have, therefore, inevitably involved large-scale investments alongside measures to reduce over-all capacity, where necessary.

Thus far the discussion has dealt with the general contours of governmental investment policy and particularly the similarities and differences in broad approach to such policy adopted by various governments. A closer examination of investment policy, however, requires separate discussion of the public and private sectors of the economy, since the considerations applying to each are rather different. While the government is in a position to channel resources to investment in either sector, the government must, in influencing private investment, rely heavily on inducements and incentives rather than on detailed directions such as are possible in the public sector.

The following discussion will deal first with policies affecting public investment in general government as well as in public enterprises;[18] here the scope of the subject is clear. The scope of public policies affecting private investment, on the other hand, is more difficult to define. As mentioned above, it is not necessarily those measures which are designed to affect investment directly that are the most significant. For example, government purchases of current goods and services inevitably affect the size and direction of private investment. In particular cases, such as the aircraft industry, most of the product line and design may be dominated by the government. Moreover, the list of government policies which may have a significant impact on investment may be extended to include the whole complex of government activities. At the same time, the impact of particular policies can be isolated only with the greatest difficulty—if at all. The following discussion will concentrate attention on a few government policies which are fairly directly related to investment in the long run and which are likely to be considered by governments as possible instruments if an active policy to promote or redirect investment is pursued.

PUBLIC INVESTMENT AND POLICY

In the majority of industrial countries the share of the public sector in total fixed investment amounts to approximately one-third, although in Sweden and the United Kingdom it is in the region of 40 per cent and in the United States under 20 per cent, as shown in table 1-9. The share of general government varies from 10 to 17 per cent; and the share of public enterprises has a considerably larger range, being less than 3 per cent in the United States, and over 20 or 30 per cent in France, Sweden and the United Kingdom.

There appears to be no systematic association between the share of the public sector in investment and the growth rate of total product or total investment; nor does a high share of public investment in total investment imply a high ratio of total investment to total output.

The relationship of public capital formation to public consumption expenditures is shown in chart 1-4.[19] This ratio generally ranges from one-third to one-half, although it is less than one-sixth in the United States and as high as four-fifths in Norway. The fact that those countries where public investment is large, such as Sweden and the United Kingdom, do not necessarily show a high ratio of public capital expenditure to public current expenditure is due to the high level of expenditure in the latter category as well.

A comparison with pre-war figures suggests a general long-term tendency for the share of the public sector in fixed investment to increase, as may be seen in table 1-9. In countries such as France and the United Kingdom where there has been substantial nationalization of in-

[18] The definition of the public sector used here corresponds to that in the national accounts and includes general government, government enterprises and public corporations. General government comprises government agencies, whether central, state or local, which undertake functions other than trading activities; the latter are included in government enterprises. Public corporations include corporations formally established by public law as well as private corporations under the control of public authorities. For the purpose of the present discussion government enterprises and public corporations are grouped together under public enterprises. For further details, *see* United Nations, *A System of National Accounts and Supporting Tables* (sales number: 59.XVII.11), pages 10 to 11.

[19] Public consumption represents current expenditures on goods and services (not including subsidies and current transfers) undertaken by general government. The same chart also shows for purposes of comparison the ratio of public fixed capital formation to general government current expenditures (including subsidies and current transfers) and the ratio of general government fixed capital formation to general government consumption or current expenditure.

Chart 1-4. Ratio of Public Investment to Public Current Expenditures

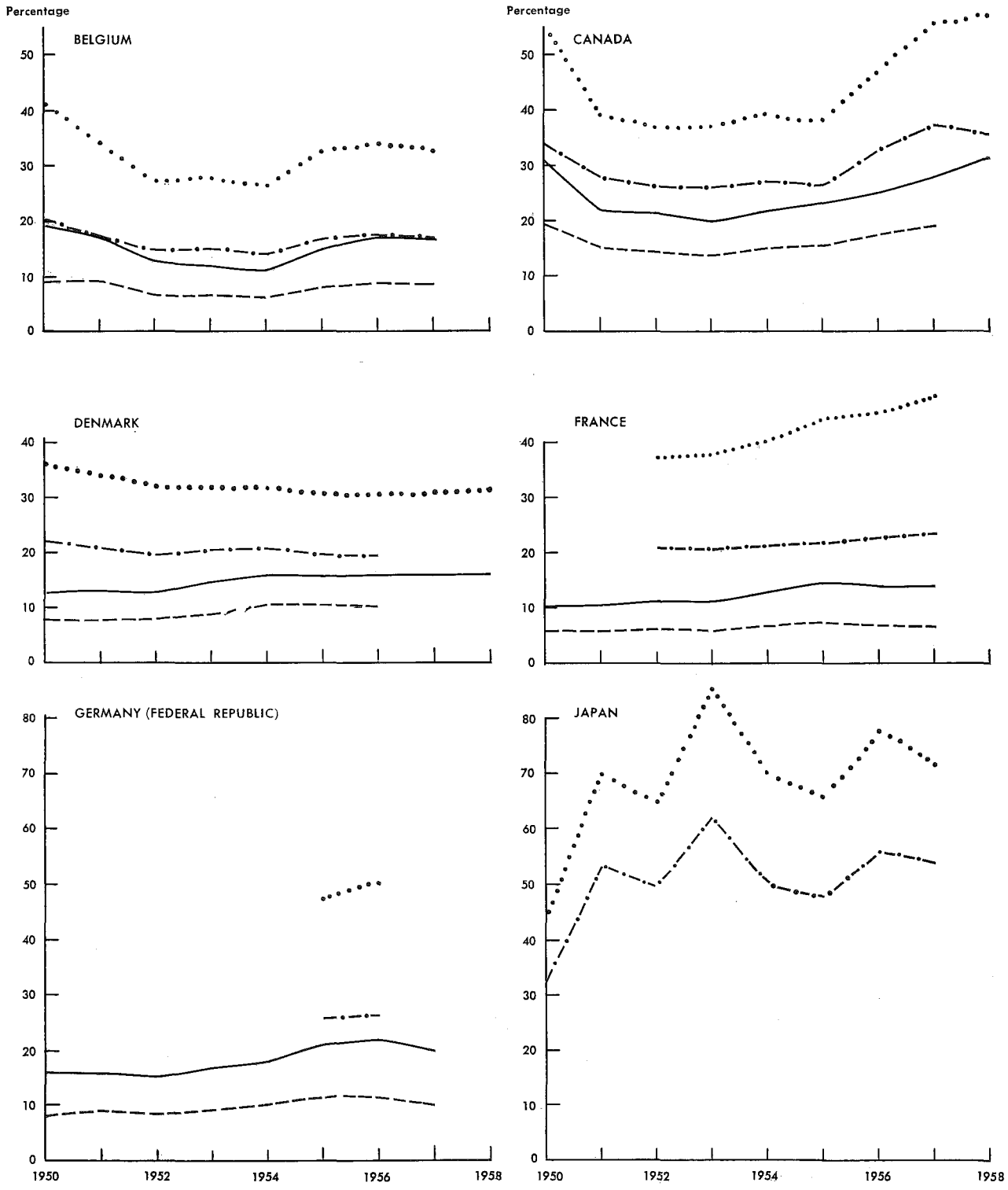
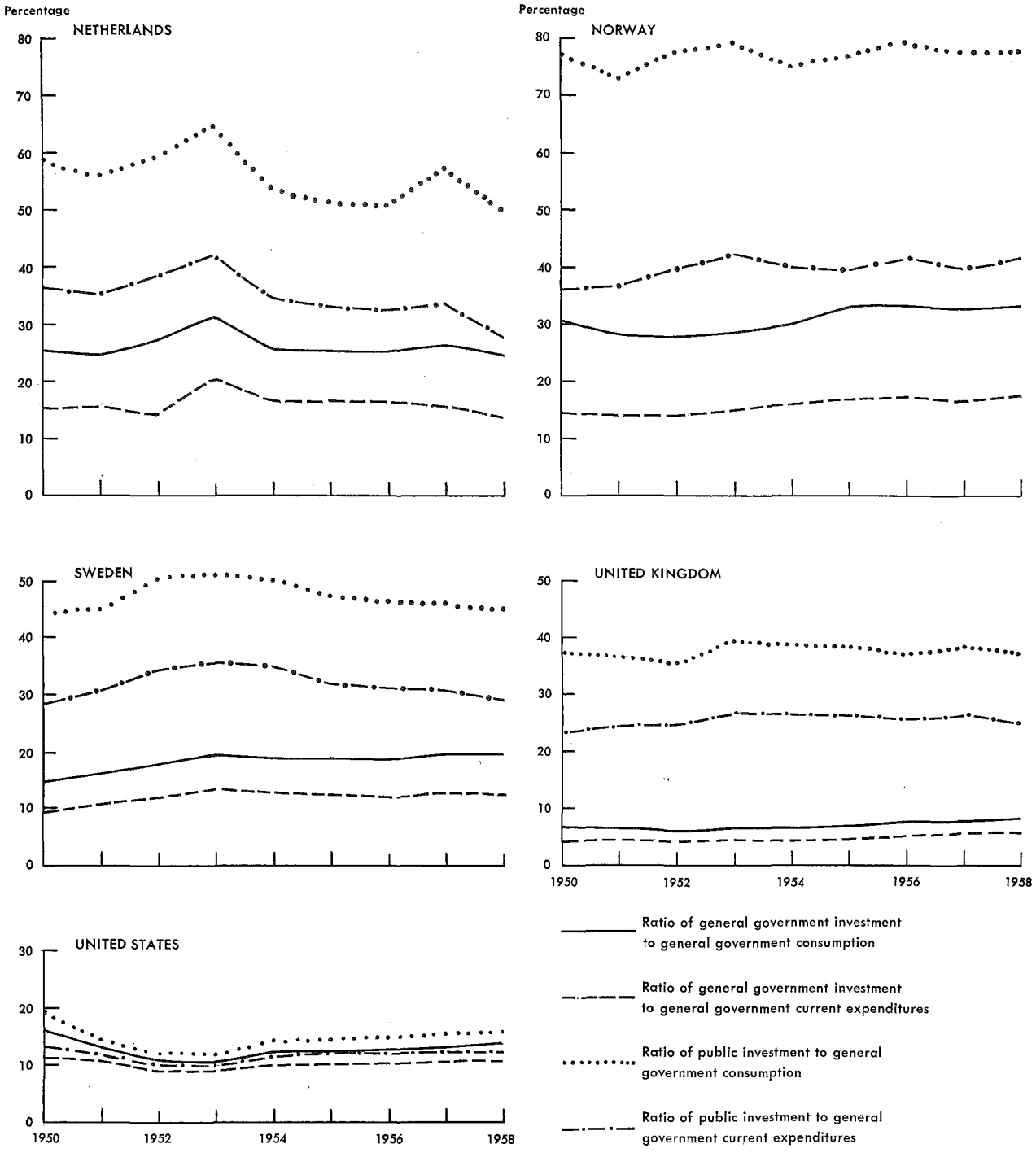


Chart 1-4. Ratio of Public Investment to Public Current Expenditures (*continued*)



Source: Table 1–10.

Table 1-9. Share of the Public Sector in Gross Domestic Fixed Investment
(Percentage)

Country and item	1938	1950	1951	1952	1953	1954	1955	1956	1957	1958
Belgium										
Public sector, total	...	*25.9*	*26.6*	*24.0*	*24.4*	*21.5*	*23.5*	*22.1*	*19.9*	*21.3*
General government	...	12.0	14.1	11.3	11.0	9.4	11.2	11.1	10.4	9.9
Public enterprises	...	13.9	12.5	12.7	13.4	12.1	12.3	10.9	9.5	11.4
Canada										
Public sector, total	*30.1*	*25.3*	*24.0*	*25.1*	*24.1*	*26.2*	*24.6*	*25.8*	*28.7*	*31.7*
General government	21.7	14.3	13.3	14.2	12.8	14.5	14.7	13.7	14.6	17.2
Public enterprises	8.4	10.9	10.8	10.9	11.3	11.6	9.9	12.1	14.1	14.6
Denmark										
Public sector, total	...	*22.2*	*21.9*	*21.1*	*21.5*	*21.7*	*23.1*	*23.3*	*22.8*	*24.0*
General government	...	8.1	8.5	8.5	9.8	11.1	12.3	12.5	11.9	12.2
Public enterprises	...	14.2	13.4	12.5	11.7	10.6	10.8	10.8	10.9	11.8
France										
Public sector, total	*16.0*	...	...	*34.1*	*36.8*	*36.4*	*35.0*	*36.9*	*36.1*	*34.3*
General government	10.0	9.0	8.8	10.7	11.1	11.7	11.8	11.9	11.2	9.6
Public enterprises	6.0	...	...	23.5	25.6	24.7	23.3	25.1	24.9	24.7
Germany (Federal Republic)										
Public sector, total	...	...	...	...	...	...	*29.1*	*29.1*	...	...
General government	...	12.7	12.9	13.0	13.0	12.8	13.1	13.1	12.7	...
Public enterprises	...	...	...	...	...	...	16.0	16.0	...	...
Italy										
Public sector, total	...	...	...	...	...	*35.4*	*31.8*	*29.6*	*29.2*	...
General government	7.8	11.5	11.5	13.6	15.6	14.2	13.1	10.9	10.8	12.7
Public enterprises	...	...	...	...	...	21.2	18.7	18.7	18.4	...
Japan										
Public sector, total [a]	*16.4*	*29.6*[b]	*32.4*	*35.8*	*38.8*	*38.3*	*40.9*	*33.7*	*28.7*	*31.9*
General government	...	...	...	...	...	27.5	28.0	21.3	17.0	...
Public enterprises	...	...	...	...	...	10.8	12.9	12.4	11.7	...
Netherlands										
Public sector, total	...	*36.5*	*38.2*	*43.7*	*43.5*	*36.7*	*33.0*	*30.7*	*34.0*	*31.7*
General government	16.7	15.9	16.9	16.2	21.3	17.4	16.0	15.4	15.7	15.7
Public enterprises	...	20.6	21.4	27.4	22.3	19.3	17.0	15.2	18.4	16.0
Norway										
Public sector, total	*20.2*	*21.2*	*21.7*	*23.5*	*24.9*	*23.0*	*21.7*	*23.9*	*23.5*	*22.9*
General government	10.0	8.4	8.3	8.4	9.0	9.2	9.5	10.1	9.9	9.8
Public enterprises	10.2	12.7	13.4	15.1	15.9	13.8	12.2	13.8	13.6	13.1
Sweden										
Public sector, total	*24.4*[c]	*33.0*	*34.7*	*41.4*	*42.0*	*40.2*	*39.9*	*39.3*	*40.4*	*38.8*
General government	15.6[c]	11.2	12.5	14.7	15.9	15.2	16.0	15.7	17.2	17.0
Public enterprises	8.8[c]	21.7	22.2	26.7	26.1	25.0	23.9	23.6	23.2	21.8
United Kingdom										
Public sector, total	*30.3*	*46.5*	*49.8*	*52.5*	*53.2*	*49.2*	*45.0*	*43.1*	*42.4*	*41.1*
General government	10.7	8.1	9.2	8.9	8.7	8.3	8.0	8.5	8.7	9.0
Public enterprises	19.7	38.4	40.6	43.6	44.4	40.9	37.0	34.6	33.7	32.1
United States										
Public sector, total	*30.6*	*13.2*	*14.6*	*15.1*	*14.8*	*15.9*	*14.7*	*15.0*	*16.1*	*18.7*
General government	26.1	11.6	12.8	13.3	13.0	14.0	12.8	12.7	13.8	16.2
Public enterprises	4.5	1.6	1.8	1.7	1.8	1.9	1.9	2.2	2.3	2.5

Source: United Nations, *Yearbook of National Accounts Statistics*, various issues, predecessor publications; and national sources. For definition, *see* footnote *18*.

[a] Includes increase of stocks of government enterprises and public corporations for 1950 and stocks of local government enterprises for 1951 to 1957.

[b] Fiscal year beginning 1 April.

[c] Fiscal year beginning 1 July.

dustries, this tendency is easily understood. In countries where there has been little or no nationalization, the trend is less certain. However, in view of the fact that the share of the public sector is rather sensitive to the level of business activity, data for the nineteen thirties cannot be regarded as typical of the pre-war period, having been strongly influenced by a low level of private investment and a high level of public works for relief purposes. The long-term tendency for the public sector's share in investment to increase is, therefore, revealed for Canada and the United States only when the figures are carried back to the nineteen twenties. In Japan, on the

other hand, the rise in the share since 1938 reflects the fact that public investment was relatively low in the late nineteen thirties as compared with the nineteen twenties.

During the post-war period the share of the public sector in investment has generally been fairly stable or in some cases has declined.[20] The share of the general government alone has been stable, on the whole, except in Belgium, where it has declined, and in Denmark and Sweden, where there have been considerable increases. A notable case of a recent decline in the share of public investment is in the United Kingdom where a downward trend is visible after a peak was reached in 1953. This was accompanied by a decline in the role of public enterprise, especially in residential building.

From the point of view of public policy, a relatively large share of the public sector in total investment implies a corresponding degree of responsibility for direct investment decisions. This responsibility is, however, usually a divided one, and many different authorities may be involved. The degree of central government control over investment decisions by local authorities and public enterprises varies in accordance with institutional arrangements as well as with personality factors. On the other hand, government control may extend well beyond the public sector especially where public financing is involved; a striking example is housing, where the government may exercise major influence through provision of finance, even though public construction may be negligible.

The distribution of investment between the central government and the local authorities is shown in table 1-10. In a number of countries where the central government is dominant, the central government share

[20] The increase in the share shown in some countries in 1958 was due to the decline in private investment and larger public works accompanying the recession in that year.

Table 1-10. Share of Central Government in Public Gross Domestic Fixed Investment
(Percentage)

Country and item	1938	1950	1951	1952	1953	1954	1955	1956	1957	1958
Belgium[a]										
Public sector, total	...	57.2	53.5	53.7	51.0	45.9	46.3	56.5	...	...
Canada										
Public sector, total	31.6	23.7	31.0	36.4	33.9	29.7	26.9	30.4	32.3	32.4
Denmark[b]										
General government	...	22.3	20.2	13.5	17.0	17.4	14.5	15.8	19.7	...
France										
Public sector, total	...	...	...	...	...	40.6	42.3	41.8	41.6	...
General government	50.0	...	...	...	31.4	23.6	27.0	28.8	25.3	...
Public enterprises	...	...	...	...	...	48.7	49.8	48.6	49.0	...
Germany (Federal Republic)										
Public sector, total	...	10.9	14.4	12.6	12.5	10.4	12.3	13.5	13.8	...
Italy										
Public sector, total	...	...	...	...	...	...	...	...	75.0	...
Japan										
Public sector, total	77.7	59.8	67.8	65.0	64.0	57.0	63.4	63.9	63.3	...
General government	...	...	...	...	...	46.5	53.1	50.7	47.9	...
Public enterprises	...	...	...	...	...	84.3	85.7	86.6	85.6	...
Netherlands										
General government	...	37.6	39.4	48.2	34.4	36.5	32.8	32.5	33.6	37.2
Norway[c]										
Public sector, total	54.4	47.5	50.3	49.6	48.1	51.0	45.5	47.9	48.4	50.1
General government	40.1	32.1	32.1	35.5	36.1	...	...	...	...	...
Public enterprises	68.3	57.7	61.6	64.4	68.2	...	...	...	...	...
Sweden										
Public sector, total[d]	50.3	42.5	41.5	47.1	45.8	41.0	38.8	41.4	39.3	41.2
General government[d]	32.0	32.3	35.9	38.1	38.7	34.3	26.4	31.5	31.8	31.1
Public enterprises[d]	82.5	46.9	43.8	51.4	49.7	44.4	45.7	47.5	44.0	48.3
United Kingdom										
Public sector, total	...	48.5	49.9	49.3	50.0	53.4	56.8	56.8	58.8	61.8
General government	...	26.1	23.7	22.1	22.0	23.1	21.9	20.6	22.4	26.0
Public enterprises	...	53.2	55.8	54.9	55.6	59.6	64.4	65.7	68.2	71.9
United States[a]										
Public sector, total	19.5	18.1	18.2	19.1	16.7	11.2	8.8	9.5	11.0	12.5

Source: United Nations Division of General Economic Research and Policies.

Note: Figures represent the percentage share of central government in gross fixed capital formation in the public sector, general government or public enterprises, when available.

[a] Construction only.

[b] Fiscal year beginning 1 April; excluding road construction.

[c] Including repair and maintenance.

[d] Fiscal year beginning 1 July.

ranges from about 40 to 60 per cent—or even more—of fixed investment in the public sector. Where the form of government is federal, the share is lower, being about one-third in Canada and about one-eighth in the United States and the Federal Republic of Germany. However, these proportions understate the role of the central government, since in most countries a sizable share of local capital expenditure has been financed by the central government—frequently on conditions that certain specific requirements were fulfilled. In a large number of cases prior approval by the central government is necessary even when the financing is through the open market. In the case of the United States, although state and local government financing of capital expenditure in the open market is not controlled by the federal government, the severe limitations on debt generally imposed by state and local constitutions and the need to be competitive with other localities as regards tax rates provide a strong incentive to obtain federal grants for capital financing.

The pattern of public investment varies greatly among countries, as may be seen in table 1-11 for a number of countries for which data are available. Differences in the distribution reflect largely the relative share of public enterprises. A notable feature of the pattern is that even in those countries where the relative share of public enterprise is high the public sector has not gone into industry to any great extent, beyond public service or basic industries such as transport, communications and power and water.

The relative weight of public investment is also reflected in the share of such investment by types of capital goods, shown in table 1-12. The share of government in construction is much larger than in equipment,[21] owing to the importance of public investment in roads and buildings. In some countries, the government has a very large share in residential construction. The role of the government in housing is nevertheless understated since public financing or subsidizing of residential construction is usually more important than direct public construction.

[21] If military construction were included in public investment the government share in construction would be shown as even larger. In some cases it has not been possible to exclude all military expenditure from public investment.

General government

The general government sector provides for all the basic public services which have traditionally been regarded as falling within the proper scope of government, as well as certain others added more recently. The pattern of general government investment—the relative importance of general services, community services and social services[22]—is presented in table 1-13. The share of general services is comparatively small in most countries, while community services predominate. In a number of cases community services have accounted for more than one-half of general government investment, and have reached as high as seven-tenths in the Netherlands, reflecting the significance of road-building and waterways. In the United Kingdom, the share of community services appears to be exceptionally low despite a noticeable tendency to increase during the nineteen fifties; the main explanation appears to be the low level of road-building in that country.

While community services such as fire protection, water supply and sanitation generally fall within the classical functions of government and are largely undertaken by local authorities, public policies for road-building are subject to considerable controversy. This is because road transport is in keen competition with other modes of transport, particularly railways. In most western European countries and Japan, where rail transport is publicly owned but road transport remains in private hands, the question arises whether the public sector has a vested interest which might prejudice in-

[22] General services include general administration, defence, justice and police; community services include roads and waterways, fire protection, water supply and sanitation; social services include education, health, social security and special welfare services. For details, *see* United Nations, *A Manual for Economic and Functional Classification of Government Transactions* (sales number: 58.XVI.2), pages 37 to 40; 144 to 156.

Table 1-11. Pattern of Public Investment, 1950-1958
(Percentage of public gross domestic fixed investment)

Country	*Housing*	*Schools*	*Hospitals*	*Other social buildings*	*Transport*	*Communications*	*Power and water*	*Other industries*
Denmark	3.6	12.4	5.8	...	29.2	13.9	22.7	1.6
Japan	4.0	5.2	0.3	...	40.0	8.8	10.0	8.5
Norway[a]	...	7.5	3.8	1.9	30.8	6.1	35.4	9.8
Sweden	16.2	10.0[b]	...	6.1[c]	20.4[c]	7.7[c]	14.6[c]	4.6[c]
United Kingdom	31.3	6.9	1.7	...	—— 17.4 ——		25.1	10.0
United States	5.1	21.0	4.4	...	37.4	—— 12.9 ——		2.5

Source: United Nations Division of General Economic Research and Policies.

Note: Figures represent arithmetical averages for the years 1950 to 1958, except for Japan where figures refer to the fiscal year beginning 1 April 1957. Percentages do not necessarily add to 100 because of incomplete information.

[a] Including repairs and maintenance.
[b] Schools and churches.
[c] Excluding local government enterprises.

Table 1-12. Share of Public Investment in Selected Types of Capital Goods
(Percentage)

Country and item	1938	1950	1951	1952	1953	1954	1955	1956	1957	1958
Belgium										
Construction	...	33.2	35.8	34.4	31.4	29.6	31.3	32.0	32.2	...
Machinery and equipment	...	16.1	15.5	14.5	17.0	16.9	23.0	16.8	17.3	...
Canada										
Construction	...	33.0	33.8	37.1	33.5	32.9	32.9	34.3	37.1	37.3
Residential	...	6.1	6.0	5.4	3.4	1.5	1.7	1.8	2.7	2.2
Machinery and equipment	...	14.6	17.0	17.5	17.6	19.4	13.8	15.1	16.0	19.8
Denmark										
Buildings	...	20.5	20.6	20.7	21.0	21.8	24.7	23.4	23.1	24.3
Residential	...	6.7	6.2	4.3	3.8	4.4	5.2	5.2	4.3	5.1
Germany (Federal Republic)										
Construction, residential	...	43.9	47.1	43.1	35.3	33.6	27.6	27.0	27.8	...
Japan[a]										
Construction	...	...	...	...	52.8	50.8	50.1	46.8	47.7	49.4
Residential	...	...	...	...	...	...	...	22.6	26.9	24.8
Machinery and equipment	...	...	...	...	19.9	15.8	24.8	17.5	13.8	22.9
Sweden										
Construction	27.0[b]	43.1	46.6	51.9	52.6	50.8	50.4	48.8	50.0	49.0
Residential	1.8[b]	22.5	26.8	25.9	25.4	26.3	25.7	23.9	25.1	22.8
Non-residential	52.4[b]	60.1	61.2	68.1	69.8	67.3	66.6	65.4	66.8	65.8
Machinery and equipment	19.1[b]	19.0	18.7	25.4	24.2	21.7	18.0	21.8	22.8	20.1
United Kingdom										
Construction	...	66.2	69.3	70.5	68.6	62.0	55.6	52.5	53.1	51.3
Residential	...	84.6	84.6	79.8	73.0	65.4	58.5	54.8	53.0	47.0
Non-residential	...	53.1	57.9	62.3	63.8	58.7	53.3	50.9	53.2	53.7
Plant and machinery	...	33.1	40.5	45.3	47.7	45.8	42.9	40.6	37.4	37.7
Vehicles, ships and aircraft	...	27.6	25.6	22.9	23.4	19.9	22.0	25.8	29.2	26.2
United States										
Construction	48.5	21.3	24.1	24.5	24.0	24.3	22.3	23.7	25.6	27.5
Residential	1.7	2.3	4.3	4.5	3.7	2.0	1.3	1.6	2.8	4.3
Non-residential	46.8	31.4	31.6	32.6	30.9	31.6	29.9	28.0	28.6	31.3

Source: United Nations Division of General Economic Research and Policies.
[a] Fiscal year beginning 1 April.
[b] Fiscal year beginning 1 July.

vestment in roads. In the United States, where both rail and road transport are in private hands, the fact that roads are constructed with public money raises the question of veiled subsidies to road transport. Public authorities have, therefore, been increasingly aware of the necessity to have a co-ordinated transport policy.

There is considerable variation in the relative importance of general government investment in social services. In the Scandinavian countries and the United Kingdom the high share of social services has been a result of conscious welfare policies. The expansion of educational and health services in most countries also reflects important demographic changes in the nineteen fifties, notably the relative increase of the school-age population and of the aged.

In contrast with educational services and general and community services for which the public sector has unquestionably taken primary responsibility, the role of the government in health and other social services varies greatly. For example, the decline in public hospital construction in the nineteen fifties in the United States was accompanied by an increase in private construction with the result that the public share declined from over three-fifths to less than two-fifths.

General government investment policy has been very mildly anti-cyclical in character in most countries,[23] as may be seen in chart 1-5 which, however, does not reflect movements within individual years. The principal stabilizing effect of investment policy has come about through the steadiness of general government investment expenditure during recessions, reinforced in some cases by a corresponding stability in the investment of public enterprises. Governments have not, however, relied to any considerable extent upon the anti-recessionary effect of general government investment because such investment usually takes time to be implemented and the post-war recessions have been too short-lived to call for large-scale public works. Anti-cyclical policy during periods of prosperity is less apparent. Since the post-war period has been charac-

[23] For further discussion, *see* United Nations, *Economic Survey of Europe in 1959*, chapter V.

Table 1-13. Pattern of Investment of General Government

(Percentage of gross domestic fixed investment of general government)

Country and item	1938	1950	1951	1952	1953	1954	1955	1956	1957	1958
Canada										
General services	...	...	12.2	12.8	11.3	14.2	15.0	10.8	10.9	11.0
Community services	...	...	45.5	53.3	51.3	53.1	50.0	54.6	55.4	59.3
Roads[a]	...	...	24.0	23.6	24.5	22.8	27.6	32.3	35.3	33.5
Social services	...	...	22.2	17.1	18.4	20.0	22.8	20.7	21.9	19.2
Education	...	...	13.7	10.7	9.9	11.3	13.0	12.4	14.0	11.8
Denmark										
General services	...	...	...	...	...	...	...	...	...	...
Community services	...	39.1	38.4	39.2	41.8	36.1	35.7	40.0	32.9	33.1
Roads	...	...	...	...	...	...	...	...	...	...
Social services	...	42.2	42.5	40.5	39.8	47.9	48.4	43.0	46.4	46.4
Education	...	20.3	21.9	24.1	25.5	30.6	30.3	23.7	24.3	24.5
France										
General services	...	...	...	...	...	18.1	16.3	10.4	15.3	12.7
Community services	...	...	...	...	...	55.4	60.0	57.6	53.7	47.3
Roads	...	...	...	...	...	17.7	18.4	9.2	13.1	...
Social services	...	...	...	...	...	26.1	...	31.9	31.0	40.0
Education	...	...	...	...	...	...	23.8	29.8	...	...
Germany (Federal Republic)										
General services	...	...	...	...	...	...	...	...	...	...
Community services	...	...	39.8	39.8	43.6	46.2	51.9	50.6	...	...
Roads	...	...	...	...	...	...	...	...	...	...
Social services	...	...	39.7	39.9	38.0	35.3	31.3	31.6	...	...
Education	...	...	...	...	...	...	...	...	...	...
Netherlands										
General services	...	...	...	...	...	...	...	...	...	...
Community services	...	68.0	69.4	70.6	73.8	68.7	68.6	72.7	72.9	69.0
Roads	...	...	...	...	...	...	...	...	...	...
Social services	...	...	...	...	...	...	...	...	...	...
Education	...	8.1	8.9	11.5	13.2	14.6	13.7	12.0	13.6	16.3
Norway[a]										
General services	8.4	5.3	5.4	9.8	8.8	7.9	7.7	6.8	6.8	...
Community services	71.1	58.9	57.6	61.2	60.2	58.8	60.5	64.2	63.9	65.2
Roads	...	...	39.6	35.4	34.9	33.7	36.9	35.2	36.6	39.0
Social services	15.5	22.1	23.4	29.8	31.3	35.5	35.5	33.5	35.3	34.0
Education	9.9	13.8	14.3	16.1	18.6	22.2	21.7	19.9	20.8	20.3
Sweden										
General services	...	...	...	...	...	...	...	...	...	...
Community services	37.9[b]	54.5	55.5	51.3	55.0	56.9	61.2	57.7	58.3	59.1
Roads	31.3[b]	29.4	33.9	34.2	35.7	32.3	35.1	33.5	34.4	35.8
Social services[c]	62.0[b]	45.5	44.6	48.7	45.0	43.1	38.8	42.3	41.8	41.0
Education[d]	15.5[b]	26.6	28.1	29.2	27.3	29.5	29.2	25.7	23.3	23.9
United Kingdom										
General services	...	5.1	5.3	8.3	10.0	10.1	8.5	6.9	4.8	3.8
Community services	...	20.3	21.9	23.2	27.5	27.4	27.7	28.2	28.3	33.6
Roads	...	8.0	7.7	7.2	7.5	8.7	11.2	12.6	14.1	19.9
Social services	...	50.7	48.5	49.7	45.5	46.2	47.3	48.5	52.1	49.0
Education[e]	...	37.0	36.7	39.2	36.0	35.6	36.6	39.3	41.7	39.1
United States										
General services	...	...	...	...	...	...	...	...	...	...
Community services	56.1	40.6	37.2	39.0	42.4	47.4	47.5	48.0	47.0	47.1
Roads[f]	49.6	39.5	36.4	38.4	41.4	46.2	46.4	46.9	45.9	45.8
Social services	15.5	34.4	38.1	37.4	34.5	33.8	34.7	33.6	34.6	35.1
Education	10.9	19.7	21.9	22.1	22.4	25.5	28.0	27.3	26.5	24.6

Source: United Nations Division of General Economic Research and Policies.

Note: For definition, *see* footnote *18*. Percentages do not necessarily add to 100 because the residual is not shown.

[a] Including repairs and maintenance.

[b] Fiscal year beginning 1 July.

[c] Including general services.

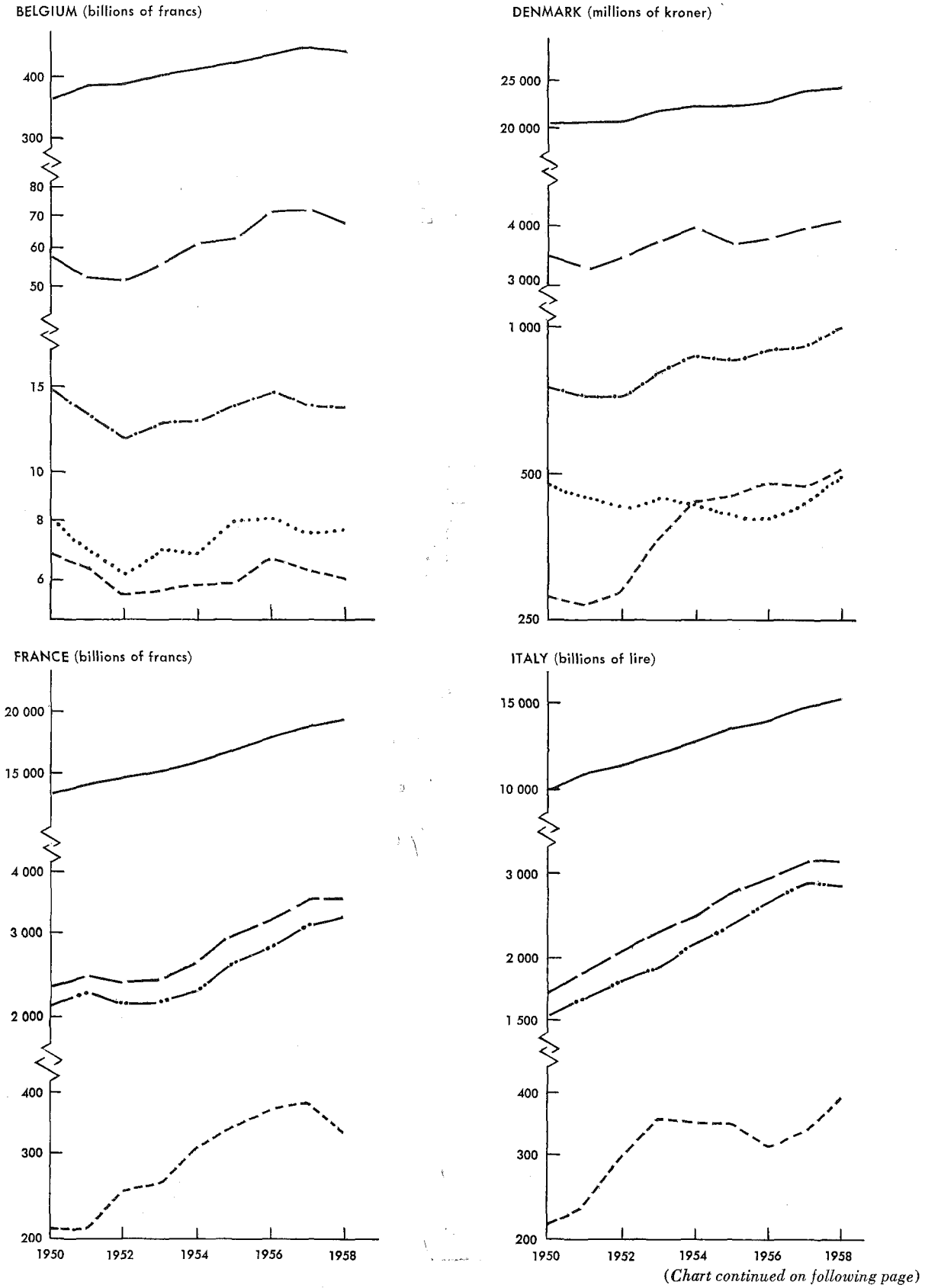
[d] Schools and churches.

[e] Education and child care.

[f] Highways.

Chart 1-5. Movements in Public Investment

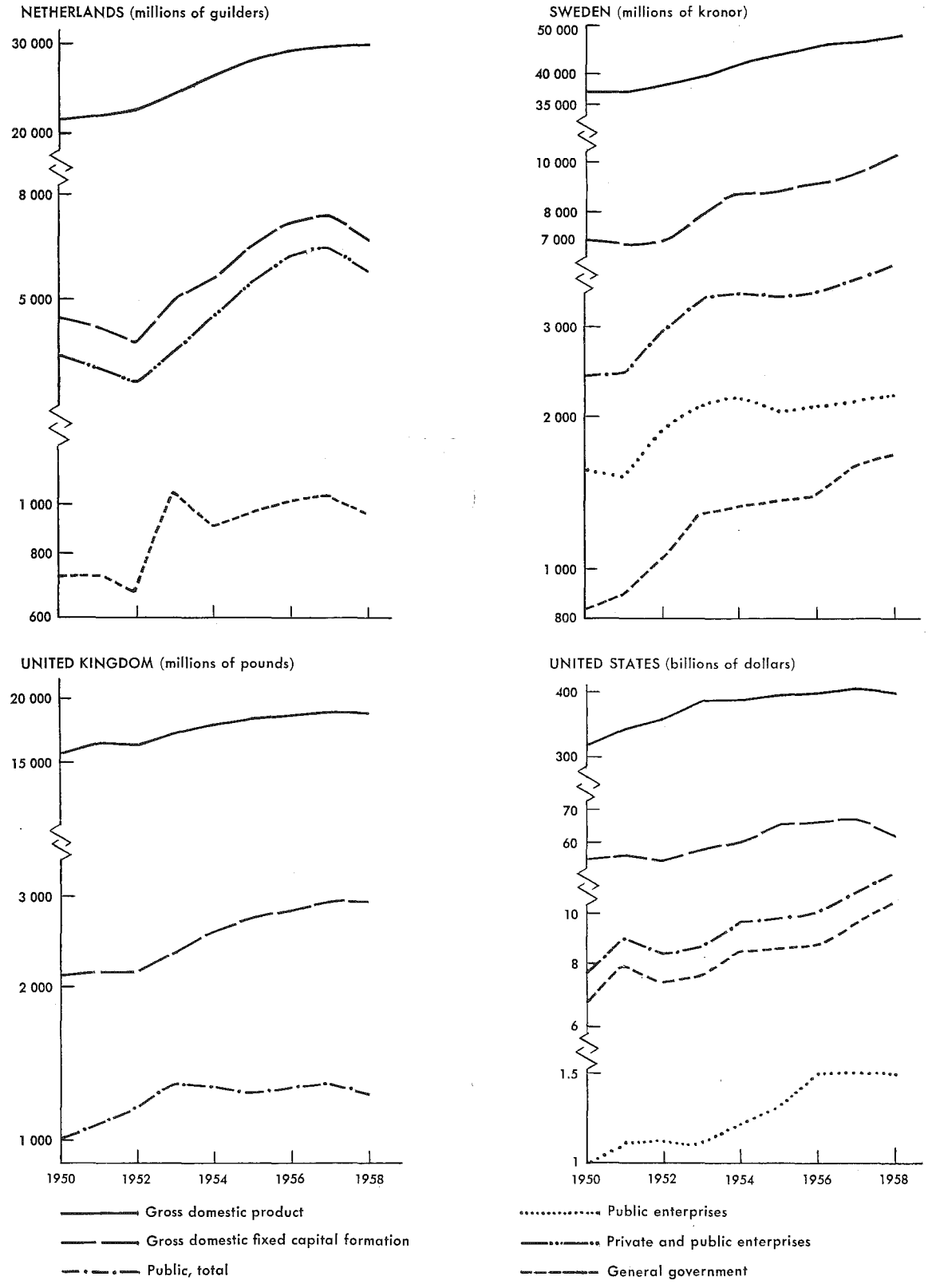
(In national currencies at constant prices; semi-logarithmic scale)



(*Chart continued on following page*)

Chart 1-5. Movements in Public Investment (*continued*)

(In national currencies at constant prices; semi-logarithmic scale)



Source: Table 1-10.

terized by general expansion at high levels of employment, general government investment has been subject to more or less continuous restraints; thus severe measures of curtailment have been applied only occasionally —and then only when an upswing has reached an advanced stage, as in the case of the Netherlands in 1957 and in the United Kingdom a year earlier. The result of the general restraint has, in a number of cases, been a lag in government investment in relation to requirements or social standards as will be pointed out further below.

Public enterprises

The dividing line between general government and public enterprises is often difficult to draw. The difficulty occurs not so much at the conceptual level as in the paucity of detailed data which would enable the various items to be distributed in accordance with accepted definitions. It is nevertheless possible to reach some tentative conclusions on the extent and nature of investment in public enterprises, albeit on the basis of limited information.

In most industrial countries investment in public enterprises has exceeded that in general government, the main exceptions being Canada and the United States. Although public enterprises include traditional trading activities of government departments such as post-offices, the fact that the relative weight of public investment has shifted from general government functions to trading activities represents a departure from classic conceptions of government.

The growth of public enterprises in a number of countries in the post-war years has not, however, originated mainly from ideological grounds. It is true that in the immediate post-war years nationalization was a deliberate public policy in a number of countries and that more recently denationalization in some countries has also reflected a change in political climate. Likewise the small scale of public enterprises in the United States has mirrored the strong sentiment against public ownership. A more significant determinant will, however, be found in pragmatic considerations in most countries. Even in those countries where nationalization was part of a political programme, this did not always mean that the whole of the programme was politically controversial. Generally speaking, the particular conditions of the industries concerned played a crucial role. The nationalization of the coal industry and of the railways in the United Kingdom was influenced by the fact that these had long been sick industries and government intervention in one form or another had therefore been expected. It is also significant that after denationalization of the iron and steel industry in the United Kingdom the government retains a considerable degree of control over the industry through a public board, and that attempts to dispose of certain public enterprises in the Federal Republic of Germany have had to be shelved owing to a lack of purchasers.

The extent to which the government actually controls the investment policies of public enterprises is affected by a complex of factors. In the first place, institutional arrangements are usually highly complicated. Public enterprises may either be directly under the control of government departments, or they may be established as special public corporations or authorities, or as mixed enterprises. At first sight it might appear that departmental enterprises should be the most effectively controlled. Any such distinction is, however, blurred by the fact that special latitude has usually been granted to such enterprises precisely because their functions have been recognized as different from general government functions. This fact is perhaps most clearly illustrated by the establishment in Sweden of trading agencies which, though a part of the civil service, have enjoyed considerable autonomy in management. The principle of autonomy is, of course, even more explicitly recognized in public corporations, but at the same time the principle of public accountability is also stressed. The actual balancing of these two principles varies greatly not only between countries but also between corporations. In the United States the desire to guard against expansion of the power of public corporations has found expression in strict control of their activities. In the United Kingdom, the policies of public corporations have been identified with those of the government. On the other hand, government control in France is diluted by tripartite representation—namely, government departments, employees and consumers—on the boards of public corporations. The fact that public corporations have been created by special enactments helps to explain the individuality of each such corporation, in a given country. This individuality has been further reinforced by the development of conventions and tacit understandings inherited from the past or based on measures introduced by strong personalities.

There is some presumption that the control of mixed enterprise may, on the whole, be weaker than of other forms of public enterprise since government rights may be limited to those exercised as a shareholder. This is particularly the case where public ownership has been inherited from previous régimes, as in the mixed enterprises of Austria, the Federal Republic of Germany and Italy. On the other hand, the influence of private shareholders on broad policies may be purely nominal as in the case of the state monopolies in Sweden.

Another factor influencing the degree of government control is the nature of the industries concerned. To some extent this consideration is related to the institutional arrangements just mentioned. Traditional enterprises such as the postal services are usually organized as departments while industrial enterprises generally take the corporate form. On the other hand, a variety of organizational forms may be found in railways and communications. It is thus useful to examine separately the economic characteristics of the industries concerned. Where public enterprises are monopolies, such as those

running the railways or supplying electricity, government control tends to be relatively strict. Where the industries compete directly with private enterprise, as in the case of Renault in France, public policy has tended to treat them as if they were private enterprises. In this connexion, the treatment of airlines largely as private enterprises, despite substantial domestic monopoly, reflects the importance attached to international competition.

An examination of the pattern of investment in public enterprises, as shown in table 1-14, indicates a high degree of concentration in essential public services, especially in transport and communications, power and water. Most of these industries are monopolistic in character. When they are in private hands, they are inevitably under public regulation or control, as in the case of railways or electric and gas utilities in the United States. In Sweden and especially the United Kingdom, housing has also accounted for a sizable share of investment by public enterprises. Public enterprise investment in other industries is small in most cases; and even where it is fairly significant it is probably influ-

Table 1-14. Pattern of Investment of Public Enterprise

(Percentage of gross domestic fixed investment of public enterprises)

Country and item	*1938*	*1950*	*1951*	*1952*	*1953*	*1954*	*1955*	*1956*	*1957*	*1958*
Denmark										
Housing	...	...	...	...	...	...	...	...	...	...
Transport	...	19.8	19.4	17.8	18.4	22.7	21.6	25.8	23.7	27.5
Communications	...	26.0	26.7	27.5	27.3	28.3	29.9	30.8	25.8	23.9
Power and water	...	49.0	47.6	47.7	46.4	43.4	39.6	37.4	44.2	42.0
Other industries	...	5.2	6.3	7.0	8.0	5.7	8.9	6.0	6.3	6.5
France										
Housing	...	...	...	...	...	...	...	...	...	...
Transport	...	...	...	...	...	...	...	...	...	19.5
Communications										
Power and water	...	...	...	...	...	33.3	33.9	33.5	35.7	42.6
Other industries	...	...	...	...	...	...	...	...	...	4.7
Germany (Federal Republic)										
Housing	...	...	...	...	...	...	...	...	...	...
Transport	...	...	...	...	...	...	...	32.0	...	...
Communications	...	...	...	...	...	...	...	14.0	...	...
Power and water	...	...	...	...	...	...	...	46.0	...	...
Other industries	...	...	...	...	...	...	...	...	...	...
Japan										
Housing	...	...	...	...	...	...	...	...	10.0	...
Transport	...	...	...	...	...	...	...	...	37.3	...
Communications	...	...	...	...	...	...	...	...	21.6	...
Power and water	...	...	...	...	...	...	...	...	24.5	...
Other industries	...	...	...	...	...	...	...	...	6.6	...
Norway[a]										
Housing	...	...	...	...	...	...	...	...	...	...
Transport	52.4	27.3	29.7	30.5	28.1	27.0	27.5	27.1	26.2	25.4
Communications	16.6	11.0	9.3	9.6	10.5	10.2	11.8	10.7	11.0	11.8
Power and water	24.2	47.7	43.9	42.7	39.2	40.1	45.0	43.3	48.0	47.7
Other industries	6.9	14.0	17.2	17.3	22.2	22.6	15.7	18.9	14.8	15.1
Sweden										
Housing	6.8[b]	26.3	28.0	22.3	23.7	26.4	27.0	26.0	27.3	26.0
Transport[c]	24.3[b]	10.6	11.3	12.6	14.7	12.9	13.3	12.2	12.2	12.5
Communications[c]	31.6[b]	13.8	12.1	12.6	13.6	11.3	12.3	12.4	9.9	11.4
Power and water[c]	16.9[b]	11.7	10.8	14.3	13.8	13.7	13.0	13.0	13.5	15.1
Other industries	...	...	...	...	...	...	...	...	...	...
United Kingdom										
Housing	...	43.1	41.5	43.7	44.9	40.7	34.8	32.3	29.3	...
Transport	...	20.9	17.9	16.2	16.6	15.8	18.9	23.1	27.1	...
Communications										
Power and water	...	30.0	29.2	28.2	26.8	30.6	34.2	32.6	32.5	...
Other industries	...	6.0	11.3	11.9	11.6	12.9	12.1	12.1	11.2	...

Source: United Nations Division of General Economic Research and Policies.

Note: Percentages do not necessarily add to 100 because of incomplete information.

[a] Including repairs and maintenance.

[b] Fiscal year beginning 1 July.

[c] Excluding local government enterprises.

enced more by historical accident than by deliberate policy. The significant share of the German public enterprises in certain industries is a case in point, these industries having been inherited from previous governments and having been operated more or less like private enterprises. In the case of Italy, although such industries may also be traced to historical accident, they have been actively used as instruments of public policy. This is partly due to the fact that the level of Italy's development is relatively low and the government's role in initiating the development of industries which require large amounts of capital or involve large risks has been considered important. This technique was also employed in Japan in earlier years.

To the extent that public enterprises are called upon either to supply basic services or to compete with private industry, the degree of adaptability of investment to broad policy requirements may be limited and is apparently less than in general government. Even so, the anti-cyclical role of public enterprise investment has not been negligible in some countries, as may be deduced from the data presented in chart 1-5. This role may be greatly strengthened with the aid of long-range investment programmes as has been done in Austria, Italy and the United Kingdom.

A further factor in influencing the degree of government control of investment of public enterprises relates to the price policy of the government. There need, of course, be no direct relationship between the price charged by a public enterprise and its volume of investment since profit need not be the sole guide for allocation of resources in public enterprises. In a state monopoly high profits do not necessarily lead to high investment and a public service may be provided on general welfare grounds even with a sustained loss. Yet a downward pressure on prices tends to exert a similar pressure on investment since it is usually more difficult to obtain funds for investment when there is also a current deficit to be covered. Under the generally inflationary conditions prevailing in the post-war years there has in fact been a persistent tendency to keep prices charged by public enterprises low despite increases in costs. This has generally occurred because the government has been anxious to avoid responsibility for setting the pace of inflationary price increases, or because it was desired to provide a stimulus to industries using products of public enterprises. Moreover, apart from questions relating to the general level of prices, the price structure may lack the kind of rational basis which would make it an effective guide to resource allocation. Thus the rate pattern of railways may have very little to do with either relative costs or competitive advantages. While these considerations are also applicable to some extent to regulated public service industries in private hands, the practice of rate fixing based on "fair returns" provides an important point of difference.

PUBLIC POLICIES AFFECTING PRIVATE INVESTMENT

General considerations

Apart from direct government control of investment in the public sector, various measures have been used by governments to influence the volume and direction of private investment, which remains predominant in the industrial countries. However, the ways in which public and private investment may be affected by government policy are significantly different.

On the whole, decisions regarding public investment can be fairly precise. Even though, as already noted, the degree of control which the government has over public investment is much smaller than might appear at first sight, it remains true that the means can always be found of achieving a particular level or distribution of public investment. Government decisions regarding private investment, on the other hand, attempt to affect the course of action of private business and the outcome is necessarily less certain.

From the point of view of the government, there are important differences in the financial implications of measures affecting public as against private investment. Changes in the volume of public investment directly involve equivalent public expenditure, while private investment may be influenced by a wide variety of methods ranging from direct grants to measures requiring little expenditure. Even where direct government grants or subsidies are involved, it is frequently possible to induce a matching—or even greater—sum of private spending with a given sum of public spending. This is due to the fact that a relatively small inducement to private investment may move a submarginal project into the area of profitability. This has been clearly demonstrated in housing where both public and private projects co-exist.

Because of the basically indirect nature of public policies affecting private investment, and the uncertainties surrounding their impact, it is often difficult to discover which policies are the most significant. It has already been pointed out that a general climate of confidence may be of the greatest importance for investment decisions, which are by nature forward looking and risk taking. Similarly, the expectation that severe depressions will no longer be tolerated and that measures to counter deflationary tendencies are likely to succeed may provide a potent stimulus to investment. The list of public policies which might affect private investment in some way could be greatly extended. In the present context, however, attention will be focused on those measures which affect the profitability of private investment more or less directly, whether such measures are aimed at the general level, the structure or the geographical location of private investment.

Before the specific measures are reviewed in some detail, two significant trends should be emphasized. In the first place, there has been a continuing tendency in

the industrial countries to move away from direct controls. Such controls had played an important role in the immediate post-war years and during the Korean boom. The desire to dispense with such measures has, however, been reflected in the wholesale dismantling of control machinery and in the movement towards liberalization of trade and, more recently, towards currency convertibility. Together with the policy of stable exchange rates, the implication of the tendency towards decontrol is that the burden of any given policy must fall more heavily on measures relying largely on incentives.

A second major trend during the post-war years has been the revival of monetary policy as a means of correcting balance of payments disequilibria or of containing upward pressures on prices. In contrast, fiscal and other restraints have been relatively mild in most countries, if used at all. Thus monetary policy has been made to carry an extremely heavy burden, and the monetary authorities themselves have been among those who have recognized that in many cases this burden has been excessive.

The shift in the centre of gravity of public policy is well illustrated by the fact that while the trend of tax rates during the past decade has been clearly downward, the trend of interest rates and of pressures upon liquidity has been equally obviously upward. In fact it has not been uncommon for government expenditure to rise and for taxes to be reduced at the same time as monetary restrictions were being tightened. The short-term effectiveness of changes in the supply of money and in interest rates in dealing with cyclical fluctuations is a matter of some controversy, although evidence recently published by an official inquiry in the United Kingdom has indicated virtual unanimity among leaders of industry in that country that their investment plans are rarely changed in response to short-term shifts in monetary policy.[24]

In the longer run, however, rising interest rates together with reduced corporate liquidity as illustrated in table 1-15 may have a significant effect on investment decisions yet to be made, whatever their impact may be on decisions already crystallized. At all events, it would be paradoxical to assume that monetary policy is sufficiently flexible to be used ase a counter-cyclical weapon, but that the trend towards tighter monetary restrictions over the business cycle as a whole would not affect investment unfavourably. Even if it be true that the impact of such restrictions upon residential construction is usually much greater than upon productive investment, it cannot be taken for granted that the effect on the latter is negligible.

As mentioned previously, this is not to say that fiscal policy may not be designed to fall most heavily on investment nor that monetary policy may not be directed to curb consumption. The introduction of investment taxes in the Scandinavian countries and the restriction of consumer credit in a number of countries are cases in point. Nevertheless consumption is likely to be more strongly affected by changes in taxes on income or expenditure than by changes in interest rates or liquidity. And conversely, in so far as general, rather than selective, monetary restraints do produce results, they may affect productive investment more than consumption.

The difficulty is that in a context of balance of payments pressure, or of price inflation, actual or feared, investment is apt to be viewed primarily in its role as a component of demand, while its functions in adding to capacity may be overlooked. Adequate measures to deal with balance of payments pressures often depend in the long run upon the expansion of exportable supplies or the reduction of import demands, and both of these would be facilitated by well-directed investment. Likewise, granted the fact that wage earners have come to expect some minimum rate of progress in money wages, the chances of holding wage costs steady depend mainly upon constant advances in productivity, and hence again upon appropriately directed investment. Structural adaptation to changes in the pattern of demand, and the most rapid absorption of technological progress similarly require investment of the right type and in the right volume, as shown earlier.

A short view may be particularly unfortunate where upward pressures on prices are due not so much to excess demand or even to wage-cost inflation as to the

[24] See *Report of the Committee on the Working of the Monetary System*, Cmnd 827 (London, 1959).

Table 1-15. Trend in Corporate Liquidity[a]
(Percentage)

Country	*1950*	*1951*	*1952*	*1953*	*1954*	*1955*	*1956*	*1957*	*1958*
Canada[b]	79.2	74.9	54.3	49.7	44.0	44.9	45.1	34.8	...
Japan[c]	...	...	18.1	18.0	17.4	18.9	15.4	13.2	15.3
United Kingdom	47.9	45.3	37.9	40.3	42.4	39.7	36.2	32.2	30.6
United States[d]	59.9	54.7	52.7	53.2	52.7	48.0	41.3	39.9	44.7

Source: United Nations Division of General Economic Research and Policies, based on official sources, except for the United Kingdom, based on data published by *The Economist* (London).

[a] Ratio of liquid assets to current liabilities. Liquid assets represent cash and government securities, except for Japan where liquid assets include cash only.

[b] On 31 March.

[c] On 30 September.

[d] On 31 December.

existence of some specific shortage in a particular sector of the economy. If, each time the bottleneck is reached, the economy as a whole has to be slowed down, there is a considerable danger that the incentive to invest in larger capacity for the production of items in short supply will be constantly inhibited at exactly the point at which it would have been most valuable; and in this way a vicious circle of restricted output and restricted demand may come into play.

The problem of how to see beyond day-to-day pressures is one of the most difficult that confronts any governmental administration in modern times. It is often far from obvious what the long-run policy implications may be of a series of decisions taken to deal with short-run issues. What the foregoing discussion suggests, however, is that the over-all balance between supply and demand has probably been secured at a higher level of consumption and a lower level of investment than might have occurred if government policy had been approached with the long-run needs of investment and growth more clearly defined and articulated.

Tax incentives

The more direct measures affecting private investment centre around the raising of the profitability of investment by favourable tax treatment, by direct grants or subsidies, by low interest charges or through price supports.

Prevailing high rates of taxation on business profits —ranging in most cases from about one-third to over half of the total—provide governments with substantial leverage in influencing private investment decisions through tax remission of one kind or another. Almost all industrial countries have taken steps, in the course of the post-war period, to encourage investment through a policy of liberal allowances for depreciation. The fact that depreciation allowances are not simply a function of the physical durability of capital but of its economic usefulness has gradually gained recognition. The rapid advances in technology in the post-war years have demonstrated further that machinery and equipment which are perfectly intact from a physical point of view may be obsolescent. It has thus been increasingly realized that depreciation allowances calculated by traditional accounting conventions based on the expected physical durability of capital and on equal annual amounts of wear and tear throughout the life of the asset (the straight line method) may tend to overstate profits and consequently taxes on profits.

An important step towards a more realistic depreciation allowance has been the acceptance in most countries of the declining balance method, under which the main part of the depreciation falls in the first few years of the life of the asset. In Canada the declining balance method adopted since 1949 has permitted depreciation approximately twice as fast as the straight line method during the early years. In the United States a similar provision was introduced in 1954 with the result that from about two-thirds to three-quarters of the cost of equipment may be written off during the first half of the estimated service life.[25] In the Federal Republic of Germany the rate of depreciation introduced in 1952 was as much as two and a half times that based on the straight line method.

The persistent rise in the prices of capital goods during the post-war years has raised doubts as to the appropriateness of the determination of depreciation allowances on the basis of historical cost. Few governments have, however, been prepared to change the conventional procedure. Only in those countries where the rise in prices has been very marked, has some provision been made to take this fact into account. Thus in Austria, Belgium, France, Italy, Japan and the Netherlands, equipment may be revalued to a certain extent in order to make some allowance for serious inflation in earlier periods.

Some countries have sought to use depreciation allowances for stimulating investment without regard to true depreciation in the economic sense. The most conspicuous cases have been the investment allowances introduced from time to time in Belgium, the Scandinavian countries and the United Kingdom. Under this system, depreciation charges may exceed the full cost of the asset. Various forms of accelerated depreciation have also been introduced in other countries. Perhaps the most liberal treatment is to be found in Sweden, where during the early post-war period business was entirely free to choose the period of depreciation. Despite subsequent tightening of the regulation, the Swedish method of depreciation is still one of the most liberal as regards both the freedom of choice accorded to business and the rate applicable. There is, however, a sharp contrast in Sweden between the liberal treatment of machinery and equipment and the stringent rules affecting buildings.[26]

[25] As an indication of the order of magnitude involved, it has been estimated that the tax saving to business resulting from the 1954 code in the United States would rise from a little over half a billion dollars in the first year to over $4 billion in ten years on the assumption of a 3 per cent annual growth of investment starting from a base of $27 billion. This compares with total annual corporate profits after taxes of $20 to $25 billion in recent years.

[26] Partly because of this disparity, most of the funds available for investment through the release of anti-cyclical investment reserves, for which no further depreciation allowance may be obtained, have been used for building. These reserves are created by the setting aside of up to 40 per cent of profit during periods of high activity; they are exempt from tax and may be used for investment when permitted or ordered by the government. Forty per cent of the reserves are deposited with the central bank while the rest may be retained by the business concerned. The total value of the reserves was some three-quarters of a billion kronor at the end of 1957, equivalent to about a fifth of non-residential construction in that year. When business activity appeared to be declining in 1958, the government authorized the use of the reserves for investment. This, together with the abolition of investment taxes and more liberal granting of building permits, made it possible for Swedish investment, especially in building, to rise in 1958, whereas in most other industrial countries investment levelled off or declined, as may be seen in chart 1-4.

Differential treatment of depreciation allowances has also been employed in favouring particular sectors of the economy. Typical of such treatment has been the accelerated depreciation allowances to defence facilities in Canada and the United States, to productive investment in Belgium and Norway, to basic industries in the Federal Republic of Germany, and to a selected list of capital expenditures in the United Kingdom. These allowances have generally been applicable for a specific period and have been designed to achieve a particular objective. A selective policy was also implemented in the United Kingdom in 1956, when the general suspension of investment allowances did not apply to expenditures on new ships, scientific research, insulation against loss of heat in industrial buildings, and for certain other purposes.

Inasmuch as liberal depreciation allowances affect investment through enhanced prospects of profitability after taxes, the question arises as to whether the same result may not be achieved through an outright reduction in profit taxes. The fact that practically all governments have relied heavily on the method of varying depreciation allowances rather than profit taxes has probably been influenced by the immense practical difficulties in making frequent adjustments of the basic tax schedules without raising fundamental questions of equity. Moreover, even if changes in profit taxes are feasible, it is more difficult to be selective between industries. Only in a few cases have exemptions of profit taxes been granted to particular industries, as in the Federal Republic of Germany during the early postwar years, in Japan and in the southern region of Italy.[27] Furthermore, since it is not possible to attribute a particular portion of profit to new investment for existing business establishments, a change in profit taxes affects new and old investment alike while a liberalization of depreciation allowances can readily be restricted to new investment. Consequently a given reduction in tax revenue will produce a greater impact upon investment when granted in the form of accelerated depreciation rather than of reductions in profit taxes.

It remains to consider whether a continuously liberal depreciation policy will go on stimulating investment after the initial impact. It should be noted that even if the reduction of tax liability due to rapid depreciation in the early part of the asset life is exactly counterbalanced by an increase in the subsequent years, the mere postponement of taxes enhances the profitability of investment so long as the rate of interest is positive. More importantly, liberal depreciation allowances will continue to provide an incentive to new investment because any increase in tax liabilities as existing equipment grows older may be reversed through the installation of new equipment, thereby raising depreciation allowances once more.[28]

The foregoing discussion does not, of course, imply that liberal depreciation allowances alone will always be sufficient to encourage investment in the precise industries and to the exact extent desired. When business expectations are pessimistic the stimulating effect of a tax remission may be relatively small. Moreover, when depreciation allowances are made variable and subject to periodic changes they may be less effective in stimulating those investments which require a long period of planning ahead. Furthermore, while depreciation allowances may be applied selectively, it is usually difficult to predict the precise amount of additional investment which will result from a given measure of liberalization. Finally, in so far as liberal depreciation allowances yield their greatest benefit to business income, questions of equity and distribution cannot be ignored and appropriate adjustments to the rest of the tax system may be required to achieve any desired goal of equity.[29]

Direct grants and subsidies

Another stimulus to investment has taken the form of outright investment grants and subsidies. These payments have usually been made selectively, the best known example being housing. Public capital grants to owner-occupied dwellings in Belgium, the Netherlands, Norway and Sweden range from one-tenth to one-fifth of the cost. Mention may also be made of the investment grants to the high-cost coal industry in Belgium, to the declining textile industry in the United Kingdom, to the non-competitive shipping industries or airlines in a number of countries, and to firms located in development areas in Belgium, France, Italy,[30] the Netherlands, Norway and the United Kingdom, and in a number of provinces or states in Canada and the United States. The same purpose may, of course, be achieved through an annual subsidy. Such subsidies have been significant in aiding the construction of rental dwellings in a number of western European countries, such as Denmark, the Netherlands, and the United Kingdom.

[27] However, extractive industries receive special treatment in such countries as the United States. For example, the permission given to some of these industries to treat capital costs as current expenditures clearly implies a form of accelerated depreciation. Furthermore, to the extent that depletion allowances deductible from income for tax purposes may exceed the actual cost of mineral assets, they may have the same effect as discriminatory profit taxes in favour of the industries concerned.

[28] Other forms of tax rebate have been employed by some countries from time to time. In Italy, for example, exemptions from import duties and registration fees granted to investments in the south amount to about 15 per cent of the cost of investment where applicable.

[29] For further discussions of depreciation allowances and other tax incentives and their implications, including questions of equity and the degree of effectiveness, *see* United Kingdom *Royal Commission on the Taxation of Profits and Income, Final Report*, 1955, Cmd 9474 (London); Joint Committee on the Economic Report, *Federal Tax Policy for Economic Growth and Stability*, 84th Congress, first session (Washington, D.C., 1955); Joint Economic Committee, *The Federal Revenue System: Facts and Problems 1959*, 86th Congress, first session (Washington, D.C., 1959).

[30] Direct grants in respect of investment in plant and machinery in southern Italy amount to about one-fifth of the cost of investment when applicable.

Additional means of aiding private investment have included capital transfers and the provision of finance. In France, capital transfers to private investment have amounted to roughly one-sixth of total private fixed capital formation. In the Federal Republic of Germany an investment fund established in 1952 was financed by a compulsory loan from all industrial enterprises; the funds allocated to selected industries against the issuance of bonds reached one billion marks or about one-fifth of the cost of investment projects submitted for approval.

Although a complete evaluation of the effect of investment grants and credits must take into consideration the manner in which the expenditure is financed, the net result is almost bound to be favourable to investment. Even if the financing involves taxes which fall largely upon investment, it is highly unlikely that the reduction in investment outlays resulting from such taxes would be as great as the increase in such outlays made possible by the channelling of funds by the government into capital formation. In so far as taxes actually fall to a considerable extent upon consumption, as in the cases of the Federal Republic of Germany and France, the net increase in investment brought about through the use of public funds is likely to be correspondingly greater. Certain industries or activities may play a strategic role in the stimulation of investment. Thus grants or subsidies to research and development tend to hasten the process of innovation and hence of investment in general. Such aid has frequently been connected with defence programmes the cost of which is usually absorbed entirely by the government. Thus in the United Kingdom by far the largest share of total research and development expenditures has been borne by the government. In the United States, the government has also accounted for more than a half of total expenditure for such purposes. In most countries, in addition to direct grants for research and development, the government fosters private research by means of tax exemption and immediate or rapid write-off of investment in research.

A familiar measure for encouraging investment is reducing the cost of borrowing. It has already been pointed out that interest rates have been comparatively high, especially recently. Not since the early post-war years have cheap money policies been employed to stimulate long-term investment, although they have been used as a counter-cyclical weapon.

Low rates of interest designed to encourage investment in particular sectors have, of course, been available in most countries and may be regarded as a form of investment subsidy. A conspicuous example is housing, where the impact of interest rates may be especially significant. In the Federal Republic of Germany interest-free loans were provided for the reconstruction of war-damaged houses, and tax advantages were extended to enterprises making interest-free loans to their staffs for residential construction. Low interest rate financing has also been made available to industries set up in development areas in a number of countries mentioned earlier. These, however, are exceptional rather than typical of government policy in general.

Price supports

Another instrument for influencing the profitability of investment consists of price supports or purchasing guarantees. The most wide-spread and costly support measures have been connected with agricultural products. Public expenditures for such purposes have accounted for an overwhelming proportion of all subsidies and sometimes even for the entire product of the industry. In Austria, Canada, Norway, Sweden, the United Kingdom and the United States, the share of agricultural subsidies in total subsidies has exceeded two-thirds. In Norway and the United Kingdom the ratio of agricultural subsidies to agricultural gross domestic product has amounted to over a third, as may be seen in the following table.

Ratio of agricultural subsidies to agricultural gross domestic product in 1955/56

(Percentage)

Norway	45
United Kingdom	39
Sweden	12
Austria	9
Netherlands	7
United States	7
France	5
Canada	4
Belgium	3
Germany (Federal Republic)	2
Italy	2
Denmark	—

Source: Organisation for European Economic Co-operation, Ministerial Committee for Agriculture and Food, *Agricultural Policies in Europe and North America* (Paris, 1957).

The figures above reflect, of course, only one aspect of the agricultural programme. Protective tariffs on agricultural products, which do not involve actual outlays, may be viewed as supporting domestic agricultural prices. Thus the ranking of countries based on the prices received by producers on a number of crops and livestock products differs importantly, as may be seen in table 1-16, from the ranking shown above.

Although the methods employed have differed from country to country, the net effect of the support programmes has been to stimulate investment in agriculture. While some support measures have been geared to price parity formulas, such formulas alone do not necessarily reflect changes in productivity or profitability. Where price support programmes have been accompanied by production controls, such as acreage restrictions, the effect of the controls has often been frustrated through the increased yields per acre made possible by additional investment on the restricted acreage.

Table 1-16. Indices of Producer Prices of Selected Agricultural Commodities in Nine Western European Countries, 1955/56-1957/58

(Average price of each commodity in nine countries = 100)

Commodity	*Belgium*	*Denmark*	*France*	*Germany (Federal Republic)*	*Italy*	*Netherlands*	*Norway*	*Sweden*	*United Kingdom*
Wheat	101.8	72.8	100.8	110.8	122.3	76.3	138.4	87.4	89.4
Rye	76.5	76.3	93.5	124.7	114.9	87.4	151.1	93.6	81.9
Barley	86.4	83.2	94.4	134.4	112.0	91.3	124.7	86.2	87.3
Potatoes	73.1	82.5	83.9	86.6	136.3	85.7	106.4	118.7	126.4
Sugar-beet[a]	89.9	83.4	95.4	113.2	94.7	89.9	...	104.3	128.8
Milk	82.6	77.0	97.3	102.3	84.5	94.2	128.0	107.9	126.1
Eggs	88.7	80.8	115.6	112.9	118.8	88.5	87.5	89.4	117.8
Cattle	103.6	80.7	88.1	99.0	128.8	108.3	96.0	105.6	89.9
Pigs	81.5	117.5	109.8	102.0	106.5	84.1	87.2	105.7	105.6
Unweighted arithmetic average of nine commodities	*87.1*	*83.8*	*97.6*	*109.5*	*113.2*	*89.5*	*114.9*[b]	*99.9*	*105.9*

Source: Food and Agriculture Organization of the United Nations, *Prices of Agricultural Products and Fertilizers, 1957/58* (Geneva, 1958).

[a] Average of eight countries = 100.

[b] Average of eight commodities.

The most successful stimulus to investment has thus been created in a sector where the problem is mainly one of surplus rather than of shortage. As noted earlier, this constitutes a classical illustration of a policy the effects of which are hardly the result of deliberate design. Yet political and social forces tend to discourage any major reformulation of policy. In more recent years several governments have attempted a gradual reorientation of policy, by more flexible support programmes and by emphasizing measures facilitating the reallocation of resources, but the pace of progress has so far been slow. It should be emphasized that the point is not whether, in a declining or weak industry, matters should always be left to take their own course, without government intervention, but whether, granted that government intervention is needed, the policies pursued contribute to a gradual solution of the basic problem rather than permitting a drift into deeper imbalance.

Conclusion

The rate of growth of output experienced by the industrial countries since 1950 has been broadly comparable to that recorded during the nineteen twenties—also a period of general economic expansion. In several countries the proportion of real resources devoted to investment has been markedly higher than in the nineteen twenties, but elsewhere the proportion has been similar or lower. There may have been an underlying tendency for capital-output ratios to decline since the nineteen twenties, partly because of a decline in the share of construction in total productive investment, but in countries other than the United States this tendency appears to have been offset by other factors. Among these were the needs of reconstruction, elements of which tended to linger beyond 1950 in some countries, as well as the arrears of investment accumulated during the years of depression and war. Other major post-war influences included the commitment of governments to full employment policies, the enlarged consumption horizon, particularly in respect of consumer durables, and the expanded outlays on research and development.

Since 1950, variation in the rates of growth of output among the industrial countries has been substantial—ranging from 7.5 to 2.2 per cent per annum. At the same time, the rate of growth of capital formation has been higher than that of output. The tangible influence of the volume of investment in each of the industrial countries has been exerted in two ways. First, in terms of demand for output, fixed investment has contributed more than proportionally to the annual growth in production; and secondly, the divergent rates of growth in investment and output imply that there has been an increasing share of output devoted to the enlargement of productive capacity.

Taking the period 1950 to 1958 as a whole, the share of resources devoted to productive investment has varied from 9 per cent in Belgium to 21 per cent in Norway. Allowance for different price relationships in the various countries and for other special factors would reduce this range by as much as one-half, or even more. The countries with the highest investment ratios are also, broadly speaking, those which have achieved the highest rates of growth; and conversely the countries with the lowest investment ratios are the ones whose rates of growth have lagged. The investment-growth relationship suggested by the data appears to imply that whatever other conditions may have been required for an acceleration in the rate of growth, a large-scale diversion of resources from other uses to investment was not needed.

Differences in the growth of productive capacity, while clearly important in the explanation of inter-country differences in the rate of economic growth, have not been the only factor. There has, in fact, been a pervasive mutual interrelationship between a number of factors—some exerting their influence directly on output and others on the productivity of capital in the first instance.

Inter-country differences in the rate at which the labour force was expanding also appear to have contributed to disparate rates of growth in output; and the joint influence of the expansion of the labour force and of productive capacity provides a superior explanation of the divergent rates of economic growth experienced by the industrial countries than either of these factors considered separately. There has also been a significant correlation between the share of resources allocated to productive investment and the growth in output per worker. This suggests that it is open to countries confronted by slow rates of expansion in the labour force to enhance their prospects for achieving a higher rate of economic growth by raising the share of output devoted to investment.

Moreover, once the initial effort has been made to step up the investment ratio and the rate of growth, forces are generated which make it easier for the new levels to be maintained. As soon as the economy has adjusted to the higher volume of investment, the supply of consumption goods can not only rise above its previous level but can increase more quickly in phase with the higher investment. At the same time, the more rapid rate of over-all growth will tend to attract new recruits into the labour force from sources previously untapped, and additional encouragement will be given to research and development. In this and other ways, the higher rate of growth will tend to become self-sustaining.

Structural changes had a major influence upon the rate of growth in a number of countries. The principal change took the form of a shift of resources from agriculture, where average output per man is generally low, to other sectors of the economy where average productivity is relatively high. The scope for gains in output from this source were largest in a number of countries which also experienced relatively high over-all rates of growth between 1950 and 1958.

Other factors affecting the divergent investment-growth experience among the industrial countries tended in the first instance to bear upon the productivity of capital. One such factor was the degree of utilization of productive capacity. It was possible for relatively greater gains in output to be achieved by those countries which had spare productive capacity at the beginning of the period or were confronted by structural unemployment. Similar beneficial effects on output appeared where elements of recovery and reconstruction from the war were still present during the period. Both of these advantages had, of course, only temporary significance. On the other hand, countries which were utilizing their capacity fully during the period were frequently confronted by an imbalance between the pattern of supply and of demand. The consequences of this structural imbalance appeared in the form of excess capacity in declining industries such as textiles, combined with bottlenecks in industries such as metals and engineering where demand grew rapidly over the period. In correcting such imbalance—which was present in some degree almost everywhere—those countries where investment was high naturally had greater opportunities for more rapid adjustment and adaptation than those where investment was low.

The composition of investment—that is, its distribution by industry—appears to have had a direct influence upon the volume of capital required to produce a given flow of output. The capital costs of output vary significantly among the broadly defined sectors of the economy—being higher in power and utilities and transport and communications and lower in manufacturing and trade and services. Thus, in those countries where the pattern of demand has drawn investment into manufacturing, trade and services, the rate of growth of total output has been high in relation to the proportion of resources devoted to investment. On the other hand, where investment in power and utilities and transport and communications has been greater than the average, a given rate of growth has necessitated a relatively high allocation of resources to productive investment.

The role of technological and scientific progress in the investment-growth experience of the industrial countries is not readily measurable. Clearly, however, capital formation provides the avenue whereby technological and scientific advances are introduced into the productive process; and the higher the level of investment, the greater the opportunities for innovation. The evidence suggests that there have been significant differences among the industrial countries in their ability to absorb technological progress. In particular, as a result of a decade of high investment, some countries have raised the technological level of their capital stock much more rapidly than others, and have gained immense advantages accordingly.

The over-all effect of the numerous interrelated factors that have contributed to the investment-output relation finds expression in the incremental capital-output ratio for the period 1950-1958—a quantity which may be regarded as indicating the capital costs of additional output or the productivity of new capital, during the period. On the whole, high productivity of new capital has gone hand in hand with high rates of growth of output, and vice versa. This is further evidence of the fact that the process of economic growth tends to be self-sustaining and to call forth all the environmental, technical, and other influences that are required to propel the economy forward.

One of the most important environmental influences has been that of government policy, which has played a significant role in shaping investment. To start with there has been a long-run tendency for the relative weight of the public sector to increase. During the nineteen fifties the public sector has channelled about a third of the national income and has accounted for about the same proportion of fixed investment in most industrial countries. Moreover, through the expanded functions of the government in economic life, no private investment is immune from the effects of public policy, intended or unintended.

The weight of the public sector cannot be said, however, to have been directed mainly to the promotion of long-term growth. The post-war succession of emergencies of one type or another has created a preoccupation with short-run problems and an environment in which it has been difficult to look ahead. Moreover, so long as backlogs of investment were plentiful, the need for deliberate policies of stimulation was not immediately apparent. Yet, in reviewing the record of the nineteen fifties, and particularly of the last few years, the question naturally arises whether a higher rate of growth might have been achieved and maintained if greater emphasis had been directed towards this goal.

As the world economy enters into the nineteen sixties, the question of the rate of growth has assumed new significance. The large disparity between rates of growth in various countries has raised the question whether improvement might not be feasible in countries where the rates have been low.

At the same time it cannot be assumed that the pressure for investment will be as great in the nineteen sixties as in the fifties. The great depression and the Second World War, which created unprecedented arrears of capital formation, are becoming more and more remote, The pressures on demand from persistent international tension will, it is hoped, be reduced as the folly of global warfare becomes more and more evident. In these circumstances, perhaps the time has come when governments might usefully try to take a longer view of their investment policies than they have been able to do during the past decade.

The formulation of long-term targets and investment programmes has sometimes been viewed with suspicion in private enterprise economies. Yet, post-war experience has shown that there is no necessary conflict between a liberal orientation of policy and the establishment of such programmes. Nor is the usefulness of such programmes limited to the long run, since the degree of short-term flexibility rests largely on the speed with which given decisions can be implemented. Moreover, experience has demonstrated that much of the dislocation associated with sudden policy decisions for which no preparation has been made—as in the vast extension of public health services or the raising of the school-leaving age—can be avoided with adequate forward programming.

The need for a co-ordinated approach to an investment programme has, perhaps, been best illustrated in the development of the less developed regions or depressed industries. Here the impediments to investment to be overcome may be so numerous and stubborn that *ad hoc* measures may often be of little avail.

Of considerable importance also is the creation of a climate favourable to investment, involving the entire social and economic framework. More specifically, the significance of fiscal incentives stands out. A common feature of the fiscal systems of most governments has been the support of the bulk of research and development expenditures which have undoubtedly stimulated investment. To the extent that such expenditures have often been connected with defence, forward programming for their continued flow if defence expenditures are cut or stop expanding appears to be essential.

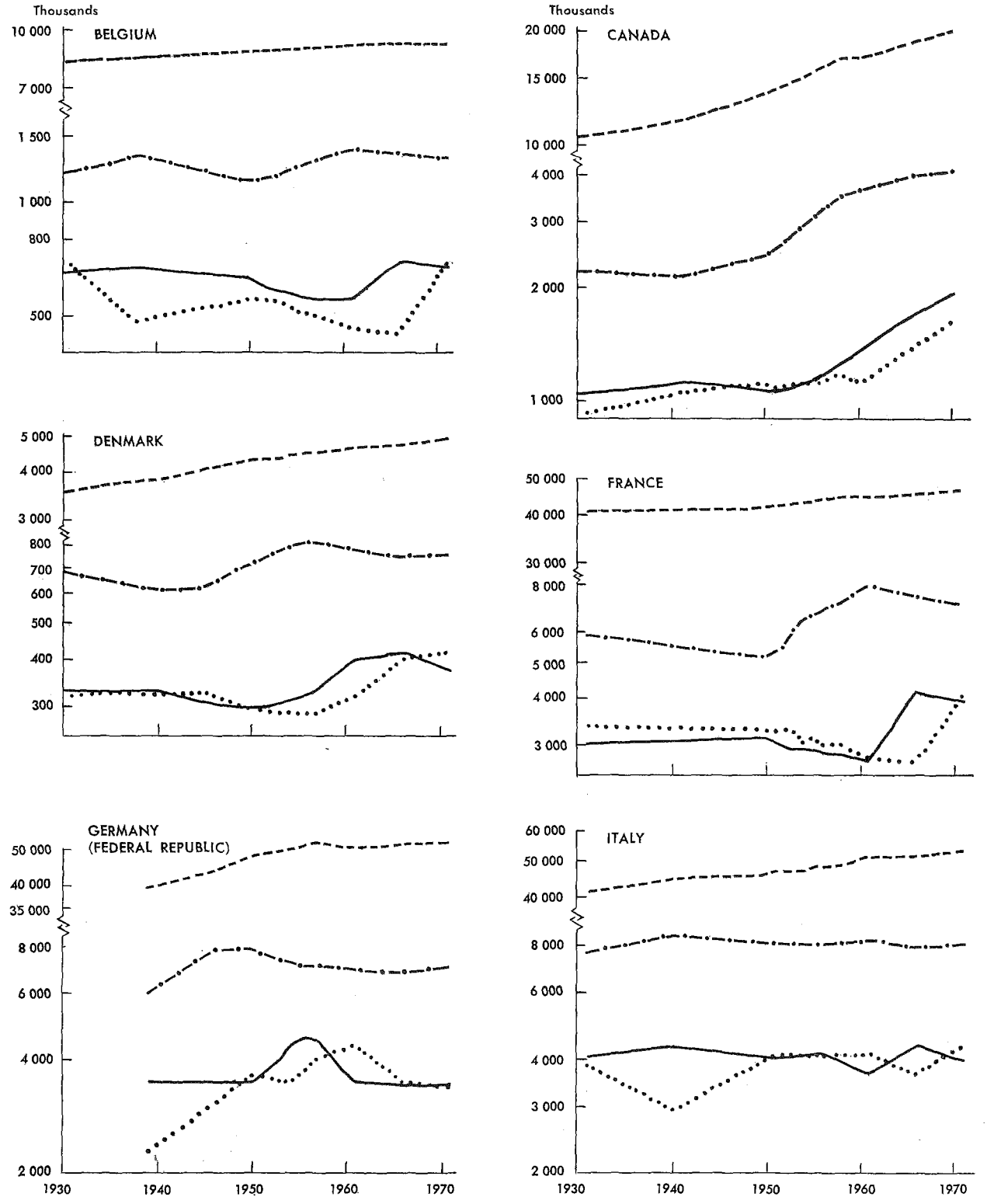
Among the fiscal arrangements which affect investment most is the depreciation allowance. Despite more liberal provisions in the post-war years, prevailing methods of calculation may not always take adequate account of the economic life of capital goods or the increasing costs of replacement resulting from advances in prices. In stimulating investment, liberalized depreciation allowances have advantages over other methods quite apart from the need to correct existing distortions. In comparison with reductions in profits taxes, depreciation allowances can be directed to new investment exclusively. In comparison with direct subsidies for investment, more liberal depreciation allowances are not only more feasible administratively but tend also to benefit the growing and high-productivity firms the most. The stimulating effect is not necessarily restricted to a short period of time as long as the economic life of capital is highly uncertain and tax saving can be achieved by high investment. On the other hand, it has to be borne in mind that the impact of fiscal measures to influence private investment can rarely be estimated precisely, and that such measures may raise questions of equity calling for appropriate adjustments elsewhere in the tax system.

While the major emphasis of investment policy must be directed towards the encouragement of private investment—if for no other reason than its sheer size as compared with public investment—the lack of a forward-looking policy in the very sector in which the government has direct control is not conducive to growth. The issue is not whether government should displace private investment in order to carry out a policy for growth, but whether with a given public sector as defined by the political and social consensus great benefit would not be derived from a more conscious and coherent framework.

In some countries the public sector may be called

Chart 1-6. Changes in Population, Actual and Projected, by Age Group, 1930-1970

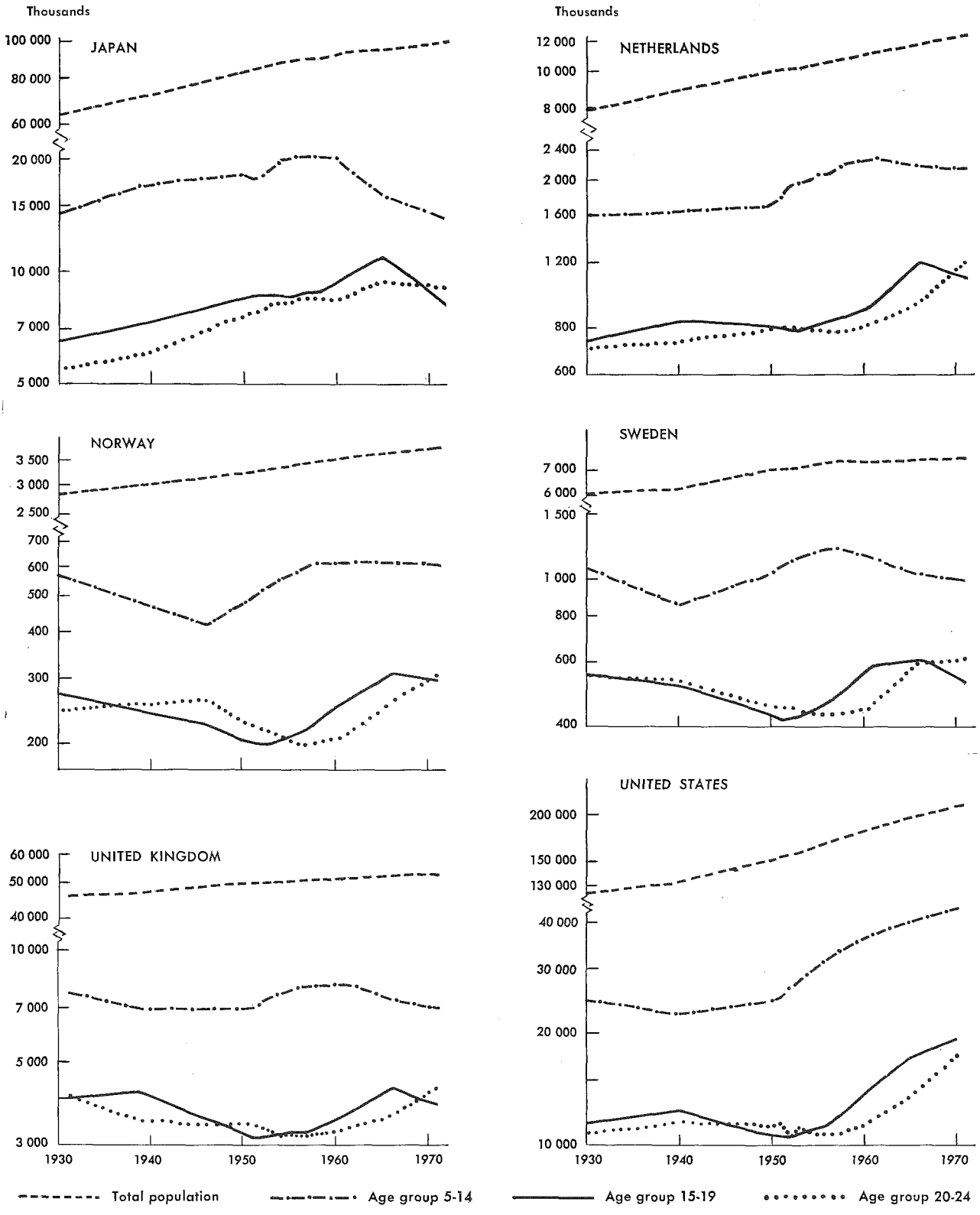
(Semi-logarithmic scale)



(*Chart continued on following page*)

Chart 1-6. Changes in Population, Actual and Projected, by Age Group, 1930-1970 (*continued*)

(Semi-logarithmic scale)



Source: Statistical Office of the United Nations; Organisation for European Economic Co-operation; and national sources.

upon to set the pace of growth rather than to follow in the wake of the growth of other sectors. In any event, there is plenty of scope for government investment activity, as can be illustrated by the possibilities in the traditional sectors of the government—particularly roads, education and health—and in housing, where the government has usually played an important part.

The tremendous increase in the stock of automobiles and the lag in road facilities in the industrial countries during the post-war years have been accompanied by extraordinary congestion and numbers of accidents. The lag in the supply of roads is strongly indicated by a fall in the length of roads per passenger car. The following table shows that in a number of countries the road/vehicle relationship has been halved since pre-war years. Even in the United States, where the automobile revolution took place much earlier than in other industrial countries, and where adaptation to the automobile age is further advanced, road mileage per vehicle has fallen since before the war.

Length of surfaced roads per passenger car in 1957
(Indices; pre-war = 100)

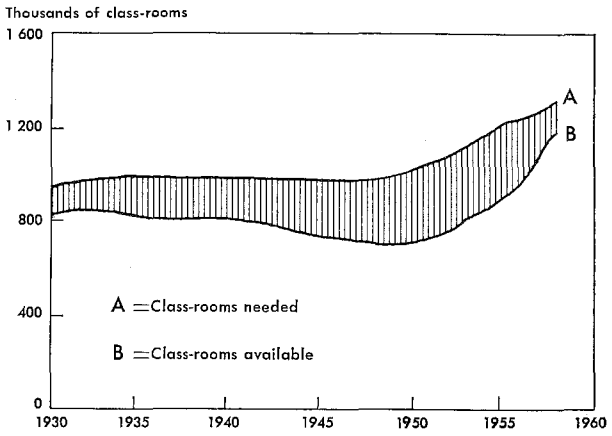
Norway	100
Canada	86
United States	68
Sweden	50
United Kingdom	50
Belgium	30

In formulating programmes of highway and urban street development, it must be borne in mind that, aside from the need for making good the existing deficiencies, the stock of cars is likely to increase at a rapid rate in the nineteen sixties.

The upsurge in the demand for educational facilities in the post-war period has been associated with a population bulge, as shown in chart 1-6. While the emergence of new school buildings has dominated the landscape of practically every locality, shortages of facilities have also been apparent in improvised school buildings and over-size classes. The gap between existing facilities and requirements has persisted in the nineteen fifties in the United States, as may be seen in chart 1-7. In Norway and Sweden the magnitude of the gap in relation to the current level of school construction is broadly comparable to that of the United States. In Italy it is much larger. While official estimates of such a gap are not available in the United Kingdom, the elimination of overcrowding ranks high in official educational objectives.

Although the post-war population bulge is likely to subside in a number of countries in the nineteen sixties, a growth in demand for higher educational facilities will be a natural sequel to the earlier expansion of the elementary or secondary school-age group. Even more important, perhaps, is the fact that educational standards are likely to be raised. Indeed, the period in which

Chart 1-7. Shortage of Public School Class-rooms in the United States, 1930-1960[a]



Source: United States Department of Health, Education and Welfare, annual reports (Washington, D. C.).
[a] School year ending in year stated.

the pressure on facilities may be expected to slacken could be treated as an opportunity for raising standards, as has been advocated in the United Kingdom where it has been suggested that the school-leaving age be increased from fifteen to sixteen. It is also estimated that the consequent increase in demand for school facilities could be met in four years. In most other western European countries the school-leaving age is lower than in the United Kingdom.

While the precise role to be assumed by the government in supplying health facilities is more controversial than in providing roads and education, the adequacy of medical care is a matter of public concern everywhere. Even in countries where private hospitals play an important role, as in the United States, the principle of public aid to private non-profit hospital construction has long been recognized. Increases in hospital facilities in most industrial countries in the nineteen fifties have, however, been only slightly higher than the increase in population, while the sharp expansion in the demand for health services owing to the spread of health insurance, the development of hospital oriented medical care and the rise in the long-term needs of the aged has been only partially offset by the tendency to reduce the average length of stay in general hospitals. The resulting deficiency in existing facilities is indicated by overcrowding and long waiting periods in many instances. In Canada and the United States, for example, the deficit in hospital beds has been estimated to be from a quarter to a half of the existing number.[31]

Investment requirements in housing may be gauged by the slowness with which housing shortages have been made good in recent years. Rough estimates of deficien-

[31] *See* Royal Commission on Canada's Economic Prospects, *Housing and Social Capital* (Ottawa, 1957) and United States Department of Health, Education and Welfare, annual reports (Washington, D.C.).

cies for a number of countries are presented in the following table; these may be compared with the current rate of construction which does not, however, represent net improvement of housing per capita, since it does not allow for replacements and new family formation. While data are not comparable as between countries owing to differences in housing standards, the considerable scope for improvement in such standards should provide an almost inexhaustible source of investment opportunities if resources should permit.

During the past decade the pace of growth of investment has frequently had to be restrained in the industrial countries. If pressures on resources are now less insistent than they were during a period when crisis followed crisis, the case for catching up on investment in essential public services must be regarded as worthy of the most careful consideration by governments along with measures for the promotion of private investment.

Estimated housing deficiency in 1958[a] and annual rate of construction, 1956-1958

(In number of dwelling units per thousand inhabitants)

Country	*Housing deficiency*	*Annual rate of construction*
Canada	22	8
France	53	6
Germany (Federal Republic)	48	10
Italy	21	5
Japan	112	5
Netherlands	20	9
Norway	21	8
United Kingdom	15	6
United States	70	7

Source: United Nations Division of General Economic Research and Policies.

[a] Based upon official estimates of sub-standard housing or overcrowding, carried forward to 1958. Because of considerable differences in standards, the data are not comparable between countries.

Chapter 2

INVESTMENT TRENDS AND POLICIES IN THE UNDER-DEVELOPED COUNTRIES

Investment experience and problems

Trends in investment

An acceleration in the rate of capital accumulation is of central importance to the economic development of under-developed areas. Continuous and lasting improvements in levels of living can be secured only through the progressive expansion of productive capacity; and, in the growth of the latter, a major determinant is the pace of capital formation. It is therefore encouraging that, in the nineteen fifties, there occurred a marked rise in the volume of investment within the under-developed areas as a whole. For many of the countries in these areas, the higher rate of investment attained in the last decade marks a significant break with the stagnant economic conditions of the past and it has already borne fruit in an acceleration of economic growth.

The marked rise in the volume of investment during the nineteen fifties is illustrated, for twenty-seven countries, in table 2-1.[1] It will be seen—and this may be regarded as indicative of the determination with which under-developed countries have approached the problem of economic development—that attainment of the increased volume necessitated, in most countries, an increase in the share of total resources allocated to investment. Concurrently with the increase in investment, there took place an acceleration in economic growth of the under-developed areas. In the period before 1950, dating from the years immediately preceding the Second World War, the annual rate of growth in total output of the under-developed areas was probably not much more than one per cent. In the nineteen fifties, however, the annual rate of growth was greatly accelerated and, indeed, between 1950 and 1958, it was broadly of the order of four per cent.[2]

Undoubtedly, the period under review has marked the inception of a new and more vigorous phase in the economic development of most under-developed areas. This has been particularly true of the African and Asian regions where governments of numerous countries, in the years since the attainment of national independence, have for the first time embarked upon large-scale programmes of economic development. In Latin America as a whole, although the volume of investment also rose strongly, it has to be remembered that, by comparison with other under-developed areas, the share of investment in total output was considerably higher at the outset of the period; neither the share of investment nor the rate of growth in total output changed as markedly between the nineteen fifties and earlier post-war years as in other areas.

Of course, among the individual countries within these areas, there has been wide diversity of experience with respect to the changes in investment. In some countries, the annual rate of increase in the volume of gross fixed investment during the nineteen fifties was extremely high, reflecting, in part, the very low levels prevailing at the outset of the period. In Turkey and India, for example, the annual rate of increase in domestic fixed capital formation between 1950-1951 and 1957-1958 amounted to 16 and 13 per cent respectively,[3] and in Iraq, it was as much as 29 per cent. In other countries,

[1] Throughout this chapter, the data presented on investment, output and other components of gross domestic product or expenditure must be regarded only as estimates. Particularly for under-developed countries, numerous well-known difficulties are encountered both in estimation of these components within individual countries and in their comparability between countries. One important difficulty, for instance, is that estimates of investment or output in the subsistence sector of production, which is substantial in many countries, are subject to large margins of error. Again, an upward bias may be introduced into estimates of output in market prices through the widening of the monetized sector or the replacement of unrecorded output in the subsistence sector by factory production. Accurate expression of investment, output or other components in terms of constant prices is also rendered extremely difficult by the absence of accurate information on price movements.

Quite apart from these difficulties at the national level, other uncertainties arise in inter-country comparisons of these components. Specifically, inter-country differences in the relative valuation of investment and consumption goods may vitiate the comparability of the ratios of investment to gross national product when both are valued in national prices. This problem is difficult enough for the more advanced industrial countries but it is likely to be far greater for the under-developed countries owing to the greater diversity in economic structure and in the stage of development. On the problem for industrial countries, *see* Organisation for European Economic Co-operation, *An International Comparison of National Product and the Purchasing Power of Currencies*, by Milton Gilbert and Irving B. Kravis (Paris, 1954) and *Comparative National Product and Price Levels*, by Milton Gilbert and associates (Paris, 1958).

[2] The growth rate for the earlier period is based on total commodity output, while, for the later period, it is derived from real gross national product. However, it is reasonable to suppose that the rate of growth in real gross national product in the earlier period would not have differed significantly from the rate mentioned for commodity output, since the two measures differ only in the exclusion of services from the latter.

[3] Though the data on total investment throughout this chapter refer to gross fixed capital formation, unless otherwise stated, the data for India always represent net fixed capital formation.

Table 2-1. Annual Rate of Growth in Gross Domestic Fixed Capital Formation and its Share in Gross Domestic Product, 1950-1951 to 1957-1958[a]

Country	Annual rate of growth[b]	Gross domestic fixed capital formation as percentage of gross domestic product	
		1950–1951	1957–1958
Countries with high rate of growth in investment			
Iraq	29	9	19
Turkey	16	9	14
Burma	15	11	20
India	13	6	10
Cuba	11	12	20
Ghana	10	9	13
Venezuela	10	23	23
Colombia	9	18	23
Belgian Congo	9	23	29
Rhodesia and Nyasaland	9	29	31
Philippines	9	7	8
Ecuador	9	10	13
Guatemala	8	9	13
Greece	8	16	17
Countries with moderate rate of growth in investment			
Thailand	7	13	14
Peru	7	18	21
Portugal	6	12	16
Mexico	6	15	15
Bolivia	6	14	17
Ceylon	5	9	10
Countries with low rate of growth in investment			
Union of South Africa	4	22	20
Chile	3	9	9
Israel	3	25	16
Brazil	2	15	13
Argentina	2	23	24
Countries with declining rate of investment			
UAR (Egypt)	−4	16	11
Morocco	−9	24	14

Source: Statistical Office of the United Nations, *Yearbook of National Accounts Statistics;* United Nations, *Economic Bulletin for Latin America*, vol. IV, No. 2, 1959 (Santiago) and unpublished material; International Bank for Reconstruction and Development, *A Public Development Program for Thailand* (The Johns Hopkins Press, Baltimore, 1959); V. V. Bhatt, "Savings and Capital Formation", *Economic Development and Cultural Change*, vol. VII, No. 3 (Chicago).

[a] For certain countries, the period covered differs from that stated. For the Belgian Congo, Colombia, Cuba and Mexico, the period ends in 1956–1957; for Iraq, Turkey and UAR (Egypt), in 1955–1956; for Bolivia, in 1954–1955. For Morocco, the period commences in 1951–1952 and ends in 1956–1957; for Thailand, it commences in 1952–1953 and ends in 1956–1957. For Portugal and Rhodesia and Nyasaland, the period commences in 1952–1953 and 1954–1955, respectively. For India, the years refer to fiscal years, beginning in April.

Before calculation of the rates and percentages, all basic data were expressed in constant 1950 prices, the only exceptions being Portugal and Thailand, for which they are in 1952 prices, and Rhodesia and Nyasaland, for which they are in 1954 prices.

For India, the data are based on net domestic fixed capital formation and domestic product. For Guatemala and Israel, the data on investment include changes in stocks. For Iraq, Israel, Thailand and Turkey, investment is expressed as a percentage of gross national product.

[b] Annual compound rate.

the rates of increase, though not so high, were generally very substantial. Only in a few countries, such as Argentina, Brazil or Chile, were annual rates of increase as low as 2 and 3 per cent recorded, and instances of an actual contraction in the volume of gross investment were exceptional.[4]

Associated with the divergent rates of increases in the volume of investment were marked differences in changes in the share of investment in total output. In the African and Asian regions, a number of countries, such as the Belgian Congo, Burma, Ghana, India, Iraq and Turkey, experienced a marked increase in the share of gross domestic fixed capital formation in gross domestic product between 1950-1951 and 1957-1958; these increases ranged from 4 to 10 per cent of gross domestic product. However, in other countries within these regions, such as Ceylon, the Philippines, the Federation of Rhodesia and Nyasaland, Thailand and the Union of South Africa, the share of investment increased only slightly or even declined. In the Latin American region, the share of investment in gross domestic product increased markedly in a number of the smaller or less advanced countries, such as Colombia, Cuba, Ecuador, Guatemala or Peru, while in some of the larger or more advanced countries such as Argentina, Brazil, Chile or Mexico, there was either a very small increase or a slight fall.

For an adequate appreciation of the forces underlying these changes in the volume of investment, it is important that the changes be viewed in the perspective of the general conditions of stagnation or slow growth that prevailed in many countries before the inception of the period under review. It is to be remembered that, in most under-developed countries, the traditional framework of political, social and economic institutions within which economic activity was long conducted, was conducive less to economic growth than to the perpetuation of economic stagnation. In its economic aspect, the historical situation in these countries was one in which very low levels of income interacted with very low levels of investment and savings to inhibit economic growth; low rates of savings and investment depressed the growth of income while stagnant levels of income provided little stimulus to invest and restrained the rate of savings. Accordingly, it has been typical of countries with very low levels of per capita income that the share of investment in total output has been small. This is clearly demonstrated in table 2-2, where the level of per capita income and the share of investment in total output at the commencement of the period under review

[4] In this chapter, as in chapter 1, the rates of growth of investment and output have been calculated as the constant annual rate of growth given by a logarithmic straight line joining the terminal years. However, in the under-developed countries, as changes in the level of investment and output in a single year are commonly subject to erratic influences, such as an export boom or a crop failure, it has been considered preferable to use the average of a pair of years as the terminal period. In the present chapter, the averages of 1950 and 1951 and 1957 and 1958 are generally used.

Table 2-2. Relationship between Level of Per Capita Income and Share of Gross Fixed Capital Formation in Gross Domestic Product, 1950-1951

Per capita income (dollars)	*Fixed investment as percentage of gross domestic product*						
	Below 8	*8 to 11*	*11 to 14*	*14 to 17*	*17 to 20*	*20 to 23*	*Above 23*
Below 150	India Philippines	Ghana Iraq Guatemala Ecuador Ceylon	Burma Thailand Bolivia	UAR (Egypt)	Peru	Belgian Congo	Morocco Rhodesia and Nyasaland
150 to 250		Turkey	Portugal	Mexico Brazil Greece	Colombia		
250 to 350			Cuba		Union of South Africa		
350 to 450		Chile					Israel
450 to 550						Argentina Venezuela	

Source: United Nations, *Per Capita National Product of Fifty-five Countries: 1952–1954*, Statistical Papers, Series E, No. 4; and table 2-1.

are compared. Of course, it could not be expected that, among the countries with per capita incomes above the lowest levels, there would necessarily be a high degree of association between these two variables; there are many factors which may cause this relationship to vary among countries. What may be regarded as significant in the present context, however, is that the countries with the lowest per capita incomes generally tended to have the lowest share of investment in total output. In the few outstanding exceptions, such as the Belgian Congo, Peru or the Federation of Rhodesia and Nyasaland, it is notable that large-scale development of mineral resources for export, largely by means of foreign capital, has been a salient feature of their post-war experience.

It would, of course, be superficial to suggest that the economic mechanism of interaction between low incomes, savings and investment adequately explains the past stagnation or slow growth of under-developed countries. The level and relationship of these economic magnitudes have invariably been related to, or even symptomatic of, more deep-rooted social and economic characteristics of under-developed countries. Low levels of investment, for instance, have often arisen, not only from the paucity of investment opportunities but also from the lack of an entrepreneurial spirit or from the absence of appropriate institutions for the provision of financial capital. Again, a related difficulty in the field of savings has been, not simply that incomes and, therefore, savings are low, but also that there has been a traditional preference among the wealthier groups to spend their income on unproductive investments or luxury consumption. Or again, the low levels of income have reflected, not only the low levels of investment, but also such other factors as the employment of primitive and inefficient methods of production or the under-utilization of existing productive resources.

It is against this background of economic stagnation that the recent increases in the volume of investment in many countries must be viewed. In such a milieu, the initial impetus to a sustained growth in investment and output has, in numerous countries, been generated through the expansive influence of the export sector or by government.

In a number of countries, the stimulus to investment has originated in the buoyancy of external demand for output of the export sector. Rising incomes from exports have not only encouraged greater private investment in the domestic economy but, through providing increased revenue from taxes, have also been instrumental in financing an expansion of public investment. In such countries as the Belgian Congo, Iraq, Peru, the Federation of Rhodesia and Nyasaland and Venezuela, rapid expansion of the export sector, largely through foreign investment, has been an important stimulus to the growth of total domestic capital formation.

By contrast, in some of the countries which experienced least growth in the past, public investment has been of crucial importance in raising the volume of total investment. A striking example is India, where as a consequence of the acceleration of capital expenditures under the second five-year plan, the annual rate of increase in public investment between 1950-1951 and 1956-1957 was 22 per cent; this is to be compared with a rate of 7 per cent for private investment. Similarly, in Burma, the extension of the government development programme caused public investments to increase at an annual rate of 24 per cent between 1950-1951 and 1957-1958 compared with 10 per cent for private investment. Very high rates of increase in public investment were also recorded in Bolivia, Cuba and the United Arab Republic (Egypt). In the Belgian Congo, Ceylon and Ecuador, the Federation of Rhodesia and

Nyasaland and the Union of South Africa, where public investment had already accounted for a large proportion of total investment at the outset of the period, a further increase in its share took place during the period.

In many other countries, including those with higher levels of per capita income, private investment has played a more important role in increasing output. In such countries the significance of public investment has often lain primarily in the fact that it has served to stimulate a correspondingly marked expansion in private investment. Further, as is discussed in a later section, the direct stimulus generated by public investment has been commonly reinforced by other governmental policies designed to encourage the growth of private investment. Though instances of marked expansion in both public and private investment were more frequent, in a few countries, such as Greece or Mexico, the increase in volume of total investment during the period was wholly ascribable to private investment.

THE SUPPLY OF RESOURCES FOR INVESTMENT

Whether efforts to increase investment have arisen from an expansive external demand for exports or from the process of self-sustaining growth in the private domestic sector or from government action, the realization of a rising volume of investment has necessarily called for an increasing flow of the appropriate real resources. Continued expansion in supplies of the types of goods and services required to satisfy the direct and indirect needs of investment activity has presupposed growth in output of specific sectors of domestic production or in supplies of specific classes of imports. Changes in the structure of domestic production or in the composition of imports have thus been integral features of the rising volume of investment in under-developed countries. Indeed, whatever governmental policies have been adopted to realize a continued expansion of investment, these have been successful only in so far as they have directly or indirectly brought about the requisite changes in supplies. It is of particular interest to analyse investment experience from this point of view since it draws attention to certain structural characteristics of under-developed countries that impinge sharply upon the problem of investment.

Two characteristic structural features of the economies of under-developed countries are of special importance in the realization of efforts to increase the volume of investment. First, most of these countries are lacking in a capital goods industry of any significant dimension and are therefore heavily dependent upon imported supplies. Secondly, the elasticity in output of consumer goods tends to be low in these countries; food is the consumer good in greatest demand, and food production, for a variety of reasons, responds sluggishly to increased demand. Each of these factors, in terms of its significance for the realization of an increased volume of investment, is discussed separately below, although, as will be seen, the two are related to each other through the channel of external trade.

The supply of imported capital goods

Expansion of the volume of investment in under-developed countries has been closely dependent upon appropriate changes in the volume and composition of external trade, since much of the increase in their investment has been conditional upon their ability to draw more heavily on the capital goods industries of developed countries. This capacity to import capital goods has, in turn, however, generally depended upon the changes which these countries have been able to effect in the volume of their exports or in the composition of their imports.

It is not true, of course, that capital goods industries are entirely absent from the under-developed countries or that, during the period under review, no efforts have been made to expand domestic production of these industries and thereby to reduce dependence on imported supplies. In particular, many countries have established or expanded domestic production of cement and other building materials. Indeed, in many Latin American countries, domestic production of cement already supplied virtually the whole of domestic requirements at the outset of the period; and in a number of other countries, the expansion of domestic production during the period under review reduced the volume of imports to a small proportion of domestic consumption (see table 2-3). In the smaller group of countries which has moved beyond the earliest stages of industrial development, considerable emphasis was also given during the period to the relatively rapid growth of certain other heavy industries, such as iron and steel; and, in such countries, domestic output of steel, for instance, has provided a substantial part of domestic requirements (see table 2-4).

The expansion in domestic production of capital goods, however, has generally been small in relation to total requirements, even in countries where the development of capital goods industries has extended beyond the building-materials industries. While it may well have permitted a greater increase in domestic investment than would otherwise have taken place, it has generally not been sufficient to cause any relative reduction in dependence on imported supplies. Thus, in many countries, the import content of total fixed investment did not change significantly during the period under review. Of course, in all countries, there were variations from year to year, sometimes of quite substantial magnitude. But, in some three-fifths of the countries shown in table 2-5, there was no discernible trend from 1950-1951 to 1957-1958 towards a reduction in the import content of investment.

Table 2-3. Index of Cement Production and Imports as Percentage of Apparent Consumption, 1950-1951 to 1957-1958[a]

Country	Production, 1957–1958 (1950–1951 = 100)	Imports as percentage of apparent consumption	
		1950–1951	1957–1958
Belgian Congo	226	34	22
Morocco	165	50	2
Union of South Africa	138	—	1
UAR (Egypt)	102	—	12
Argentina	154	—	—
Brazil	226	78	1
Chile	120	—	—
Colombia	199	—	—
Cuba	129	27	26
Ecuador	231	3	1
Guatemala	176	1	9
Mexico	145	—	—
Peru	158	—	—
Venezuela	300	34	7
Burma	388	79	72
Ceylon	171	80	72
India	199	—	3
Iran	332	42	13
Iraq	1,057	18	1
Israel	163	20	1
Philippines	145	12	12
Thailand	218	5	8
Greece	312	—	—
Portugal	165	—	—
Turkey	351	25	10

Source: Statistical Office of the United Nations, *Statistical Yearbook*; and national publications.

[a] For certain countries, the periods are different from those stated: for Turkey, beginning period is 1950 only, and for Cuba and Guatemala, 1952; for the Philippines, terminal period is 1956 only; for Brazil, Cuba, Iran, Israel and Morocco, terminal period is 1956–1957.

Table 2-4. Index of Steel Production and Net Imports as Percentage of Apparent Consumption in Certain Countries, 1950-1951 and 1957-1958[a]

Country	Production, 1957–1958 (1950–1951 = 100)	Net imports as percentage of apparent consumption	
		1950–1951	1957–1958
Argentina	177	89	87
Brazil	165	29	30
Chile	315	39	26
India	120	14	51
Mexico	212	52	52
Pakistan	367	99	97
Rhodesia and Nyasaland	245	78	75
Turkey	149	62	41
Union of South Africa	196	34	21

Source: Statistical Office of the United Nations, *Statistical Yearbook*.

[a] For Mexico and Rhodesia and Nyasaland, terminal period is 1956–1957.

For those countries where the import content of domestic fixed investment was substantially different in 1957-1958 from what it had been in 1950-1951, the immediate explanation probably lies primarily in marked shifts in the composition of investment, though rising domestic production of certain capital goods may also have been a contributory factor. Statistical information on investment composition is lacking for most of these countries, but other evidence lends support to this interpretation. In Turkey, for instance, acute foreign exchange difficulties were experienced in most of the years following 1954, and it appears that investments requiring imported capital goods were substantially reduced. At the same time, however, the level of total real investment was maintained, rising domestic output of cement having apparently permitted an expansion in total construction activity. In Iraq, the rapid increase in gross fixed investment was accompanied by even more sharply rising cement production; an increase in construction activity as a proportion of total domestic investment was accordingly associated with a substitution of domestic supplies of cement for im-

Table 2-5. Imports of Capital Goods as Share of Gross Domestic Fixed Capital Formation, 1950-1951 and 1957-1958[a]

(Percentage)

Country	1950–1951	1957–1958
Countries where import content has risen		
Chile	60	78
Guatemala	49	61
UAR (Egypt)	30	43
Venezuela	47	62
Countries where import content has remained roughly stable[b]		
Argentina	19	18
Bolivia	59	54
Burma	20	26
Ceylon	34	34
Colombia	38	32
Ecuador	58	51
India	27	25
Israel	16	22
Mexico	65	64
Peru	46	45
Philippines	33	33
Portugal	46	45
Rhodesia and Nyasaland	40	38
Thailand	32	31
Union of South Africa	42	46
Countries where import content has fallen		
Belgian Congo	59	45
Brazil	29	20
Cuba	51	43
Ghana	62	40
Iraq	64	43
Turkey	37	21

Source: United Nations Division of General Economic Research and Policies, based on national publications.

[a] The period is somewhat shorter in a few cases. Except for Ecuador and the Union of South Africa (1950–1951 to 1956–1957), the differences in period of coverage are as indicated in table 2–1, footnote *a*.

[b] The countries classified in this group are those where there was no discernible upward or downward trend in the share of capital goods imports throughout the period, although, in some instances, the figures for the particular terminal years shown here revealed some deviations from trend.

ports. Similarly, in Brazil there was a marked increase in the domestic production of cement and certain other capital goods. In Chile, on the other hand, the markedly higher share of imported capital equipment in total investment in 1957-1958 as compared with 1950-1951 was related to the curtailment of government construction expenditure as part of the stabilization programme.

Apart from such exceptions, however, the realization of an increasing volume of investment has generally continued to depend closely upon a corresponding expansion in imported supplies of capital equipment; and even in the exceptional instances, the relative decline in import content of domestic fixed investment was often dictated by adverse circumstances of a transient nature.

Since the burden of adaptation required to permit an increasing flow of capital equipment has been borne almost entirely by the external sector, this has meant, in essence, that either total import capacity has been increased through an expansion in foreign exchange receipts or the composition of imports has been altered to increase the share of capital equipment. Of course, in some countries, import capacity derived from exports of goods and services has been substantially augmented by inflows of foreign long-term capital, in the form of either private investment capital or official loans and grants. In most countries, however, the inflow of foreign long-term capital has amounted to about 5 to 10 per cent of total foreign exchange receipts during the period and, consequently, the trend in total import capacity has been very largely determined by the increase in import capacity derived from exports of goods and services. Thus, except in a few countries which entered the period under review with large foreign exchange reserves and which drew heavily upon these reserves during the period, the increase in total real imports has generally followed closely the trend in import capacity derived from exports of goods and services (see table 2-6). The scope for an expansion of exports other than minerals, either through the fuller utilization of existing resources in the export sector or the diversion of other resources to this sector, has, however, not usually been very large; and, as was discussed in the *World Economic Survey, 1958*, this has been due less to supply conditions prevailing in under-developed countries, than to the relatively slow growth in world demand for internationally traded primary commodities.[5]

Table 2-6. Indices of Real Imports and Import Capacity, 1957-1958
(1950–1951 = 100)

Group and country	Real merchandise imports	Import capacity[a] derived from: Merchandise exports and net services	Import capacity[a] derived from: Merchandise exports, net services, private and official donations, private capital and long-term official capital[b]
Exporters of metals, ores and petroleum			
Belgian Congo	151	82	88
Bolivia	108	55	73
Chile	132	110	120
Iran	247	228	290
Iraq	251	213	210
Mexico	140	125	125
Peru	203	144	191
Rhodesia and Nyasaland	167	164	189
Venezuela	236	179	256
Exporters of beverage crops			
Brazil	96	85	117
Ceylon	128	108	111
Colombia	116	137	131
El Salvador	179	150	153
Guatemala	171	118	166
Exporters of food and tobacco			
Argentina	106	83	82
Burma	185	109	157
Cuba	116	105	116
Ecuador	194	141	150
Greece	122	508	112
Israel	121	494	138
Philippines	143	109	99
Thailand	138	78	121
Turkey	95	101	113
Exporters of rubber, textile fibres and other raw materials			
India	164	100	121
Indonesia	104	70	82
Portugal	143	129	127
Union of South Africa	124	130	128
UAR (Egypt)	88	81	88[c]

Source: International Monetary Fund, *Balance of Payments Yearbook* and *International Financial Statistics* (Washington, D.C.).
[a] Obtained by using import price index as deflator.
[b] Excluding short-term banking capital.
[c] Excluding official donations in 1958.

Apart from the expansion of imports of capital goods through the growth in volume of exports, most countries have also been able to increase their imports of capital equipment through altering the commodity composition of total imports. This is not to say that, because governments in most under-developed countries exercise exchange and import controls, the proportion which capital goods bear to consumer goods and raw materials in total imports can be arbitrarily changed by governmental decree. While drastic changes may well be possible in the short run, the structure of domestic production in relation to domestic demand sets limits to the extent to which governments can, in the longer run, freely alter the composition of imports by manipulation of import controls. An economy dependent on imported raw materials or essential consumer goods cannot restrict such imports in favour of capital goods without adverse effects on domestic

[5] *See* United Nations, *World Economic Survey, 1958* (sales number: 59.II.C.1), chapter 1.

economic activity or domestic consumption levels. In the longer run, therefore, the important governmental policies in this context are not import controls by themselves, but all those policies which are designed to modify the level and composition of domestic demand and output and which may thus indirectly alter the composition of import requirements.

In the period under review, the proportion of total import capacity available for the importation of capital goods has thus been dependent on the trends in domestic demand and output of consumer goods and raw materials in relation to the trend in total import capacity. In so far as domestic consumption has risen more slowly than total import capacity, or in so far as domestic output of consumption goods or raw materials has increasingly replaced imported supplies, the margin available for imported capital goods has been increased. These relationships are illustrated by the data shown in table 2-7. It is to be emphasized, however, that the data shown in this table suffer from certain statistical limitations and are not to be considered, therefore, as providing more than rough indications of orders of magnitude. Real domestic consumption is, for instance, inclusive of expenditure on services which is not strictly relevant in the present context; also, imports of

Table 2-7. Relationship between Import Capacity, Domestic Consumption and Capital Goods Imports, 1950-1951 to 1957-1958[a]

Group and country	*Increase, 1950–1951 to 1957–1958*		*Imports of consumer goods and raw materials as percentage of domestic consumption*		*Imports of capital goods as percentage of total imports*	
	Import capacity (1950–1951 = 100)	*Domestic consumption (1950–1951 = 100)*	*1950–1951*	*1957–1958*	*1950–1951*	*1957–1958*
Group I. Countries with greater rate of increase in import capacity than domestic consumption						
In which import content of domestic consumption has declined or remained stable:						
Colombia	163	142	10	9	45	49
India	118	...	...	...	24	43
Rhodesia and Nyasaland	119	116	38	38	33	34
Thailand	120	117	17	17	24	26
Venezuela	256	215	19	14	51	63
In which import content of domestic consumption has risen:						
Burma	157	140	17	21	15	26
Ecuador	147	137	11	15	43	39
Guatemala	166	143	16	19	26	33
Iraq	202	131	20	29	29	39
Morocco	130	106	34	39	32	14
Peru	191	127	15	20	46	44
Portugal	134	125	18	21	32	30
Group II. Countries with smaller rate of increase in import capacity than domestic consumption						
In which import content of domestic consumption has declined or remained stable:						
Argentina	82	115	10	10	40	39
Belgian Congo	99	156	31	31	45	41
Bolivia	84	107	28	27	26	28
Brazil	117	123	10	9	45	38
Ceylon	111	120	35	35	11	12
Israel	138	195	17	13	24	27
Philippines	118	139	10	8	20	28
Turkey	125	141	5	5	45	46
Union of South Africa	124	129	29	26	33	35
In which import content of domestic consumption has risen:						
Chile	120	128	11	13	39	41
Cuba	108	113	33	35	19	24
Ghana	...	148	26	28	22	18
Mexico	128	139	7	8	54	52

Source: Tables 2–1, 2–5 and 2–6.

[a] The period is somewhat shorter in a few cases. Except for Ecuador and the Union of South Africa (1950–1951 to 1956–1957), and Morocco (1951–1952 to 1955–1956), the differences are as indicated in table 2–1, footnote *a*. Because of such differences in time period, figures for import capacity for several countries in this table are different from those shown in the third column of table 2–6. Domestic consumption refers to total private consumption.

fuels and raw materials have been assumed to flow entirely into domestic consumption, though some part has doubtless entered into domestic investment. But these shortcomings would not appear to invalidate the general conclusions that can be drawn from this table.

Among the first group of countries shown in table 2-7, the increase in import capacity between 1950-1951 and 1957-1958 was greater than the increase in domestic private real consumption; and, in most of these countries, the proportion of capital goods in total imports rose. In a few countries—for example, Venezuela—the effect of the relatively greater increase in import capacity than in domestic consumption was reinforced by a decline in the import content of domestic consumption. In most other instances, however, the increase in the share of capital goods in total imports occurred despite some increase in the import content of domestic consumption.

In the second group of countries import capacity increased less than domestic consumption; generally this was not because domestic consumption rose more rapidly than in the first group of countries but because import capacity expanded more slowly or even declined. In two-fifths of the countries in this group, the failure of import capacity to rise as much as domestic consumption contributed to a decline in the share of capital goods in total imports. In some countries, however, where changes in the structure of domestic production in favour of import-substituting activities resulted in some reduction in the import content of domestic consumption, this was sufficient to prevent any decline in the share of capital goods in total imports or even to permit some increase.

It is notable that among most of the under-developed countries which have passed beyond the earlier stages of industrial development, the import content of domestic consumption underwent little or no change during the period under review. Thus, in Brazil, Colombia, Mexico and Turkey, it remained stable, or changed only moderately. In these countries, both industrial production of manufactured consumer goods and agricultural production of food had already been developed to the point where dependence on imported supplies of these commodities was a marginal element in total domestic consumption. While the process of import substitution continued in the period under review, it was to a large extent offset by the increase in imported raw materials, inclusive of fuels and chemicals, required by the expanding consumer goods industries.

On the other hand, significant reductions in the import content of consumption were made in a few countries, such as Israel and Venezuela, where the expansion of both agricultural and industrial production contributed to the relative decline in imports. In India, though precise data are unavailable, it is probable that the import content of domestic consumption also fell during the period owing to substantial progress towards achieving self-sufficiency in food.

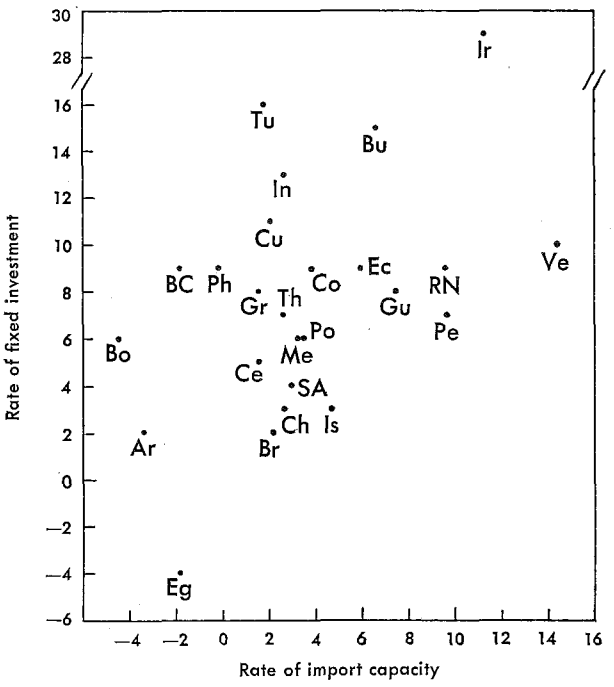
In most countries, however, by comparison with the relative trends in total import capacity and total domestic consumption, the process of import substitution has been of minor importance in affecting the supply of foreign exchange available for capital goods. In the countries which have moved through earlier stages of industrialization, the scope for further import substitution of consumer goods has been reduced by the progress already made and by the offsetting increase in import requirements of raw materials; and in many of the least developed countries, the process of import substitution has yet to assume significant proportions.

In summary, it may be said that, because of the relative absence of capital goods industries, the foreign trade sector has assumed particular significance in the growth of investment in under-developed countries. Only in a few countries did the import content of domestic fixed investment decline during the period, and even in these instances, it often reflected special and temporary circumstances rather than structural changes in domestic production. The rate of growth in total import capacity has therefore been of major importance in determining the rate of increase in domestic fixed investment. Only in a few exceptional countries which held large foreign exchange reserves at the outset of the period did total imports increase faster than total import capacity. In many countries, however, imports of capital equipment rose more sharply than total import capacity. This was generally because import capacity increased more rapidly than domestic consumption, although, in a few instances, it reflected changes in the structure of domestic production, permitting a relative reduction in the import content of domestic consumption.

The net effect of these various intermediate links in modifying the general relationship between the growth of import capacity and the volume of domestic fixed investment is summarized in chart 2-1. It will be seen that, by and large, high or low rates of increase in import capacity were associated with high or low rates of increase in the volume of domestic fixed investment. Some countries, however, deviated markedly from this general tendency, the relationship between import capacity and domestic investment having been considerably modified by some of the intermediate factors discussed above. India, for example, drew heavily on the sterling balances which it had accumulated during the war and also made substantial progress towards self-sufficiency in food. Similarly, the Philippines permitted a large decline in its foreign exchange reserves and also reduced the import content of domestic consumption. In Iraq and Turkey, there were apparently marked shifts in the composition of domestic investment towards construction. The influence of these intermediate factors, however, was not confined to such

Chart 2-1. Relationship between Rate of Growth of Gross Fixed Investment and Import Capacity, 1950-1951 and 1957-1958

(Annual rate)



Ar—Argentina
BC—Belgian Congo
Bo—Bolivia
Br—Brazil
Bu—Burma
Ce—Ceylon
Ch—Chile
Co—Colombia
Cu—Cuba
Ec—Ecuador
Eg—UAR (Egypt)
Gh—Ghana
Gr—Greece
Gu—Guatemala
In—India
Ir—Iraq
Is—Israel
Me—Mexico
Pe—Peru
Ph—Philippines
Po—Portugal
RN—Rhodesia and Nyasaland
SA—Union of South Africa
Th—Thailand
Tu—Turkey
Ve—Venezuela

Source: Tables 2-1 and 2-6.

exceptional instances, but also affected the average relationship between import capacity and domestic investment. Thus, as may be seen from chart 2-1, the rate of increase in domestic fixed investment was, despite many exceptions, typically greater than the rate of increase in import capacity during the period under review; in other words, through the operation of the intermediate factors, greater increases in domestic investment were realized than might have been expected from the growth in import capacity.

The supply of consumer goods

As was mentioned earlier, another structural characteristic of under-developed countries which is of special importance in realizing efforts to increase the volume of investment is the inflexibility in supplies of consumer goods, particularly food.

It is important to understand the sense in which the supply of consumer goods may properly be regarded as impeding the realization of higher levels of investment. A continued expansion in investment activity implies the absorption at prevailing wage rates of under-employed labour into the fully employed labour force; and this means an expansion in market demand for consumer goods, particularly food. The employment of labour in investment activity need not necessarily entail any reduction in total output of consumer goods since the manpower may previously have been under-employed in agriculture. But this by no means implies that marketed supplies of consumer goods necessarily increase in proportion to market demand. In so far as labour has transferred from agriculture, for instance, the net result may be that per capita consumption in the subsistence sector rises, not that marketed supplies increase. Further, the level of real wages paid to the newly employed labour is invariably higher than are the consumption levels of labour in agriculture. Thus, in the absence of a rising trend in marketed supplies of consumer goods, particularly food, the continued expansion of investment activity may be hampered by rising food prices and declining real wages.

Of course, it does not follow that the volume of under-employed labour that can be absorbed into investment activity at prevailing real wage rates increases in exact proportion to the rise in marketed supplies of consumer goods. As the expansion in investment generates higher per capita incomes, part of the increase in marketed supplies may be absorbed in higher levels of personal consumption by persons already in employment. Similarly, if government is expanding its consumption expenditure, the higher level of employment in the government sector may also absorb part of the additional supplies. Such situations have undoubtedly prevailed in a number of countries where the emphasis in government policy has been laid upon improvements in real wages or social welfare programmes.

The extent to which the supply of consumer goods, particularly food, has been a factor tending to limit the growth in investment has thus depended, not only upon changes in supply, but also upon the particular concept of the socially acceptable level of consumption that imbues government policy. There is therefore no reason to expect that, in different countries, similar changes in the supply of consumer goods should have had similar effects on investment. It is, however, significant that, regardless of the particular government policies with respect to consumption, most under-developed countries have encountered the problem of excess demand for food in the post-war years. As was pointed out in the *World Economic Survey, 1957*, per

capita food production in many countries had not, by 1955-1956, risen appreciably above pre-war levels, and in most countries, increases in food prices have been a dominant element in the advances in their cost of living indices.[6]

Although it is difficult to identify in general the extent to which the slow growth in food production has impeded the expansion of investment, among countries which have been substantial importers of food the implications for investment of inadequate domestic food production have often presented themselves in an acute and easily recognizable form. Deficiencies in domestic food supplies, whether occasioned by a decline in domestic production or an expansion in domestic demand, may be offset wholly or partly by larger imports; and governments have frequently found themselves compelled to resort to this line of action. But since foreign exchange reserves in most countries are low in relation to import requirements and strict limitations have already generally been imposed upon imports of less essential consumer goods, larger imports of food can usually be secured only by reductions in imports of either raw materials and fuels or capital goods. Governments are then faced with a difficult choice. On the one hand, lower imports of capital goods mean that the level of investment cannot be readily maintained. On the other hand, lower imports of raw materials and fuels enforce a reduction in industrial output and, hence, in the domestic supply of industrial consumer goods. Since adoption of the latter course may depress current domestic production and tend to aggravate the incipient inflationary situation created by food shortages, governments have often been unwilling to protect imports of capital goods at the expense of raw materials; and some part of the reduction in imports other than food has therefore tended to fall on capital goods.

By way of illustration, the experience of selected countries, where food imports generally bulk large in total imports, is shown in table 2-8. Although experience varied from country to country, it is apparent that variations in the share of food in total imports frequently were partially offset by variations in the share of capital goods; the inability to protect imports of capital goods was especially evident when the increase in food imports was large. In India, for example, where variable domestic harvests caused food imports to fluctuate sharply from year to year, food imports fell substantially from 1954 to 1955 in response to the excellent harvest, and imports of capital goods accordingly rose; in 1958, on the other hand, when the opposite situation arose, the government was compelled

[6] *See* United Nations, *World Economic Survey, 1957* (sales number: 58.II.C.1), pages 71-73.

Table 2-8. Change in Share of Food and Capital Goods in Total Imports, 1951-1958
(Change over previous year in percentage points)

Country	*1951*	*1952*	*1953*	*1954*	*1955*	*1956*	*1957*	*1958*
Ceylon								
Food	−4.6	2.3	1.5	−4.2	−1.5	1.0	−1.1	1.5
Capital goods	2.3	−0.1	−1.0	−0.6	1.3	1.5	−1.0	0.5
India								
Food	8.2	−2.3	−10.1	3.7	−12.4	−2.9	4.5	7.2
Capital goods	−5.3	3.9	1.1	1.3	12.3	7.6	1.2	−6.1
UAR (Egypt)								
Food	0.5	8.6	−3.2	−15.2	−0.6	4.4	9.9	−5.1
Capital goods	−3.1	2.4	0.5	4.5	4.4	1.1	−10.2	4.5
Bolivia								
Food	−6.1	−0.8	9.4	−0.1	−3.5	−4.7	9.2	...
Capital goods	1.2	4.6	−9.5	2.3	7.3	4.0	−5.5	...
Chile								
Food	−0.9	1.5	−4.0	5.8	0.8	−10.1	4.0	−0.1
Capital goods	−1.9	0.1	5.6	−14.2	4.2	9.7	3.0	−10.7
Cuba								
Food	−0.3	−0.8	4.4	−5.1	−3.0	−0.4	...	...
Capital goods	3.7	−0.5	−2.6	1.2	−0.1	0.5	...	...
Mexico								
Food	1.0	0.9	5.4	−7.6	−5.7	2.1	4.2	...
Capital goods	4.4	−1.0	−5.2	−2.1	2.0	4.2	−2.7	...
Peru								
Food	−8.2	2.8	−2.1	0.9	1.7	−2.4	0.3	...
Capital goods	4.4	−1.7	4.3	−5.5	−2.0	3.9	−2.0	...

Source: Statistical Office of the United Nations, *Yearbook of International Trade Statistics;* United Nations, *Economic Bulletin for Latin America*, vol. IV, No. 1, 1959.

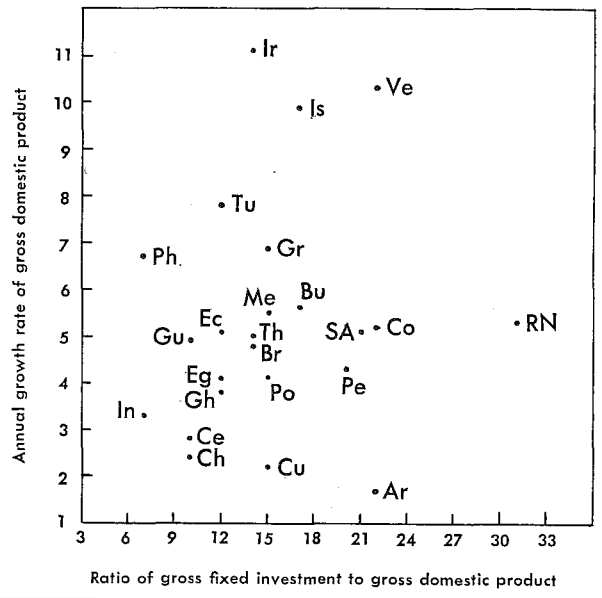
to cut back imports of capital goods and reduce the rate of domestic investment. Or again, in Bolivia, large increases in food imports in 1953 and 1957 were accompanied by substantial reductions in imports of capital goods, while in 1955 and 1956, capital goods imports were increased appreciably as food imports fell. Of course, as may be seen, variations in food imports have not invariably been associated with inverse variations in capital goods imports; sometimes, as, for example, in India during 1954 and 1957, greater food imports were accompanied by increased capital goods imports, the burden of adjustment having been borne wholly by other items in the balance of payments.

It appears, therefore, that in food-importing countries, deficiencies in domestic food production have often adversely affected the level of investment through limiting imports of capital goods. Even in countries which are largely self-sufficient in food, however, insufficient growth in food production can impede the expansion of the labour force employed in investment activity through the generation of inflationary pressure.

INVESTMENT AND THE RATE OF GROWTH

So far, attention has been concentrated upon the factors affecting the growth in volume of investment. In the final analysis, however, it is in its contribution to an acceleration of economic growth that the significance of a larger volume of investment lies. As can be seen from chart 2-2, differences among countries in the share of fixed investment in total output during the period 1950 to 1958 were positively correlated with differences in rates of growth in total output. The relationship does not appear to have been as strong, however, as is sometimes assumed. This reflects the fact that the long-run growth in output of any economy is by no means related solely to the level of investment; other factors may considerably modify the relationship between investment and output that is found in different countries or in the same country at different times. For example, among the countries where the share of gross fixed capital formation in gross domestic product was about 12 per cent, the annual rate of growth in total output varied from about 4 per cent in Ghana to almost 8 per cent in Turkey (table 2-9). Even more arresting

Chart 2-2. Relationship between Annual Rate of Growth of Gross Domestic Product and Ratio of Gross Fixed Investment to Gross Domestic Product, 1950-1951 to 1957-1958



Source: Table 2–9. For abbreviations, *see* chart 2–1.

Table 2-9. Relationship between Rate of Growth in Output and Share of Investment in Output, 1950-1958[a]

(Percentage)

Country	*Annual rate of growth in gross domestic product*	*Gross domestic fixed capital formation as percentage of gross domestic product*	*Incremental capital-output ratio*
Iraq	11.1	14	1.3
Venezuela	10.3	22	2.1
Israel	9.9	17[b]	1.7
Turkey	7.8	12	1.5
Rhodesia and Nyasaland	7.0	31	4.4
Greece	6.9	15	2.2
Philippines	6.7	7	1.0
Burma	5.6	17	3.0
Mexico	5.5	15	2.7
Colombia	5.2	22	4.2
Union of South Africa	5.1	21	4.1
Ecuador	5.1	12	2.4
Thailand	5.0	14	2.8
Guatemala	4.9	10[b]	2.0
Brazil	4.8	14	2.9
Peru	4.3	20	4.7
Portugal	3.9	15	3.8
Ghana	3.8	12	3.2
UAR (Egypt)	3.3	12	3.6
India[c]	3.3	7	2.1
Ceylon	2.8	10	3.6
Chile	2.4	10	4.2
Cuba	2.2	15	6.8
Argentina	1.7	22	12.9

Source: United Nations Division of General Economic Research and Policies; Statistical Office of the United Nations, *Yearbook of National Accounts Statistics;* United Nations, *Economic Bulletin for Latin America*, vol. IV, No. 2, 1959.

[a] The annual rate of growth refers to the compound rate obtained after averaging gross domestic product in the first and last pair of terminal years. Gross domestic fixed capital formation as a percentage of gross domestic product was derived from cumulated totals for both components over the whole period. The incremental capital-output ratio was derived by dividing gross domestic fixed capital formation as a percentage of gross domestic product by the annual rate of growth. All the figures are derived from data in constant prices. The period is generally from 1950 to 1958, but for a few countries the results refer to shorter periods; on this, *see* table 2-1, footnote *a*.

[b] Including inventories.

[c] Net domestic product and net capital formation.

is the range of variation in growth of total output for those countries where the share of investment was of the order of 14 to 15 per cent; at one extreme, Cuba experienced an annual rate of growth of somewhat less than 2.5 per cent, while in Greece the rate was almost 7 per cent and in Iraq it amounted to no less than 11 per cent. Some part of these wide disparities may have arisen from differences among countries in the statistical measurement of output and capital formation; the collection of comprehensive data on these aggregates is notoriously difficult in under-developed countries and there are also well-known problems relating to the international comparability of such aggregates.[7] But, in the main, such deficiencies cannot account for more than a minor part of the wide disparities in growth among countries with similar levels of investment, and the primary reasons must be sought in other causes.

Analyses of variability in the relationship between the level of investment and the rates of growth recorded in industrially advanced countries usually give prominence to the pace of technical progress, the composition of investment, changes in quantity and quality of other productive resources, particularly labour, and, over shorter periods, changes in the degree of utilization of all productive resources. Not all of these considerations, however, are of equal or similar significance for economic growth in the under-developed countries. While the growth in labour supply and innovations dependent on the pace of technical progress may be regarded as tending to limit the long-run rate of growth in the industrially advanced countries, they are not constraints of much relevance for the under-developed countries. It is self-evident that under-developed countries are far from having fully exploited existing levels of technical knowledge. No less is it a characteristic feature of these countries that they suffer from widespread under-employment of available labour supplies; indeed, the supply of labour in these countries, rather than being an impediment to economic growth, is more correctly viewed as an under-utilized productive resource which can contribute to the acceleration of economic growth, particularly if traditional market institutions are undergoing rapid adaptation.

Three main types of factors, however, appear to have been of particular significance in influencing the relationship between investment and output in under-developed countries during the period under review. First, an important influence has been the development of demand during the period in relation to the level and composition of under-utilized productive resources at the outset of the period. Secondly, countries have differed in the degree to which there have been improvements in those techniques or methods of organization whose introduction has required little or no additional investment. Thirdly, differences in the composition of investment and output and in the stock of capital may have affected rates of growth in aggregate output. It is to be borne in mind, however, that such factors may have partly reflected other differences among countries, such as topography and natural resource endowment, which may have indirectly exerted some influence on the relationship between investment and output.

The development of demand over the period in relation to the level and composition of under-utilized productive resources at the outset has been important in so far as increases in output have been attained simply through the greater utilization of existing resources. While it is quite impossible to determine the degree of utilization of resources that obtained in the various sectors of production at the outset of the period, widespread under-utilization of productive resources is such a well-known characteristic of under-developed countries that it hardly requires demonstration. It is perhaps less well understood that this applies not only to labour but frequently to other productive resources as well. The utilization of agricultural land, for instance, particularly if it is suitable only for the production of certain specific commodities, may be subject to wide variation. Paradoxical though it may seem, even the capital equipment available in an under-developed country may frequently be under-utilized. Indeed, under-utilization of industrial capital equipment may be greater in some cases in under-developed countries than in the industrially advanced countries, since, owing to the narrow productive structures of these countries, total output adapts only sluggishly and imperfectly to changes in the level and composition of demand. The phenomenon of excess demand in some sectors of production coincident with excess capacity in others is accordingly common in these countries.

An extreme example of the effect of structural maladjustment on the relationship between aggregate investment and output is provided by the experience of Argentina. In a succession of years dating from the late nineteen forties, industry operated well below capacity levels partly because the absence of growth in the fuel, electrical power and transport sectors, when combined with acute balance of payments difficulties, created severe shortages throughout the economy; thus, the level of manufacturing production attained by 1954 did not exceed the level previously reached in 1948. At the same time, however, investment intended partly to overcome the sectoral bottlenecks depressing output in the economy as a whole continued to rise. As a consequence of this situation, the reported level of investment in relation to the growth in total output was extremely high during the greater part of the nineteen fifties.

In the industrial sectors of other countries, however, experience has often been the opposite to that of Argentina. The development of demand has stimulated the expansion of output in sectors of production where

[7] *See* footnote *1*.

there was considerable under-utilization of existing productive resources. The great increase in railway freight traffic which has taken place since the war without much new investment provides an example common to many countries. Even in manufacturing industries, some countries entered the nineteen fifties with substantial excess capacity; in Mexico, for example, under-utilization of capacity in major consumer goods industries was considerable in the late nineteen forties.

In most under-developed countries, however, it is in the agricultural sector that under-utilized productive resources are most commonly in evidence. Particularly in this sector, more effective utilization of productive resources is often conditional, as has been suggested above, upon a transformation of the existing institutional framework. But, even within the existing institutional conditions, considerable growth in agricultural output through fuller utilization of existing resources has not been uncommon. In Turkey, for instance, during the period from 1948 to 1953, the acreage planted to cereals increased by nearly 40 per cent; and an important factor inducing this increase was the price support programme introduced by the Turkish Government. While there was considerable agricultural investment during this period, it is believed that the stimulus of the high level of demand created by the support programme was in itself an important factor accounting for the greater utilization of agricultural land.[8]

A special but very important case of the greater utilization of existing productive resources in agriculture is to be found in the export sector. Most under-developed countries concentrate activity in their export sectors upon production of one or two primary commodities in which, by reason of climate or natural resource endowment, they enjoy an advantage in international trade. But while the productive resources utilized in the export sector frequently exist in abundance and are eminently suited to the production of the export commodity, they are also of a highly specific character and cannot be easily adapted to the production of other commodities. Thus, the degree to which these resources are utilized depends very largely on the level of external demand. Outstanding examples are provided by countries specializing in tree crops, such as rubber or the beverage crops. Of course, where exports consist of agricultural field crops, productive resources can sometimes be transferred to alternative uses in the event that external demand contracts. But this assumes favourable conditions, such as easy substitution of alternative crops and a ready market for these crops, that do not often obtain; and in any case, such substitution generally entails the cultivation of crops that contribute less in value to total output.

These characteristics of the export sectors of under-developed countries have been of considerable significance for the relationship between the level of aggregate investment and the growth in total output that obtained in individual countries during the period under review. For, where the trend in external demand has stimulated a marked expansion in output of the export sector, exports have significantly contributed to the growth in total output; but, in so far as the expansion in exports has been achieved through greater utilization of existing resources, the additional capital required to permit the increase in output of the economy as a whole has to that extent been reduced. In other words, an upward trend in external demand for the exports of a country has frequently tended to reduce the incremental capital-output ratio; conversely, where external demand for output of the export sector of a country has been stagnant, the capital requirements needed to permit an increase in total output have usually tended to be high.

This is broadly corroborated by the data presented in table 2-10. The highest incremental capital-output ratios, as may be seen, have been recorded mainly in

Table 2-10. Merchandise Exports and Aggregate Incremental Capital-Output Ratio, 1950-1951 to 1957-1958[a]

Country	*Annual rate of increase in merchandise exports*	*Incremental capital-output ratio*
Iraq	22	1.3
Ecuador	19	2.4
Israel	17	1.7
Mexico	13	2.7
Greece	12	2.2
Belgian Congo	9	5.6
Union of South Africa	8[b]	4.1
Venezuela	7[c]	2.1
Burma	6	3.0
Philippines	6	1.0
Peru	6	4.7
Turkey	5	1.5
Chile	5	4.2
Thailand	4	2.8
Rhodesia and Nyasaland	4	4.4
Portugal	3	3.8
Guatemala	2	2.0
Cuba	2	6.8
India	1	2.1
Argentina	1	12.9
Ceylon	1	3.6
Colombia	—	4.2
Brazil	−1	2.9
UAR (Egypt)	−2	3.6

Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* United Nations, *Economic Survey of Africa since 1950* (sales number: 59.II.K.1); International Monetary Fund, *International Financial Statistics;* and table 2-9.

[a] The period is somewhat shorter in a few cases; *see* table 2-1, footnote *a*. Except for Greece (1951–1952 to 1957–1958), Israel (1950–1951 to 1956–1957), and Turkey (1950–1951 to 1954–1955), the export data conform to the period for which incremental capital-output ratios have been calculated.

[b] Exports of goods and services.

[c] Exports of petroleum only.

[8] *See* W. H. Nicholls, "Investment in Agriculture in Underdeveloped Countries", *American Economic Review* (Menasha, Wisconsin), May 1955.

countries where the rate of growth in exports of goods and services has been relatively low. Conversely, among the countries where exports of goods and services have shown more buoyant growth, the incremental capital-output ratio has tended to be low. Of course, even identical rates of growth in exports of goods and services have not necessarily had similar over-all effects, since the size of the export sector relative to total output has also varied from country to country.

One group of countries which represents an important exception to this tendency consists of the Belgian Congo, Peru, the Federation of Rhodesia and Nyasaland and the Union of South Africa. Though the rates of growth in exports of these countries have been high or moderately high, their incremental capital-output ratios have also been high. But, in all these countries, ores and metals have been the dominant, or most expansive, export commodity; and in the mining industry, it is clear that a continued expansion in output over a period of years invariably requires substantial investment, not only in sinking mines, but also in equipment for the extraction, processing and transportation of the metals. Thus, the general assumption of under-utilized resources in the export sector does not apply to the same extent in these countries.[9]

It is true that in certain other mineral exporting countries, this has not been evident. In Iraq and Venezuela, output of the export sector has expanded strongly, but their incremental capital-output ratios have been relatively low. However, both of these countries are exporters of petroleum, not of metals; and in the petroleum industry, it is only in the initial period of exploration and development that capital costs are comparatively heavy. Once the petroleum bearing regions have been located and such equipment as pipelines, storage and dock facilities have been installed, the additional capital requirements needed to permit increases in output may be relatively small; and it may be noted that, in both Iraq and Venezuela, the initial phase of development of the oilfields was completed well before the commencement of the period under study.

While the trends in external demand or, more generally, the trends in total demand in relation to the level and composition of under-utilized productive resources provide some explanation of the differences among countries in the relationship between aggregate investment and their rates of growth, changes in the degree of utilization of existing resources are, in practice, often accompanied by changes in the system of productive organization or in the techniques employed in production. Indeed, the fuller utilization of these resources is often largely dependent upon institutional changes, sometimes of a far-reaching character.

In the industrially advanced countries, the introduction of new technical or organizational methods is usually associated closely with the process of capital formation; it is commonly through the formation of new capital that the new methods are absorbed into the productive system. This is not less true of under-developed countries in fields of production where the existing organizational and technical conditions are not greatly different from those in the former countries. But it is quite clear that, in certain important areas of production, the scope for the introduction of new methods is greater in the latter countries, if only because traditional methods of production, long since superseded in the industrial countries, are still prevalent in under-developed countries. Further, it is by no means always the case that the introduction of more efficient techniques or methods of productive organization is conditional upon fixed capital formation—though it may sometimes require more working capital. For example, the adoption of crop rotation in farming, the use of improved seeds or the application of fertilizers may yield appreciable increases in agricultural output without additional fixed investment.[10]

The extent of such non-capital-using innovations, and their influence upon the relationship between aggregate investment and the rate of growth, must certainly have differed among the various under-developed countries. While it is virtually impossible to distinguish their influence from that of the greater utilization of existing productive resources, the combined influence of these two sets of factors can be illustrated. In table 2-11, the relationships between investment and output prevailing in specific sectors of production are compared for different countries. This comparison of sectoral capital-output ratios, in effect, abstracts from the influence of differences among countries in their investment composition upon their aggregate capital-output ratios and therefore isolates the influence of other factors.

It will be seen that the least variation in capital-output ratios among the countries shown in table 2-11 has been in the industrial sector, while the greatest has been in the agricultural sector.[11] In other words, the degree to which the factors discussed above have affected the amount of additional capital required to permit a given increase in output has varied most in the agricultural sector and least in the industrial sector. This is hardly surprising since, as has been suggested

[9] In Chile, however, though it is principally an exporter of metals, exports have not increased much and the country's relatively high capital-output ratio must therefore be mainly ascribed to developments outside the export sector.

[10] A striking historical instance is provided by Japan where it is estimated that agricultural output of the six major crops increased by 77 per cent in the three decades between 1881-1890 and 1911-1920. What is significant is that this was accomplished with very little new fixed investment in agriculture, and mainly through the extended use of fertilizers and improved seeds (*see* Bruce F. Johnston, "Agricultural Productivity and Economic Development in Japan", *Journal of Political Economy*, Chicago, December 1951).

[11] Argentina has been excluded from this comparison because of the exceptional character of the relationship between its investment and output noted previously.

Table 2-11. Incremental Capital-Output Ratios by Sector, Selected Countries

Country and period	Agriculture	Industry		Basic facilities		Other	Total
		Total[a]	Manufacturing	Transport and communications	Electricity, gas and water		
Greece							
1950–1958...	0.6	1.7[b]	1.7	8.6	8.1	3.9[c]	2.2
Mexico							
1945–1951...	1.0	...	...	...	...	...	...
Ecuador							
1950–1955...	1.7	2.7	3.1	4.7	5.7	1.5	2.3
Argentina							
1950–1955...	3.5	37.9	...	33.6	...	19.0	15.0
Portugal							
1952–1957...	3.7	1.7	1.6[c]	11.3	7.2	6.2	4.0
Colombia							
1945–1953...	4.5	2.6	2.8[c]	4.6	...	3.6	3.7
Israel							
1952–1957...	5.1	2.2[d]	...	3.9	...	2.3	2.7

Source: Statistical Office of the United Nations, *Yearbook of National Accounts Statistics;* United Nations Economic Commission for Latin America; International Bank for Reconstruction and Development, *The Economic Development of Mexico* (The Johns Hopkins Press, Baltimore, 1953).

[a] Mining, manufacturing and construction.
[b] Excluding construction.
[c] Including construction.
[d] Including electricity, gas and water.

above, it is in the agricultural sector that the scope for the operation of these factors has usually been greatest.

In the sectors providing basic facilities, such as transport and electricity, the variations in capital requirements have also been greater than in industry. While these variations may have partly been occasioned by different changes in the degree of utilization, it is doubtful whether the factors so far discussed have been of primary importance. To some extent, these variations may have reflected differences among countries in natural resource endowment or in topography; such natural circumstances have probably caused greater variations among countries in the capital-output ratios of these sectors than in the industrial sector. Differences in these ratios among countries, however, have probably also been affected simply by the long periods that elapse between the initiation of capital projects in these sectors and the time when they finally become ready to contribute to output. If a country has initiated a number of large-scale projects in the period under study, these may not yet have been completed; accordingly, this would be reflected in a very high capital-output ratio.

In view of the differences in capital-output ratios prevailing among the various sectors of the economy noted above, it is clear that within each country the relationship between aggregate investment and output must also depend upon the distribution of investment by economic sectors.

One aspect of the composition of investment that is of obvious importance in this respect is its distribution between the non-productive and productive sectors. If a substantial proportion of total investment is absorbed in the formation of social overhead capital, it is clear that this must tend to affect the rate of growth in total output over any moderate span of years. The accumulation of social overhead capital may well be indispensable for the long-term economic growth of a country; investment in education, for instance, may well be no less important than investment in other areas for long-term growth. Such investment is not necessarily reflected, however, in an immediate increase in the rate of growth in output.

Considerations extending beyond those of a purely economic nature, of course, play a large part in determining the proportion of total investment allocated to the formation of social overhead capital. Thus, among the countries for which data on investment composition are shown in table 2-12, social welfare policies partly accounted for the relatively high proportion of total investment absorbed in residential construction in Argentina and Chile; and, in Argentina at least, they also gave rise to substantial investment in such public services as schools, institutes of higher education, hospitals and clinics. In Israel, the high proportion of investment allocated to residential construction was related to the need to provide accommodation for the heavy inflow of immigrants, while in Greece, it was partly dictated by the extensive war-time destruction of dwellings.

It is not only the proportion of investment absorbed in the formation of social overhead capital, however, but also its distribution within the productive sectors

Table 2-12. Distribution of Gross Domestic Fixed Capital Formation by Sector, Selected Countries
(Percentage)

Country and period	Agriculture	Industry[a]	Basic facilities[b]	Total	Residential construction	Public administration	Other	Total
Ecuador								
1950–1955	27	26	18	70	18	11	2	100
Colombia								
1945–1953	26	25	20	71	...	7	...	100
Israel								
1952–1957	21	23[c]	...	56	36	1	7	100
Mexico								
1945–1951	15	...	...	...	...	...	...	100
Portugal								
1952–1957	12	22	28	62	22	6	11	100
Argentina								
1950–1955	9	19	17	45	31	19	...	100
Greece								
1950–1958	8	15[d]	34	57[d]	28	3	13[e]	100
Philippines								
1956–1958	6	27[d]	13	46[d]	15	——40[e]——		100
Chile								
1950–1954	...	...	...	...	33	...	...	100

Source: See table 2–9.
[a] Including mining, manufacturing and construction.
[b] Including transport, communications, electricity, gas and water.
[c] Including electricity, gas and water.
[d] Excluding construction.
[e] Including construction.

that affect the general relationship between investment and growth. It is obvious that the capital requirements per unit of additional output vary from sector to sector and that this tends to affect the over-all relationship. It is less obvious, though more important, however, that the composition of investment also has broader effects on the general relation between investment and output. It cannot be supposed, for instance, that countries which devote a high proportion of total investment to industry, where the incremental capital-output ratio is generally low, and abstain from investment in basic facilities, are automatically assured of a faster rate of long-term growth in total output than countries which allocate a substantial proportion of total investment to basic facilities, where the incremental capital-output ratio is generally high. In other words, the primary importance of the composition of investment in relation to economic growth lies, not in the fact that incremental capital-output ratios differ among sectors, but in its effect on the relative rates of growth in output of related sectors of production. Since the output of some sectors of production serves as the input of other sectors, the rate of growth in total output is heavily dependent upon the attainment of an appropriate balance in the rates of expansion of the different sectors. Of course, temporary and minor shortages in output of specific sectors may be a frequent event in a rapidly growing economy; and consequent changes in relative prices may often be sufficient, through increasing the rate of utilization of existing capacity, to effect the appropriate readaptation of output. However, if the shortages are symptomatic of insufficiencies in productive capacity, their elimination becomes dependent upon changes in the composition of investment. Adaptation of the composition of investment to the changes in level and composition of demand is hardly less important than the level of aggregate investment for the longer-run rate of growth in total output.

An assessment of the effect of the composition of productive investment on the rate of economic growth would, however, require much more detailed country studies than can be undertaken here; and, in any case, data on investment composition are available for only a few countries. Some general comments may nonetheless be appropriate.

Among the few countries for which data are available, it is apparent that the proportion of total investment absorbed in industry was consistently quite high (see table 2-12). Generally, it exceeded 20 per cent; and at that level, it did not fall much short of the proportion prevailing in the industrially advanced economies where its share, on the average, was of the order of 25 to 30 per cent. Undoubtedly, the substantial proportion of total investment absorbed by industry has, in large measure, reflected the emphasis generally placed on the development of import-substituting lines of domestic production. And to the extent that such investment has permitted greater use of foreign exchange for imports of capital goods in place of con-

sumer goods and raw materials, it has facilitated an expansion in the level of aggregate investment and, hence, an acceleration in the prospective rate of growth.

In contrast to industrial investment, investment in agriculture as a proportion of total investment varied widely from country to country. But, as has been mentioned above, the amount of investment required in agriculture to yield a given increase in output may differ greatly among countries because of the influence of other factors. Such variations may therefore not be of great significance in themselves. It may be repeated here, however, that in many under-developed countries there has been considerable evidence of a tendency to ascribe insufficient importance to agricultural investment.

An appropriate distribution of productive investment between industry and agriculture is, however, not sufficient in itself to assure steady growth in total output. Both industrial and agricultural development may be impeded by the inadequacy of basic facilities, such as transport and power. A specific instance is Argentina where, owing to negligible investment, or even disinvestment, in these sectors during the nineteen forties and early nineteen fifties, acute shortages have been experienced in recent years, adversely affecting production in other sectors. For most under-developed countries, however, the evidence suggests that investment in basic facilities has generally accounted for a substantial proportion of total fixed investment, perhaps of the order of 20 to 30 per cent, during the nineteen fifties. Such investment, as is discussed in a later section, has absorbed a very substantial proportion of total public investment in most countries, and it will be recalled that public investment, in turn, generally accounts for a high share of total investment. Among the countries shown in table 2-12 for which data on the volume of investment in basic facilities are available, it will be seen that the share of such investment in the total has generally been quite high, though varying from as much as 34 per cent in Greece to as little as 13 per cent in the Philippines.

Without detailed country studies, it is difficult to say whether investment in basic facilities has generally been sufficient to meet the growth in demand for their output. It does seem, however, that at least among the countries at the earlier stages of economic development, a large part of such investment has been motivated, not only by the need to relieve specific and currently revealed shortages in the basic facilities sector, but also by the belief that an adequate supply of basic facilities is a prerequisite for future expansion of commodity production.

To the extent that the expansion of basic facilities has not contributed directly to the growth in current output, at least during the period under review, but has nonetheless been a substantial proportion of total investment, it would be expected that the incremental capital-output ratio for the economy as a whole would tend to be rather high. Indeed, as a broader generalization, it is often said that capital requirements per unit of current output must usually be expected to be rather high in countries at the initial stages of economic development. In large part, this is considered probable because these countries are lacking in the basic facilities necessary for the expansion of commodity production; the expectation, however, is also heightened by the fact that they sometimes lack even the buildings to house public administrative services or such elemental requisites for urban development as adequate supplies of drinking water.

Lack of data precludes an accurate assessment of the validity of this view for the period under discussion. In so far, however, as the proportion of construction activity to total investment may be taken as an indirect indicator of the share of investment channelled into the construction of basic facilities and public buildings, the scattered evidence shown in table 2-13 does not suggest that the incremental capital-output ratios have necessarily been higher in countries where the share of construction activity has been higher.

When the composition of investment is viewed more generally, it is difficult to resist the conclusion that it has been less important in explaining differences among countries in the relationship between investment and output than have the other factors discussed above. This is not to say that the composition of investment has been unimportant for the economic growth of individual countries. But, among countries, the differences in the extent to which existing productive resources have been more fully or more efficiently utilized appear to have been of greater importance.

Table 2-13. Construction as Share of Gross Fixed Capital Formation and Aggregate Incremental Capital-Output Ratio, 1950-1958[a]

Country	*Construction as percentage of fixed capital formation*	*Aggregate incremental capital-output ratio*
Ceylon	74	3.6
Israel	74	2.7
Burma	72	3.0
Greece	71	2.2
Portugal	69	3.8
Ghana	65	3.2
Colombia	64	4.2
Argentina	61	12.9
Philippines	60	1.0
Union of South Africa	58	4.1
Chile	52	4.2
Ecuador	50	2.4

Source: Table 2–9.

[a] The period differs somewhat in a few cases. Except for Israel, where the data refer to 1950–1957, the differences are as those indicated in table 2–1, footnote *a*.

Public investment and policies to stimulate private investment

While, as has been indicated, the post-war trends in investment and output in under-developed countries have been shaped by many diverse influences, there is no doubt that governmental policy has been an element of prime importance. Largely because of the heightened post-war interest in stimulating economic growth, governments have come to assume a major role in determining the level and pattern of capital formation; and this has been reflected both in the rapid post-war rise of public investment and in official policies towards private investment. In their broad outline, the governmental policies pursued in under-developed countries during recent years have been largely determined by the long-range economic goals which the individual countries have set for themselves and by the presence or emergence of specific problems or bottlenecks, whether of a transitory or more deep-rooted nature.

Higher levels of living are, of course, the principal long-range economic goal of all under-developed countries. Commonly, countries have striven towards this objective by directing their efforts towards the diversification of domestic economic activity; in particular, they have sought to increase the relative importance of industry and related activities in total output. Low per capita incomes, rapidly growing populations and heavy dependence on exports of one or two commodities, which are often faced with slow growth in world demand and severe periodic market fluctuations, have been principal factors emphasizing the need for diversification.

The broad objectives and problems of under-developed countries have naturally affected profoundly the specific policies adopted to influence activity at different levels and in different sectors of the economy. Diversification of the economy calls for many different types of investment in both the public and the private sectors; most governments have accordingly sought to expand public as well as private investment. Further, since industrialization is heavily dependent on imported supplies of capital equipment, governments have generally adopted policies designed to release as much foreign exchange as possible for such imports. In pursuance of this aim, governments have generally striven to encourage the expansion in domestic production of selected goods, particularly certain consumer goods and raw materials that bulk large in total imports. In many countries, a major criterion for the provision of the various types of public aid or support to specific industries or sectors has been, in fact, the probable effect of greater domestic production on import requirements. The degree of success attaching to these endeavours to substitute domestic production for imports has, of course, varied from country to country and commodity to commodity. But it may be noted that this policy has generally been pursued, with respect to selected commodities, in all the major sectors of production, though with rather less vigour in agriculture than in manufacturing or in energy and fuels.

Although not as widely adopted a goal as import substitution, export promotion has also been undertaken by many countries in order to increase the supply of foreign exchange. And just as import-substituting production has made possible the achievement of both a broader economic base and a better use of foreign exchange in many cases, export promotion combined with export diversification has likewise permitted progress towards two goals. Not only has it contributed to an increase in foreign exchange availabilities, but it has also furthered the objective of broadening the economic base and thereby lessening the severity of economic fluctuations.

In order to achieve the goals of import substitution and export promotion, a number of under-developed countries have taken steps to increase output and raise the prevailing low levels of productivity in the agricultural sector. An increase in food supply has been regarded as an essential key not only to stability in the balance of payments but also to the solution of the inflationary tendencies which, from time to time, have arisen in part out of food shortages. Public policy has therefore become increasingly oriented towards raising capital formation, both public and private, in the agricultural sector in order to alleviate these problems of internal and external instability.

While most under-developed countries have had broadly similar problems and policy objectives, the specific approach adopted by each country has been conditioned to a considerable degree by its particular economic structure. Least favourably situated are countries with very low per capita income levels, little industrial development, high densities and rates of increase in population, narrow resource bases, dependence on one or two export commodities faced with a stagnant world demand and few basic economic facilities. At the other extreme are a few countries which are favourably placed in many of these respects, while most, of course, fall at various points between these poles.

These fundamental differences go far towards explaining certain salient contrasts in public investment policies during the past decade. Thus, the relative emphasis on public investment has, with one major group of exceptions, in large part reflected differences in structure. The exceptions have consisted of investment in several key industrial raw materials, such as steel and petroleum, where the size of the required investment or political considerations have resulted in a preference for public, rather than private, investment. These exceptions aside, the contrasting patterns which

emerge from post-war experience derive primarily from differences in economic structure. Although these patterns may be illustrated by examples from all parts of the world, they conform broadly to certain regional distinctions. In the more advanced of the under-developed countries the emphasis has been on a broadening of the industrial base through the encouragement of private enterprise. In these countries, located mostly in Latin America but including the Union of South Africa, the private sector was already comparatively well developed and the most essential basic facilities were available. Public policy has thus been largely oriented towards stimulating investment by the private industrial sector, in part through expanding strategic economic services required by private enterprise, such as transport and power, and in part through a broad range of incentives offered to entrepreneurs. Through these incentives private investment has been encouraged to flow not only into an ever increasing range of light industries, but also into heavy and complex industry. In these more advanced countries, the economic function of government has been viewed as that of a catalyst to private enterprise; and in keeping with this general philosophy, comprehensive planning has been eschewed. As may be seen from table 2-14,[12] public investment programmes and policies towards the private sector have instead been confined to the achievement of highly specific goals or the solution of particular economic problems. This may be illustrated by Argentina's policy of achieving self-sufficiency in petroleum, Chile's eight-year agricultural and transport development programme and Brazil's programme of transport and electric power development.

In sharp contrast to these relatively advanced countries in the under-developed group, the new African nations are almost entirely at the pre-industrial stage, and at the beginning of the post-war period they possessed only rudimentary basic economic facilities. As a result, a very high priority has been given to the provision of such facilities and services in public investment programmes. A second area of emphasis has been on raising the extremely low levels of agricultural productivity prevailing in most parts of Africa. In many Asian countries the high density and rate of increase in population have pointed to a pressing problem of food supply; an especially urgent objective of public policy has therefore been the raising of agricultural output. At the same time, the somewhat larger stock of basic facilities has permitted a relatively greater emphasis on policies to stimulate industry than has been possible in Africa. In general, the industrial activity which has been encouraged has been confined to light manufacturing and the processing of primary products. The outstanding exception is, of course, India where the production of heavy and complex industrial products is at a relatively advanced level.

In many of the less advanced of the under-developed countries, government policy towards investment has in several respects been more comprehensive than in some of the more advanced of these countries. In addition to public investment in economic and social overhead facilities, government operation of some types of productive enterprises has also been rendered necessary by shortages of risk capital and managerial experience. Thus, in Asia and Africa many governments have embarked on a broad range of industrial activities. At the same time, as is shown in table 2-14, a large number of these countries have engaged in varying degrees of planning, especially with respect to public investment.

While there have been significant differences among under-developed countries in their approach to planning, it has been a common practice to create special public bodies responsible for the formulation and implementation of investment programmes. The nature of these entities and the range of their responsibilities, however, have varied considerably among countries. In some, they have been of a very comprehensive character, taking the form of national planning commissions empowered to prepare and direct over-all plans of

[12] The information given in the table is illustrative, and not complete; it is intended only to suggest the range of recent planning experience. In addition to the various plans which were put into operation, there are a number of comprehensive development plans, such as that of Ceylon, which are in draft form and await implementation.

Table 2-14. Principal Features of Investment Plans, Selected Countries

Country	*Plan or programme*	*Period*	*Scope or object*	*Principal planning or implementing authority*
Asia and the Middle East				
Burma.....	Four-year implementation programme	1956/57–1959/60	Mainly public sector plan to restore pre-war level of production and to develop basic facilities	Ministries and special agencies
Federation of Malaya.....	Five-year capital expenditure plan	1956–1960	Public expenditure plan largely for agricultural development	Ministries

(Continued on following page)

Table 2-14. Principal Features of Investment Plans, Selected Countries (*continued*)

Country	*Plan or programme*	*Period*	*Scope or object*	*Principal planning or implementing authority*
India	Second five-year plan	1956/57–1960/61	Comprehensive plan for a 25 per cent increase in national income during the plan period	Planning Commission and ministries
Indonesia	Five-year development plan	1956–1960	Comprehensive plan to raise national income by about 3 per cent per annum	State Planning Bureau and ministries
Iran	Second seven-year development plan	Period ending 22 September 1962	Public sector plan for agricultural development and basic facilities	Plan Organization
Iraq	Second five-year programme	1955–1959	Public sector plan for providing mainly irrigation and other basic facilities	Development Board
Pakistan	First five-year plan	1955/56–1959/60	Comprehensive plan to achieve 15 per cent increase in national income during the plan period	Planning Commission and ministries
Philippines	Three-year programme of economic and social development	1959/60–1961/62	Part of a long-range programme of development	Office of National Planning and ministries
UAR (Egypt)	Five-year industrialization plan	1957–1961	Development of industrial sector	Economic Organization and Ministry of Industry
Africa				
Belgian Congo	Ten-year development plan	1950–1959	Basic facilities and services through public investment	Secrétariat du Plan Décennal
Ghana	Second development plan	1959–1964	Mainly a public investment programme to supply basic economic and social services; also, special aid to agriculture and industry	Ministries and special agencies
Latin America				
Argentina	Petroleum development	1959–1961	Self-sufficiency in crude oil	Yacimientos Petrolíferos Fiscales
Bolivia	Agricultural development	From 1952	Agricultural sector	Agricultural Bank
Brazil	Transport and electric power development	1957–1961	Expansion of basic facilities	National Development Bank
	Petroleum development	*From 1953*	*Import substitution*	*Petrobras*
Chile	Agricultural and transport development	1954–1961	Import substitution and relief of transport bottleneck	Development Corporation and Ministry of Agriculture
	"Chillán Plan"	From 1954	Regional and agricultural development	Ministry of Agriculture and official agencies
Cuba	Economic and social development programme	1954–1958	Diversification of the economy especially through industrialization	Ministries and special institutions
Mexico	Agricultural development programme	From 1943	Import substitution and development of agricultural sector	Ministries and special agencies
Peru	Food expansion programme	From 1951	Import substitution	Ministry of Agriculture and special agencies
Venezuela	Rice expansion programme	From 1949	Self-sufficiency	Development Corporation

Source: Official publications.

economic development. In others, they have been more limited in scope. Generally, they have consisted of development banks or corporations whose area of responsibility has been confined to specific sectors of the economy, such as industry or agriculture, and whose functions have been the provision and guarantee of finance and the planning or promotion of new projects. In some of these countries, a single entity has undertaken both the financial and the planning functions, while in others each function has rested with a separate body. Finally, in certain circumstances, entities of an even more specific character have been established to promote investment in particular industries, such as petroleum.

Inevitably, the effectiveness of such development institutions has varied considerably from country to country. While there are many which have been judged very successful from the national viewpoint, others appear to have accomplished relatively little. In some instances, this has reflected the limited resources available to the institution. In others, activity has been confined to the formulation of programmes, and governments have done little to translate these plans into effective action.

PUBLIC INVESTMENT

A striking characteristic of the growth of investment in the under-developed countries during the past decade has been the wide-spread and rapid increase in public investment. Unlike the developed countries where considerable importance is given to the role of public investment as a stabilizer for the economy, public investment in the under-developed countries has been employed primarily as an instrument for the achievement of accelerated rates of economic growth. The expansion of public investment has been directed largely towards the formation of economic and social overhead capital, which is widely regarded as an essential prerequisite to general economic development. In many countries, such investment in overhead capital is seen as a major stimulus to the growth of investment in private industry. In others, however, where the response of the private investment has been sluggish, governments have also undertaken direct investment in industry.

The importance of public investment in the expansion of total investment in individual countries can be seen from table 2-15. In most countries, public investment increased at high rates between 1950-1951 and 1957-1958. In countries such as Burma, Cuba and India, where investment had previously been low and stagnant, exceptionally rapid increases in public investment were the major factor in the reversal of this trend during the past decade. In other countries, such as Brazil, Chile and the Union of South Africa, where total investment grew rather slowly, such growth as was realized was also mainly the outcome of an expansion in public investment. In fact, in two-thirds of the countries included in table 2-15, public investment ex-

Table 2-15. Growth of Public, Private and Total Investment, 1950-1951 to 1957-1958[a]
(Percentage)

Country	*Annual rate of growth in investment*			*Public investment as share of total*	
	Total	*Public*	*Private*	*1950–1951*	*1957–1958*
Burma	15	24	10	29	49
India	13	22	7	31	50
Cuba	11	24	6	13	31
Ghana	10	9	11	42	41
Belgian Congo	9	13	7	35	43
Rhodesia and Nyasaland	9	15	6	35	41
Philippines	9	4	11	36	25
Ecuador	9	12	8	31	36
Greece	8	−1	12	40	22
Thailand	7	5	9	36	32
Peru	7	12	6	14	20
Mexico	6	−2	10	40	25
Bolivia	6	41	−5	15	45
Ceylon	5	6	3	47	53
Union of South Africa	4	8	1	33	44
Chile	3	7	1	24	31
Brazil	2	8	—	23	34
Argentina[b]	—	−4	2	59	32
UAR (Egypt)	−4	20	−16	19	58

Source: Statistical Office of the United Nations, *Yearbook of National Accounts Statistics;* and national sources.

[a] The period is somewhat shorter in a few cases; *see* table 2-1, footnote *a*.

[b] Public investment is based on capital expenditures in the budget, and refers to the period 1950–1951 to 1954–1955 only.

panded at a much higher rate than private investment. Generally, by 1957-1958 the share of public investment reached a level between one-third and one-half of total investment.

Broadly, among under-developed regions, the relative share of public investment has not only been far higher but the increase over the years has been much larger in Asia and Africa than in Latin America. The economies in the first two regions are for the most part among the least developed of the under-developed countries and, consequently, the need for the types of investment generally undertaken by the public sector is relatively great. This is in sharp contrast to many of the Latin American countries where such investment had already been carried out on an appreciable scale in the first half of the century and where the most pressing need in recent years has been the rehabilitation and improvement of basic facilities rather than their creation. In Latin America, public policy also has generally placed greater emphasis on a rapid expansion of the private industrial sector.

In order to provide for the efficient channelling of the relatively large amounts of public investment into the directions desired, most of the countries of Asia and Africa have drawn up investment budgets and have adopted development plans, which range in scope from programmes to develop specific sectors, at one extreme, to the comprehensive Indian five-year plans at the other. Thus, from 1950-1951 to 1957-1958, governments in the Belgian Congo, Burma, India, and the Union of South Africa substantially increased the proportion of capital expenditure in their combined consumption and investment expenditure (see table 2-16).

Table 2-16. Public Investment as Percentage of Public Consumption and Investment, 1950-1951 and 1957-1958[a]

Country	*1950–1951*	*1957–1958*	*Change*
Cuba	12	29	17
Burma	26	40	14
India	30	41	11
Ecuador	18	28	10
Belgian Congo	46	54	8
Brazil	23	30	7
Bolivia	2	8	6
Union of South Africa	40	46	6
Chile	16	21	5
Peru	27	31	4
Rhodesia and Nyasaland	54	55	1
Thailand	30	29	−1
Ceylon	29	25	−4
Philippines	26	20	−6
Argentina	41	35	−6
Greece	33	26	−7
Mexico	58	50	−8
Ghana	46	30	−16

Source: Table 2–15.
[a] *See* footnotes *a* and *b* of table 2–15.

While this was also true for some Latin American countries, such as Bolivia, Brazil, Chile, Cuba, Ecuador and Peru, in the remaining countries capital expenditure, though generally increasing, fell in relation to total expenditure. This tendency has been partly due to the lack of effective public investment policies, which may often predispose governments to meet current demands at the expense of investment programmes that yield benefits only at some time in the future. In many countries, moreover, budgetary accounting is not firmly established and spending authority is scattered among many different agencies; in these circumstances the emergence of an effective aggregate public investment programme is in some measure left to chance. Also, in a number of countries with higher income levels, government current expenditure on various social services generally constitutes a relatively large proportion of the total and such expenditure is normally less easy to cut than postponable capital expenditure. Thus, the experience of several under-developed countries has shown that, when the rise in government current and capital expenditure has been followed by an increase in inflationary pressure and a deterioration in the balance of payments, it has been capital expenditure which has borne the brunt of the necessary cutbacks.

Not only the aggregate levels of public investment but also the patterns of public investment expenditure have varied from country to country, though similarities in stage of development have imposed certain common types of experience among countries. Since most of the African countries are generally at a very early stage of development and have only meagre basic economic facilities, public investment in construction and in transport and communications has been particularly heavy (see table 2-17). The large volume of construction expenditure in these countries has reflected in part the need for medical, educational and administrative facilities, while the heavy expenditure on transport and communications has been necessitated by the absorption of backward regions into the market economy as well as by the increased demand for these services in areas already supplied with such facilities. The magnitude of growth in demand for transport services, for example, may be seen from chart 2-3. For Africa as a whole the use of port facilities has nearly doubled since 1938. In Ghana the great expansion in demand for such facilities resulted in a high proportion of expenditure in these fields. A still greater increase took place in African countries in the use of rail and road transport networks; this roughly trebled between 1938 and 1958.

Similarly, in the Asian and Middle Eastern countries, where there has also been a rapid growth in demand for transport, considerable public investments have been undertaken in order to fill the gap between needs and existing capacity. In addition, the Asian and some of the Middle Eastern countries have devoted a generally larger share of investment to irrigation and other re-

Table 2-17. Percentage Distribution of Public Investment, 1950-1959[a]

Country	Transport and communications	Construction	Agriculture	Industry	Energy	Health and education	Municipal and rural development	Other	Total
Latin America									
Argentina	42	7	4	6	21	8	5	7	100
Colombia	69	12	1	2	5	4	—	7	100
Ecuador	45	24[b]	7	1	4	...	16	3	100
Mexico	38	3	14	31[c]	...	14[d]	...	—	100
Peru	25	28[b]	16	11[c]	...	...	3	17	100
Venezuela	37	19	13	12	1	—	7	11	100
Africa									
Belgian Congo	42	26	5	—	7	10	9	1	100
Ghana	36	22	5	5	5	21	6	—	100
Nigeria	48	16	—	1	9	8	7	11	100
Sudan	29	10	15	1	9	22	11	3	100
Union of South Africa	49	—	14	8	—	14	—	15	100
Asia and Middle East									
Burma	30	16[b]	15	16	15	5[e]	...	3	100
Ceylon	22	13	35	3	8	11	3	5	100
India	32	—	29	13	8	16	—	2	100
Iraq	21	30[b d]	34	11[c]	...	...	...	4	100
Philippines	40	3	22	6	...	15	...	14	100
Thailand	43	9	19	4	8	12	5	—	100

Source: United Nations Division of General Economic Research and Policies; based on national sources.

[a] The figures can be taken only as a broad indication of magnitudes. The figures for Argentina, Colombia and Venezuela cover central government investment only, while those for the Belgian Congo, India, Iraq, Nigeria and the Sudan represent spending under a development plan rather than actual investment. Moreover, systems of classification differ from one country to another. For example, in India general administrative construction is not considered part of the development plan, while in Nigeria agriculture is a responsibility of local authorities, so that in each of these cases there is no entry in the table under the respective item. Such qualifications have been taken into account where possible in the discussion. In a few cases the distributions are based on the sum of expenditures over a ten-year period; generally the period is shorter, owing to the limited availability of data.

[b] Including education and health.

[c] Including energy.

[d] Including municipal and rural development.

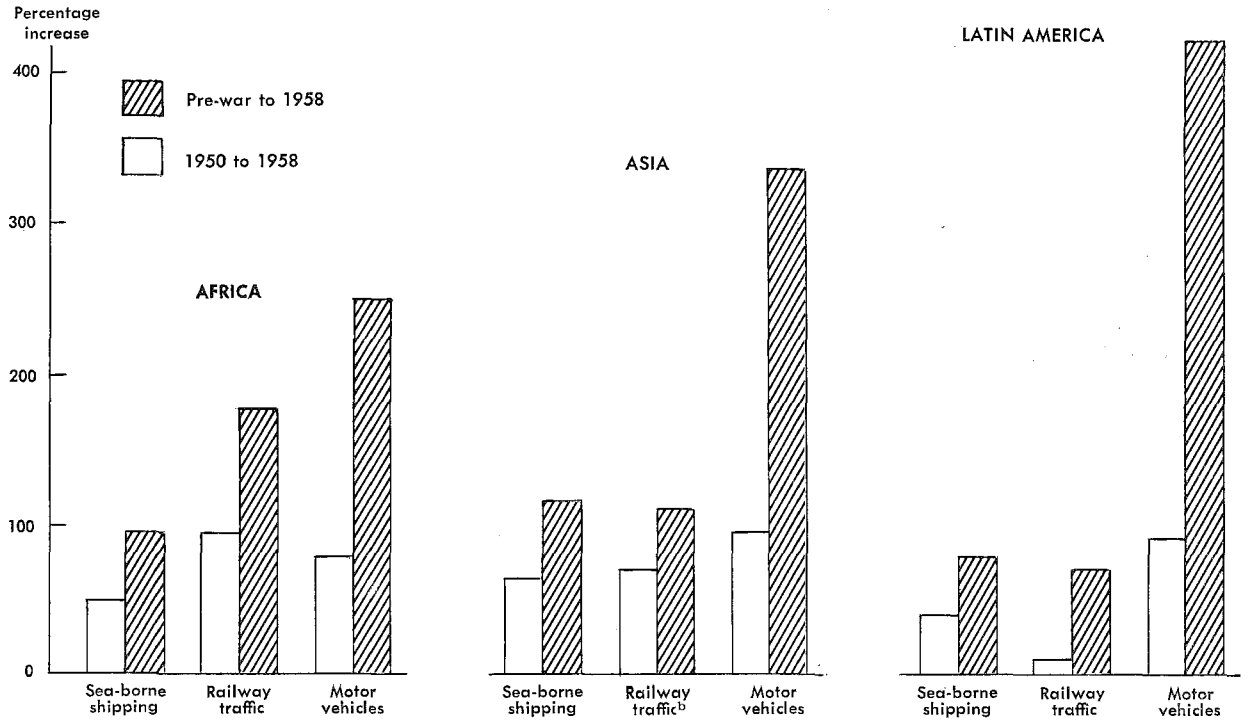
[e] Social services only.

lated facilities designed to promote agricultural production than have either the African or Latin American countries. Most of the Asian countries have been faced with severe population pressures, often aggravated by war-time economic dislocation; consequently, the problem of adequate food supplies has presented itself in an acute form. Large-scale efforts have therefore been made to achieve greater food production through such projects as the construction of irrigation facilities, land clearance programmes and provision of adequate storage. In the Middle Eastern countries, while there has generally been little population pressure, there are large areas which could be brought under cultivation or on which the yield could be substantially increased. In these circumstances Iraq, for example, has concentrated heavily on irrigation facilities, while in Turkey public investment contributed to the large increase in area under cultivation during the first half of the nineteen fifties.

In a number of Asian and Middle Eastern countries, public investment in industry has reached comparatively high levels. In some cases the hesitancy of the private sector has led to direct public undertaking of industrial activities. Key projects, which are generally left elsewhere to the private sector, have been undertaken on government account when it was felt this would speed other development. Examples have been such projects as steel mills or fertilizer and cement plants. In other instances, such as Burma and India, the relatively large share of industry in public investment is due, not to heavy spending on a single activity, but to a broader participation by the governments of these countries in the sphere of industrial production. In Burma, direct investment in industrial enterprises has been a central part of the greatly expanded public investment programme which was initiated in 1953; public investment more than doubled from 1953 to 1955, and some 70 per cent of total additional investment was channelled into industry and energy. However, when financing difficulties forced a cutback in the total programme in 1956, industrial investment was restricted to the completion of projects already begun, resulting in a sharp decline in the volume of such investment. In India, the trend in this respect has been the opposite. During the first five-year plan from 1951/52 to 1955/56, priority was accorded to agriculture; undertakings designed to stimulate agricultural production absorbed over one-third of total development expenditure under the plan while industrial investment accounted for less than 5 per cent of the total. However, in the second five-year plan the emphasis was shifted to industrialization, and especially to the development of basic and

Chart 2-3. Indicators of Growth in Demand for Rail and Road Transport and Port Facilities, Under-developed Regions, Pre-war to 1958[a]

(Percentage increase, 1938 to 1958 and 1950 to 1958)



Source: Statistical Office of the United Nations, *Statistical Yearbook.*

[a] International sea-borne shipping refers to goods unloaded, in tons; railway traffic, to goods carried by trains (excluding service traffic, mail baggage and non-revenue government shares), in ton-kilometres; and motor vehicles, to the number of commercial vehicles (including trucks, buses, tractors and semi-trailers) in use.

[b] Pre-war to 1957 and 1950 to 1957.

heavy industries. During the first two years of the plan, industry and mining absorbed over 20 per cent of public investment. Thus, public investment in the industrial sector is at a post-war peak in India and, under present policy, can be expected to remain relatively high.

In some other countries, such as Pakistan, Turkey and the United Arab Republic (Egypt), where the proportion of industrial enterprises which are wholly or partly government-owned is large, governments have probably also allotted a substantial part of public investment to industry, although complete figures are not available. But, contrary to the trend in India, recent policy in these countries has often assumed the eventual disposal of such holdings to the private sector. Pakistan and Turkey have both made official announcements of such intentions, but, particularly in Turkey, the shortage of private capital has made it difficult to realize sales to the private sector.

In the more advanced regions, such as many Latin American countries and the Union of South Africa, the general aim of public investment policy has been to refrain from direct participation in manufacturing production but rather to provide the facilities essential for the expansion of industry in the private sector. Although in practice most governments have engaged to some degree in industrial activity, the private sector still accounts for the bulk of current production and is relied upon to play the principal part in its future expansion. Nevertheless, the provision of adequate basic facilities remains an extremely formidable task for most governments. While in many countries heavy investment in such facilities has taken place in recent years, this has often been sufficient only to maintain services at the existing level, and has not kept pace with the rapidly rising demand for these services. The small increase in railway freight traffic during the nineteen fifties in Latin America is a case in point. While, as may be seen from chart 2-3, this partly reflected the increasing preference for motor transport as a means of commercial shipment, it also resulted from failure of some countries to maintain and improve their railway networks. For example, the largest railway network in Latin America is in Argentina, but relatively little investment was devoted to the system during the first post-war decade and freight traffic declined nearly 20 per cent. By contrast, in Mexico a rather extensive rehabilitation of the railway system was undertaken during the nineteen fifties; as a result, freight traffic has increased more than 40 per cent since 1948.

Even in countries which have made significant headway in providing needed basic social and economic services during the past ten years, however, it is clear that much remains to be done, both to close the present gap between demand and capacity, and to provide for the needs which will be created by the growth of population and economic activity in the decade which lies ahead.

POLICIES TO STIMULATE PRIVATE INVESTMENT IN INDUSTRY

While public investment has been important and, indeed, frequently indispensable in stimulating private investment activity, it has not, as a rule, been sufficient, in itself, either to assure higher levels of private investment or to channel the latter into the desired fields. To supplement public investment policy, more specialized instruments have been required.

Apart from the provision of such essential facilities as energy, transport and communication, the principal and most effective specific public measures which governments have adopted to stimulate private industrial investment have been those designed to influence or control the structure of imports; these have included not only exchange or import controls, but also other measures intended to create sheltered domestic markets for selected products through the erection of barriers to foreign competition. Many governments have also sought to overcome two other major obstacles to private investment by the direct provision of public credit and allocation of foreign exchange to industry. Such policies have generally been supplemented by measures to raise the profitability of enterprise; these have included the incentive of higher profits through exemption from tax payments and cost-reducing devices such as favoured rates of exchange for the importation of parts, materials and equipment.

In view of the great importance of foreign trade in the economies of most under-developed countries, it is not surprising that control of the structure of imports has been a principal method for pursuing the widespread objectives of industrialization and import substitution. While in the less advanced of the under-developed countries the objective has necessarily been limited to increasing capital formation in light industry, in the countries which have advanced beyond the earlier stages of industrialization, the goal has been a broadening of the industrial base to include the heavy and more complex products of industry. In both cases protective import policies have been relied upon to restrict imports of competing goods and to favour imports of materials and equipment required for investment in the new domestic industries.

In Latin America and Asia, protection against the competition of foreign producers—a classical economic instrument to encourage production for the domestic market—has been a major aspect of public policy to foster manufacturing investment; but it has been less commonly resorted to among the Middle East countries. Although the primary stimulus for the adoption of import controls was often a balance of payments problem rather than a desire to protect certain industries, the advantages to domestic industries have been the same as in those cases where the motivation was primarily protectionist.

In countries with a single exchange rate, protection has been sought mainly through the use of import duties and quantitative controls; in the multiple rate countries such weapons have constituted only part of a broader range of measures in which differential rates of exchange have played a major, and often the principal, role. In Asia, import duties have been extensively used as a means of protection. Although a main object of such tariffs is revenue, they have frequently been set at levels high enough to produce a protective effect as well. The use of protective tariffs is perhaps most developed in India and Pakistan, although the Philippines, Thailand and the United Arab Republic (Egypt) have recently been making increasing use of such protection. Extensive quantitative restrictions have also been employed by countries such as Burma and Thailand. In Thailand, as well as in Ceylon and Indonesia, additional protection has been provided by requiring importers to purchase specified quantities of local products in order to obtain licences for importing similar products from abroad.

In Latin America, Mexico, Peru and, in recent years, Cuba exemplify countries where import duties and physical controls have been the major tools used in the creation of sheltered domestic markets for manufacturing industry. Similar measures have been employed in some other Latin American countries which have also relied heavily on multiple exchange rates to influence the allocation of resources. For example, Colombia and Ecuador have made use of high import duties to restrict selected manufactured imports. While Chile still depends heavily on quantitative restrictions, Argentina and Brazil, which had employed licensing extensively, have shifted to a greater use of high tariffs for protection in more recent years.

In the multiple rate countries the manipulation of exchange rates has generally provided a more powerful protectionist weapon. Competitive imports have been subject to very high import rates of exchange. At the same time, as shown in table 2-18, imports of the materials and equipment required by the protected national industry have been facilitated by a policy of granting relatively low exchange rates and, in addition, ample availabilities of foreign exchange. But their use has declined rather sharply in recent years as the countries have increasingly simplified their exchange rate structures.

Table 2-18. Relative Cost of Foreign Exchange for Imports in 1955, Selected Countries and Commodity Classes[a]

(Import rate for non-essentials = 100)

Country	*Non-essentials*	*Capital goods*	*Raw materials*	*Essential consumer goods*
Argentina.....	100	65	32	65
Brazil.....	100	50	27	13
Chile.....	100	52	52	35
Colombia[b].....	100	74	66	41
Indonesia.....	100	40	40	40
Philippines.....	100	85	100	85
Turkey[b].....	100	67	67	67

Source: International Monetary Fund, *Annual Report on Exchange Restrictions* and *International Financial Statistics;* official publications.

[a] Rates prevailing at end of year, except in Indonesia, where rates are those prevailing until mid-1955. All imports in a commodity class were not necessarily purchased at the rate shown, but in each case that rate applied to a substantial proportion of such imports. The rates shown for raw materials in Brazil and non-essentials in the Philippines are unweighted averages of two prevailing rates.

[b] Effective rates after taking into account exchange taxes.

In these countries, as in those relying on unitary rates of exchange, the specific areas of manufacturing into which governments have sought to channel the flow of investment have varied; to a considerable extent the choice has been determined by the stage of development. Thus, the countries at more advanced stages of industrial development have utilized the multiple rate system to foster the objective of promoting a broad industrial base including heavy industry. Brazil employed such policies to encourage investment in many branches of heavy industry and has recently made significant headway towards relieving a serious transport bottleneck by promoting major investments in a domestic motor vehicle industry. Chile fostered investment in metal fabrication. Among the countries at earlier stages of industrial development, Colombia and Turkey expanded investment in light industry under the umbrella of protection.

Import policy has been used as an instrument not only to shelter the output of domestic industries but also to increase the supplies of equipment and other commodities required for the attainment of industrialization objectives. In general, such imports have been favoured by relatively low duties, or even subsidies, and by low import rates of exchange combined with relatively generous allocations of scarce foreign exchange. In some cases, as shown in a previous section, these policies have contributed to consistently high proportions of capital goods imports to total imports during the nineteen fifties.

In stimulating manufacturing investment, governments of the under-developed countries have thus relied heavily on the inducements of protection and the creation of a favourable economic environment through provision of basic economic facilities. Important as they have been, however, these measures have been recognized in most countries to be inadequate to realize many potential investments.

Another strategic facility lacking in under-developed countries has been credit. The almost universal preference of private banks in the under-developed countries is for short-term commercial loans; consequently, most enterprises have great difficulty in obtaining outside finance for periods longer than one year. In this respect, Mexico constitutes one of the few notable exceptions. Over the years a relatively high proportion of the loans of private deposit and savings banks in Mexico has been on a medium-term and long-term basis. This has been the result, in part, of selective credit controls. Savings and deposit banks have been given the option of depositing certain proportions of their liabilities with the Banco de Mexico or investing in securities and long-term loans. But in most countries, long-term credits on reasonable terms have been almost unobtainable for the purpose of financing capital formation.

Many governments have sought to overcome this obstacle to investment by allocating a part of government revenue for loans to, and investments in, private firms. This has generally been accompanied by the creation of specialized institutions which also provide technical and advisory services. In some countries the activities of such institutions have included the undertaking of joint ventures in which public capital has supplemented private funds; some institutions have also given particular attention to aiding small-scale industry, which is especially hard pressed to obtain credit.

The extent of aggregate public lending to private industry by these specialized institutions is suggested by table 2-19. In most countries, the amount of such loans has appeared to be small. Thus, as percentages of gross fixed investment they ranged from one-fifth of one per cent in Ghana to about 8 per cent in Ecuador. Similarly, expressed as a percentage of total central government expenditure, they appeared small, representing in most cases less than one-twentieth of the central government's budget. Only in Mexico were these proportions high throughout the period. However, it should be noted that, even in cases where the annual level of public loans seemed to be small in relation to total investment or to government expenditure, the absolute quantities were far from negligible. In addition, it is significant that such assistance generally increased considerably during the past decade, as shown in table 2-20. Thus, although the nature and effectiveness of such lending doubtless varied considerably among countries, it seems reasonable to conclude that the cumulative amount of such loans represented an important contribution to the growth of private investment in a number of countries.

As might be expected from the widespread emphasis of under-developed countries on the importance of industrialization, it was the industrial sector which re-

Table 2-19. Loans Granted by Official Institutions for Capital Formation, as Ratio of Private Fixed Investment and of Government Expenditures, Selected Years, 1950-1957[a]

Country[b]	Loans as percentage of: Private gross fixed investment[c]		Loans as percentage of: Total central government expenditures[c]	
	1950	1957	1950	1957
Cuba	5.1[d]	27.8[e]	...	...
Mexico[f]	28.5	23.4	25.4	30.6
Ecuador	7.9	8.6	7.8	6.4
Brazil	4.9[g]	5.7[g]	4.7	4.1
Philippines	7.8	4.6	4.3	2.8
India[h]	0.5	2.0	0.4	0.7
Chile[i]	2.7	1.7	1.3	0.9
Ghana[j]	0.2	1.5	...	0.6
Ceylon	0.3	1.2	0.1	0.3
UAR (Egypt)	0.4	...	0.3	0.7
Iraq	...	...	0.5	0.6
Pakistan[k]	...	...	0.4	0.5

Source: Official sources.

[a] The figures shown for Asian and Middle East countries are based on industrial loans only; however, the volume of their agricultural loans—medium-term or long-term—was very small.

[b] Countries are listed in descending order of ratios of loans to fixed investment in 1957.

[c] In some cases the first year is 1952 or 1953 and the second is 1956 or 1958; for some countries the years used are fiscal years.

[d] Based on loans formalized by Banco de Fomento Agrícola e Industrial de Cuba, year ending June 1953, as percentage of average gross fixed investment for 1952 and 1953. Since a part of the loans formalized may not have been exercised by borrowers, the effective loan ratios may be moderately less than the ratios here shown. The inclusion of crop (short-term) loans may be a further source of overstatement.

[e] Based on financing formalized by Banco de Desarrollo Económico y Social, June 1956 through June 1957, as percentage of average fixed investment for 1956 and 1957. Since a part of the loans formalized may not have been exercised by borrowers, these ratios may be a moderate overstatement of the effective loan ratios.

[f] Based on Nacional Financiera lending.

[g] Public corporations are included in gross private fixed investment.

[h] Investment data are net of depreciation.

[i] Computed on the assumption that 30 per cent of expenditures of Corporación de Fomento de la Producción were loans (see table 2–21, footnote *e*).

[j] Data for the beginning year refer to loans to private sector in the year ending March 1952, expressed as ratio of average capital formation or of government expenditure in 1951 and 1952; for the end year, small loans disbursed in 1957/58 fiscal year, plus loans and investments in "associated companies" computed as the change in balance of shares, plus loans outstanding between June 1957 and June 1958 expressed as ratio of average capital formation or of government expenditure for 1957 and 1958.

[k] Based on average of two years, 1949/50–1950/51 and 1956/57–1957/58.

ceived the bulk of loans in most countries. In Asia and the Middle East, virtually all medium-term and long-term loans were granted for industrial investment. In some selected countries in Latin America, as may be seen from table 2-21, industrial loans ranged from 17 to 87 per cent of total credits granted. In recent years, industrial lending accounted for the majority of loans

Table 2-20. Average Annual Percentage Increase in Real Value of Public Loans Granted to Industry for Capital Formation, 1950-1951 to 1957-1958[a]

Country	Growth rate, compounded
Cuba	92
Ceylon	29
Mexico	27
India	26
UAR (Egypt)	22
Peru	20
Pakistan	13
Ecuador	5
Turkey	5
Philippines	−2
Chile	−3
Brazil	−10

Source: Official sources.

[a] In a few cases the period is slightly shorter, because of limitations of data. The cost of living index was used as a deflator.

and a rapidly increasing share of the total in Cuba, Chile and Mexico.

While tax exemptions have perhaps offered less direct inducement than public loans for the formation of capital by new enterprise, they have performed a similar function by increasing the resources available to firms for investment purposes. Complete or partial exemptions from direct and indirect taxes have been increasingly offered by the governments of under-developed countries to encourage investment in manufacturing and, to a lesser degree, in mining. In particular, new firms and those planning to expand output of key services or commodities in short supply have commonly been granted exemption from some or all taxes for varying periods of time, frequently for as long as five to ten years.

Moreover, in line with national goals of reducing dependence on external sources for supplies of selected consumer goods, raw materials or other products, exemption from taxation has been offered especially to enterprises whose production offers increased scope for import substitution. Among the many countries granting full or partial exemption from duties on imports of materials and equipment have been most Asian and some African countries and such Latin American countries as Cuba, Ecuador, and Peru. Mexico has also effectively employed a fiscal device which has simultaneously promoted investment in machinery-producing and machinery-using firms by granting the latter accelerated amortization of domestically produced equipment and machinery. In addition, for the purpose of export promotion, similar tax advantages have been offered by Mexico and Peru to stimulate investment in mining; and Chile has recently granted such advantages to nitrate producers. The removal of the disincentives resulting from the taxation implicit in existing export rates of exchange was the reason underlying the liberal-

Table 2-21. Percentage Distribution of Government Loans for Private Capital Formation in Latin America, Selected Years, 1950-1958

Country[a] and year	Manufacturing or processing	Agriculture	Mining	Other	Total
Cuba[b]					
1952	30[c]	70	—	—	100
1958	87[c]	13	—	—	100
Chile[d e]					
1953	67[c]	5	25	3	100
1957	85[c]	3	8	4	100
Mexico[d]					
1953	39	11[f]	—	50[g]	100
1957	52	24	—	24	100
Brazil[d]					
1953	58	37[h]	3	2	100
1957	34	61[h]	4	1	100
Peru[i]					
1950	26[c]	63	12	—	100
1957	25[c]	67	8	—	100
Ecuador[d j]					
1950	17[c]	73	—	11	100
1958	19[c]	76	—	6	100

Source: Official sources. While a principal function of the investment or lending institutions, information from which is used here, is the stimulation of capital formation through medium-term and long-term loans, a part of the loans for some of the countries undoubtedly comprises loans with maturities of less than one year. Also, account has not been taken of some institutions granting medium-term and long-term credit, either because of non-availability of data or the probability that a high proportion of their loans is short-term. The coverage is, however, believed to be quite comprehensive.

[a] Countries are listed in descending order of share of loans to manufacturing in 1957 or 1958.

[b] For 1952, percentages based on December loan balances outstanding; for 1958, June loan balances.

[c] Shown in national source as loans to "industry".

[d] Percentages based on disbursements.

[e] Percentage distribution based on data for loans and investments (including ventures of Corporación de Fomento de la Producción). As of December 1954 the loans outstanding were reported to be 4.9 billion pesos, while investments amounted to 10.9 billion pesos.

[f] Based on 1953 agricultural loans of Nacional Financiera plus average of 1952, 1953 and 1954 loans for capital formation of official agricultural development banks.

[g] More than two-thirds of these loans for 1953 were granted for provision of services and energy.

[h] Farm improvement loans.

[i] Percentages based on December loan balances outstanding.

[j] Based on both short-term and long-term loans, not available separately by sectors.

ized exchange treatment granted to producers of iron ore in Brazil and of copper in Chile.

While some of the measures used to promote domestic capital formation have also been available to foreign investors, additional inducements have been required to overcome the special obstacles associated with foreign investments. Since these measures are reported in detail in other United Nations publications,[13] no more than brief mention of their principal features is needed here. Broadly, the incentive measures adopted by under-developed countries to attract foreign investors have been of two types: those designed to offer investors assurances with regard to their property rights and the right to remit profits; and those aimed at increasing the profitability of enterprises, in the main through liberalization of tax exemptions.

Important developments serving to limit or to promote the entry of capital into specific economic sectors have occurred in recent years. One has been the emerging tendency in some Asian countries to reserve certain economic sectors to government enterprise. A second is the adoption of legislation stimulating private foreign enterprise in the development of minerals, particularly petroleum. Increased efforts to attract investment into petroleum production have been made by a large number of under-developed countries in Latin America, Africa and the Middle East. Other minerals have also been the object of recent legislation; for example, foreign investment has been encouraged in the production of copper and nitrate in Chile and of sulphur and non-ferrous metals in Mexico.

While public policy has thus been widely used in a variety of ways to stimulate private investment, these

[13] United Nations, *The International Flow of Private Capital, 1956-1958* (sales number: 59.II.D.2); "The Promotion of the International Flow of Private Capital", Progress Report by the Secretary-General, Economic and Social Council, twenty-ninth session (E/3325); "The International Flow of Private Capital, 1958-1959", Economic and Social Council, thirtieth session (E/3369).

measures have occasionally been partly nullified by policies which checked profits and hence the inducement to invest. This is most commonly illustrated in essential commodities such as fuels or in basic services such as power and transport. Since governments have generally yielded to demands for low price and rate ceilings, the usual consequence has been an inadequate expansion of private investment in these fields. In some cases where governments sought to eliminate the resulting bottleneck by stimulating private investment, prices were eventually adjusted upward; and where the increase was sufficient, investment rose. In this way expansion of petroleum-refining facilities and electricity-generating capacity in Peru has been stimulated; in Ecuador, petroleum-refining capacity has been increased to such an extent as to make the country self-sufficient in refined petroleum products. Substantial increases in the rates charged to consumers have also been granted in recent years to private producers of electrical power in Brazil, Chile and Mexico.

By means of the various measures discussed above, governments have contributed to the attainment of two major objectives of public policy with respect to private investment, namely, increases in industrial production and self-sufficiency in selected products. In the less advanced of the under-developed countries, investment has often been substantial in such light industries as beverages, food-processing and textiles, where there has been considerable scope for import substitution as well as the resources required to realize such substitution. This conclusion is borne out, for example, by the experience in production and imports of cotton cloth of a number of importing countries, as shown in table 2-22. Although investment data are lacking, it is reasonable to assume that substantial increases in capacity were, in general, associated with the major increases in cotton cloth production recorded between 1950 and 1958 in the countries shown. Similarly in the manufacture of sugar, many countries in all regions experienced significant increases in manufacturing capacity involving, in a number of instances, a relative reduction in dependence upon foreign sources.

Table 2-22. **Production and Imports of Cotton Cloth, by Volume, 1950-1951 to 1956-1957**

Country	*Production index, 1956–1957 (1950–1951 = 100)*	*Imports as percentage of apparent consumption*	
		1950–1951	*1956–1957*
Pakistan	448	77	4
Indonesia	240[a]	96[b]	90
Philippines	167	91	83[c]
Turkey	149	40	5
Belgian Congo	140[a]	54[b]	52
Colombia	136[c]	5	1[c]

Source: International Cotton Advisory Committee, *Cotton—World Statistics* (Washington, D.C.).

[a] 1951 = 100.
[b] 1951.
[c] 1956.

In the under-developed countries, which had passed beyond the earlier phases of industrial development, such as in a number of Latin American economies and in India, progress towards self-sufficiency in manufactured foodstuffs, other light or non-durable consumer goods and cement had already been very substantial by 1950. It is not surprising that for such countries the greatest scope for import substitution in manufacturing has often lain in the more complex manufactured products and in heavy industry. For instance, steel production is one of the many lines in which substantial investments have been made, and where, in general, various forms of government assistance have been provided to private enterprise. Among the countries where private or joint public-private steel plants have contributed to increased self-sufficiency are Argentina, Brazil, Chile, Cuba, India and Peru. Substantial investment has also been made in the production of mechanical, electrical and electronic parts and equipment in Argentina, Brazil, India and Mexico. In some of these countries, there has also been considerable investment in the chemical and transport equipment industries. But on the whole, the increased production of capital goods in these countries has been far from sufficient to meet the expanded requirements of investment; consequently, they still have to depend heavily on imported capital goods.

A closely related goal common to numerous countries has been import substitution of fuel oils. Rapid industrialization and urbanization have greatly increased the demand for petroleum products in most countries. The resultant drain on foreign exchange has led many governments to adopt policies aimed at replacement of fuel imports through encouraging investment in the production of crude petroleum as well as refined petroleum products. The restricted availability of proved reserves and the great costs of exploration and development have limited substantial private investment to a bare handful of importing countries, such as Argentina and Cuba. On the other hand, savings in foreign exchange have been open to petroleum importers through increased domestic provision of refined petroleum products. In the area of refining facilities, therefore, a much larger number of countries have successfully promoted investment in such facilities. As shown in table 2-23, many countries in all regions decreased their relative dependence on imports of refined petroleum products.

POLICIES TO STIMULATE PRIVATE INVESTMENT IN AGRICULTURE

Governments in under-developed countries have paid increasing attention to agricultural development in recent years. In the face of rapidly expanding populations, food output has had to be increased to raise the low levels of per capita consumption and to check the rise in prices. In addition, industrialization programmes have required increased supplies of agricultural raw materials for domestic industries. Simultaneously, efforts have been necessary to expand agricultural exports, which

Table 2-23. Production and Imports of Refined Fuel Oils, by Volume, 1950-1951 to 1957-1958

Country	Production index, 1957–1958 (1950–1951 = 100)	Imports as percentage of apparent consumption	
		1950–1951	1957–1958
Philippines	[a]	100	55
Brazil	6,924	98	41
Turkey	4,455	99	80
Union of South Africa	3,655	101	97
India	2,818	112	23
Cuba	967	85	33
Burma	485	64	21
Bolivia	485	56	−3
Israel	236	44	33
Argentina	183	32	24
Morocco	168	95	105
Pakistan	161	84	95
UAR (Egypt)	141	43	25
Ecuador	127	5	29

Source: United Nations, *World Energy Supplies*, Statistical Papers, Series J.
[a] No production in the base period.

account for the major part of total exports in most under-developed countries, in order to increase foreign exchange earnings and essential imports.

The last consideration has indeed prompted many governments to take steps designed to stimulate the expansion of investment in the agricultural export sector, especially following the Korean raw materials boom. One of the common deterrents to investment has been the severe periodic fluctuations in the prices of agricultural exports arising from world demand conditions. Many governments have consequently resorted to measures to stabilize prices. A few under-developed countries, especially in Africa, have sought to reduce fluctations in prices received by agricultural producers through the establishment of stabilization funds; in Ghana and Nigeria, for example, marketing boards have aimed at setting aside part of the proceeds from cocoa exports in times of high prices in order to augment returns to growers when prices are low.

More generally, governments in under-developed countries have employed such measures as liberalization of export quotas, reduction or elimination of export duties or the granting of more favourable exchange rates to promote agricultural exports.[14] Significant results have been achieved in the promotion of minor exports in a number of countries, as for example, cotton, sugar and tobacco in Brazil, bananas, tobacco and rice in Colombia, rice in Ecuador, and coffee and cocoa in Venezuela. In Asia, although there are several cases in which governments have encouraged exports of agricultural commodities other than traditional major exports, such as the production and export of Virginia leaf tobacco in the Philippines or of rubber in Burma and Thailand, government policies have generally been rather passive in this respect.

Another measure adopted by certain countries, such as Brazil and Uruguay, has been the raising of prices at which government agencies purchase commodities for export. In Ceylon and Malaya, where the governments are seriously concerned about the urgent need for replantation of rubber, subsidies to smallholders have been provided since 1953; but this policy has not been generally followed in the under-developed countries. A number of countries have also concluded long-term bilateral contracts as a device to achieve some stability in their export markets. Prominent among such contracts were those arranged by Burma for the supply of rice to India and the Soviet Union, by Ceylon for the export of rubber to mainland China and by the United Arab Republic (Egypt) for the sale of cotton to several countries in eastern Europe.

In general, however, import substitution has constituted the principal aim of government policy with respect to private agricultural investment. In particular, self-sufficiency in food has been given the highest priority. In addition to providing irrigation works and other basic services in agriculture, which, though essential, do not automatically lead to an expansion in private investment, governments have adopted specific measures to stimulate private investment by farmers or peasants.

A reorientation of price policies regarding the major food grains has been attempted by many countries to strengthen the incentive to produce and invest. Government price measures adopted during and immediately after the Second World War were aimed not so much at providing inducements for greater production as at controlling prices for the benefit of consumers. Thus, in many Latin American countries, for example, investment in the production of basic foodstuffs was for many years after the war deterred by the policy of subsidizing consumption through permitting imports at highly favourable exchange rates or by the imposition of low ceiling prices. But as the drain on foreign exchange resulting from agricultural imports continued and as food shortages contributed increasingly to inflation, governments sought to stimulate investment in import-replacing agricultural commodities. Ceiling prices were raised in Argentina, Chile, Colombia and Peru; and support prices combined with a guaranteed market were provided for wheat in Argentina, Chile, Ecuador and Guatemala, and for a broad range of foodstuffs in several countries, including Brazil, Mexico and Venezuela. Among the African countries, price support measures have also been used with effective results in stimulating the output of maize in the Federation of Rhodesia and Nyasaland and of wheat in the Union of South Africa. Guaranteed markets have also been provided in some of the Latin American countries through the erection of import barriers. In a number of cases, the protective fea-

[14] For additional discussion of national commodity stabilization policies, see *World Economic Survey, 1958* (sales number: 59.II.C.1), chapter 2.

ture has taken the form of a requirement which specified that certain minimum percentages of the raw materials puchased by the food processing industries must be of domestic origin.

Although prices of food grains have also been fixed or guaranteed by governments in several Asian countries, in most cases they are still largely oriented towards the interests of urban consumers. In some instances the price fixed for the producer has been so low that it has probably acted as a disincentive. Among these countries, only Ceylon has operated a rather comprehensive guaranteed minimum price scheme coupled with support buying for paddy; the guaranteed price of paddy was raised by as much as 50 per cent between 1950 and 1953 in order to provide inducement to producers.

In the sphere of industrial crops, however, price policies of a few Asian countries have sometimes favoured further efforts on the part of producers. Following the scheme launched by the Government of the Philippines to purchase domestic supplies of Virginia leaf tobacco at a fixed price, output increased nearly threefold in the short span of two years, from 1954/55 to 1956/57. A variant of price support schemes has been successfully operated in India where minimum prices to sugar-cane growers are assured through collection by processing factories. But in some countries increases in the output of industrial crops have taken place at the expense of food production. Furthermore, maintenance of producer support policies has often entailed high financial costs for governments. It was this factor, for instance, which compelled Pakistan to abandon the direct price support operations for jute in 1952/53 and, in their place, to adopt control over jute acreage.

While the incentive of higher prices has been an important inducement to increased output, it has not been sufficient in many instances to overcome the numerous economic and institutional obstacles to expansion in agricultural investment. For example, even where cultivators have been willing to increase their investment, they may often have been deterred by the lack of access to credit on reasonable terms. Commercial banks have as a rule confined their activities to the cities and, in agriculture, to the provision of credit facilities for large landowners. Although credit co-operatives exist in many under-developed countries, their operations have generally been small. Many governments have therefore taken steps to make a larger supply of public funds available for meeting the investment needs as well as the operating expenses of cultivators.

The amount of public long-term agricultural credit has increased rapidly in a number of Latin American countries in the nineteen fifties. In Mexico, the expansion of such credit (adjusted for price changes) amounted to nearly 70 per cent per annum. While the Mexican example is an extreme one, the rates of increase in some countries were also 15 per cent or more. In Asia and Africa, however, public agricultural credit has been largely confined to crop loans. Thus, in India and the United Arab Republic (Egypt), for example, about 95 per cent of the loans provided during the period were of a short-term nature.

In Latin America, governments have generally provided agricultural credit by strengthening the resources of existing specialized institutions. In some cases, in order to increase its effectiveness, the provision of loans has been tied to the improvement of farm practices, in part through agricultural extension services. In Asia, a prominent feature in recent years has been the establishment of special institutions for agricultural credit, as in Burma, Pakistan and the Philippines. In the United Arab Republic (Egypt), the government has increased the funds of the existing agricultural bank, while in Turkey, in addition to increasing its loanable funds, the agricultural bank has been active in advancing loans in kind, especially tractors and other farm equipment. In India, additional funds have been provided to the co-operative credit societies and to the land mortgage banks both by the central bank and by the largest commercial bank, which was nationalized with the principal objective of expanding banking facilities in rural areas.

In addition to the inducements of higher prices and access to credit facilities, governments have also sought to encourage investment through measures aimed at reducing the cost of materials and equipment necessary for capital formation. One of the outstanding examples is the subsidization of fertilizer consumption. Except in a few Latin American countries, the United Arab Republic (Egypt) and the Union of South Africa, there was little use of chemical fertilizers in under-developed countries before the Second World War. Yet fertilizers are essential not only for raising current yields but also for restoring the nutritive content of the soil, which in some areas has been depleted to the point of exhaustion. Governments, particularly in Asia, have therefore attached great importance to popularizing the use of chemical fertilizers. In many Asian countries, the use of fertilizers is subsidized by governments and, in certain countries of Latin America and the Middle East, the agricultural credit institutions set up by governments supply loans for fertilizers at low rates of interest. As a result, the use of chemical fertilizers in under-developed countries has been increasing rapidly, although the total amounts involved are still very small in relation to the crop area. In the case of equipment, it has been a common practice in a few Latin American countries to arrange for a limited number of farm machines to be sold at subsidized prices with a view to providing an initial impetus to the mechanization of agriculture. Governments in Brazil, Chile and Peru have also established tractor pools for the use of farmers. While the number of tractors has also been increasing in Asia, their use is largely confined to government farms or to special activities such as land reclamation.

Partly as a result of improvements in the use of fertilizers and equipment, agricultural yields have risen significantly in a number of countries. Among the major producers of wheat, for instance, yield per hectare rose by 20 per cent or more from 1950-1952 to 1956-1958 in Argentina, Mexico and the United Arab Republic (Egypt). Improvements in the yield of rice have likewise been recorded in India and the United Arab Republic (Egypt). In cotton, one major producer, Mexico, has succeeded in raising the productivity of land under cultivation by nearly one-half. But it must also be noted that only a few countries have had such impressive results. Other large increases in average yield have usually been in crops which are new or of minor importance to the country concerned; and in some cases, yields have actually declined. It appears therefore that in many cases government measures to increase productivity are as yet at a very early stage. Quantitatively, they have been small in relation to the need. Efforts in under-developed countries will have to be intensified very greatly in order to bring agricultural yields closer to the levels reached in North America and western Europe.

As an additional effort aimed at increasing agricultural investment and production, several countries have sought to increase the area under cultivation. Fiscal measures have been employed for this purpose in a few countries. For example, in Chile and Mexico tax exemptions have been granted for bringing new land under cultivation, while, in some states of India, land revenue rates on waste lands newly brought under cultivation have been reduced for specified periods. A few countries have also raised tax rates on uncultivated waste lands as a penalty measure.

Efforts have also been devoted to removing some of the institutional obstacles to agricultural investment. Many governments, mainly in Asia, have attempted to modify land tenure systems in order to increase cultivators' incentives. Reform measures in certain Asian countries have taken the form of expropriation of land, landowners being compensated with long-term government bonds. In most states of India, for instance, the landlord system has been abolished and ownership of land has been transferred to the cultivators. In other under-developed countries, land reform involving changes in ownership has been more limited in scope; generally it has involved expropriation of bigger units only, as in the United Arab Republic (Egypt), Bolivia, Cuba and Pakistan.

Where tenant cultivation is still permitted, governments, especially in Asia, have sought by legislation to establish a better defined pattern of relationship between landowners and tenants. In some parts of India, for example, tenants have been given permanent occupancy rights, but more generally, the new legislation has been designed to give them the right to cultivate land for a specified period. In a number of countries, notably Ceylon, India, Malaya and Pakistan, provision has also been made for controls over rents. While many countries have enacted such legislation, the implementation of new laws has been frequently thwarted for a variety of reasons. Furthermore, the land tenure reforms have not generally affected the problem of fragmented holdings which is a major obstacle to improvements in techniques of cultivation and to increases in investment.

Although there is no doubt that governments in under-developed countries have adopted a wide range of measures to encourage agricultural investment, lack of data makes it difficult to measure their effect on rural capital formation. As a rough indication, however, the impact of such official policies may be gauged from the data on production of major cereals. Of the twenty-four food-deficit countries included in table 2-24, output of principal food grains in thirteen countries increased

Table 2-24. Change in Production and Imports of Major Food Grains[a] in Food-Deficit Countries, 1950-1952 to 1956-1958[b]

Country	*Index, 1956–1958 average*		*Imports as percentage of apparent consumption*	
	Production (1950–1952 = 100)	*Imports*	*1950–1952*	*1956–1958*
Israel	321	163	88	79
Mexico	157	131	11	9
Iraq	152	[c]	—	6
Turkey	141	212	2	3
Ecuador	136	145	20	19
Union of South Africa	135	36	8	3
UAR (Egypt)	134	103	24	19
Ceylon	134	103	67	61
Iran	133	235	2	3
India	132	96	9	7
Cuba	129	85	62	51
Chile	129	103	10	8
Brazil	129	114	14	12
Indonesia	118	135	7	8
Philippines	118	121	11	11
Malaya	116	113	66	70
Ghana	107	149	18	23
Belgian Congo	105	244	4	8
Pakistan	103	761	1	8
Colombia	102	175	5	9
Guatemala	101	117	7	8
Venezuela	100	135	29	35
El Salvador	86	115	8	10
Peru	75	126	24	35

Source: Statistical Office of the United Nations, *Yearbook of International Trade Statistics;* Food and Agriculture Organization of the United Nations, *Production Yearbook*, *Trade Yearbook*, *World Grain Trade Statistics* and *Monthly Bulletin of Agricultural Economics and Statistics* (Rome); Commonwealth Economic Committee, *Grain Bulletin* and *Rice Supplement* (London).

[a] Wheat, rice and maize.

[b] The terminal period for Chile, El Salvador, Guatemala and Iran is 1956–1957, and for Colombia, 1956. The base period data for El Salvador and Pakistan pertain to the average of 1950 and 1952 and for Guatemala to 1951–1952.

[c] Imports negligible in the base period. A relatively large amount of food grains was imported in 1956 following the unusually poor crops of 1955.

by one-fourth or more between 1950-1952 and 1956-1958.

Despite the striking advances in the output of principal agricultural commodities in many countries, the success in attaining self-sufficiency has been rather less impressive. Thus, only three countries—Cuba, India and the Union of South Africa—recorded a fall in the absolute level of food grain imports. Although the relative dependence on imports tended to diminish in a few other countries as well, the decline was usually modest. In fact, nearly half the countries appear to have become more dependent on imports.

It must be emphasized, however, that many of the policies adopted are of comparatively short duration. Had the period been somewhat longer, the results might have appeared more striking. What is perhaps most significant is the fact that awareness of the issues involved is growing.

Conclusion

The foregoing review has amply illustrated the crucial importance of a greater volume of investment in raising the level of productive capacity in the under-developed countries. It is therefore encouraging that investment in these countries generally increased quite markedly during the nineteen fifties. Of course, wide disparities in rates of increase in investment were evident among individual countries. But it is notable that, in some three-fourths of the countries studied in this chapter, investment increased annually at a rate exceeding 5 per cent between 1950-1951 and 1957-1958. The attainment of this expansion in volume necessitated, in most countries, an increase in the share of total resources allocated to investment. The significance of this increase can hardly be overemphasized, since a rise in the share of investment is of strategic importance in the acceleration of economic growth.

Governmental policies have generally played an important role in fostering these recent advances. In many of the countries with the lowest levels of living and long histories of economic stagnation, public investment has been a principal engine of recent progress. In other countries, where the private enterprise sector has acquired a vigour and dynamism of its own, governmental policies have often imparted an additional upward thrust to private investment. But, whether through greater public investment or through the encouragement of private investment, governments of under-developed countries have generally assumed responsibility for setting in motion forces to overcome the inertia long inherent in the economic life of these countries.

It is a dominant fact of investment experience in under-developed countries that it is closely shaped by the nature of developments in their foreign trade sectors. The realization of an increasing volume of investment depends ultimately on an expanding flow of those goods and services necessary to meet the direct and indirect requirements of capital formation. But a major component of these requirements is the supply of capital equipment and, in the virtual absence of capital goods industries in most under-developed countries, heavy reliance must be placed on imports from the industrially advanced countries. The growth in total import capacity of the under-developed countries and the proportion available for capital goods have therefore been critical elements in the rate of expansion in investment. In these circumstances, governments have generally accorded considerable importance in the formulation of their investment policies to the attainment of both a more rapid expansion of exports and an increase in domestic production of import substitutes. However, in view of the heavy dependence of the under-developed countries on exports of primary products and of the relatively slow growth in world demand for internationally traded primary products, the ability of most under-developed countries to accelerate the growth in total import capacity through greater merchandise exports has necessarily been circumscribed. Greater scope has existed for independent action by these countries in the expansion of domestic production of selected import substitutes, particularly in such fields as manufactured consumer goods, food or industrial raw materials. A wide variety of policies, ranging from protective tariffs or import controls to preferential fiscal treatment or the provision of ready credit facilities, have been utilized by governments to encourage the expansion in domestic production of selected commodities. Many of these policies have been adopted only in recent years and it is quite probable that the full measure of their impact cannot yet be taken. What may be said, however, is that, in most countries during the nineteen fifties, despite the absolute growth in domestic production of import substitutes, there was no significant reduction in the relative dependence of domestic consumption upon imports of manufactured consumer goods and the raw materials necessary for domestic production of these goods. On the one hand, in most of the countries which had previously developed fairly extensive manufacturing industries, continued reductions in imports of manufactured consumer goods were offset by increased requirements of imported fuels and other raw materials. On the other hand, in most other countries at earlier stages of industrial development, absolute increases in domestic production of manufactures were apparently not of sufficient magnitude to reduce significantly their relative dependence. Consequently, in most countries, the rate of increase in im-

ports of consumer goods and raw materials was largely determined by the growth in total domestic consumption; where total domestic consumption rose more slowly than total import capacity, the proportion of the latter available for capital goods imports increased, but where the converse occurred, the proportion generally fell.

An adequate flow of imported capital goods has not, in itself, been sufficient to meet all the direct and indirect requirements of a continued expansion in domestic capital formation. The additional employment generated by rising investment activity tends to increase demand for marketed supplies of consumer goods, particularly food. But, as has been pointed out, growth in domestic output of food has often tended to be slow and many under-developed countries have encountered the problem of excess demand for consumer goods, particularly food, at various times in the post-war years. It is true, of course, that insufficient domestic output of food may be relieved by increased imports, but such increases have often tended to be at the expense of capital goods imports.

It is quite clear that the problem of achieving an increasing supply of those goods and services necessary for the expansion of investment is much affected by the concept of the socially acceptable level of consumption that permeates government policy. Whatever the rate of increase in import capacity or in domestic production of food and other consumer goods, this concept has been pivotal in determining the supplies available for realizing a rising volume of capital formation. And it is almost inevitable that it has often been inconsistent with the higher levels of investment which are desired.

Thus, frequently, the desire to accelerate the rate of capital accumulation has conflicted with the responsibility of governments to maintain a balance between expanding effective demand and the growing supplies of goods and services that can be yielded by the actual increases in productive capacity. In their eagerness to accelerate investment and realize rising consumption levels, governments have often permitted increases in total effective demand greater than warranted by the growth in supplies. Failure to reconcile the competing claims of investment and consumption within the limits set by total productive capacity has sometimes resulted in the development of an acute inflationary situation and severe balance of payments difficulties that have hampered further steady growth.

It is a paradox of under-developed countries that, despite wide-spread under-utilization of labour and, often, of other productive resources as well, their economies are particularly prone to inflationary pressures. Many circumstances, arising not only from the lack of capital but also from numerous institutional defects and deterrents, combine to render flexibility in output extremely low despite the existence of under-utilized resources. The presence of institutional circumstances in under-developed countries which tend to impede the growth of investment and output, however, emphasize the need for public action on a broad front if the process of economic growth is to acquire powerful momentum. Particularly in the early stages of economic development, increases in output need not always wait upon capital accumulation but can follow swiftly from removal of the very institutional and technical obstacles that have long prevented the fuller or more efficient utilization of existing productive resources. Certainly, removal of these obstacles often requires capital formation but frequently it depends more upon changes in the structure of social and economic institutions or in traditional techniques and forms of work organization. For example, the low productivity of agriculture in many under-developed countries can often be raised by the introduction of superior methods requiring little or no investment, such as crop rotation, the intensified application of natural fertilizers, the use of improved seeds or the multiplication of small irrigation works. Similarly, in small-scale industry, output can be raised by institutional changes such as the provision of adequate credit facilities, improved systems of marketing or the amalgamation of excessively small units of production. Of more general importance than the introduction of technical or organizational changes, however, is the creation of a social environment in which individual producers become eager to acquire and apply knowledge of improved methods. In many of the developed countries of today, for example, a milestone in the history of their economic development was the reform of their systems of land ownership or tenancy; through agrarian reforms, many farmers and peasants were imbued with a new and real incentive to raise the productivity of the land.

There is thus no doubt that, in countries at the earlier stages of economic development, governments can do much to raise output in various sectors of production without waiting upon substantially higher levels of capital formation. While this clearly improves the prospect for the realization of a rapidly expanding volume of investment, it certainly does not lessen the need to channel as much output as possible into investment.

Of course, an increase in total output is not sufficient to ensure an expanded volume of investment. Whatever the stage of economic development that has been reached and whatever the degree to which existing productive resources have been more fully or efficiently utilized, it is clearly essential to any programme of rising investment levels that productive capacity be expanded in those directions that will yield increasing supplies of the appropriate goods and services. Thus, in so far as governmental policy influences the composition of current investment, it becomes a fundamental determinant of the attainable future rate of capital accumulation.

In view of its implications for future investment and growth, the importance of careful allocation of current

investible resources can hardly be overstressed. A striking example of imbalanced investment found in many countries during the post-war years has been a relative neglect of agriculture; not only has this retarded progress in import substitution of food and agricultural raw materials, but supplies of food have been inadequate to meet the rising demand created by industrial development and rapid urbanization. It has been seen above that, if the supplies needed to permit an increasing volume of future investment are to be forthcoming, current investment must be directed into the expansion of domestic capital goods industries, as well as into the export-promoting and the import-substituting sectors of production; for only through greater domestic production or larger imports of capital goods can higher levels of investment be realized.

In conclusion, it may be said that, for the under-developed countries, the post-war years have been a period of constructive experiment in the immense task of economic development. Despite errors, some progress has been made and much valuable experience has been accumulated. If in the past too much significance has sometimes been attached to particular projects with popular appeal, attention is now increasingly coming to be focused on the over-all aspects of rational economic development. Certainly, a larger inflow of foreign capital would greatly assist the under-developed countries in their task of raising investment and output. But this in no way lessens the primary responsibility, which only the under-developed countries themselves can fulfil, to utilize domestic resources in a manner best calculated to promote long-range economic growth.

Chapter 3

INVESTMENT TRENDS AND POLICIES IN THE CENTRALLY PLANNED ECONOMIES

In the centrally planned economies, the years 1949-1958 were characterized by steep increases in investment and national income and by considerable changes in relative rates of growth in the course of the decade. At the same time, significant modifications took place during this period in investment planning and policies.

It will be realized, of course, that the institutional dissimilarities between the centrally planned and the private enterprise economies give rise to profound differences in the nature of their investment planning or policies. It is hardly necessary to say that a fundamental difference lies in the fact that most investment in the centrally planned economies is determined by the central authorities; neither the volume nor the distribution of such investment is affected by the profit expectations of individual enterprises. Another difference is that, whereas in the private enterprise economies, investment policies are frequently conceived as a means of raising effective demand, through the effect of increased investment upon employment and income, in the centrally planned economies, the primary decisions are generally based on supply considerations. In these countries investment decisions are related to the goals set for output to be achieved in a given period, and the investment plans are based on the estimated amount of investment required to achieve the output targets.

Significant differences also exist between centrally planned and private enterprise economies with respect to the financing of investment and its effect on the volume of investment. In the centrally planned economies, since the major part of investment expenditure is financed by the state budget and by the retained profits of enterprises, which are subject to the central plan, the problem of financing is not of primary importance. As expenditure in the financial plan is not in any way tied to revenues from specific sources, it is largely a matter of indifference whether investments are financed by deductions from profits or by revenues from income or turnover taxes. The problem of financing arises only in cases when investment outlays are not determined by the central authorities but depend instead on the decisions of the investing units; the most important instances are agricultural investment of collective farms and individual peasants, expenditure on private housing, and that part of investment by enterprises not subject to the centralized decisions of government. In these cases, investment decisions may be influenced by governmental measures affecting the supply of credit or of investment goods as well as by price and other measures.

New tendencies in investment planning

In all centrally planned economies far-reaching changes have taken place in recent years in the approach towards investment planning. In some countries the new tendencies have been reflected primarily in public debate of problems and policies but in others new methods and policies have already been introduced. These changes have been closely related to the broad reappraisal and modification of the methods of general planning and management occurring in recent years.

The most important of these recent developments have been essentially of three kinds. First, there has been a trend towards lessening the degree of centralization of planning and management and a corresponding enlargement of the responsibility of management at the lower levels regarding the determination of targets in the productive units under their supervision. Secondly, there has been a change in the general attitude of the central authorities towards investment planning. And thirdly, partly as an outcome of these developments, new methods of choice among various investment projects based on a stricter economic accounting have been introduced or extended. These three groups of changes, which, of course, have been closely interrelated in practice, are discussed separately below.

Before reviewing these changes individually, however, it may be noted that they have been broadly motivated by the same consideration, namely, the need to formulate methods of planning and management more appropriate to the present stage of economic development. While the timing of the changes has been largely determined by political factors, their underlying cause is to be found in the new conditions created after several years of rapid economic growth. The considerable expansion and diversification of the centrally planned economies has made it imperative to revise those methods and policies which were devised at earlier stages of development and were much influenced by the specific historical conditions prevailing in the Union of Soviet Socialist Republics at the inception of its long-term plans of development. A complex and diversified econ-

omy can hardly be efficiently directed by the same methods which, despite their crudeness, were effective at the early stages of development. Further, the gradual disappearance of idle or easily appropriated resources has made it increasingly important to find ways of achieving more economic utilization of total available resources. Another important factor stimulating the reappraisal of methods and policies has been the growing claim of consumers for a greater satisfaction of their needs. Whether reflected in difficulties encountered in achieving the planned increases in output per man or in sporadic expressions of unrest, the need for raising consumption levels at accelerated rates could not be postponed. In turn, such an acceleration of consumption obviously imposes restrictions on the volume of investment and carries the risk of reducing the rate of expansion in total output below the level considered desirable.

DECENTRALIZATION IN PLANNING AND MANAGEMENT

Of far-reaching importance has been the trend towards replacement of the extremely centralized system of planning and management by a more flexible system which leaves greater scope for the exercise of initiative at the lower administrative and managerial levels.

The system of planning which had been originally developed in the Soviet Union and was applied later in all other countries of the group was characterized by extreme centralization.[1] The central plans contained a very great number of detailed targets which had the character of operational directives. This extreme centralization considerably restricted the number of decisions left to management of enterprises or lower administrative units; it overburdened managers and administrators with an enormous amount of paper work caused by the need to refer continuously to the centre, and it stifled local initiative. At the same time, it did not necessarily ensure efficient control by the central authorities.

Investment decisions based on output targets were also extremely detailed and the lower administrative units or managements of enterprises had hardly any scope for the adoption of independent investment policies. Although part of the profits and depreciation funds was retained by enterprises, the use of most of these funds was strictly controlled by the authorities. In agriculture, while investment by collective farms or individual peasants was not directly determined by the central authorities, a large part of total investment was state investment in machine and tractor stations and state farms, and state organizations also undertook a considerable amount of the investment in drainage and irrigation works. Such investments were subject to the same control as investment in industrial enterprises.

In recent years, however, the number of detailed targets previously included in the central plan has been considerably reduced. The central plan has consequently acquired a much more aggregative character, with the determination of specific targets being left to lower authorities. It has been generally acknowledged that the reduction in the number of targets set by the central plan and the enlargement in the area of decisions to be taken by the lower authorities should be accompanied by the development of a system of incentives designed to induce management to achieve the planned quotas, not only with the minimum of administrative interference from the central authorities, but also at the lowest cost; certain steps in this direction have already been taken and additional measures have been under consideration. The intention of the new incentives is to encourage more economical use of equipment, raw materials and labour, and it is expected that these should have a significant influence on the requests of producing units for additional capital. In addition to the changes in the system of incentives, there has been an increase in the proportion of profits which individual enterprises are permitted to retain, and their freedom of choice in the disposal of these profits and of amortization funds has been enlarged.

The transition towards a more aggregative form of planning and management by the central authorities has been associated with the creation of various intermediate administrative units, which form a link between the central authorities and individual enterprises and have a certain freedom of decision within the limits set by the central plan. In the Soviet Union, for example, these units, established in 1957, have taken the form of regional economic councils which have become the managing and planning units for industry and construction enterprises located in each region. Thus, the reorganization has consisted in replacement of planning and management by central ministries, which dealt with specific industries on the national scale, with integrated regional planning of all industries.[2] The regional plans drafted by the councils are subject to further co-ordination by the central planning boards and those of the various Republics. This co-ordination relates, however, only to aggregate targets such as total output of a given industry; the commodity composition of output and its allocation to different plants generally remain under the jurisdiction of the councils. More radical changes have been introduced in the planning of agricultural production. The managements of collective farms have been left free to elaborate their own production and investment plans and their only obligation stipulated in the central plan is the procurement quotas for various kinds of agricultural produce. In consequence, the targets for agricultural production specified in the plans, unlike the other targets, are not

[1] The system of planning prevailing before the recent changes, briefly discussed here, was more fully described in United Nations, *World Economic Survey, 1957* (sales number: 58.II.C.1) and *World Economic Survey, 1958* (sales number: 59.II.C.1), and in *Economic Survey of Europe in 1958* (sales number: 59.II.E.1).

[2] Excepting agriculture and several industries, such as railways, merchant marine, construction of electric power stations, medium machine-building and some others, which still remain under the jurisdiction of the central authorities.

conceived as obligatory directives but represent forecasts or desirable goals which are to be realized by various types of inducement rather than by administrative orders.

Although the particular form of the reorganization of planning and management has differed from country to country, the general direction of change has been similar in all the eastern European countries. While in the Soviet Union and Bulgaria the new organization of management has been based on a territorial principle, in Poland, Czechoslovakia and Eastern Germany it has consisted in the creation of industrial associations, which group together several enterprises in an industry or in a few complementary industries, either on a regional or a national basis. The most important change from the point of view of planning is the acquired right of these organizations to allocate the over-all goals assigned to them by the central authorities.

Briefly, then, while the central plans of economic development continue to have the force of law, the general tendency has been to confer upon the regional and local authorities, as well as upon groups of enterprises and individual enterprises, an increasing freedom of decision in the production and allocation of resources.

The effect of these measures on investment planning and policies has been twofold. First, the role played by regional and local units and by enterprises in the preparation of investment plans has increased substantially. The reduction of the number of detailed output targets included in the central plan and their replacement by aggregate targets has had its corollary in similar change in investment planning. In several countries, for example, the central plan has stipulated only the total volume of investment allocated to a given industry, leaving its allocation among individual enterprises to the lower administrative units. Secondly, the share of total investment not included in the central plan and financed either from credit or from the funds left at the disposal of local units or individual enterprises has increased considerably. In all countries, the share of profits retained by enterprises and, more important, the proportion of such funds which can be used for investments other than those specified in the central plan have been enlarged.

The extension of the authority of regional bodies, associations or enterprises in this latter respect has varied considerably from country to country. In some countries, part of the amortization funds and retained profits can be used by enterprises, especially for modernization, without any special authorization by higher bodies. In others, however, investment decisions of enterprises have to be approved by regional or local authorities.

In the Soviet Union, for example, the approval of the regional economic councils has been required. The part played by these councils in the preliminary stages of planning of investment has, in fact, been significant. But even after final approval of plans by the Central Planning Board, the councils have been free, within certain limits, to change the pattern of allocation of investment funds within a given industry. Any change in allocation among industries, however, has been subject to the approval of the planning boards of the Republics or of the Central Planning Board of the Union of Soviet Socialist Republics. In Poland and Czechoslovakia, the industrial associations have been free to distribute the investment, allocated to them by the central plan, among the enterprises under their jurisdiction; and they have also frequently been free to determine the timing of such investments. Moreover, the proportion of retained profits and amortization funds which they have been entitled to invest without the approval of the central authorities has been considerably greater than in other countries.

In addition to the extension of the scope of decentralized investment within the state sector, the share of investment not directly controlled by the central authorities has been further increased by the expansion of private housing construction and by an increase in investment of collective farms or individual peasants relative to state investment in agriculture. As was observed above, investment in collective and private farms, even before the recent reforms, was not determined directly by the central plan. The influence of the State was, however, greater when production targets were set by the central planning boards than it is under the recent arrangements, whereby decisions relating to output have been left to the collective farms and the central authorities have limited themselves to setting targets for deliveries of agricultural produce to the state purchasing agencies. But a much greater reduction in the influence of the central planning boards on investment in agriculture has arisen from abolition of the machine and tractor stations, which has already been completed in some countries and is now taking place in others. The machine and tractor stations were government-owned and absorbed a very large share of total investment in agriculture. Investment in these stations was entirely determined by the central government and financed by the budget. But since their abolition, decisions to invest in agricultural machinery and equipment have rested with the collective farms.[3]

The increase in the share of investment not directly controlled by the central authorities has raised the problem of the co-ordination of autonomous investment decisions with government plans. This is to be resolved by the use of indirect physical controls or by changes in price or credit policies. Investment not subject to direct government control can, for instance, be influenced by restricting or increasing the supply of investment goods made available by the state enterprises, or, in the case of building, by directives issued to the state

[3] In state farms, however, investment continues to be wholly determined by the Government.

building enterprises. Similarly, the price policy applied to investment goods sold to collective farms or private investors as well as the credit policy of the State can play an important part in influencing non-state investment.

In addition to the lessening in the scope of centralized planning and management, a significant change has been taking place in the general attitude towards investment planning. Although the particular techniques of investment planning have always differed in detail among countries, the basic principles and the recent changes have been sufficiently common to most countries to permit some generalization.

THE LEADING INDUSTRIES APPROACH

Before the recent modifications, the general criteria for investment planning in all countries were essentially those which had been formulated in the Soviet Union during its early five-year plans. Fundamental to the approach to investment planning was the conviction that the rate of investment and, hence, the long-run rate of economic growth should be maximized. Frequently, this was expressed in the form of a theoretical assertion that the condition essential for economic growth was a faster rate of increase in output of producer goods than of consumer goods. Applied in practice, this "law of predominant increase in output of producer goods" meant that priority was invariably given to expansion of the producer goods sector over the consumer goods sector.

Closely associated with this fundamental conviction and serving as a criterion for the relative growth of industries within the producer goods sector, was the concept of "leading industries". These were industries regarded as crucial for the particular phase of economic development envisaged in the plan. These industries, of course, varied from country to country and from plan to plan, but included at different times and places such industries as machinery, ferrous-metallurgy, chemicals and fuel and power.

It was within the framework of these concepts that the planning of output and investment took place. The crux of the planning process lay in the output targets set for the "leading industries". Once these targets had been determined on the basis of existing capacity and potential scope for expansion, either through domestic production or imports, the goals for other industries were constructed around them. First, the necessary growth in output of complementary industries, required to support the leading industries, was established; thereafter, targets for other industries, lower down on the scale of priorities, were considered. Finally, output of the consumer goods industries was determined on the basis of the rise in employment and such increases in wage rates or payments to the peasants as were considered indispensable to increase the productive efficiency of the population and to maintain political stability.

This preliminary determination of production targets provided the starting point for the planning of investment. At this stage, the task consisted in an evaluation of the increase in capacity required to achieve the production targets. After making estimates of existing capacity, additions to capacity likely to accrue from the completion of investment projects previously commenced, and the scope for increasing output through fuller utilization of existing resources, the planning authorities arrived at an assessment of the amount of new capacity which had to be created during the plan period. This, in turn, called for increases in output of specific capital goods, and these increases had to be integrated into the original production targets.

These preliminary estimates were then checked for internal consistency by use of the material balances; these were balance sheets drawn up in physical terms for a great number of individual commodities, each sheet showing the output of a commodity and its allocation by industries or final uses.[4] Through these balance sheets, the production and capacity plans for each sector were adjusted by successive approximations so as

[4] While each balance sheet showed the output of a given commodity and the requirements of various industries for that commodity, it did not contain any data on inputs required for its production. The future requirements of any industry for the output of other industries were calculated by the application of so-called "progressive norms" or input-output coefficients for each input factor; these norms were based on average requirements in the past but were frequently raised in the light of expected improvements. Although the existence of a large number of balance sheets, amounting to as many as ten thousand in the Soviet Union, provided a wealth of information, the fact that they were not integrated into a matrix covering the whole of the economy considerably limited their usefulness for central planning as well as for operational adjustment in the process of fulfilment of the plan. While any variation from the originally postulated production of an industry would obviously require modifications in the output both of enterprises supplying raw materials and fuels and of enterprises acquiring its products, the effect of such a variation on these industries and, indirectly, on the rest of the economy could not be ascertained from the data given in the balance sheets for individual items. The effects of miscalculations or of over-fulfilment or under-fulfilment of sectoral plans on the economy as a whole were extremely difficult to trace and to correct, and since investment was based on production programmes, all these discrepancies had a direct effect on the allocation of investment.

These defects of the individual balance sheets have been subject to criticism in all the centrally planned economies during recent years and several steps have been taken to eradicate them. The considerable reduction in the number of detailed targets included in the central plans has paved the way for the introduction of more efficient methods. Where the number of items planned in physical terms has been considerably reduced, the collation of the balance sheets for individual commodities in a single table can provide a matrix showing the inter-industry flows. In several countries such matrices have recently been prepared and the need for similar tables in value terms is generally admitted; indeed, in some countries, tables in value terms have already been elaborated. The wider use of electronic computers and the application of methods of linear programming, together with the introduction of integrated material balance sheets, are expected to improve considerably the planning of output and investment. It has been especially emphasized that these methods will considerably facilitate the process of successive adjustment of targets planned for individual sectors and the selection of the most advantageous structure of production and the most efficient allocation of investment in the plans for economic development.

to correspond to present and prospective resources. In this process of successive adjustment, it sometimes proved necessary to cut down the original targets set for the leading industries in the event that allocation of the full amount of resources needed for the planned expansion of these industries would have entailed a curtailment in the growth of complementary industries. Even in such circumstances, however, the established scale of priorities among industries was adhered to, and those industries or sectors with low priorities had to carry the brunt of any necessary reductions in total planned output.

The planned increases in capacity, expressed in physical terms, which emerged from these tests of internal consistency and conformity with available resources were then translated into value terms and integrated into the general financial plan embracing all the money flows of the economy. The value of investment after deduction of amortization allowances was also integrated into the plan for national income. Even at this stage the volume of investment could be subject to revision since, in general, the authorities tended to specify in their decisions the maximum desirable ratio of accumulation to national income. It seems, however, that this latter test did not play any significant part in its determination.

A more important part was played by the financial plan. Analysis of this plan could disclose inconsistencies which had not appeared in the original estimates obtained by the method of material balances. Especially important in this context was the balance of money income and outlays of the population. Total money income of the population, after allowance for personal savings and taxation, could be compared with the value, at ruling prices, of the planned supply of consumer goods and services. Any lack of balance between these two aggregates would indicate whether, at the given price level, the supply of consumer goods and services fell short of projected demand and whether, if an inflationary situation were to be avoided, the originally postulated volume of investment should be reduced in relation to national income, or the rise in disposable income should be made smaller than originally planned. Although, in the past, either the latter solution or inflationary price increases were generally preferred, in some instances, the preliminary targets set for consumer and producer goods industries were altered in the final draft of the plans. In the latter event, changes in both the allocation of investment by sectors and the share of investment in national income became necessary.

Until recent years, then, the formulation of investment plans, elaborated by the method of material balances and supplemented by the checks just described, revolved essentially around the targets set for "leading industries"; and, underlying the emphasis placed on these industries, was the "law of predominant increase in output of producer goods". Recently, however, there has been a strong tendency towards modification of these attitudes. The increasing importance attached to problems associated with the relative cost and efficiency of investments and the greater attention being paid to the satisfaction of consumer needs have both contributed to the changes in attitude. But, in more fundamental terms, it may be said that the new attitudes have begun to develop in response to the changed economic conditions that have emerged from a period of rapid economic growth. The central feature of the new trends has been a tendency to reassess the policy of the maximization of investment and the rate of economic growth in the context of an optimum distribution of resources and of higher levels of consumption.

Associated with this has been a growing tendency to place less stress on the "leading industries" approach to investment planning. In their place, new criteria have been developed to guide investment planning, not only in the choice between investment projects within a given industry but also, and more significantly, in the allocation of investment between sectors.

Undoubtedly, the view that the fundamental law of economic growth consisted in a higher rate of growth in the producer goods sector than in the consumer goods sector was, apart from doctrinal considerations, deeply rooted in the requirements of economies at the initial stages of their development. But, however useful and important as a basis for economic policy in the early phases of development, this view has lost much of its relevance in the conditions of an advanced economy and its theoretical inadequacy has become increasingly apparent.

The diminishing relevance of this principle may, perhaps, be best understood if it is rephrased in the more familiar terms of investment and consumption as components of national product. It is true, of course, that in the terminology of the centrally planned economies producer goods include not only final investment goods but also raw materials and semi-manufactures. But, since there is no reason to suppose that the output of semi-manufactures is bound to rise more rapidly than output of final goods and since raw materials requirements per unit of final output tend to decrease, the only component of producer goods which can be of crucial importance in determining the relative rates of growth in output of producer and consumer goods is final investment goods. Thus, the law concerning the relative rates of expansion in the producer goods and consumer goods sectors can, in essence, be expressed in terms of the relative rates of increase in investment and consumption.

It becomes clear that, when expressed in this form, the law appears to imply that economic growth can take place only if the rate of expansion of investment is greater than that of consumption. But obviously, output may continue to grow so long as productive capacity continues to expand, and this may occur so long as

there is net investment regardless of whether investment is growing faster than consumption. An identity in the rates of increase in investment and consumption and, hence, constancy in the shares of national product, is quite consistent with steady growth in total output.[5] Even if investment increases at a slower rate than consumption, national income may continue to expand for some time, although at a diminishing rate. Of course, when the aim of the planning authorities is to accelerate the rate of economic growth, investment must be increased relatively to consumption. Moreover, in the process of transition from a period when the output of investment goods has been just sufficient to meet replacement of retired equipment, even a limited expansion in total output may require an exceedingly high rate of increase in output of producer goods. It was, in fact, in this kind of situation that the "law of predominant increase in output of producer goods" first assumed such primary importance in the formulation of investment plans; and, while the assertion was theoretically unfounded, it may have served as a useful principle of economic policy during a period when the overriding aim of governmental policy was to break the deadlock of economic backwardness and to accelerate the rate of economic growth.

Similarly, the concept of "leading industries" was closely adapted to economic requirements in the earlier phases of development. Although in any planned economy the authorities are bound to determine their scale of preference in planning structural changes and the corresponding allocation of investment, the need to concentrate on a single industry or on a limited number of strategic industries was inevitably much greater in the early stages of development. The efforts to develop new industries considered as essential for future growth and the large-scale nature of investment projects in heavy industry claimed a very large part of the limited amount of investment resources and left relatively little for investment in other sectors. In these conditions, the "leading industry" approach meant sharp advances in a single industry associated with considerable lags in other industries; during subsequent periods when higher priorities were assigned to the other sectors, these lags were sometimes reduced or eliminated, but other lags were frequently created.

Although this approach was greatly influenced by the conditions prevailing in the Soviet Union during its first five-year plans, it was adopted by the other centrally planned economies, frequently in entirely different situations. During recent years, however, this policy has been subject to considerable criticism and has been generally recognized as hardly applicable to a highly integrated and diversified economy. This criticism has been related both to the leading industries approach and to the exclusive use of the method of material balances in planning of output and investment. The predominant role played by the method of material balances, expressed in physical terms, left little room for consideration of the relative advantages of alternative patterns of allocation of resources, and this method was effective only in testing the internal consistency of plans. While material balances continue to be used in planning, the opinion held formerly that these balances were the decisive tools of planning and that national income projections could not serve as the starting point for the preparation of general plans of economic development has been rejected.

Further, the need for the "leading industry" approach has been considerably reduced in a period when the investment goods industries have attained a very high level of development and have considerably increased their share of total output. The great diversification of output and the resulting increase in the substitutability of various products have also heightened the scope for realization of the general goals of government policy by alternative combinations of output or of investment allocation. Moreover, in a closely integrated economy, the restriction of rapid growth to a limited number of industries becomes much more wasteful than in an economy where the mutual dependence of various sectors is only in the process of formation.

The change in attitude towards the "law of predominant increase in output of producer goods" and towards the "leading industry" approach as guiding principles of investment policy has not been explicitly stated in all countries. In some countries, the existence of such a law has been denied outright and the criterion of "leading industries" has been openly rejected. In other countries, however, the change in attitude has been mainly reflected in a lessened emphasis on the importance of these principles as the basic premises for economic planning and policies, and in a new insistence on the need to base the planning of output and investment on the comprehensive economic analysis of all relevant factors rather than on simplified rules and principles. Although, in most countries, the starting point in the preparation of output and investment plans is still the physical targets for those basic industries, such as machinery, metallurgy, chemicals and fuel and power, which are considered crucial for the determination of the rate of growth of the economy, the aim is no longer to maximize these targets irrespective of their effect on other sectors of the economy. Before final approval, plans for such industries are much more thoroughly confronted with their effect on the distribution of income between investment and consumption. Moreover, the targets for consumer goods and for investment in consumer goods industries and in housing now tend to be treated as independent variables rather than as residual items whose lower limit was determined by the minimum requirements necessary to preserve political stability and the ability to work. Thus even in countries where the "leading indus-

[5] This will not necessarily hold true, of course, if the capital-output ratio changes because of the influence of various factors, among which the most important are capital-absorbing or capital-saving forms of technical progress.

try" method has been retained, its meaning has been changed. The new attitude has been reflected in the repeatedly stated need for "optimal" rather than "maximal" planning of output and investment. In explanation of this distinction, it has been pointed out first, that the maximum target set for a leading industry may result in inefficient utilization of total resources if it draws off resources necessary for the expansion of complementary industries, and secondly, that since the major part of the increase in national product is to be obtained through increase in output per man, the need to raise incentives and therefore to increase consumption imposes limits on the growth of investment in relation to national income and consequently on the planned growth of national product.

In Poland, there has been a significant departure from earlier practice in recent years. For the first time, the preliminary project of the long-term plan of economic development has been prepared not by setting up targets for specific leading industries but by taking as a starting point the estimated increase in national income and the volume of productive investment necessary for such an increase. The first estimates were then corrected by taking into account such limiting factors as the supply of raw materials and labour and the balance of foreign trade. Another characteristic of the Polish approach was that, in the determination of the rate of growth of national income and of productive investment, greater account was taken of the need to increase non-productive investments, such as housing, public utilities and health, and to raise personal consumption.

INVESTMENT CRITERIA

It is evident from the preceding section that, before the recent changes in attitude to investment planning, the allocation of investment by sectors, as well as the choice between investment projects within an industry, were not generally made on the basis of the relative efficiency of various investment alternatives but were determined by other considerations. In the earlier phases of development, especially in the Soviet Union, the limited capacity of the sector producing investment goods circumscribed the scope for an optimum allocation of investment among sectors, based on cost accounting and on the relative efficiency of investments. The number of possible variants in the allocation of investment was severely limited by the structure of the economy, and the initial advance was therefore achieved by concentration on crucial sectors. In these circumstances, the usual concepts of relative advantage, relative efficiency and cost had little application in the formulation of government investment policy. This is not to say that a different policy, based on an analysis of all the factors contributing to economic growth, would not have yielded better results, especially after the first years of expansion. But the need for a more judicious allocation of resources seemed less pressing than in the more recent stages of development. In recent years, as the supply both of easily appropriated raw materials and of labour has become tighter, and as the rising claims of consumers have become a restraining factor on growth, the need to ensure the optimum utilization of existing resources has increased considerably. It is because of these changed conditions that increased use has recently been made of new, or improved, efficiency criteria in the choice between various investment projects within an industry and that a tendency has emerged to use such criteria in the allocation of investment between sectors.

It will be realized that, even when the allocation of investment by sectors is determined entirely by the output targets established for each sector, there still arises the problem of choice between various ways of producing a given output; alternative investment projects differ in their capital and current cost, depending partly on the particular combinations of capital and labour that are required. It is obvious that if an analysis of the efficiency of various projects in terms of cost is undertaken before the volume of investment allocated to an industry is finally determined, this may considerably affect not only the allocation by sectors but even the volume of total investment. If, for example, less capital-absorbing projects are preferred in a particular sector, the saving on investment outlay may be used for greater investment in other sectors and, hence, may yield an acceleration in the rate of economic growth; alternatively, this saving may be used for an increase in the share of consumption in national product, the rate of growth in total output being held at the originally projected level. Thus, the use of adequate investment criteria within individual industries may have significant repercussions on the economy as a whole.

The formulation of investment criteria, however, was never an easy matter in the centrally planned economies. Within the prevailing institutional framework, the managements of enterprises had no inducement to formulate their capital requirements on grounds other than an increase in output per man or a reduction in current cost, since capital equipment was allocated to them free of charge. But the authorities responsible for the approval of any investment project were bound to base their decisions on some general criteria reflecting the needs of the economy as a whole. In practice, over a long period, no unified approach to this problem existed in the centrally planned economies and the various ministries and institutions used different criteria, most of which were expressed in physical terms. The guiding principles usually employed were the most modern technique, the increase in output per man, the potential savings in raw materials, the reduction in current cost or the savings in investment outlay. Frequently, several of these criteria were used simultane-

ously and, since their results were often irreconcilable, the final decision had an arbitrary character.

The need for a practical formula which could be used by planning organizations was recognized long ago and, in several cases, some such formula was constructed and actually applied. But it has been only during recent years that the use of efficiency criteria in value form has been recommended by government authorities for all investment projects. While several of the efficiency criteria are not considered as adequate and are still under debate, the new trend in thinking and policy emerges clearly from several official documents dealing with this problem. It is significant that the new approaches to the problem of the efficiency of investment have not been, as in past discussions, limited to the choice between alternative projects producing the same kind of output. The emphasis has been on the broader implications of such choice for the economy as a whole. What is even more important, there has been a strong tendency to apply efficiency criteria to the allocation of investment between sectors within the limits set by the general objectives of the plan. In practice, the scope for such decisions has been confined to the choice between industries producing substitutable goods. But the continuous diversification of production, together with the fact that the high level of output attained by key industries reduces the need to concentrate on these sectors, tend to broaden the area where alternative decisions might be taken on the basis of relative cost without jeopardizing the general objectives of the plan. It is very doubtful, however, whether the use of such criteria could be extended to the point of wholly determining the allocation of investment among all sectors of the economy. Even in an economy where relative prices adequately reflected relative scarcities, prices would not serve as a sufficient basis for the long-term planning of investment, since prices reflect present conditions while the planning of investment must take account of longer-run considerations. But, in any event, prices in the centrally planned economies are determined by government and do not reflect relative scarcities. In such conditions, differences among sectors in the return on capital cannot provide any guide to the allocation of investment. More important, in view of the differences between the marginal net product of an industry and the social net product, it is inconceivable for an economy based on state ownership of means of production to allocate investment exclusively on the basis of differences in the profitability of individual sectors of the economy.

Notwithstanding these limitations, criteria of efficiency are playing an increasing role in the economic policy of the centrally planned economies. In their most general form, these criteria are based on comparisons of the capital outlays and annual current cost of different projects producing the same output. Obviously, no problem arises where both the capital and current costs of one project are smaller than those of an alternative project. But where the choice is between a more capital-absorbing and a less capital-absorbing project, it is decided in favour of the former only if the additional investment cost can be recouped by savings on current cost within a period equal to or smaller than the "normative" recoupment period established for the industry.

In the Soviet Union, where the problem of criteria to determine the efficiency of investment was intermittently discussed over a period of several years, a single formula was recommended at a special conference in 1958 for application in all industries. This formula was later included in the official instructions, published in 1960,[6] concerning methods for the calculation of efficiency.[7]

The recoupment period calculated in the formula is compared with a normative period of recoupment established for a given industry, and the more capital-absorbing project is chosen only if the former period is shorter than or equal to the latter. The same result is obtained if, in place of the above, the reciprocal of the recoupment period—which is called the coefficient of relative effectiveness—is compared with a normative coefficient. It may be seen that the normative coefficient plays a role in the choice between alternative investment projects similar to that of an imputed interest rate.[8]

This similarity is particularly evident in the Soviet formula recommended for comparisons of more than two projects, according to which a given project is chosen if the annual current cost plus imputed interest on capital is smaller than in the other projects.[9]

[6] *Tipovaya Metodika Opredelenia Ekonomicheskoi Effektivnosti Kapitalnykh Vlozheny i Novoi Tekhniki v Narodnom Khozyaistve SSSR* (Moscow, 1960), published by the Academy of Sciences of the Soviet Union in agreement with the State Planning Commission and other government institutions.

[7] The basic formula for the recoupment period was established in the following form:

$$\frac{I_1-I_2}{c_2-c_1}=T,$$

where I_1 and I_2 are the capital outlays involved in the more and the less capital-absorbing projects, c_1 and c_2 are the annual current costs of operating the two projects, with c_2 being greater than c_1, and T is the period during which the additional investment outlays required for the first project would be recouped by the saving on current cost. The formulas are based on the assumption that the volume of annual output of all projects under comparison is identical. The Soviet instruction states that when comparing projects which differ in annual output, it is necessary to adjust the investment and output data so as to render them comparable.

[8] The coefficient of relative effectiveness $\frac{c_2-c_1}{I_1-I_2}=\frac{1}{T}$ is compared with normative coefficient $\frac{1}{T_n}$ for the industry and the more capital-absorbing project is chosen if $\frac{c_2-c_1}{I_1-I_2}\geqslant\frac{1}{T_n}$.

[9] The recommended formula for more than two projects was $c+I\frac{1}{T_n}=$minimum. This formula is directly derived from $\frac{c_2-c_1}{I_1-I_2}\geqslant\frac{1}{T_n}$ which can be presented as $c_1+I_1\frac{1}{T_n}\leqslant c_2+I_2\frac{1}{T_n}$; this means that the condition of choice between two variants is $c+I\frac{1}{T_n}=$minimum.

Since both prices and the volume of output are assumed to be the same for the various projects, any saving on current annual costs represents additional profits.[10] This means choosing the project with the highest profits, net of imputed interest cost, on the capital used. Thus, although the capital is supplied free of interest charge to managements of enterprises, an interest charge is imputed to the use of capital in deciding upon the selection of projects.

The normative coefficients are supposed to be established for a number of years and revised periodically. The Soviet instruction states that the "normative coefficient for individual branches should be established, at the present time, at no less than from 0.15 to 0.3, which corresponds to a recoupment period of about three to seven years. For specific branches such as transport or power, longer periods of recoupment may be established, but not above ten years, implying a normative coefficient of effectiveness not less than 10 per cent." The coefficient actually established for power was 12 per cent.

The use of a formula incorporating a normative coefficient of efficiency tends to discourage the choice of a more capital-absorbing project unless the saving in cost or the addition to profits is at least equal in magnitude to the imputed interest on the capital used. The introduction of this method in the analysis of the effectiveness of investment projects has been motivated by the need to economize in the volume of investment per unit of output. The determination of the normative period of recoupment for individual industries has presented considerable difficulties since it should be based on several factors, not all of which are easily measurable. These include the availability of capital and labour for a given branch of industry, the technical possibilities of reducing the recoupment period and the priority given to technical progress in specific industries.

While the use of these relatively simple investment formulas has been recommended to all planning organizations, these formulas have not been considered by the authorities as entirely adequate. The modifications already introduced or suggested have tended to improve the formulas in the direction of making the decisions relating to a single industry more dependent on their effect on the economy as a whole. The saving of capital, labour or raw materials in a single plant arising from the choice of projects on the basis of these formulas has had a positive effect on the economy in so far as it has made more resources available for use in other sectors. But it is recognized that account must also be taken of the additional investment expenditure in complementary industries which may be entailed by the choice of a particular project; otherwise, internal economies accruing from the choice of the particular project may easily be offset by the additional costs incurred in other sectors. For instance, if the construction of a project, which appears more advantageous on the basis of the formulas above, would require the building of an additional railroad or a new mine, the cost of expansion of these latter industries could easily exceed the economies derived from the decline in unit cost of output of the project; in this event, an alternative project, which seems less advantageous in the context of these formulas, might be more economic from the point of view of the economy as a whole. An additional limitation of the formula stems from the fact that the coefficient of effectiveness is based on the capital and operating cost only for the completed project; consequently, it fails to take into account differences in the period of construction of various projects during which the invested capital does not yield any return.

The recommendations and decisions recently taken in all countries emphasize the need to take these factors into account in estimating the relative efficiency of various investment projects. But, while the construction of a particular project may entail additional investment in many sectors of the economy, all the repercussions cannot be taken into account in estimates relating solely to individual projects. Consequently, it is recommended that only the most important and immediate effects be considered. The Soviet instructions to the power industry, for example, state that, in evaluation of any proposed expansion of capacity in the industry, the repercussions on other industries should be taken into account only if their output will provide a large part of the equipment or raw materials necessary for the construction of the additional capacity and the increase in power output.

The effect of the immobilization of capital during the period of construction is generally considered as a loss equal to the net product which could have been obtained if the capital had been active. This loss is, therefore, to be considered as an additional capital cost calculated by applying to the sums immobilized each year either the imputed "interest rate" established for a given industry or a special rate based on some over-all measure of

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[10] The basic formula used for measuring the effectiveness of investment can thus be presented as

$$\frac{P_1-P_2}{I_1-I_2} \gtrless \frac{1}{T_n},$$

where P_1 and P_2 are annual profits of the two projects. But the difference in annual profits of the two projects in relation to the difference in investment outlays simply represents the marginal return on capital of the more capital-absorbing project. The more capital-absorbing project is to be chosen if the marginal return is equal to or greater than the normative coefficient, which is the equivalent of the imputed interest rate. When more than two projects are under consideration, the condition of choice may be presented as

$$\frac{P-I}{T_n} \frac{1}{} = \text{maximum}.$$

effectiveness of investment, such as the average return on capital or the increment in national income per unit of investment.[11]

The criteria for selection of projects on the basis of recoupment periods used by the Soviet Union were adopted with various modifications by other centrally planned economies. As in the Soviet Union, the criteria were not used consistently, and only during recent years has the application of coefficients of effectiveness become general.

The main differences in the formulas used to determine choice between various investment projects consist in the number of variables introduced into them. In this respect, the Polish formula introduced in 1960 merits particular attention, since it is much more comprehensive than the methods used in other countries.[12] It includes several terms for factors not contained in the Soviet formula, although, according to the Soviet instruction, some of these factors are to be considered before a final decision is made on the most effective investment alternative. Besides making explicit allowance for both direct and associated investment outlays, capital repairs and the cost of the immobilization of capital in unfinished construction, the Polish formula takes into account the effect of the difference in the length of life of various investment projects. While the advantages derived from the choice of a longer lasting project are partly allowed for in the Soviet formula through inclusion of depreciation in current cost,[13] the Polish method goes much farther by introducing coefficients accounting not only for the advantage but also for disadvantage of the greater longevity of a project; this disadvantage is conceived as the loss arising from the greater likelihood of obsolescence of the longer lasting asset.

Such improvements in the basic formulas do not, however, solve all the difficulties encountered in the construction of comprehensive investment criteria. The fact that prices and wages do not reflect relative scarcities of factors of production or products makes it difficult to estimate in value terms the effect of any particular choice between alternative projects on the whole economy. In consequence, it is generally recognized that the coefficient of efficiency should not be used as an exclusive criterion. The assessment of effectiveness in value terms has to be supplemented by analysis in physical terms of the supply of such factors as fuel, raw materials, labour and capacity of equipment; because of the existing price system, the relative scarcity of such factors may not be accurately reflected in the value coefficients. At the same time, it is considered that, in cases where achievement of the general economic targets set for a given time period requires a certain rate of increase of a given output in a particular sector or industry, the criteria of effectiveness may be disregarded if a less efficient project will start producing at an earlier date than an efficient project. A well-known case in point is the decision taken by the Soviet Union to increase the output of electric power during the current seven-year plan through expansion of thermal rather than hydroelectric stations despite the lower total unit costs of the latter.[14]

As already noted, the efficiency criteria based on the recoupment period were applied in various countries long before the recent decisions to generalize their use or to modify their content. They were used originally

[11] The Soviet instruction also stipulates that if alternative projects are to be built in different periods, the capital outlays required for the project constructed later should be discounted by the use of the following formula:

$$I\,(1+\frac{1}{T_n})^{-b},$$

where b stands for the number of years separating the start of construction of the two projects.

[12] *Instrukcja Ogolna w Sprawie Metodyki Badan Ekonomicznej Efektywnosci Inwestycji* (Warsaw, 1960), published by the Planning Commission of the Council of Ministers. The Polish formula can be presented in a slightly simplified form as follows:

$$\frac{I\,\frac{1}{T_n}\,(1+qm)+KY}{OZ}=\text{minimum},$$

where I=direct and associated investment; $\frac{1}{T_n}$, normative coefficient of effectiveness; q=coefficient of immobilization of capital in unfinished construction; m=period of immobilization; K=constant operating costs less depreciation plus capital repairs; Y=coefficient of correction for operating costs; O=annual volume of output; Z=coefficient of correction for the volume of output. Z and Y are each defined as increasing functions of the life of the project, having values of unity in the case of projects with the standard life of twenty years and value greater or less than unity according as the life of the project exceeds or falls short of twenty years. Thus, Z represents allowance for the greater output per unit of investment of the longer lasting project and Y indicates the disadvantage of the longer lasting project in terms of obsolescence.

The effect of obsolescence, as conceived in the Polish formula, can be shown by the following example. Assume two projects last twenty and thirty years respectively. If the first project is chosen, it will be replaced after twenty years by a new project with a smaller operating cost due to technical progress. If the second project is chosen, no reduction in operating cost will take place for another ten years. The difference between the anticipated operating cost after twenty years and the present operating cost of an asset represents a loss caused by the continuance of the present operating cost for an additional period of ten years.

The Polish instruction adopts twenty years as a standard period for the active life of an asset and contains tables indicating the value of the coefficients, Y and Z, for periods of exploitation of an asset from one to one hundred years. Other things being equal, the choice between various projects will depend on the relation between values of Y and Z.

The normative period of recoupment T_n was established in Poland as six years, and its reciprocal, the normative coefficient of effectiveness $\frac{1}{T_n}$, at 17 per cent. In the Soviet method, the establishment of different normative periods of recoupment was partly intended to take account of differences in the longevity of assets, whereas in the Polish formula, a uniform normative period of recoupment was established for all industries. In the Polish formula, however, differences in the longevity of assets are taken into account by the introduction of the terms Y and Z.

[13] Annual operating cost in the Soviet formula includes depreciation and therefore, other things being equal, the project with the longer life span will have a lower total unit cost of output than a project with a shorter life span.

[14] The official explanation was that the construction period and the required capital outlays are lower for thermal than for hydroelectric stations although the total unit cost of output is lower in the hydroelectric plants because of a smaller operating cost and much longer life span.

in the choice between investment projects producing identical output. They played a considerable part in determining the optimum size of a project and its geographical location. With some modifications they were also used to estimate the effects of modernization of existing plants or to determine the choice between modernization and the construction of new plants. More recently, their use has been extended in two directions, significantly increasing their role in the allocation of investment between sectors. In the first place, greater use has been made of these criteria in the foreign trade sector. In several countries, the distribution of investment between industries producing goods which are important in foreign trade is partly based on the relative domestic costs of these industries, as calculated by the criteria described above, considered in relation to the external prices ruling for the products of these industries. The planning authorities may decide to allocate investment to industries where the external price is high in relation to domestic cost per unit of output rather than to industries where it is relatively lower.

The second area where extended use of the criteria is being made is in industries producing close substitutes. The use of efficiency criteria in the choice between various industries producing substitutable goods may clearly affect the allocation of investment by sectors.[15] As the range of substitutable products increases with continued economic development, the influence of these criteria on the allocation of investment by industries is bound to increase.

The tendency towards greater use of criteria of effectiveness in the allocation of investment by sectors has been reflected in several countries in the new emphasis placed on the calculation of aggregate indicators of effectiveness of investment for the economy as a whole.

The Soviet instruction of 1960 for investment emphasized the need for the calculation of an over-all coefficient of efficiency of investment in terms of the increase in net product per unit of investment.

Although the instruction does not specify clearly the intended use of such an over-all coefficient in planning and investment policies, it seems that the practical purpose of such an indicator would be its utilization as a criterion for the most efficient allocation of investment by sectors. While at the present time investment policy is still largely based on decisions taken with respect to the expansion of specific industries, there is a continuously widening area of the economy where alternative rates of expansion of individual industries are a matter of indifference from the point of view of the achievement of targets set for the first priority sectors. The existence of such a "neutral" area makes it possible to allocate investment among sectors in such a way as to attain a maximum increase in national income per unit of investment and to use the aggregate coefficient of efficiency for testing the effect of various patterns of investment on the rate of economic growth. Although it is doubtful whether such methods are intended to be applied to all sectors of the economy, the general tendency noticeable in all the centrally planned economies is to make use of this approach to an increasing degree.

PRICES, OBSOLESCENCE AND INTERNATIONAL CO-OPERATION

The wider utilization of estimates of efficiency of investment in value terms has raised the problem of pricing of investment and consumer goods. It is obvious that as long as the prices paid for various goods are not based on any uniform pricing methods, comparisons of effectiveness of investment in alternative projects may yield misleading results. Probably the factor giving rise to the greatest distortion has been the difference in pricing of producer and consumer goods; since the latter includes the turnover tax, the element of markup in prices of investment goods has been considerably smaller than in prices of consumer goods. In consequence, labour costs in relation to the cost of capital equipment or raw materials have appeared to be considerably higher in money terms than the proportion of resources actually devoted to the production of wage goods and producer goods. Recent price reforms introduced in some countries and suggested in others are intended to eliminate these discrepancies by raising prices of producer goods in relation to consumer prices. Even steep increases in prices of producer goods need have no effect on consumer prices since the higher costs may be entirely absorbed through a reduction of the turnover tax.[16] An increase in prices of producer goods in relation to consumer prices would simultaneously result in an increase in cost of equipment and raw materials in relation to labour. It is considered that this will improve the efficiency of economic accounting and eliminate the distortions caused by the discrepancies between relative inputs and their valuation.

Apart from this basic difference in price formation, considerable variations have existed in pricing of various producer goods owing to differences in profit rates. This has been partly due to unequal changes in cost in various industries over time but the most important

[15] The Soviet recommendation of 1958 states that "in allocating investment by branches of the national economy and by branches of industry, the indicators of effectiveness are mainly used for solution of the problem: through what domestic branches can the economic task set by the plan be accomplished; for instance, what branches of the fuel industry or what branches of the construction materials industry should be developed in order to secure the required volume of fuel and construction?" (*Voprosy Ekonomiki*, No. 9, 1958, Moscow). Other examples are the substitution of concrete for steel in building or of plastics for non-ferrous metals.

It may be noted that, in comparing the relative effectiveness of investment of projects producing substitutable goods, the different products are expressed in units obtained by the use of physical coefficients of substitution.

[16] This will not affect state revenue since the decline in revenue from indirect tax may be entirely compensated for by an equal increase in the profit of state enterprises producing producer goods.

factor has been the calculation of profits as a percentage of cost rather than in relation to value added. Consequently, profits in relation to value added have been much greater in the more advanced stages of fabrication than in the less advanced. The relation between prices of various goods determined by an addition of a certain percentage to cost and the amount of resources used for their production has therefore been distorted, quite apart from the problem of turnover tax. The aim of most of the price reforms in the centrally planned economies is to eliminate these defects of the existing price system so as to obtain a homogeneous measuring unit of all factors of production.[17]

Apart from the changes analysed so far, two other aspects of investment policy may have a considerable influence on future developments in the centrally planned economies. One is the change in attitude towards obsolescence and the other is the co-ordination of investment plans of various countries in the group.

It is a well-known fact that for a long period the problem of obsolescence and of declining productivity of worn-out equipment was practically ignored in the centrally planned economies. Although such an attitude was frequently explained on the grounds of the lack of competition, which supposedly made it unnecessary to discard equipment as long as it was able to produce, the actual reason for the policy was more realistic.

As long as labour supply was abundant, the economies to be gained by the replacement of old with new equipment could be disregarded. In fact, a greater increment of output per unit of investment could be obtained by adding new equipment to the existing stock than by using part of the additional equipment for the replacement of old assets. From the point of view of the economy as a whole, such a policy might be justified as long as the marginal productivity of the workers employed in the outworn plants was considerably greater than in sectors such as agriculture, from which the supply of labour for industry was mainly drawn.[18] This situation, however, changed completely when further transfer of labour became difficult and when the pressure to economize in raw materials became greater. Thus, the change in attitude towards obsolescence and the retirement of worn-out equipment has been closely related to the level of economic development reached by the centrally planned economies during recent years. As in other aspects of investment policy, the older attitude towards obsolescence was not equally justified in all countries even at the earlier stages of their development and in many cases represented a simple transfer of Soviet practice to entirely different conditions.

The effect of the new policy on future rates of growth cannot be easily assessed. It is clear that the increase in the share of investment devoted to replacement of retired equipment will reduce the rate of expansion of capital stock per unit of investment, but at the same time it will raise the average productivity of the stock. No less obvious is the fact that, in view of the relative decline in the supply of labour and raw materials and the increase in real wages, continuation of the former policy was yielding rapidly diminishing results. It is, therefore, certain that the change in policy will enable the centrally planned economies to maintain a higher rate of expansion than could be obtained if the former policy were retained at the present stage of development. The lack of information both on the degree of obsolescence and of wear and tear of fixed assets and their effect on cost and on factors increasing the investment requirement per unit of output precludes any definite conclusions about the actual effect of the new policy on the rate of economic expansion. It may be, however, that it has already exerted a certain influence on the rise in the incremental capital-output ratios postulated in the new long-term plans of economic development, although this increase might also be due to entirely different factors. The new attitude towards obsolescence is reflected in the revaluation of capital stock taking place in most of the centrally planned economies. Its purpose is to assess the value of capital stock in terms of its replacement cost, taking into account its degree of wear and tear and obsolescence; this will permit determination of new amortization rates that will include an allowance for obsolescence.

The co-ordination of national plans of economic development under the aegis of the Council for Mutual Economic Assistance has been tending to play an increasing part in the shaping of investment plans and policies in member countries. Since the co-ordination of planning takes account of inter-country differences in natural resources and in comparative costs in the production of various goods, the recommendations of the Council have tended to lead to the expansion of specific industries in different countries and have therefore had a direct bearing on national investment policies. The attempt to allocate investment in individual countries in conformity with the needs of the other centrally planned economies has raised several problems which could not be adequately solved within a limited period of time. Thus, for instance, the recommendation made to some countries to concentrate on the expansion of the extractive, chemical and power industries, which are characterized by high capital requirements and long construction periods, would result in a rise in the share

[17] The problem of including interest on capital in the calculation of cost was also discussed in several countries. Similarly, in some countries it was suggested that scarcity relationships should also be reflected in pricing of producer goods, but the prevailing view is that in economies based on state ownership and central planning, where both supply of and demand for investment goods are determined by the authorities, this is not of primary importance. This problem does not arise for consumer goods, the prices of which are determined so as to equate demand and supply.

[18] It should be added that this policy was not applied uniformly in all industries. Frequently the rate of replacement in the first priority sector was fairly high, but the equipment retired from use in these sectors was transferred to industries producing consumer goods, where the rate of replacement was negligible.

of investment in national income and, consequently, were such an expansion to be financed entirely out of domestic income, in restrictions on consumption. This burden upon individual countries should, according to the Council, be reduced by the participation of other countries in the financing of such investment. In some instances, joint projects have been set up for development of national resources by several countries. Thus, Czechoslovakia has participated financially in the development of Polish sulphur deposits, Eastern Germany has taken part in the development of Polish brown coal mines, and Hungary and Romania have jointly financed the construction of a gas pipeline providing Romanian natural gas to Hungary. The largest among such projects is the construction of pipelines for the delivery of Soviet crude oil from the Volga region to Hungary, Czechoslovakia, Poland and Eastern Germany, which is planned for the period 1959 to 1965. The agreement, signed by the participating countries, provides for the delivery of machinery, equipment and installations by all the participants and for the construction by each country of those sections of the pipeline crossing its territory.

Investment and national income, 1949-1958[19]

THE GROWTH OF INVESTMENT

In the decade since 1949, the major aim of government policy in the centrally planned economies was to expand fixed investment as much as possible in order to achieve high rates of economic growth. The task of allocating resources between consumption and investment for this purpose was facilitated by the ability of governments to control directly most economic activities. The freedom of decision on the part of governments was not, however, unlimited. It was conditioned by the productive capacity in machine-building and construction industries as well as by the feasibility of adapting the structure of output to the needs of the investment sector. Except in cases where the same capital equipment can be used for producing either investment or consumer goods, the structure of output cannot be altered significantly in a short period. This lack of substitutability, which in a short period could be overcome only by imports, was an important factor limiting the freedom of investment decisions. No less important was the extent to which it was possible to restrain the claims of consumers for greater satisfaction of their needs. In practice both problems were frequently interconnected, particularly where a rise in imports of investment goods had to be achieved through a decline in imports or a rise in exports of consumer goods, thus reducing domestic consumption in relation to national income.

Similarly, the allocation of investment among sectors was not entirely independent of the existing structure of the economy, the opportunities offered by foreign trade and the pressure of consumer needs. The general tendency, however, was to restrict non-productive investment and investment in consumer sectors in favour of investment in industries producing capital goods and raw materials required for these industries.

The influence and scope of these limiting factors varied considerably over time. In the earlier period the share of consumption in national income was reduced substantially through restraints imposed upon real wages relative to increases in output per man and, in some instances, even by a decline in real wage rates.[20]

The policy of restraining or reducing real wage rates was effective only so long as its negative influence on increases in output per man, and therefore on total output, could be offset by the abundant supply of labour. Under such conditions investment expanded considerably. The policy was facilitated by the fact that the increase in the industrial labour force was achieved by the inflow of peasant population whose consumption standards were lower than those of the urban population.

The attempts to adjust the volume and composition of supply to the rising requirements of the investment sectors frequently resulted in higher production costs and smaller increments in output per unit of investment. Thus, the need to achieve external balance led to unprofitable exports, which, though justified by the pressing need to eliminate bottlenecks, could have been avoided had a more moderate rate of expansion been chosen. The cost of investment was also raised by autarkic tendencies and the lack of co-ordination of plans among countries, in turn partly owing to each country's policy of concentrating on expansion of sectors producing investment

[19] Data presented in this chapter are estimates, derived in many cases from fragmentary or inadequately defined statistical series. They should, therefore, be considered only as broad approximations indicating the general order of magnitude and direction of changes.

Some of the centrally planned economies do not publish national income data in absolute terms although such figures can be derived indirectly from scattered information. Investment data for certain countries relate to the state sector or to the state and co-operative sectors only. While such investment covers the bulk of total investment in the economy, it may differ considerably from the total in particular sectors such as agriculture and housing where private investment was significant in the period under review. In such cases official data were adjusted by addition of the estimated value of private investment. The estimates on sectoral distribution of investment may contain a certain margin of error which also affects the estimates of the sectoral incremental capital-output ratios.

A special caution is called for in analysing statistics of mainland China, for which no adequate information is available on methods of computation and coverage or on accuracy of basic data. According to recent official statements—made in connexion with the substantial downward revision of data on agricultural production for 1958—the reporting agencies lack experience and are liable to commit substantial errors in their estimates.

[20] The effect of a fall in real wages on per capita consumption was frequently offset either by longer working hours or by an increase in the number of wage earners in a worker's family.

goods.[21] Moreover, the shortage of skilled labour and of managerial skills often resulted in poor organization of production and in waste of equipment and materials. In an attempt to expand investment rapidly, many construction works were started simultaneously, but in the face of shortages of qualified labour, managerial staff and equipment, completion of projects was frequently delayed. The immobilization of capital in unfinished construction was a significant factor reducing the effectiveness of investment during this period. The rising costs or diminishing effectiveness of investment outlays called for a further rise in their share in national product if the planned increases in output were to be achieved.

These limiting factors continued to be important as long as the pace of industrialization was being accelerated. At a certain stage, however, the policy of forced expansion had to give way to a more moderate policy. The transition from one stage to another did not generally coincide with the transition from one long-term plan of development to the next; frequently it took place in the midst of a given plan period. Nor were changes in investment policies uniquely determined by purely economic reasons. Political problems, domestic as well as foreign, including rising or falling international tensions, played a significant role at times in shaping investment policies.

In the Soviet Union the rapid increase in investment began with the introduction of the first five-year plan in 1928 and continued up to 1936 with only one year of relaxation in 1933. The enormous tasks of reconstruction of war-devastated regions resulted in a rapid expansion of investment in the early post-war years, the pace of which slackened only in 1950. In contrast to the Soviet Union, in mainland China the beginning of the first plan of development in 1953 was not associated with a considerable acceleration in investment; that phase did not begin, in fact, until 1956.[22]

In eastern Europe, investment began to rise rapidly from the inception of the long-term plans of economic development which started, variously, between 1948 and 1951. In 1954, however, the rapid expansion was slowed down under the stress of economic and political pressures which came to the fore as a result of changes in general political conditions. But neither the strains imposed by the steep increases in investment nor the relaxations that followed were of equal intensity in all eastern European countries. Although the extent of such strains cannot be measured by statistical data, some information on their intensity may be provided by a comparison of the relative rates of increase in investment in various countries. As is indicated in table 3-1, the spread between the average annual percentage increases of fixed investment[23] in various countries was considerable throughout the period. It was even greater before the turning point of 1954, ranging from about 50 per cent per annum reported in mainland China to 12 per cent in Bulgaria. During the period 1954-1958 the annual percentage rate of change varied from an increase of 22 per cent in mainland China to a decline of 4 per cent in Hungary.

During the initial period of rapid economic growth, these variations reflected differences at the beginning of the period in general economic conditions prevailing in various countries. In some cases they can be related to the degree of post-war recovery at the beginning of the period under review or to the timing of the inception of the long-term plans of development which usually marked a steep rise in investment. Thus, the unusually high percentage rate of increase in mainland China reflects the very low level of investment in 1950, the first year of recovery from the civil war. The differences between the rates of increase in investment in eastern European countries, however, cannot be fully explained by differences in the timing of their recovery or the inception of their long-term plans of economic development.[24] This is clearly indicated by the fact that the large differences in the relative rates of increase in investment are not entirely eliminated if the base of comparison is shifted from the period covered in table 3-1 to the period beginning with the inception of the respective long-term plan in each country and ending in 1953.[25]

In the Soviet Union, the rate of increase in investment from 1949 to 1953 was smaller than in most other eastern European countries. But, as the following data, relating to the average annual compound rate of increase of investment, show, the Soviet Union had already re-

[21] Official statements in centrally planned countries have repeatedly emphasized that a more rational division of functions among countries would have resulted in a considerable reduction of investment costs.

[22] The reported increases in state fixed investment thereafter were very high but irregular: 63 per cent in 1956, followed by a decline of 12 per cent in 1957 and an increase of 115 per cent in 1958.

[23] Throughout this chapter, fixed investment denotes expenditure on construction and equipment, gross of depreciation or retirements. It does not include expenditure on capital repairs.

[24] During 1950 to 1953 some eastern European countries were still in the period of recovery while others were just beginning their long-term plans. In Romania the post-war recovery was not accomplished until the end of 1950. In Eastern Germany the 1936 level of output does not seem to have been reached until 1953, though the country's five-year plan of development was inaugurated in 1950. In Bulgaria and Czechoslovakia, on the other hand, the pre-war level of output was exceeded in 1948; and the year 1950 was the second year of implementation of the long-term plans of development. Only in Hungary and Poland did the long-term plans of development, following the period of recovery, start at the beginning of the period covered by the present study.

[25] The rise in investment during the period between the inception of the long-term plans and the year 1953 is indicated as follows:

	Period	*Annual compound rate of increase (percentage)*
Bulgaria	1948 to 1953	18.0
Czechoslovakia	1948 to 1953	19.6
Poland	1949 to 1953	20.5
Hungary	1949 to 1953	27.9
Romania	1951 to 1953	32.7

Table 3-1. Relationship between Rate of Growth of National Income and Gross Fixed Investment, 1949-1958[a]

Country and period	Average annual percentage increase		Gross fixed investment as percentage of national income	Incremental capital-output ratio
	National income	Investment		
Bulgaria				
1949 to 1958	10.3	8.2	19.8	1.9
1949 to 1953	14.9	12.0	19.9	1.3
1953 to 1958	6.9	5.3	19.7	2.9
China (mainland)				
1950 to 1958	12.3	31.6	19.1	1.5
1950 to 1953	12.2	49.9	12.5	1.0
1953 to 1958	12.4	21.7	22.5	1.8
Czechoslovakia				
1949 to 1958	8.0	11.3	28.2	3.5
1949 to 1953	9.0	14.7	27.1	3.0
1953 to 1958	7.2	8.8	29.0	4.0
Eastern Germany				
1950 to 1958	8.0	18.6	15.6	1.9
1950 to 1953	10.0	20.0	11.3	1.1
1953 to 1958	6.9	17.8	18.2	2.6
Hungary				
1949 to 1958	7.5	9.0	22.7	3.1
1949 to 1953	11.9	27.9	25.8	2.2
1953 to 1958	4.1	−4.1	20.2	4.9
Poland				
1949 to 1958	9.4	12.1	23.5	2.5
1949 to 1953	11.5	20.5	23.3	2.0
1953 to 1958	7.8	5.8	23.6	3.0
Romania				
1949 to 1958	9.3	11.4	23.8	2.6
1949 to 1953	12.8	28.9	23.0	1.8
1953 to 1958	6.6	2.0	24.4	3.7
USSR				
1949 to 1958	11.5	14.1	21.3	1.9
1949 to 1953	12.5	12.5	19.9	1.6
1953 to 1958	10.7	15.4	22.1	2.1

Source: United Nations Division of General Economic Research and Policies, based on data published in official sources.

[a] Except China (mainland) and Eastern Germany where the beginning year is 1950. Average annual percentage increase refers to compound rate obtained from terminal years of period indicated. Gross fixed investment as percentage of national income was derived from cumulated totals for both components over the whole period. The incremental capital-output ratio was derived by dividing gross fixed investment as percentage of national income by the annual rate of growth in national income. All figures are derived from data in constant prices.

corded very high rates of expansion in investment in some of the earlier periods:

	Total investment	State and co-operative investment
1928 to 1936	20.3	29.1
1936 to 1940	4.4	4.0
1940 to 1943	−18.5	−18.2
1943 to 1950	21.4	20.4

With the exception of the Soviet Union, the pace of investment slackened in all countries during 1953 to 1958. In mainland China the period 1953-1958 marked the initial phase of the long-term plan of development. While the average rate of increase of investment was less than half that achieved in the preceding period of reconstruction, it was nevertheless considerably higher than in any other centrally planned country in the same period. It is of interest to note that this rate was equal to the median rate achieved by the eastern European countries during their initial period of development and was almost identical with the rate achieved by the Soviet Union between 1928 and 1936. A rather peculiar feature of changes in investment in mainland China was their unusually erratic character; the high average rate for 1954-1958 was essentially the result of a steep increase in 1956 and again in 1958.

In eastern Europe the changes in the rate of investment during the period 1953-1958 seem to have been influenced by the degree of strain experienced during the preceding period. In fact, the greater the rate of

expansion achieved in the period prior to 1953, the greater was the deceleration in the period that followed. In Hungary investment was even lower in 1958 than in 1953. In Eastern Germany the average rate of increase in fixed investment during 1953 to 1958 was only slightly lower than that in the preceding period. The fact that, compared with other countries, Eastern Germany recorded only a small deceleration in the rate of expansion was partly due to the favourable effect generated by the abolition of the reparation payment which increased the supply of resources available for domestic use. In the Soviet Union, although investment by the State expanded at about the same rate as in the period 1949-1953, the very substantial increases in investment by collective farms and private housing brought about an acceleration in the over-all rate of investment during 1953-1958.

In the absence of adequate statistics, it is not easy to ascertain the effect of changes in gross fixed investment on net fixed investment, accumulation[26] and changes in capital stock. However, the rapid rate of growth in gross fixed investment resulted in a relatively small ratio of depreciation and retirement to gross investment. That the life span of fixed assets was relatively long, partly because of little attention paid to obsolescence, was also a factor tending to reduce these ratios.

Since depreciation and retirement are related to the existing stock of fixed assets, their ratio to gross fixed investment tends to fall or rise with an acceleration or deceleration of gross investment. It may be inferred, therefore, that the increase in net investment and in capital stock per volume of gross fixed investment was comparatively greater during the first part of the decade under review.[27] This tendency might have partly influenced the substantial increase in gross investment in relation to increment in output which took place during the latter part of the decade.[28]

The relationship between changes in gross fixed investment and accumulation was influenced both by the changes in net fixed investment and by those in inventories. The expansion in inventories most likely exceeded that in net fixed investment in the early years of post-war reconstruction, but fell behind the rate of increase in net fixed investment in the succeeding years of rapid expansion. After 1953, in most countries, the rate of increase in fixed investment declined more than the rate of increase in inventories. These changes in relative rates of growth were due partly to the accelerated expansion in retail trade and partly to the fact that the rate of increase in industrial production, which affected the volume of inventories directly, declined less than the rate of increase of gross fixed investment. In addition, the changes in stocks were strongly influenced by fluctuations in harvests and by the stockpiling policies of Governments. The divergent changes in inventories and in net fixed investment in relation to gross fixed investment were, in turn, responsible for the lack of any close correlation between variations in accumulation and in gross fixed investment on a year-to-year basis, although this relationship was much closer over the longer period.

[26] In the terminology of the centrally planned economies, accumulation stands for net fixed investment plus change in inventories.

[27] This relationship between the changes in gross fixed and net fixed investment is not always apparent in table 3-3, partly due to the fact that changes in depreciation indicated in the statistics of the centrally planned economies are strongly influenced by changes in capital repairs.

[28] This point is discussed in the section below, "Relation between investment and output".

CHANGES IN INVESTMENT AND NATIONAL INCOME

The share of investment in national income

Recent studies of economic growth suggest that there is a historical pattern in the share of national income devoted to investment. It is stated that the investment ratio tends to rise in earlier stages of development; but when the economy reaches a certain level of expansion, there is a tendency for the ratio to level off.

In the less developed countries of eastern Europe, the share of investment[29] in national income began to rise long before the era of central planning, although in some cases this trend was interrupted by the dislocations caused by the First World War and the depression of the nineteen thirties. Nevertheless, the available evidence suggests that the share of resources devoted to investment on the eve of the Second World War was relatively low, especially with regard to net investment.

In 1949, however, that is, before or at the inception of the long-term plans of economic development, the ratio of investment to national income[30] in most eastern European countries was already considerably higher than that prevailing before the war.[31] In Poland the ratio of investment rose from 14 per cent of national income in 1938 to over 20 per cent in 1949, owing to an increase of about 15 per cent in income and 66 per cent in investment. In Hungary, from 1938 to 1949, income increased by 9 per cent and investment by 41 per cent, raising the investment ratio from 13 per cent in 1938 to 17 per cent in 1949. In Bulgaria a rise in investment in relation to income is suggested by the fact that construction increased by 56 per cent as against a 5 per cent rise in income. According to a rough estimate, the ratio of fixed investment to national income rose from about 13 per cent in 1939 to 19 per cent in 1949 in that country.

In the industrially more developed countries, especially in Eastern Germany and most likely also in Czechoslovakia, the pre-war ratio of investment to na-

[29] Investment in this section refers to gross fixed investment unless otherwise stated.

[30] Throughout this chapter, national income denotes, in accordance with the concept used in centrally planned economies, income originating in material production and is equal to the net domestic output of goods (excluding services not connected with material production), valued at transfer prices.

[31] Expressed in pre-war prices.

tional income was higher and the change from the pre-war to the immediate post-war period smaller than in the less developed countries.[32] In Eastern Germany the estimated ratio of investment (including inventories) to national income in 1950 seems, in fact, to have been at about the same level as in 1938.

Thus, the difference between the share of resources devoted to investment by the more and the less developed countries in this group was considerably smaller in 1949 than before the war, thanks largely to the significant increases in the investment share in the latter. The narrowing of these differences becomes even more apparent if the pre-war years are compared with the years marking the end of the reconstruction period in each country.

The effect of these changes on the relative rates of growth of different countries is not easily discernible because of considerable differences in general economic conditions in various countries during the reconstruction period. The differences in the degree and the nature of war destruction, and of the state of capital equipment, influenced considerably the incremental capital-output ratios, which even before the war had differed from country to country.

The rates of growth of fixed investment and of national income from 1949 to 1958, shown in table 3-1, indicate that since 1953 there has been a greater decline in the rate of increase in investment than in the growth of national income. The median rate of increase in investment for the eight countries included in the table was 20 per cent from 1950 to 1953 and 7 per cent from 1954 to 1958. The corresponding median rates for national income were 12 and 7 per cent, respectively. From 1949 to 1953 the average annual increase in investment exceeded that of income in every country except Bulgaria and the Soviet Union. After 1953, however, the reverse relationship prevailed in half of the countries, and in the other half, the differences between the relative rates of growth of investment and income were much less pronounced than in the earlier period.

It is noteworthy that in countries where the pattern of relative changes in investment and income which emerged between 1949 and 1953 was reversed in the following period, the relaxation of the investment drive was greater in countries which during the earlier period achieved the larger increases in investment in relation to income. The factor determining the extent of the change in policy was not so much the level of the ratio of investment to national income reached by various countries as the rate of increase of investment in relation to income in the period preceding the change in policy.

Changes in the ratio of investment to national income may be seen in greater detail from the annual data presented in table 3-2. The figures indicate a steeply rising trend in the first half of the decade in most countries. Only in Bulgaria and the Soviet Union did the share of investment in national income remain relatively stable during that period. Since 1953, however, mainland China, Eastern Germany and the Soviet Union have shown an upward trend in the investment share while in other countries the share either fell or, as in Czechoslovakia, increased only slightly at the end of the period following several years of decline.

In mainland China, the steep increase in the share of investment during the first half of the decade and the continuing, albeit slower, increase in the subsequent period reflected the fact that in 1950 the ratio of investment to national income was still very small. Similarly, in Eastern Germany the reconstruction period lasted much longer than in other parts of eastern Europe; in the early nineteen fifties the ratio of investment to income was still at a relatively low level, owing to a substantial diversion of resources to reparation payments.

It is of interest to note that the pattern of changes in the investment ratio—a strong initial upward push followed by a period of relaxation—which was apparent

[32] In Czechoslovakia, such change is in part indicated by the rise in construction in relation to national income.

Table 3-2. Annual Ratio of Gross Fixed Investment to National Income, 1949-1958[a]
(Percentage)

Country	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
Bulgaria	21.5	19.5	17.9	21.5	19.5	21.4	20.8	19.7	19.4	18.0
China (mainland)	...	7.6	7.9	14.3	18.2	19.3	19.3	25.2	18.9	27.1
Czechoslovakia	22.1	24.1	26.5	28.5	27.2	25.6	25.0	28.8	29.5	29.3
Eastern Germany	...	10.1	10.4	10.3	12.9	12.9	14.3	17.1	18.8	19.4
Hungary	16.5	22.9	27.3	30.9	28.2	21.8	19.6	23.1	18.6	19.9
Poland	18.9	21.9	23.1	25.5	25.8	25.3	24.1	23.0	22.8	23.5
Romania	15.0	21.3	19.8	26.0	29.0	25.6	23.3	28.1	22.4	23.3
USSR[b]	19.5	19.9	20.0	20.2	19.5	20.6	20.9	21.6	22.7	24.1

Source: See table 3-1.

[a] At 1949 prices for Bulgaria, Czechoslovakia and Hungary; at 1950 prices for Eastern Germany, Poland, Romania and USSR; at 1952 prices for China (mainland).

[b] For USSR no official data have been published for the value of national income in post-war prices. The value of national income at 1950 prices which forms the basis of the estimates in this table was derived from fragmentary information on the value of some components and their estimated share in the total.

for most of the European centrally planned economies from 1949 to 1958 was in many respects similar to the developments in the Soviet Union in the early period of its industrialization. A rough estimate indicates that during the initial push towards industrialization in the Soviet Union, the share of investment in national income increased very steeply from 1928 to 1936, absorbing a considerable share of national income.[33] This was followed by a period of relaxation which lasted until 1940. During at least a part of the post-war reconstruction period, consumption seems to have increased more than investment, but taken as a whole the share of investment in national income was considerably higher in 1949 than in 1940.

The preceding analysis was conducted in terms of gross fixed investment and national income because of lack of comparable data on accumulation in most countries. However, the more comprehensive data available for a few countries (see table 3-3) make possible some consideration of the relationship between gross and net investment, depreciation and changes in inventories. It will be seen that there were frequently significant differences in the magnitude and even in the direction of changes in gross investment, net fixed investment and accumulation in relation to national income. The differences between changes in accumulation and changes in net fixed investment obviously reflected fluctuations in stocks, which in agrarian countries are influenced largely by changes in harvest. The substantial differences between changes in the ratios of gross and net investment to national income, or, in other words, the fluctuations in depreciation in relation to national income, reflect largely changes in expenditure on capital repairs.[34]

A feature common to all centrally planned economies during the period under review was the very high ratio of net to gross investment and the very low ratio of depreciation to national income, considerably lower in fact than in most private enterprise economies.[35] The low ratio of depreciation to national income implies higher rates of growth and greater longevity of capital assets. This conclusion is not invalidated by the fact that the depreciation data reproduced in table 3-3 understate the extent of capital consumption as originally estimated. While comparing these data with depreciation allowances in other countries, it should also be remembered that they do not include provisions for obsolescence. While the non-inclusion of allowances for obsolescence

[33] In 1928 prices.

[34] Amortization allowances are calculated, in the centrally planned economies, by adding to the book value of fixed assets the foreseen capital repairs less the scrap value of the asset, and dividing this sum by the period of life of the asset. Amortization funds of the enterprise comprise, therefore, depreciation allowances and provisions for capital repairs. The latter are not, however, included in the data on gross fixed investment, but are added to net fixed investment. The figures on depreciation in table 3-3 represent the difference between annual amortization allowances as defined above and actual expenditure on capital repairs. In consequence, an increase in capital repairs over and above the rate originally anticipated will not affect the data on gross fixed investment but will be reflected in a relative decline in "depreciation" and a rise in net in relation to gross fixed investment. Since expenditure on capital repairs often exceeded the amounts provided for this purpose in the amortization allowances, the depreciation data reproduced in table 3-3 understate the extent of capital consumption.

[35] In the countries listed in table 3-3, disregarding certain exceptional years, this ratio amounted to 5 to 6 per cent of national income. It seems that in other centrally planned economies the proportion was similar. Since national income data in these countries do not include services, these ratios should be reduced by some 15 to 25 per cent when compared with national income statistics including income produced by services.

Table 3-3. Bulgaria, Hungary and Poland: Gross Fixed Investment, Depreciation, Changes in Stocks and Accumulation as Percentage of National Income, 1949-1958

Country and item	*1949*	*1950*	*1951*	*1952*	*1953*	*1954*	*1955*	*1956*	*1957*	*1958*
Bulgaria (at 1952 prices)										
Gross fixed investment	20.5	18.6	17.1	20.3	18.5	20.4	19.8	18.8	18.5	17.2
Less depreciation[a]	5.7	5.9	5.8	5.0	2.2	5.3	2.9	5.0	6.0	...
Net fixed investment	14.7	12.7	11.4	15.3	16.3	15.1	16.9	13.8	12.5	...
Changes in stocks	...	...	...	11.4	11.7	3.8	−0.5	0.2	5.9	...
Accumulation	...	...	...	26.8	28.0	18.9	16.5	14.0	18.5	16.1
Hungary (at 1949 prices)										
Gross fixed investment	16.5	22.9	27.3	30.9	28.2	21.8	19.6	23.1	18.6	19.9
Less depreciation[a]	...	6.0	5.3	5.0	3.4	5.3	3.9	4.9	5.7	5.1
Net fixed investment	...	16.9	22.0	25.9	24.8	16.5	15.7	18.2	12.9	14.8
Changes in stocks	...	9.9	11.9	2.5	6.6	8.3	11.1	−7.6	16.4	6.8
Accumulation	21.0	26.8	33.9	28.4	31.4	24.8	26.8	10.6	29.3	21.6
Poland (at 1956 prices)										
Gross fixed investment	15.2	18.2	19.1	21.4	22.3	21.3	20.3	19.4	19.2	19.7
Less depreciation[a]	5.1	6.0	6.3	6.7	6.6	6.3	6.1	5.8	5.4	5.3
Net fixed investment	10.1	12.1	12.8	14.6	15.7	14.9	14.2	13.6	13.8	14.4
Changes in stocks	4.7	7.6	6.6	7.2	11.1	7.3	7.3	5.9	8.5	7.7
Accumulation	14.8	19.8	19.4	21.9	26.8	22.3	21.5	19.5	22.3	22.1

Source: See table 3-1.

[a] Total amortization charges (including reserves for capital repairs) less actual expenditures for capital repairs.

was closely connected with the replacement policy applied in the past, the change in this policy in more recent times has since resulted in retirement of non-amortized equipment. The ratios would be somewhat different were capital repairs included in gross fixed investment and subsequently charged off through depreciation allowances in the usual way. The differences in procedure would have affected, particularly, the ratio of net to gross investment.

Another characteristic of the structure of accumulation in the countries listed in table 3-3 was the rather high rate of changes in stocks, brought about largely by the relatively faster expansion of the industrial sector whose requirements for inventories were much greater than those of the other sectors in the economy. There also developed a tendency by individual enterprises to keep considerable stocks as an insurance against shortages and uncertainty of delivery of raw materials by the suppliers. In addition, the frequent lack of synchronization between planned output and the plans for material supplies, together with disproportions arising from non-fulfilment of plans in some sectors and over-fulfilment in others, created the need for large centralized reserves as a cushion against bottlenecks likely to arise in the process of very rapid changes.[36] The high share of stock formation in total accumulation was a significant factor tending to diminish the productive efficiency of accumulation. Governments in the centrally planned economies have often emphasized the need for reducing excessive stocks as a means of decreasing the over-all capital-output ratios.

While the relationship between gross fixed investment and accumulation discussed above appears to have been typical for most centrally planned economies, there were significant differences among various countries. In the absence of adequate data, these differences can be only briefly outlined. In Czechoslovakia and Eastern Germany, for example, the ratio of depreciation to national income was higher and that of net to gross investment lower than in the other countries.[37] In the Soviet Union, on the other hand, amortization charges amounted to about 5 per cent of national income, but this amount was practically offset by capital repairs. It should be noted, however, that the underestimation of actual capital consumption was larger in the Soviet Union in comparison to the other countries.

Changes in stocks in the Soviet Union claimed about the same share of national income as in Poland, despite the fact that the distances from producers to consumers were larger and transportation facilities perhaps less adequate. In Eastern Germany, the estimated proportion of national income devoted to stock formation averaged about 8 per cent in 1950-1953, followed by a sharp decline in the succeeding period. In Czechoslovakia, the share of stock formation was on the average probably lower than in other centrally planned countries, except mainland China, where it was roughly estimated to have averaged only about 3 per cent.

The comparison of the ratios of investment to national income in various centrally planned economies during the period under review indicates that there was hardly any direct relationship between the levels of per capita income of individual countries and the share of resources devoted to investment. Similarly, no apparent relation existed between this share and the distribution of income by industrial origin. Thus, the mobilization of resources for investment was not always influenced by the extent of the agrarian character of a given country or by the degree of collectivization of its agriculture. In most countries, even at the early stages of their planned development, the share of resources allocated to investment was relatively high. The only exception was mainland China where the proportion of investment to national income was very low in 1950, but by 1953 it had already reached the level attained by other countries at the end of their reconstruction period.

It is significant that the relation between investment and income was not greatly affected by foreign aid. External aid apparently did not play a quantitatively important part in the over-all expansion of investment, although it was frequently crucial for the expansion of specific branches of industry. Only in mainland China was external financing relatively large in relation to total investment, but even in this case it tended to decline after 1953.

The lack of an apparent relationship between the proportion of resources allocated to investment on the one hand and per capita income or the degree of industrialization on the other, especially since external financing played only a small part, indicates that development policies of centrally planned economies were such as to overcome the restricting effect of low per capita incomes on the share of resources allocated to investment. Although in the earlier stages of development this policy involved severe restrictions imposed upon the growth of consumption, in the subsequent period the over-all economic expansion resulted in a substantial increase in per capita consumption in all centrally planned economies.

While the high proportion of resources devoted to investment was an important factor of the rapid growth of the centrally planned economies, other factors also contributed to the rates of expansion achieved during this period. The effect of some of these factors on the rates of growth will be analysed in the following sections.

The problem of pricing and its effect on the share of investment in national income

The preceding analysis was conducted in terms of the prices of the base year. In view of the particular pricing

[36] Stock formation may also have included additions to stocks of military equipment.

[37] In Eastern Germany, for instance, the ratio of depreciation of productive assets to national income was on the average 4.7 per cent. This does not include depreciation on housing and municipal facilities.

policies of centrally planned economies and, what is perhaps more important, of the fact that the years 1949-1958 were characterized by far-reaching structural changes associated with rapid economic growth, it is pertinent to probe further into the implications of price variations for comparison of investment and income. One of the problems is to ascertain to what extent changes over time in the investment ratio, when expressed in constant prices of a basic year, correspond to changes in relative amounts of productive resources or inputs actually devoted to investment and consumption. It is clear that if productivity in the investment sector increases faster than in the sector producing consumer goods, the actual "burden" of investment in terms of required inputs of resources will be smaller than if expressed in the prices prevailing before these changes. This problem is particularly important in an analysis of the centrally planned economies since there were significant differences in the pace of technical progress in the investment and consumer goods sectors. It might therefore seem that the relationship between investment and national income expressed in current prices could provide a more useful measure of relative inputs and therefore of the allocation of resources between investment and consumption. This would certainly be true if changes in current prices of different goods in fact reflected relative changes in productivity. This however is not generally the case, especially in the centrally planned economies where—as has already been explained in earlier issues of the *World Economic Survey*—price-cost relations for consumer and investment goods were established on entirely separate bases.[38] Moreover, price policy in the centrally planned economies differs from country to country; therefore, the relation between prices of consumer and investment goods reflects not only differences in relative cost but also differences in rates of profit established by national Governments, in the part played by indirect taxes in different countries and in distribution of such taxes by industrial branches. But before analysing this problem, it is of interest to ascertain to what extent the ratios of investment to national income in constant prices were influenced by the new pricing policies introduced in most countries after the war. The available data in pre-war and post-war prices relating to the year taken as a basis indicate that, except for Eastern Germany, the ratios of investment to income at the beginning of the nineteen fifties were quite similar for each country whether expressed in pre-war or post-war prices. Although prices of consumer goods had generally increased more than prices of investment goods since the pre-war period, the effect of these different rates of change on the proportion of investment in national income did not exceed 2 to 3 percentage points in either direction.[39] In Eastern Germany, however, the ratio of investment to national income in 1950 expressed in current prices amounted to 10 per cent as against a rough estimate of at least 14 per cent in 1936 prices. Since this difference reflected the specific pricing policies prevailing during this period in Eastern Germany, these data are not fully comparable with those for other countries; the ratios in this case require an upward adjustment for valid comparison.

The problem of comparability is much more complex for the Soviet Union, where the pricing methods characteristic of the centrally planned economies had been adopted long before the war. Since the changes in price relations between investment and consumer goods over and above those caused by changes in relative cost are mostly due to the fact that the turnover tax was imposed chiefly on consumer goods, an approximation of the actual distribution of national income between investment and consumption in terms of cost can be obtained by excluding the turnover tax from the value of consumption. Such an adjustment would increase the share of investment in national income in the Soviet Union from about 20 per cent in 1950, as indicated in table 3-2, to about 26 per cent. This adjustment would raise the ratio for the Soviet Union to the highest estimate for any country of the group. While the adjustment for Eastern Germany is also substantial, it does not alter the order of countries with respect to the ratio of investment to national income implied in table 3-2.

The other question raised earlier, relating to the extent to which movements of the ratio of investment to income between 1949 and 1958 reflect changes in current cost, is more difficult to answer. Relative price movements of consumer and investment goods during this period were much more influenced by changes in pricing policy than by changes in relative cost, and differed considerably from country to country. In most of the eastern European countries the lack of a direct link between consumer and investment prices was reflected in the divergent movements of these prices over time. Frequently, increases in consumer prices were ac-

[38] As the analysis of the methods of price fixing and of the significance of prices in the centrally planned economies has been provided in greater detail in these earlier issues (*see*, in particular, *World Economic Survey, 1957*, page 112, ff), only a brief mention seems to be called for here. For consumer goods, prices are set so as to equate demand and supply and are thus determined by the wage bill not only in the consumer goods sector but also in that producing investment goods. An increase in the wage bill in the investment sector, other things being equal, will, for example, result in an increase in consumer prices. During the period of expansion of investment, a rise in employment and in the wage bill in the investment sector was largely responsible for the rise in prices in relation to costs of consumer goods. The increase in prices was brought about through an increase in turnover tax.

In contrast, prices of investment goods are not influenced by supply-demand relationships. In principle, they are based on cost plus a certain percentage of profits; but, in practice, they have not always been adjusted to the rising cost. For long periods prices of investment goods remained below cost; this was made possible by budgetary subsidies provided to the enterprises.

[39] It should be noted that, although relatively less important than in the latter years of the period under review, turnover taxes were already significant in most countries at the beginning of the period. This probably accounts for the lower proportion of investment when measured in post-war prices as compared with pre-war prices in Czechoslovakia, Hungary and Poland. In Bulgaria, turnover taxes were small in 1949.

companied by reductions in prices of investment goods; and, conversely, during other periods consumer prices were reduced while prices of investment goods were raised. The changes in relative prices, as indicated by the ratio of consumer to investment goods prices, for a few bench-mark years, are shown below (1953 = 100):

	Ratio of consumer to investment goods prices		
	In 1949	*Highest reached after 1949*[a]	*In 1957*
Bulgaria	77	110	87
China (mainland)	132[b]	125	124
Czechoslovakia	57	100	87
Hungary	55	105	88
Poland	58[b]	100	62
USSR	115	109	108

[a] Bulgaria and Hungary—1952; Poland and Czechoslovakia—1953; USSR and China (mainland)—1955.
[b] 1950.

These divergent movements in the prices of investment and consumer goods had a profound impact on the share of investment in national income in current prices. In Czechoslovakia and Poland, for instance, the proportion of accumulation in national income in 1953, expressed in current prices, amounted to 25 per cent for each; but in prices prevailing at the beginning of the period,[40] the share was 31 per cent and 38 per cent, respectively. In Hungary, likewise, the proportion of national income devoted to accumulation in 1954 was 25 per cent in 1949 prices as against only 18 per cent in current prices. In most countries the share in 1957 was higher in current prices than in the prices prevailing in the middle of the period but lower than when valued in prices at the beginning of the period (see table 3-4).

Since price movements reflect, in most cases, changes in the distribution of income between consumers and the State brought about by government policy, they can hardly be considered as good indicators of changes in relative productivity in the sectors producing investment and consumer goods. Changes in the relation between investment and national income expressed in current prices do not, therefore, throw much light on changes in the actual burden of investment. A more realistic measure of the proportion of investment in national income may be obtained by excluding turnover taxes from the value of investment and consumption. The data for countries for which such estimates could be made show that the ratios of investment to national income in current prices adjusted by the elimination of indirect tax differed, at the end of the period, only slightly from the corresponding ratios expressed in prices prevailing at the beginning of the period (see table 3-4). The rather small change in the relative cost of investment and consumption goods during the period of rapid industrialization might have been due to the fact that the effect of a more rapid increase in output per man in investment goods industries than in consumer goods industries was offset by a comparatively higher rate of wage increase in the former sector. In consequence, the relative changes in unit cost diverged substantially from changes in output per man. Furthermore, construction costs, which account for a large proportion of investment outlays in the centrally planned economies, either did not decline or else declined much less than the cost of machinery and equipment.

[40] In Czechoslovakia, 1949 prices, and in Poland, 1950 prices.

Table 3-4. Accumulation and Gross Fixed Investment as Percentage of National Income, Expressed in Prices of Various Years

Country and year	*Accumulation*	*Gross fixed investment*
Bulgaria		
1952, in prices of		
1949	26.3	21.5
1952	26.8	20.3
1957, in prices of		
1949	18.3	19.4
1952	18.5	18.5
1957	21.4	20.9
Czechoslovakia		
1953, in prices of		
1949	31.2	27.2
1953	25.0	16.9
1957, in prices of		
1949	...	29.5
1953	...	18.3
1957	...	20.6
1957 (excluding turnover taxes)	...	28.6
Hungary		
1954, in prices of		
1949	24.9	21.8
1954	17.8	14.4
1957, in prices of		
1949	30.9	18.6
1954	22.3	12.3
1957	24.1	12.6
1957 (excluding turnover taxes)	...	17.0
Poland		
1953, in prices of		
1950	37.9	25.8
1953	25.3	16.7
1957, in prices of		
1950	32.3	22.8
1953	21.3	14.5
1957	22.7	20.9
1957 (excluding turnover taxes)[a]	...	23.9
USSR		
1950, in prices of		
1950	...	19.9
1950 (excluding turnover taxes)[a]	...	26.0
1957, in prices of		
1950	...	22.7
1957	...	22.2
1957 (excluding turnover taxes)[a]	...	27.1

Source: See table 3-1.
[a] Estimated on the assumption that 7 per cent of turnover taxes are included in gross fixed investment.

The ratio of investment to national income in current prices was more closely related to the relative costs of investment and consumption at the end of the period than during the intermediate period for a variety of reasons. Changes in price policy between 1949 and 1957 had a marked effect on the ratios of investment to national income, irrespective of the turnover tax. During the first part of the period most countries expanded their subsidizing of investment goods industries in order to keep prices of such goods below cost. On the other hand, after 1949, prices paid to peasants were reduced through the introduction of compulsory deliveries; this was reflected in a reduction of the relative share of consumption in national income in current prices. The substantial increase in prices paid to peasants after 1953 had the opposite effect on the ratio of investment to national income. Similarly, the introduction of rationing and derationing, which affected the current prices of consumer goods, also influenced the relation of investment to national income in current prices. At the end of the period, however, subsidies were generally eliminated, rationing was abolished and prices paid to agricultural producers were either unified or, in countries where compulsory deliveries were partly retained, the price differences for deliveries and free purchases were considerably reduced.

The preceding analysis has demonstrated that changes in the ratios of investment to national income from the beginning to the terminal year of the period under review were similar whether expressed in constant or current prices, exclusive of the turnover tax. It has also been shown that the inter-country differences in the changes in the valuation of investment and consumption, introduced after the war, were not so large as to affect the comparability of the ratios of investment to national income in constant prices shown in table 3-2.

ALLOCATION OF INVESTMENT BY SECTORS

By virtue of their ability to control the economy, Governments in the centrally planned countries have been able to exert a particularly marked influence on the allocation of investment among sectors, and among branches within each sector, in accordance with their desire to achieve high rates of growth. By and large, investment was channelled into sectors considered essential for sustaining high rates of growth in the long run, even though a different allocation might have led to greater immediate results. Frequently, this policy entailed imposition of restraints on the growth of consumption. Eventually, however, the ability to maintain large increases in output has led to sizable increases in consumption.

The most characteristic pattern of allocation of investment during the period of planned development has been the high proportion of investment devoted to heavy industry and construction and the low proportion devoted to light industry, transport—particularly passenger transport—housing and social capital[41] (see table 3-5). The allocation of investment by sectors was based on the priority rating determined by the relative importance of various industries for the achievement of high rates of economic expansion. Thus, the non-productive sector[42] was accorded the lowest priority, followed in ascending order by agriculture, consumer goods indus-

[41] Social capital denotes investment in services, such as recreation, education and health facilities, municipal construction and government administration.

[42] "Non-productive" investment in the terminology of the centrally planned economies is closely related to the concept of production which excludes services. It includes capital expenditure on housing, administration, health, education and other services. While such investment has a direct effect on the satisfaction of consumer needs, and therefore represents a smaller "burden" than investment in other sectors, it has no direct effect on the growth of output as defined in the centrally planned economies. It should be added that even in countries where the definition of output includes services, a meaningful distinction may be made between productive and non-productive investment in so far as the effect of these two kinds of investment on output varies considerably.

Whatever the long-run impact of non-productive investment on economic growth may be, its immediate effect is more similar to that of an increase in consumption than in productive investment.

Table 3-5. Distribution of Gross Fixed Investment, by Sector
(Percentage)

Sector	*Bulgaria 1949–1957*	*China (mainland) 1950–1959*	*Czechoslovakia 1949–1957*	*Eastern Germany 1950–1957*	*Hungary 1949–1957*	*Poland 1950–1958*	*Romania 1950–1958*	*USSR 1928–1950*	*USSR 1951–1958*
Industry and construction	44.0	49.1	44.7	48.5	42.8	46.3	55.2	41.6	41.8
Heavy industry and construction	38.7	...	...	39.6	38.2	40.1	48.9	36.3	37.3
Light industry	5.2	...	...	8.9	4.6	6.2	6.3	5.3	4.5
Agriculture	21.1	16.1	11.5	10.0	17.0	14.0	14.6	13.9	17.7
Transport and communications	10.0	12.6	11.7	11.7	10.7	11.3	9.8	15.7	8.1
Trade and procurement	7.6	5.1	2.4	...	2.6	3.2	2.6	...	...
Housing	7.3	17.1	17.0	14.5	10.9	12.9	8.4	13.1	20.0
Other	10.0		12.5	15.3	16.2	12.4	9.3	15.8[a]	12.3[a]

Source: See table 3-1.
[a] Including trade and procurement.

tries and the sector producing investment goods. Within the investment goods sector the highest priority was assigned to industries producing machinery and equipment for the investment sector itself; in comparison, a much lower rating was given to investment in plant producing equipment for consumer goods industries. The highest priority given to the expansion of the investment goods sector was determined by the need to adjust the structure of production to the changing requirements of the economy caused by the policy of raising investment in relation to national income, on the one hand, and in order to increase output per man in the longer run, on the other.

It is significant that, in practice, a policy based on these premises has contributed to the relatively high increases in output per unit of investment, although, as already mentioned, the minimization of the incremental capital-output ratio was not by itself a guiding principle of government policy during this period. The low share of non-productive investment was an important factor reducing the over-all incremental capital-output ratio. Similar influence was exerted by the low share of the consumer sector in total investment, notwithstanding the fact that the incremental capital-output ratio in industries producing consumer goods was generally lower than in investment goods industries.[43] Since the expansion in consumer goods industries depends largely on agricultural raw materials, it would entail a rise in the share of investment allocated to agriculture where the incremental capital-output ratio was very high. In consequence, the restrictions imposed upon the growth of the consumer sectors not only left a larger share of resources for investment goods industries but also tended to reduce the over-all incremental capital-output ratio.

The policy of restraining the share of investment allocated to non-productive sectors, such as housing or passenger transport, was made possible by the ability to restrict the supply of these services to a level below that generally required by the rise in demand for them associated with economic growth. But investment in freight transport and in power stations, two capital-absorbing sectors the growth of which is directly related to the rising needs of expanding industries, was also kept at a relatively low level during the period under consideration. This was partly facilitated by the possibility of increasing, in most countries, the supply of power and transport to industries with little additional investment, either by a more intensive utilization of the existing capacity[44] or by restricting the supply for personal consumption. The expansion of output of these two sectors was, therefore, generally sufficient to satisfy the increasing requirements of the economy, despite the relatively modest share of investment allocated to power and transport.

The situation was somewhat different in agriculture, another sector characterized by a high incremental capital-output ratio. Although the government's endeavour was to minimize, as far as possible, investment in agriculture, particularly in the early phase of long-term development planning, the actual share claimed by this sector has remained significant. As is indicated later, the productivity of investment in agriculture was extremely low in the centrally planned economies. It was the high investment requirement per unit of output, together with the pressure of demand for agricultural raw materials and food, which compelled governments to devote a higher share of investment to agriculture than originally contemplated.

Notwithstanding this general pattern common to all centrally planned economies, there were considerable differences in the allocation of investment among countries. It can be seen from table 3-5 that the share of housing varied from 7 per cent in Bulgaria to 17 per cent in Czechoslovakia and the Soviet Union, while that of social capital ranged from 9 per cent in Romania to 16 per cent in Hungary. On the other hand, the share of heavy industry and construction varied from 38 per cent in the Soviet Union to 49 per cent in Romania; that of light industry from less than 5 per cent in Hungary to 9 per cent in Eastern Germany; and that of agriculture from 10 per cent in Eastern Germany to 21 per cent in Bulgaria. In contrast to these variations, the share of investment allocated on the average to transport and communications was similar in all countries, varying no more than from 10 to 13 per cent.

These differences show that, above all, despite a common attitude and, in many respects, identical policies, the allocation of investment in the centrally planned economies was influenced by the specific conditions prevailing in each country. The differences were shaped by the structure of production, the structure of foreign trade, the degree of urbanization, and, to some extent, by the relative importance of the private sector which, although less significant in the centrally planned economies than elsewhere, cannot be entirely ignored.

In general, there was no correlation between the level of development and the share of investment devoted to industry—more specifically, to heavy industry—or between the degree of industrialization and the proportion of investment directed into transport and communications. However, the proportion of non-productive investment has been higher in the industrially more developed than in the less developed centrally planned economies. In most cases the difference was due to the higher share

[43] The terms "incremental capital-output ratio" and "the ratio of investment to increment in output", used alternatively in this section, refer to the relationship of gross fixed investment to increment in output.

[44] Because of the indivisibility of investment projects in power and transportation, the normal output of existing installations in the beginning of the period was lower than its potential possibilities. It was, therefore, possible to increase substantially the number of kilowatt-hours per installed capacity and to raise the freight turnover per track milage or per unit of rolling-stock.

of housing and the lower share of agriculture in the more developed countries, a fact which was partly accounted for by the greater demand for housing in the less agricultural countries and by their dependence on imports of agricultural produce. This was particularly the case in Czechoslovakia and Eastern Germany, which imported a substantial share of their foodstuffs from abroad. In the Soviet Union, however, both agriculture and housing have claimed a large proportion of investment during recent years. On the other hand, in Romania, which was much less industrialized than Czechoslovakia and Eastern Germany, the share of investment in agriculture was also relatively low; but unlike those two countries, the non-productive investment also claimed no more than a very small share of total investment. The small share of agriculture in Romania seems to have been due mainly to the large share of investment claimed by the expansion of the petroleum industry.

Changes in the sectoral allocation of investment not only reflected the changes in the relative importance attached to various sectors at different stages of development, but they were also highly correlated with changes in the proportion of fixed investment to national income. This was particularly true for two broad groups of investment: one including investment in heavy industry and construction—which mainly affect the future capacity to invest—and the other including investment in agriculture, light industry, trade and housing, that is, in goods or services available for personal consumption. In the earlier phase of planned development, the proportion of investment allocated to the former group tended to rise in each country, while that allocated to the second group tended to decline. The reverse pattern emerged in the later stage of development, when the proportion allocated to heavy industry and construction tended to decline or to level off in some countries, while that allocated to the consumer goods industries and to housing rose sharply. In contrast to these two groups of investment, the share of investment allocated to transport and to social capital tended to decline throughout the period under discussion.

Available information suggests that, even at the beginning of the long-term plans for investment, it was possible to divert substantial resources previously directed to the reconstruction of transport, housing, schools or hospitals into industry. In effect, the pattern which emerged was significantly different not only from that prevailing during the reconstruction period but also from that prevailing in the more distant past. The shifts in the allocation of investment between 1947 and 1949, years which mark the beginning of the long-term plans of economic expansion, emerge clearly from the following data for Czechoslovakia and Poland:

Percentage distribution of investments

	Allocation of productive investment	
	1947	*1949*
Czechoslovakia		
Industry and construction	26.0	49.5
Agriculture	5.8	7.3
Transport	24.0	14.7
Housing	29.4	16.1
Government and other[a]	14.8	12.4
Poland		
Industry and construction	32.1	42.0
Agriculture	6.9	10.0
Transport	26.8	18.0
Housing	19.9	8.0
Government and other[a]	14.3	22.0

Source: United Nations, *Economic Survey of Europe Since the War* (sales number: 1953.II.E.4), page 24 and table 3-6.
[a] Including trade.

Thus, as a result of considerable shifts in the allocation of investment by sectors even before the inception of the long-term plans,[45] most centrally planned economies began the period under review with a relatively high proportion of investment allocated to industry, and more specifically to heavy industry. This share continued to rise during the early nineteen fifties. Among the eastern European countries, the increase was particularly steep in Hungary, Poland and Romania but somewhat less intense in Bulgaria and Czechoslovakia, where it had fully taken place between 1947 and 1949 (see table 3-6). As a counterpart to these increases, the total share of investment allocated to light industry, agriculture, trade and housing showed, in most of these countries, a decline which lasted until about 1953. It is notable, however, that the decline in the share of investment in these sectors was less pronounced than the increase in that of heavy industry, the difference having been made up by a fall in the share of transport and communications and, in some cases, in the share allocated to social capital. Also, while the share of light industry and agriculture declined in almost all countries, the share of housing tended to increase in a few cases, namely, in countries where the share of investment in heavy industry rose most. The rise in the share of housing in these countries was probably the result of comparatively greater pressure of demand for new housing, caused, in part, by the transfer of manpower from agriculture to industry.

[45] Apart from fragmentary information on allocation of investment before the war in countries other than the Soviet Union, this conclusion is also partly supported by data on the structure of capital stock in 1948 or 1949 compared to the allocation of investment during the same period. The validity of such a comparison rests on the assumption that capital stock at the end of the reconstruction period corresponded roughly to the structure of investment before the war. Although the structure of fixed assets at any given time and the structure of investment made several years earlier may differ, it seems that before the war the allocation of investment was generally related to the structure of fixed assets. For instance, the share of housing, transport and social capital in total capital stock amounted, in 1949, to 65 per cent in Czechoslovakia and to 75 per cent in Hungary, while the share of these sectors in the investment of the same year was equal to 45 per cent in each country.

Table 3-6. Changes in the Distribution of Gross Fixed Investment, by Sector, 1949-1958
(Percentage)

Country and sector	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
Bulgaria										
Heavy industry and construction..	29.9	37.7	41.6	38.1	39.6	40.4	41.9	40.6	36.0	...
Light industry, agriculture and trade	32.9	29.0	31.7	32.3	30.1	34.2	34.1	36.1	40.5	...
Transport and communications...	18.7	14.2	9.4	11.8	13.7	8.4	7.3	7.2	6.1	7.6
Housing	8.6	8.9	5.6	4.8	5.1	7.3	7.3	6.5	11.1	...
Miscellaneous, non-productive....	9.9	10.2	11.6	13.0	11.5	9.6	9.4	9.6	6.3	...
China (mainland)										
Heavy industry and construction..	...	...	...	27	31	33	34	...	...	46
Light industry, agriculture and trade	...	...	...	44	38	36	36	...	...	35
Transport and communications...	...	...	...	8	8	10	11	...	...	10
Housing	...	...	...	14	13	12	10	...	...	9
Miscellaneous, non-productive....	...	...	...	7	11	10	10	...	...	
Czechoslovakia										
Heavy industry and construction..	42.8	43.7	42.7	44.4	38.4	38.1	34.7	32.8	33.4	37.8
Light industry, agriculture and trade	15.0	16.5	17.7	15.8	17.0	19.3	22.6	23.2	23.1	25.6
Transport and communications...	14.7	13.2	13.7	13.6	14.8	12.3	10.7	9.3	10.2	10.1
Housing	16.1	14.8	13.1	13.6	14.3	18.5	20.1	22.7	21.6	15.8
Miscellaneous, non-productive....	11.3	11.7	12.8	12.5	15.4	11.7	11.9	11.9	11.7	10.7
Eastern Germany										
Heavy industry and construction..	...	34	...	...	44	41	35	39	41	43
Light industry, agriculture and trade	...	16	...	...	18	24	24	21	21	22
Transport and communications...	...	6	...	...	8	9	15	14	14	16
Housing	...	13	...	...	17	15	14	11	24	19
Miscellaneous, non-productive....	...	31	...	...	13	11	12	15		
Hungary										
Heavy industry and construction..	28.5	37.3	43.7	46.2	46.3	34.5	31.6	36.7	31.1	30.0
Light industry, agriculture and trade	29.5	18.6	15.7	14.0	18.5	33.0	35.9	28.6	26.1	27.2
Transport and communications...	19.2	18.7	13.9	12.0	10.5	6.2	7.6	7.6	6.5	8.5
Housing	22.8	4.8	7.3	9.5	6.1	12.6	14.6	16.3	26.5	24.2
Miscellaneous, non-productive....		20.5	19.4	18.4	18.6	13.6	10.3	10.7	9.8	10.1
Poland										
Heavy industry and construction..	31.9	34.7	37.0	46.0	46.3	44.1	40.7	39.4	37.1	34.4
Light industry, agriculture and trade	24.1	26.1	18.9	17.8	16.8	19.5	23.7	26.6	28.0	29.7
Transport and communications...	18.0	15.2	15.1	13.0	12.2	11.3	10.5	9.0	9.5	9.8
Housing	8.0	9.0	11.2	10.6	11.0	12.1	13.2	14.0	15.3	15.9
Miscellaneous, non-productive....	18.0	15.1	17.8	12.5	13.7	12.9	11.8	11.0	10.1	10.2
Romania										
Heavy industry and construction..		40.6	51.4	52.6	53.0	49.6	47.0	49.6	47.2	46.4
Light industry, agriculture and trade		25.2	20.2	19.9	18.4	25.3	28.1	22.5	23.7	26.7
Transport and communications...		14.5	12.6	12.9	12.2	7.6	7.3	8.3	8.7	8.5
Housing		10.2	6.6	6.0	7.9	8.3	8.9	8.9	9.3	9.0
Miscellaneous, non-productive....		9.4	9.2	8.6	8.5	9.3	8.7	10.7	11.1	9.3

Source: See table 3-1.

The decline in the share of investment allotted to heavy industry and to construction that began around 1953 was less pronounced than the increase in the share of investment serving more immediate needs of consumers. This was accomplished by a continued decline in the share of transport and, in some countries, by a decline in the share of investment in social capital. It is also notable that the increase in the share of housing generally exceeded the rise in the share of investment allotted to light industry and agriculture; this tendency was particularly pronounced towards the end of the decade. These changes reflected the acute housing shortages which developed as a result of low priorities given to housing construction in the preceding years. Moreover, in countries where government policy was aimed at increasing the standard of living, it was relatively easier to achieve this goal by expanding housing rather than the supply of consumer goods because of the comparatively smaller dependence of housing construction on imported goods.

In Eastern Germany where post-war reconstruction had lasted well into the nineteen fifties, changes in the allocation of investment followed a pattern somewhat different from that in other countries of eastern Europe. Between 1949 and 1953, the decline in the share of social capital in total investment was associated with a corresponding increase in the share of every other sector. But during 1953-1958, as in Czechoslovakia in the preceding quinquennium, the share of heavy indus-

try remained practically unchanged and that of consumer sectors, particularly housing, recorded a decline. In contrast to Czechoslovakia, however, the share of transport rose quite steeply during 1954 to 1958, largely because of the low share of this sector in the preceding period.

In mainland China, the proportion of investment allocated to heavy industry and construction rose throughout the period while that allotted to light industry, agriculture and housing generally declined. The share of investment in transport and communications rose only during part of the period.

In the Soviet Union, between 1928 and 1932, a period comparable to the first stage of planned development in other centrally planned economies, the proportion of investment allocated to heavy industry rose from 18 to 39 per cent while the share of consumer goods industries, agriculture and housing declined from 61 to 31 per cent (*see* table 3-7). During the subsequent period until the outbreak of the Second World War, this tendency was partly reversed. The most significant change during this period was a substantial decline in the share of investment allocated to heavy industry and construction; but this decline did not have any significant effect on the share of investment allocated to consumer sectors. Although the share of housing increased substantially, it was almost entirely offset by a fall in the share of light industry and agriculture. In fact, the decline in the share of heavy industry was absorbed almost fully by the rise in the share of investment allocated to social capital.

The outbreak of the war brought a drastic shift in the composition of investment in favour of heavy industry and construction to the detriment of all other sectors, but this trend was reversed during the post-war reconstruction. After the war, for the first time in the era of central planning, the share of investment allocated to transport and communications declined,[46] and that allotted to light industry and agriculture increased sharply. The share of the latter continued to increase through the mid-nineteen fifties, in spite of some increase in the share allotted to heavy industry and construction. In more recent years the respective shares of industry, heavy as well as light, and agriculture have declined, while the share of housing has increased substantially. In contrast to these variations, the share of investment allocated to transport and communications has continued to decline throughout the post-war period.

If the period of the early nineteen thirties is compared with the similar stage in planned development of the other centrally planned economies, it appears that the share of heavy industries and construction in total investment was lower in the Soviet Union. On the other hand, the share of transport and communications was substantially higher, most likely because of the country's large size and also because, in Russia before the First World War, this sector was much less developed than in other countries after the Second World War. Likewise, the share of investment in social capital was generally higher than elsewhere. The need to devote a greater share of investment to these sectors was largely responsible for the comparatively smaller share allocated to heavy industry and to consumer sectors. In the nineteen fifties, following the considerable decline in the share of investment claimed by transport and communications and social capital, the proportion of investment devoted to housing, agriculture and light industry increased significantly; in fact, this proportion was higher than at any time between 1932 and 1950. The share of investment in agriculture and housing was even greater than in 1928.

In view of the importance of heavy industry and construction in the centrally planned economies, and of the priority rating within this industry, it is pertinent to explore the allocation of investment within this sector. The data in table 3-8 indicate a certain general pattern common to all centrally planned economies which remained practically unchanged during the period under review. The largest share of investment in heavy industry was allocated to fuel and to power, the former claiming a much greater share than the latter in all countries except Bulgaria, where the share of power

[46] Provided the decline during the war years, 1941-1945, is disregarded.

Table 3-7. Union of Soviet Socialist Republics: Sectoral Distribution of Gross Fixed Investment, 1928-1958
(Percentage)

Sector	1928	1932	1933–1937	1938–1940	1941–1945	1946–1950	1951–1955	1956	1957	1958
Heavy industry and construction	18.0	38.5	31.9	30.8	44.9	37.5	40.0	36.9	34.6	32.7
Transport and communications	12.9	18.4	19.9	18.2	16.2	12.4	8.7	7.9	7.5	7.3
Light industry and agriculture	38.0	23.2	20.4	18.6	14.4	19.6	23.3	26.5	24.8	24.3
Housing[a]	22.8	8.2	10.7	13.9	8.4	15.7	18.1	18.1	22.2	24.7
Social capital[b]	8.2	11.9	17.1	18.5	16.0	14.8	9.9	10.7	10.9	11.0

Source: Planovoe Khozyaistvo, No. 9, 1929 (Moscow); *Socialisticheskoe Stroitelstvo* (Moscow, 1936); *Narodnoe Khozyaistvo SSSR v 1958 Godu* (Moscow, 1959).

[a] Investment in private housing partly estimated.

[b] Including investment in trade and procurement facilities.

Table 3-8. Distribution of Gross Fixed Investment in Heavy Industry and Construction, by Branch
(Percentage)

Country and period	Fuel	Ore mining and metallurgy	Electric power	Engineering and metal products	Chemicals and rubber	Construction and building materials
Bulgaria						
1950–1957	17.2	21.7	34.5	10.0	9.7	6.9
1950–1953	9.3	23.0	34.6	8.4	17.6	7.0
1954–1957	23.0	20.8	34.4	11.2	3.9	6.8
Hungary						
1950–1957	23.8[a]	16.7	16.4	19.9	12.3	10.8
1950–1953	18.5[a]	19.8	13.9	22.7	12.4	12.6
1954–1957	31.3[a]	12.3	20.1	15.9	12.2	8.2
Poland						
1950–1957	20.5	19.8	11.4	17.9	14.7	15.7
1950–1953	19.1	21.3	10.0	21.0	14.1	14.4
1954–1957	21.5	18.6	12.5	15.5	15.2	16.7
Romania						
1951–1958	39.8	18.5	12.9	8.2	9.1	11.5
1951–1953	40.5	13.7	14.5	9.2	6.6	15.5
1954–1958	39.5	20.9	12.1	7.7	10.4	9.5
USSR[b]						
1929–1934	17.0	24.0	9.0	10.0	...	...
1952–1958	28.0	9.0[c]	16.0	14.0	4.0	13.0

Source: See table 3-1.
[a] Including some investment in ore mining.
[b] Components do not add up to 100 because the total includes investment which could not be distributed by branches. The undistributed percentage was about 39 in 1929–1934 and about 16 in 1952–1958.
[c] Excluding non-ferrous mining and metallurgy.

was exceedingly high owing to the very low output at the starting point. In most countries the second largest share was devoted to ore mining and metallurgy and the third to engineering. The share of investment allocated to chemical industries or to construction and building materials industries was lower than that of engineering in all countries except Romania.

It is significant that fuel, ore mining and metallurgy together claimed, in all countries for the period taken as a whole, about 40 per cent of all investment allocated to heavy industry. The changes in allocation between the periods preceding and following the year 1953 have been most significant for fuel industries, whose share in the total increased substantially in most countries. This shift was largely motivated by bottlenecks in the production of fuels and raw materials, characteristic of the period prior to 1953, which called for a readjustment between the capacity in metallurgy and the supply of domestic or imported fuel and raw materials. The high incremental capital-output ratio in mining was an important factor influencing the magnitude of this shift. The almost general decline in the share of investment allocated to ore mining and metallurgy was due to several factors. For example, the maturation of projects begun before 1953 made it possible to expand output during the subsequent period with a relatively smaller volume of investment. This effect was considerably enhanced by the fact that, after 1953, it was possible to achieve a part of the increment in output by enlarging the projects built earlier, at a much smaller cost than had been required for the construction of entirely new projects.

The pattern of allocation discussed above was not entirely determined by the relative importance attached by governments to each industry over the long term; it was also influenced both by current requirements for their respective outputs and by the incremental capital-output ratios which differed considerably from industry to industry.

RELATION BETWEEN INVESTMENT AND OUTPUT

While, as was indicated earlier, the relatively large increase in income per unit of fixed investment, together with the high proportion of investment in national income, have been instrumental in bringing about impressive rates of growth in the centrally planned economies, the relationship has neither been uniform among countries nor has it been stable over time. The increment in income per unit of investment was greater during 1949 to 1953 than in the period that followed. It was also generally higher in the less developed countries of the group than in the others.

Before proceeding to an examination of the incremental capital-output ratio, which represents the relation between gross fixed investment and the increment to output, it may be noted that, since completion of investment projects takes time, the volume of investment

actually put into operation during a given period need not necessarily be equal to investment outlays, that is, to gross fixed investment. A part of the current period's outlays may be completed and put into operation in the following period; contrariwise, the volume of investment put into operation in the current period is influenced by the fruition of projects started in the preceding period. As a first approximation, therefore, it may be said that, in a given period, the ratio of investment to increment in output is influenced by, first, gross fixed investment minus the net change in capital immobilized in unfinished projects and, second, the output per unit of capital in the newly completed investment projects. In turn, this output per unit of capital is influenced by technical changes, and depends, among others, on whether technical progress takes the form of capital-saving or labour-saving innovations.

In addition, it should be noted that the actual increment in output in relation to investment may be smaller than the productive effect of the new assets put into operation inasmuch as a fraction of them serves to replace assets withdrawn from production. Moreover, the wear and tear of existing equipment reduces the productivity of the old capital stock, and therefore tends to offset partly the productive effect of new assets.

It is also evident that the relationship between investment and the increment in output may be influenced by other factors not directly related to changes in the volume of investment. Such non-investment factors as, for example, improvement in organization, availability of labour for a better utilization of physical capacities through introduction of multiple shifts, increased skill of labour and saving on raw materials, may have a considerable effect on raising output in relation to investment, especially in countries in the process of rapid economic growth. Allocation of investment between construction and equipment may also have a bearing on the capital-output ratio. Thus, assuming no change in the relative cost of construction and equipment, the larger the volume of equipment per unit of construction, the greater is the productive effect of a given investment. Finally, since the ratios of investment to increment in output vary among sectors, differences in the aggregate incremental capital-output ratio may be influenced by changes in allocation of investment by sectors.

Although it is obviously impossible to trace the impact of each of these numerous factors on the incremental capital-output ratio, some broad conclusions may be drawn from the available information. The high degree of utilization of physical capacity and the rather extensive use of labour have been responsible to a large extent for the relatively low ratio of investment to increment in output during the decade as a whole.

The high share of the labour force in the total population has been brought about through restraints imposed upon real wages coupled with rising opportunities for employment which have reduced more members of a working family to enter the labour force in order to increase family earnings.

While the large supply of labour in relation to capital has been responsible for the relatively low incremental capital-output ratio in all centrally planned economies, the differences in the relative availability of labour in different countries have been partly responsible for variations in this ratio among countries. Thus, the less developed centrally planned economies, which have had large reserves of labour, have been able to achieve a more intensive utilization of existing capacity through multiple shifts and a more extensive use of labour in auxiliary works. Similarly, the existence of greater labour reserves has permitted the use of relatively more labour-intensive technology in newly constructed plants, particularly in materials handling, internal transport, and so on, and—what is perhaps more important—in extending construction and irrigation works, where the possibilities of substituting labour for capital are particularly large. Finally, the existence of large labour resources has made it possible to maintain a relatively low rate of replacement and modernization in cases where replacement would have contributed more to releasing labour than to raising output.

Changes in the supply of labour in relation to capital were also reflected in changes in incremental capital-output ratios over time. During the first part of the period under consideration, from 1949 to 1953, the rise in output was frequently achieved by a steep increase in non-agricultural employment in the existing facilities. This factor was particularly important at the time of the inception of the plans and was reflected in considerable increments in output in relation to current investment. But its effect was bound to decline in the second half, from 1954 to 1958, as the opportunities to employ labour in existing facilities were diminishing. The resulting increase in the ratio of investment to incremental output was only partly offset by the expansion in output brought about by the maturation of investment initiated earlier.

Although the quantitative effect of changes in the degree of utilization of equipment on the ratio of investment to incremental output cannot be ascertained, owing to the lack of adequate information, there is no doubt that it was very important in several centrally planned economies. The degree of change in the incremental capital-output ratio between the first and the second half of the period was considerably influenced by the extent to which individual countries were able to increase their output during the first half by improved utilization of existing capacity. This relationship explains to a large extent why the increase in the incremental capital-output ratio was much smaller in Czechoslovakia and the Soviet Union, where the degree of utilization of capacity was higher in 1949 than, for instance, in Eastern Germany, where the opportunity to

raise output by improved utilization of existing plants was considerable at the beginning of the decade.

While several factors accounted for relatively low investment requirements per unit of increment of output, certain other factors, such as the length of the construction period and the high share of construction in total investment, had an opposite effect. It will be seen from table 3-9 that the volume of completions fell below the volume of investment throughout the period.[47] It is, of course, to be expected that there will be a lag between investment outlays and completions in an economy with a growing volume of investment. The extent of the lag depends on the length of the construction period of the new assets, while the length of the construction period is in turn partly determined by the level of technique in the construction industry and by the degree of efficiency of the building enterprises.

Table 3-9. Value of Completed Investments as Percentage of Investment Expenditures, 1949-1958

Country and item	*1949–1953*	*1954–1958*	*1949–1958*
Bulgaria			
Total	83.6	98.2[a]	91.4[b]
Industry	77.3	93.6	87.2
Czechoslovakia			
Total	80.3	96.4	90.0
Industry	73.9	98.3[a]	85.9[b]
Hungary			
Total	82.3	95.2[a]	88.2[b]
Industry	73.1	95.7	84.1
Romania			
Total	69.0	...	...
USSR			
Total	...	88.3[c]	...

Source: See table 3-1.
[a] 1954–1957.
[b] 1949–1957.
[c] 1953–1956.

It has been repeatedly stated by the authorities of the centrally planned economies that the extension of the construction period beyond that required by the existing technique was largely due to the dispersion of the work of the building enterprises among a great number of projects.[48] As the number of projects started consistently exceeded the capacities of construction industries, the construction period was lengthened considerably owing to a lack of equipment, to the use of unqualified labour and to shortages of materials. This practice tended to influence the investment-output ratio in two ways. First, it increased the investment cost and, second, it reduced the increment in output during a given investment cycle by the amount which would have been obtained had the investment matured earlier.

The lengthening of the construction period caused by the simultaneous beginning of a large number of projects was clearly related to the rapid rate of growth. The shorter the period for attaining a given increase in output, the larger is the number of investment projects required to be undertaken simultaneously in order to raise capacity needed for the fulfilment of the plan. It is significant that when the need for economizing resources began to play a much greater part in shaping economic policy, the difficulties connected with the lengthening of the construction period were considered as one of the reasons calling for a slowing down in the rate of expansion of investment.

Another factor tending to raise the investment-output ratios was the relatively high proportion of construction and the low proportion of machinery and equipment in productive investment[49] (see table 3-10). However, the relatively low share of non-productive investment in total investment has tended to lower the share of construction in total investment in centrally planned economies.

Table 3-10. Value of Machinery and Equipment in Relation to Construction, 1949-1958
(Percentage)

Country	*1949–1958*	*1949–1953*	*1954–1958*
Bulgaria	51.7	48.4	55.3
Czechoslovakia	53.7	56.0	51.6
Eastern Germany	76.2[a]	...	...
Hungary	41.5[b]	34.6[c]	47.7
Poland	48.4[b]	43.3[c]	52.7
Romania	56.3[b]	59.2[c]	54.1
USSR	48.1	46.0	50.1

Source: See table 3-1.
[a] 1951–1955.
[b] 1950–1958.
[c] 1950–1953.

[47] Such ratios are obviously not perfect measures of the divergence at any given time between completions and outlays. Some of the projects started at the beginning of the period might have been completed only at the very end. In such cases the ratio of completions to outlays for the period as a whole might be high. Clearly, however, the over-all effectiveness of investment would be lower in this case than if completions were more evenly distributed over time.

[48] The dispersion of work was not the only reason for the considerable extension of construction time. Poor efficiency of building organization was frequently due to difficulties in the supply of raw materials and skilled labour, defective planning of construction schedules, miscalculations in cost estimates and the resulting interruption of work for lack of funds, frequent changes in blueprints, and the like.

[49] The importance of this factor has been frequently emphasized in the centrally planned economies and considerable results are expected from measures taken with the purpose of raising the share of equipment in total investment. The reduction of the share of construction in favour of equipment is to be obtained by a more economical use of construction materials, reduction of construction cost, better utilization of space by reducing the bulkiness of equipment, an increased mechanization of production and a better disposition of equipment within a given space.

While it is impossible to appraise the net effect of these factors, the data shown in table 3-10 suggest that the allocation of investment between equipment and construction has not been a factor lowering the capital-output ratio as compared to private enterprise economies.[50] The data for centrally planned economies do not reveal any clear-cut association between the share of machinery and equipment in total investment and the level of industrial development of individual countries. Although, in general, the proportion of machinery and equipment has tended to increase over time, the increase has been rather modest.

Scattered information indicates that these general conclusions pertaining to the economy as a whole hold true for individual sectors as well. In Czechoslovakia, for instance, only 40 per cent of industrial investment went into machinery and equipment in 1957.[51] The following data for Poland in 1958, indicating the share of machinery and equipment in investment in various sectors, show that in industry this share amounted to 43 per cent, and even in construction it did not exceed 68 per cent:[52]

	Percentage
Total	33.8
Non-productive	10.2
Productive	45.2
Industry	42.6
Construction	68.0
Agriculture	40.9
Transport	55.8

In addition to the lengthening of the construction period, the high construction costs and the high share of construction in investment, several other factors have tended to raise the incremental capital-output ratio in the centrally planned economies. There has indeed been considerable waste of capital and other resources on account of lack of incentives for management to save on capital outlays, which were allocated free of charge, and the absence of adequate investment criteria for the planning authorities. At the same time, the poor maintenance of existing equipment, especially in agriculture, resulted in accelerated wear and tear which seriously affected the incremental capital-output ratio. Finally, the recurring bottlenecks in various industries caused by miscalculations in planning or by over-fulfilment or non-fulfilment of plans in various sectors created unused capacities and slowed down the rise in the aggregate output in relation to investment. It is significant that, in general, these bottlenecks were not caused by any lack of supply of machinery and equipment, but resulted rather from the shortages of raw materials, fuel and power. In agriculture—another sector which was expanding at a considerably slower rate than manufacturing—the important limiting factor was the lack of incentives for producers and, to some extent, the low level of technical qualifications. Such bottlenecks could not be resolved by intra-group trade, primarily because they existed, in varying degree, in all centrally planned economies. The needed imports could not be acquired from other areas for lack of exportable commodities required by such countries.

The recent changes in planning of output and investment, however, have tended to eliminate the recurring bottlenecks, first, by adjusting the rate of growth of the economy to the feasibility of expanding the lagging sectors, and second, by increasing the effectiveness of investment through more judicious methods of management and allocation. These measures are expected to eliminate some of the factors which in the past have tended to raise the incremental capital-output ratios.

It may be seen from the data in table 3-11 that the sectoral incremental capital-output ratio has generally been smallest in construction and highest in transport or agriculture.[53] Particularly significant has been the large difference between agriculture and transport, on the one hand, and industry, on the other. For the decade as a whole, the median incremental capital-output ratio for the eight countries listed in the table was three times smaller in industry than in agriculture or transport. A clearer impact of this difference on the aggregate investment requirements per unit of output will be realized if it is recalled that investment in industry amounted to 40 to 50 per cent of total and to 60 to 70 per cent of productive investment. The differences among countries in the ratio for the industrial sector have been small in comparison to those for other sectors, despite the fact that, within the industrial sector, there have been significant variations among countries in the incremental capital-output ratios for individual industries (see table 3-12).[54] This was partly due to the fact that inter-industry differences tended to compensate for one another.

It is interesting to note that the amount of investment required for increasing output in industry and agriculture has tended to be comparatively small in the less developed centrally planned countries, but no such correlation has been apparent in transport and trade. Thus, in industry the lowest incremental capital-output ratios have been recorded in Bulgaria and mainland China and the highest in Czechoslovakia. The very low ratio for Eastern Germany, far from invalidating this conclusion, reflects only the fact that, apart from some undervaluation of investment goods, this country was

[50] The difficulties stemming from differences of valuation, however, inevitably place very serious limits upon any comparisons between countries, particularly between countries with different economic systems.

[51] The percentage share in other years was as follows: 1948, 41; 1951, 52; 1954, 35; 1955, 44; 1956, 40; 1957, 40 (*Hospodarske Noviny*, Prague, 17 April 1959).

[52] *Statistical Yearbook of Poland, 1959*. The data do not include a certain amount of unclassifiable investment.

[53] In the absence of complete information, these findings should be considered as indicative of broad orders of change only. This statement is especially pertinent in the case of sectoral data, owing to the problems connected with the valuation of output and the incidence of turnover tax.

[54] The difference between the data in tables 3-11 and 3-12 is due to the fact that the former are based on net and the latter on gross output of industry.

Table 3-11. Incremental Capital-Output Ratios, by Sector[a]

Country and period	Total	Productive sectors	Industry	Agriculture	Construction	Transport	Trade
Bulgaria							
1949 to 1958....	1.9	1.7	1.3	3.7	0.3	4.2	1.4
1949 to 1953....	1.3	1.1	1.1	1.5	0.3	3.4	0.5
1953 to 1958....	2.9	2.3	1.5	10.1	0.3	5.2	37.1
China (mainland)							
1952 to 1956....	1.8	1.5	1.3	1.8[b]	0.3	3.2	1.0
Czechoslovakia							
1949 to 1958....	3.5	2.3	2.1	118.5	0.4	8.3	0.6
1949 to 1953....	3.0	2.1	2.2	10.2	0.3	9.1	0.3
1953 to 1958....	4.0	2.5	2.0	−44.0	0.5	7.8	0.9
Eastern Germany[c]							
1950 to 1958....	1.9	1.3	1.0	9.5	...	4.1	...
	(2.6)	(1.8)	(1.4)	(13.2)		(5.7)	
1950 to 1953....	1.1	0.6	0.5	2.0	...	1.6	...
	(1.5)	(0.8)	(0.7)	(2.8)		(2.2)	
1953 to 1958....	2.6	1.7	1.2	43.2	...	5.6	...
	(3.3)	(2.4)	(1.7)	(59.9)		(7.8)	
Hungary							
1949 to 1958....	3.1	2.4	1.7	7.1	0.7	4.2	1.1
1949 to 1953....	2.2	1.6	1.1	3.7	0.4	2.7	13.9
1953 to 1958....	4.9	3.8	3.0	11.2	1.9	13.6	0.7
Poland							
1950 to 1958....	2.8	2.1	1.8	3.9	0.9	13.1	1.1
1950 to 1953....	2.4	1.8	1.3	86.5	0.3	9.4	6.1
1953 to 1958....	3.0	2.3	2.1	3.0	2.5	16.7	0.7
Romania							
1950 to 1958....	2.7	2.2	2.0	4.7	0.9	4.0	1.6
1950 to 1953....	1.4	1.2	1.3	0.9	0.7	2.9	0.5
1953 to 1958....	3.7	3.2	2.4	−15.8	1.2	4.9	4.2
USSR[c]							
1950 to 1958....	2.2	1.5	1.2	4.0	...	4.6	...
	(3.0)	(2.0)	(1.8)	(5.2)		(6.0)	
1950 to 1955....	2.0	1.4	1.1	4.9	...	4.8	...
	(2.6)	(1.8)	(1.6)	(6.4)		(6.3)	
1955 to 1958....	2.6	1.7	1.4	3.4	...	4.3	...
	(3.4)	(2.2)	(2.0)	(4.4)		(5.6)	

Source: See table 3-1.

[a] Since data on industrial origin of national income in post-war prices have not been published for Bulgaria, Czechoslovakia, Romania and the Soviet Union, the figures in the table are estimated from the percentage distribution of national income by industrial origin and the indices of net output in individual sectors, except for the Soviet Union where the indices used were those pertaining to gross value of output.

[b] Including handicraft.

[c] Figures in parentheses represent estimates adjusted for better comparability with data for other countries.

still in the stage of reconstruction which enabled it to raise output with relatively small investment expenditure. On the other hand, the relatively high ratio in Romania was mainly due to the higher share of the capital-intensive petroleum industry in total investment. The variations in the ratio of investment to incremental output in agriculture have been considerably larger than in any other sector of the economy, obviously as a result of a much greater impact of factors other than investment. Apart from differences in natural endowment, such as the availability of arable land, quality of soil, and weather conditions, the changes in output have depended on the supply of fertilizers and on various aspects of government policy—for example, collectivization of agriculture and procurement and price policies—which varied from country to country. The impact of the investment pattern in agriculture on the differences in incremental capital-output ratios in various countries has been no less significant than that of factors other than investment. Thus, countries where the bulk of investment in agriculture was devoted to the replacement of labour by equipment had a much higher investment ratio than those where investment was channelled into irrigation works, drainage, livestock or extension of the arable area. Some of the changes in the investment-output ratios during the periods before and after 1953 probably reflect changes in the allocation of investment within the agricultural sector among labour-saving and output-raising types of investment. In countries which had no possibility of increasing the arable area by bringing new lands under cultivation, investment in tractors and agricultural machinery con-

Table 3-12. Incremental Capital-Output Ratios, by Industrial Branch[a]

Industrial branch	Bulgaria			Hungary			Poland			Romania		
	1949 to 1958	*1949 to 1953*	*1953 to 1958*	*1950 to 1958*	*1950 to 1953*	*1953 to 1958*	*1950 to 1958*	*1950 to 1953*	*1953 to 1958*	*1951 to 1958*	*1951 to 1953*	*1953 to 1958*
Total industry	0.88	0.71	0.81	1.01	0.61	1.72	0.73	0.53	0.87	1.56	1.05	1.77
Heavy industry	1.38	1.26	1.44	1.60	0.92	3.09	1.18	0.82	1.44	2.08	1.28	2.50
Electric power	6.90	6.51	7.12	5.30	4.41	5.93	3.30	3.98	3.10	6.21	5.39	6.52
Fuels	3.34	1.83	4.03	6.18	2.11	27.92	4.32	2.44	6.26	6.21	3.72	7.73
Metallurgy	1.59	1.40	1.68	2.07	1.26	3.97	1.78	1.16	2.24	3.44	1.16	5.29
Metal processing	0.34	0.34	0.35	0.59	0.41	0.99	0.52	0.44	0.58	0.40	0.36	0.41
Chemicals	1.08	2.52	0.53	1.23	1.34	1.15	1.68	1.30	1.86	1.57	0.91	1.80
Construction materials	0.81	0.43	1.22	1.78	31.36	0.98	1.84	1.34	2.24	1.50	1.00	1.80
Light industry	0.19	0.19	0.19	0.25	0.12	0.40	0.21	0.16	0.24	0.50	0.49	0.51
Textiles	0.22	0.20	0.23	...	...	...	0.22	0.21	0.22	0.61	0.54	0.63
Food processing	0.13	0.12	0.14	0.23	0.09	0.42	...	...	...	0.54	0.41	0.58

Source: See table 3-1.

[a] Unlike those in table 3-11, the data in this table are based on the gross value of output.

tributed mainly to increases in output per man, thereby facilitating the release of agricultural workers for other occupations. The effect on total output, however, was relatively limited. Thus, when the bulk of investment was devoted to mechanization, the rate of change in investment was by itself a factor affecting the incremental capital-output ratio in agriculture.

The special conditions prevailing in the agricultural sector explain largely the differences in the incremental capital-output ratio between the earlier and the latter part of the decade under discussion. While, in most countries, agricultural investment increased two to four times from the period prior to 1953 to the period that followed, there was a decline in the rate of growth in output in Bulgaria, Eastern Germany and Hungary, and in Czechoslovakia and Romania, even the absolute amount of agricultural output fell. Only in Poland and the Soviet Union was the increment in output between 1953 and 1958 much larger than in the preceding period. In Poland the increase was unusually large, partly owing to improved weather and partly as a result of policy changes, which provided greater incentives for agricultural producers. The Soviet Union was the only country where investment in 1955-1958 was only about 7 per cent above the amounts allocated to agriculture between 1950 and 1955. The increment in output during the second period, however, was greater by as much as one-half than that during the first period. This unique decline in investment in relation to increment in output was mainly due to the large areas of virgin and fallow land brought under cultivation between 1955 and 1958. This policy—impossible on any comparable scale in other European countries—enabled output to be raised substantially per unit of investment, especially if account is taken of the fact that part of investment expenditure required for the appropriation of new lands took place before 1955.

Before 1953 the relatively small share of agriculture in total investment tended to reduce the over-all investment requirements per unit of output, but after 1953, following the increase in the relative share of agriculture, the pattern was reversed. The effect of this shift, however, was partly offset by an opposite change in the share of transport in most countries. Within industry, the increase in the share of investment in light and food processing industries, which require relatively little investment per unit of output, tended to check the increase in the over-all incremental capital-output ratio.

The impact of changes in the sectoral incremental capital-output ratios and in the shifts in the allocation of investment by sector on the change in the aggregate ratio between 1949-1953 and 1954-1958 may be seen from the following data:[55]

	Coefficient of total change	*Change due to variation in*	
		Investment allocation	*Sectoral ratios*
Bulgaria	2.1	0.97	2.16
Czechoslovakia	1.3	1.04	1.26
Eastern Germany	2.2	0.91	2.39
Hungary	2.3	0.95	2.42
Poland	1.25	0.96	1.30
Romania	2.6	0.99	2.64

It is clear that, in all countries, the increase in sectoral investment requirements per unit of output has played a decisive role in raising the over-all investment ratio. On the other hand, with the exception of Czechoslovakia, the change in the allocation of investment by sector has tended to reduce the over-all ratio.

The change in the incremental capital-output ratio does not by itself indicate the direction of changes in the average capital-output ratio. Thus, a rise in the incremental ratio will be associated with a decline in the average capital-output ratio so long as the incremental ratio remains below the average; conversely, a fall in the incremental ratio will be accompanied by an increase in the average ratio so long as the former remains higher than the latter. An approximate indication of the effect of changes in the incremental capital-output ratio on the average ratios may be obtained from the data for Bulgaria and Hungary shown in tables 3-11 and 3-13.[56] It is evident that, with the exception of transport, the incremental ratios were higher in all sectors than the average ratios and were rising, thereby causing an increase over time in the average capital-output ratios. In transport, however, the incremental ratio was considerably lower than the average and, although it increased substantially over the period, was responsible for lowering the average capital-output ratio. It is notable that whereas, in most sectors, the differences between the incremental and the average ratios were not very large in the earlier period, in agriculture the incremental ratio was considerably above the average ratio from the outset.

For Czechoslovakia and the Soviet Union the data on the average capital-output ratios, available only in index form, are shown below.[57]

	1950–1953	*1954–1958*
Czechoslovakia		
Productive sectors	105.9	95.3
Industry	104.7	96.2
Agriculture	88.3	109.4
Construction	114.9	85.1
Transport	119.1	84.8
USSR		
Productive sectors	100.4	99.7

[55] The effect of variation in investment allocation is measured by the change in the over-all ratios between the two periods that would have taken place in the absence of any change in the incremental capital-output ratios within sectors; the effect of variation in sectoral ratios is obtained as a residual.

[56] It should be noted as a qualification on the comments in the text that the ratios of investment to increment in output are not directly comparable with the average capital-output ratios as defined in the centrally planned economies, since the latter relate output to capital stock in operation only, exclusive of uncompleted construction. The changes in the average capital-output ratios are therefore influenced not by investment of a given period in relation to increment in output but by the increase in capital stock net of withdrawals, which in any given time may differ considerably from the volume of investment.

[57] Average, 1950-1958 = 100.

Table 3-13. Bulgaria and Hungary: Ratio of Fixed Assets to Net Output

Item	Bulgaria		Hungary	
	1952–1953	1954–1957	1951–1953	1954–1958
Productive sectors	1.09	1.23	1.14	1.43
Industry	0.95	1.10	0.72	0.98
Agriculture	0.76	0.97	1.33	1.92
Construction	0.43	0.45	0.37	0.49
Transport	8.82	7.71	6.94	6.12

Source: See table 3-1.

In Czechoslovakia, the average capital-output ratios of all sectors except agriculture declined, while the incremental capital-output ratio increased in the aggregate and in all sectors except industry and transport. The decline in the aggregate capital-output ratio of the productive sectors suggests that the incremental ratio, despite its increases over the period, has remained below the average ratio. The very steep increase in the average capital-output ratio in agriculture seems to indicate that, during the period under review, the rising incremental capital-output ratio exceeded the average ratio.

In the Soviet Union the very slight decline in the average capital-output ratio between 1950-1953 and 1954-1958 suggests that the incremental ratio was not significantly lower than the average.

INVESTMENT AND OUTPUT IN THE NEW PLANS OF ECONOMIC DEVELOPMENT

The new development plans of centrally planned countries have been discussed in greater detail in other United Nations publications;[58] hence, this section will analyse only the planned changes in investment and output. On the whole, the new plans, for the period ending in 1965, stipulate a rate of growth in national income somewhat lower than that of the preceding plans. However, compared with the rates actually attained in the period preceding the new plans, the target rate of expansion is smaller only in Eastern Germany, Hungary and the Soviet Union; in Czechoslovakia and, to a much less extent, Poland, the planned rate of increase in income is to rise (see table 3-14). In all countries, the planned rise in gross fixed investment is lower than that achieved in the preceding period. With the exception of Poland, investment is to increase at a higher rate than national income,[59] but this increase will be smaller than that achieved in the preceding period.

The new plans provide for an increase in total investment expenditure, over the preceding period, as high as 140 per cent in Eastern Germany and as low as 45 per cent in Poland (see table 3-17); the corresponding percentages for the Soviet Union, Czechoslovakia and Hungary are 104, 54 and 51, respectively. The increase in total investment is associated with significant changes in the allocation of investment by sector (see table 3-15). Thus, the share of industry in gross fixed investment is to increase in Czechoslovakia and to a lesser extent in Eastern Germany. In contrast, this proportion is to decline considerably in Hungary and slightly in Poland and the Soviet Union.

In the Soviet Union, the plan also calls for a decline in the shares of agriculture and transport, but the allocation for housing is projected to increase. These changes have largely been determined by the increasing part played by private investment in housing and by the investment of collective farms in agriculture.[60] If, however, only state fixed investment is considered, the planned changes appear to be quite different. Thus, the share of industry in state fixed investment is, in fact, planned to increase from about 43 per cent in 1952-1958 to some 45 per cent in 1959-1965, whereas the share of agriculture is to decline from an average of about 12 per cent in the past seven years to 8 per cent during the new seven-year plan.[61] The latter decline is due in part to the abolition of state-owned machine and tractor stations whose investment functions were taken over by the collective farms which previously invested very little in machinery and equipment.

In Poland, the fall in the share of investment in industry is planned to be accompanied by a much

[58] *See* United Nations, *World Economic Survey, 1958* (sales number: 59.II.C.1) and *Economic Survey of Europe in 1959* (sales number: 60.II.E.1).

[59] The original Polish plan provided for a higher rate of increase in investment than during the preceding period. The rate indicated in the table 3-14, however, is based on the actual changes between 1956 and 1959 and on the planned data for 1960; the data shown in the table differ from those included in the plan, owing to the fact that actual expansion in 1959, together with the planned increase for 1960, was higher than what had been anticipated at the time of the preparation of the plan. The data indicated in the table were calculated on the assumption that the total value of investment originally planned for 1960-1965 has not been revised (*see* also footnote *a* to table 3-14).

[60] The share of state agricultural investment in total investment is to decline from 8.7 per cent in 1952-1958 to 5.0 per cent in 1959-1965. State investment in housing is to fall likewise from 14.1 per cent of total investment in 1952-1958 to 12.6 per cent in 1959-1965.

[61] The share of transport in state-fixed investment is to increase slightly and that of housing, amounting to about 19 per cent of state investment, is to remain practically unchanged. Likewise, the share of investment allocated to culture, education and health services is to remain at the level of about 4 per cent of the state investment and the share allocated to trade and others is to rise from 12 to 13.5 per cent.

Table 3-14. Annual Rate of Growth in National Income and Investment in the New Plans[a]

(Percentage)

Country	New plans[b]			Preceding periods (actual)[c]		
	Gross fixed investment (1)	National income (2)	Ratio (1) ÷ (2) (3)	Gross fixed investment (4)	National income (5)	Ratio (4) ÷ (5) (6)
Czechoslovakia	8.4	7.3	115	14.2	6.5	218
Eastern Germany	10.4	6.8	153	17.4	7.4	235
Hungary	8.9	5.0	178	11.0	6.5	169
Poland	6.6	6.9	96	8.3	6.5	128
USSR	9.0	7.3	123	12.5	9.3	134

Source: United Nations Division of General Economic Research and Policies, based on directives on long-term plans, reports on fulfilment of plans and other official sources.

[a] Calculations based on data in constant prices, except for Eastern Germany where they were in current prices. Rate of growth in investment computed from aggregate investment in the plan period and investment in year immediately prior to the plan. Investment refers to total investment in Czechoslovakia, Poland and the Soviet Union, and to state and state-financed investment in Hungary. The coverage is not clearly defined in official statements of Eastern Germany, but it is probably close to total investment. For the USSR, total investment computed on the basis of data for state and co-operative investment, investment by collective farms and estimates of investment in private residential housing. Annual rate of growth of state investment in 1952–1958 was 10.7 per cent and the planned rate for 1959–1965, 8.4 per cent. For Czechoslovakia, Hungary and Poland, rates of growth in gross fixed investment and national income in 1956–1960 computed on the basis of rates attained in 1956–1959 and plans for 1960. For Poland, the rates of increase as officially indicated at the time of the preparation of the plan were: for 1956–1960, investment, 6.5 per cent and national income, 7.8 per cent; for 1961–1965, 9 per cent and 6.6 per cent, respectively. These data differ from the averages indicated in the table because the actual changes between 1956 and 1959 and the planned changes for 1960 were different from those originally anticipated.

[b] For Czechoslovakia, Hungary and Poland, 1961–1965; for Eastern Germany and the USSR, 1959–1965.

[c] For Czechoslovakia, Hungary and Poland, 1956–1960; for Eastern Germany and the USSR, 1952–1958.

Table 3-15. Percentage Distribution of Gross Fixed Investment[a] by Sector, Selected Periods

Country	Industry[b]	Agriculture and forestry	Transport	Housing	Other
Czechoslovakia					
Actual, 1959–1960	42.0	16.0	10.0	18.0	14.0
Planned, 1961–1965	48.0	15.0	11.0	14.0	12.0
Eastern Germany[c]					
Planned, 1959–1965	43.0	10.0	10.0	21.0	16.0
Hungary					
Actual, 1956–1960	45.0	14.0	10.0	...	31.0[c]
Planned, 1961–1965	40.0	20.0	11.0	18.5	10.5
Poland					
Actual, 1956–1960	40.5	13.5	9.0	20.0	17.0
Planned, 1961–1965	39.0	14.0	9.0	24.0	14.0
USSR					
Actual, 1952–1958	39.0	17.5	8.0	22.0[d]	13.5
Planned, 1959–1965	38.0	16.5	7.0	25.0	13.5

Source: See table 3-14.

[a] Total investment, except in Eastern Germany and Hungary. *See* table 3-14, footnote *a*.

[b] Including construction, except in the Soviet Union.

[c] Data shown here are not comparable with those for 1950–1958 in table 3-5 because of differences in coverage and valuation.

[d] Including estimated investment in private housing in rural areas, not shown in data given in tables 3-5 and 3-7.

greater decline in the share of other sectors, including trade, education and municipal services, but by a considerable rise in the share of housing; there is also to be a slight improvement in the share of investment devoted to agriculture. In Hungary, in contrast, the most significant shift in the allocation of state investment will be from industry to agriculture. The share allocated to housing is also higher, though the extent of the change cannot be ascertained. In Czechoslovakia, the substantial shift in the allocation of

investment in favour of industry is planned to occur at the expense of agriculture, housing and services. In Eastern Germany, the rise in the share of investment channelled to industry is to be accompanied by an increase in that of housing and a fall in the share of the remaining sectors.

In Poland and the Soviet Union—two countries for which more detailed data are available—there are considerable differences in the planned shifts in the allocation of investment within industry (see table 3-16). A characteristic feature of the Polish plan[62] is the reduction in the share of investment allocated to ferrous metallurgy, machine-building and electric power, and a rise in the share of coal, construction materials, and consumer goods industries; the share of chemical industries is planned to remain unchanged. In the Soviet Union, the new plan stipulates an almost opposite pattern of changes: a considerable shift in favour of ferrous metallurgy and chemicals, a decline in the share allocated to construction materials and an insignificant increase in the share of consumer goods industries. Both countries plan to reduce the relative shares of machine-building and electric power; but while Poland plans to raise the proportion of investment allotted to coal, the Soviet plan has provided for a sharp decline in the share of this industry. The effect of this fall is only partly offset by a rise in the share of investment channelled to the oil industry.

All the new plans emphasize the need for reducing the cost of construction and for raising the volume of machinery and equipment in relation to the volume of construction. In Czechoslovakia, for instance, the construction cost of plants, transport and housing is to be reduced during the new plan period by 15 to 30 per cent; in the Soviet Union, the cost of plant construction and installation of equipment is planned to decline by 6 per cent, and housing costs are expected to go down by not less than 14 per cent. The reduction in cost of construction is to be achieved mainly by a further mechanization of work in the building trades. The extent of planned improvement in the ratio of machinery and equipment to construction is indicated by the fact that, for instance, in Czechoslovakia, the volume of construction is to increase by 47 per cent in 1961-1965 as against 1956-1960, while deliveries of machinery and equipment are planned to rise by 75 per cent. In the Soviet Union, the ratio of machinery to new construction (in constant prices) is to increase from about 30 per cent in 1952-1958 to 33 per cent in 1959-1961. Considerable efforts are also to be directed in all countries to reduce the maturation period of investment projects undertaken during the new plans and, whenever possible, to expand production through modernization or extension of existing plants, rather than by construction of entirely new projects.[63]

While the implementation of these measures will tend to reduce the investment requirements per unit of output, there are other factors tending to raise these requirements over the levels reached during the preceding period. Among the factors which may account for the substantial differences in the changes in the incremental

[62] For differences in time period, *see* table 3-16, footnote *a*.

[63] In the Soviet Union, 77 per cent of the planned increase in output of pig iron, 79 per cent of that of rolled steel and 71 per cent of the increment in output of coke are to be obtained through enlargement and modernization of plants already in operation. Almost 60 per cent of investment in ferrous metallurgy, 75 per cent in machine-building and 47 per cent in the oil processing industry is to be used for extension of existing plants.

Table 3-16. Poland and Union of Soviet Socialist Republics: Percentage Distribution of Gross Fixed Investment, by Industry, 1952-1958 and 1959-1965

Item	*Poland*[a]		*USSR*[b]	
	1952–1958 Actual	*1959–1965 Planned*	*1952–1958 Actual*	*1959–1965 Planned*
Industry, total	100.0	100.0	100.0	100.0
Ferrous metallurgy	15.2	10.5	7.1	8.7
Chemicals	13.2	13.2	3.5	8.9
Oil and gas	1.4	1.3	12.6	15.0
Coal	17.0	18.3	10.7	6.7
Electric power	11.7	11.1	13.1	11.1
Machine-building	15.0	11.1	11.4	10.3
Wood, wood processing and paper			4.4	5.1
Building and construction materials	12.8	15.0	10.7	9.7
Consumer goods	12.5	13.9	7.0	7.2
Other	1.1	5.5	19.5	17.2

Source: Directives on long-term plans; *Gospodarka Planowa*, No. 6, 1959 (Warsaw); *Narodnoe Khozyaistvo SSSR v 1958 Godu* (Moscow, 1959).

[a] The periods differ from those indicated in the preceding tables because of the unavailability of data on allocation of investment by industry for 1956–1960 and 1961–1965.

[b] Data on total industrial investment derived from *Narodnoe Khozyaistvo SSSR v 1958 Godu* for the years 1951–1958, adjusted by an estimate for 1951. Data on investment in industry for 1959–1965 based on information provided in the plan that industrial investment in 1959–1965 will be twice that of the preceding period.

capital-output ratio during the period of the new plans in various countries, the most important are the degree of utilization of existing capacity at the beginning of the plan, the stage of the investment cycle in various sectors and the differences in sectoral allocation of investment. The effect of the first factor hardly needs any explanation. In countries where at the beginning of the new plan the existing capacity was fully utilized, the increment in output per unit of investment is expected to be smaller than in those where part of the increment in output is planned to be achieved through a better utilization of available facilities. Similarly, in countries where the beginning of the new plan has coincided with the beginning of a new investment cycle—especially in industries characterized by a long maturation period—the incremental capital-output ratio shows a much greater increase than in countries which, during the new plan period, intend mainly to put into operation investment projects started earlier. This, together with differences in the sectoral allocation of investment, accounts for substantial divergence in changes in incremental capital-output ratios implied in the new long-term plans of various countries.

The most striking feature of these changes emerging from the data shown in table 3-17 is the great difference between the movements of the incremental capital-output ratio in Eastern Germany, Hungary and the Soviet Union, on the one hand, and in Czechoslovakia and Poland, on the other. However, since in several instances the data are only rough estimates, it is possible that the difference is exaggerated.[64] But the lack of complete information on allocation of investment and increments in output in various sectors during the two periods under review prevents a full explanation of the inter-country differences.

The more detailed information available for Poland and the Soviet Union makes it possible, however, to analyse the factors accounting for the striking difference between the 60 per cent increase in the over-all incremental capital-output ratio in the Soviet Union and the 6 per cent increase in Poland (see table 3-17). The comparison of changes in the sectoral capital-output ratios in these two countries indicates that the incremental capital-output ratios are scheduled to increase in all sectors in the Soviet Union, whereas in Poland the ratio is to decline in industry and agriculture. In both countries the over-all ratio is to increase more than the ratio of productive investment to increment in output, indicating therefore a certain shift towards non-productive investment. The large differences between the ratios for industry and transport reflect the fact that in Poland the completion or extension of the investment projects started earlier or at the beginning of the plan will play a significant part in raising output; the Soviet Union, on the other hand, is entering a new investment cycle involving considerable outlays in projects which will come to fruition in the terminal year of the new plan or even later. This is particularly significant in the plans for ferrous metallurgy, engineering, chemicals and, to some extent, in consumer goods industries. The considerable increases in the incremental capital-output ratios in the Soviet Union, despite the fact that a large proportion of the rise in output is to be obtained through modernization and extension of existing plants, are essentially due to two factors: first, the investment devoted to new construction will be immobilized in projects requiring a long period of maturation; secondly, the shift in the location of industries to the eastern regions, where entirely new industrial centres are to be built, involves considerable investment outlays which may not yield significant results before 1965.

The impact of variations in the incremental capital-output ratios in individual industries on the ratio for the industrial sector as a whole in Poland and in the Soviet Union is brought out in table 3-18.[65] Thus, the ratio in ferrous metallurgy, chemicals and coal mining is to increase in the Soviet Union by 73 per cent, 57 per cent and 149 per cent, respectively, under the new plan, but in Poland there is to be a decline in all three industries. The influence of these changes in sectoral ratios on the aggregate ratio of industrial investment in relation to growth of output is enhanced by the fact that the share of investment allocated to ferrous metallurgy and the chemical industry is planned to increase substantially in the Soviet Union. This effect, however, is to be offset in part by a decline in the share of investment allocated to the coal industry and by a slight decline in the incremental capital-output ratios in the oil and gas and engineering industries and a sizable decline in electric power.

The need to increase investment per unit of incremental output in the Soviet Union is also demonstrated by the data on relative changes in output and capacity in 1952-1958 as compared with the respective changes planned for 1959-1965 (see table 3-19). In 1952-1958, output of several industries increased considerably more than capacity, indicating the existence of large opportunities for improved utilization of available plant and

[64] In cases where the period preceding the beginning of the new plan included the year 1960, the data on national income and investment were calculated by using planned targets for that year. Moreover, some countries calculated their investment and output indices for 1961-1965 on the basis of estimates for 1959 and 1960 which differed substantially from the data used as a basis for the indices in table 3-17. Despite these qualifications, the general tendency emerging from the data in the table is in broad agreement with information contained in various pronouncements made during the discussion preceding the adoption of the new plans. For Poland, an estimate of changes in the ratio of investment to increment in national income (in *Gospodarka Planowa*, No. 6, 1959) indicates a 22 per cent increase in 1959-1965 as compared to 1952-1958. The difference between this percentage and the 6 per cent increase for 1961-1965 as compared with 1956-1960, indicated in the table, is entirely due to the differences in the periods covered.

[65] For reasons stated in footnote *a* of table 3-16, the data on Poland cover a period different from that in table 3-18. The changes in the incremental capital-output ratios indicated in table 3-18 are generally greater than those indicated by the comparison of the years 1961-1965 with the preceding five years.

Table 3-17. Planned Changes in Output, Investment and Incremental Capital-Output Ratios

Country and item	Increment in output[a]			Investment, plan period (index, preceding period=100) (4)	Incremental capital-output ratio, plan period (index, preceding period=100) (4)÷(3) (5)
	Plan period (in percentage points) (1)	Preceding period (in percentage points) (2)	Index, plan period (preceding period=100) (1)÷(2) (3)		
Czechoslovakia					
All sectors	42.0	27.0	155	154	100
Industry	50.0	39.0	128	180	140
Agriculture	21.0	8.0	262	152	58
Transport	30.0	30.0	100	175	175
Eastern Germany[b]					
All sectors	59.0	41.0	144	241	167
Industry	88.0	49.0	180	250	139
Hungary[c]					
All sectors	27.0	27.0	100	150	150
Industry[d]	38.0	26.0	146	147	100
Agriculture	21.0	12.0	175	232	133
Transport	45.0	34.0	132	175	133
Poland					
All sectors	40.0	29.0	138	146	106
Productive sector				138	100
Industry[e]	50.0	35.0	143	137	96
Agriculture	20.0	11.5	174	144	83
Transport	14.0	11.0	127	148	117
USSR					
All sectors	63.5	50.0	127	204[f]	160
Productive sector				194	153
Industry	80.0	53.0	151	200[f]	132
Agriculture	70.0	40.0	175	192	110
Transport	56.0	48.0	117	188	161

Source: See table 3-14.

[a] Calculated as the difference between the indices for the last year of the period indicated and the year preceding the period. Data on output for all sectors relate to national income; those on industry and agriculture based on indices of gross value of output; data on transport based on volume of freight transport expressed in terms of tons, except for the Soviet Union, where they are expressed in ton-kilometres.

[b] Investment probably refers to total investment (*see* table 3-14, footnote *a*).

[c] Investment refers to state and state-financed investment.

[d] State industry only.

[e] State and co-operative industry.

[f] Including estimated investment of collective farms and private investment in residential housing.

Table 3-18. Poland and Union of Soviet Socialist Republics: Planned Changes in Incremental Capital-Output Ratios in the Industrial Sector

Item	Poland[a]				USSR			
	Increase in output in percentage points (1958=100)		Changes in investment outlays in 1959–1965 (index, 1952–1958=100)	Capital-output indicator	Increase in output in percentage points (1958=100)		Changes in investment outlays in 1959–1965 (index, 1952–1958=100)	Capital-output indicator
	1952–1958	1959–1965			1952–1958	1959–1965		
Industry	56	80	161	112	53	80	200	132
Ferrous metallurgy[b]	50	60	111	92	43	61	245	173
Chemicals	64	162	161	65	61	200	515	157
Oil and gas[c]					65	161	238	96
Coal[c]	14	25	174	97	43	22	125	249
Electric power[d]	56	84	154	102	55	119	169	78
Engineering	72	112	120	77	52	100	180	94
Consumer goods	54	77	180	126	48	64	206	155

Source: Directives on long-term plans; *Narodnoe Khozyaistvo SSSR v 1958 Godu*, 1959; *Rocznik Statystyczny*, 1959 (Warsaw); *Gospodarka Planowa*, Nos. 5 and 6, 1959.

[a] *See* table 3-16, footnote *a*.

[b] In terms of steel output.

[c] In terms of standard fuel units.

[d] In terms of kilowatt-hours.

Table 3-19. Union of Soviet Socialist Republics: Increases in Output and Capacity of Selected Products, Actual, 1952-1958 and Planned, 1959-1965
(Millions of tons, except as indicated)

Product	1952–1958			1959–1965		
	Increase in capacity	Increase in output	Increase in output as percentage of increase in capacity	Increase in capacity	Increase in output	Increase in output as percentage of increase in capacity
Pig iron	16.3	17.7	109	27.0	27.9	103
Steel	12.4	23.5	190	32.0	33.5	105
Rolled steel	6.9	18.9	274	26.0	24.6	95
Coal	184.9	213.9	116	210.0	200.0	95
Leather shoes[a]	60.6	116.6	192	137.0	159.0	116

Source: Pravda, 14 February 1959; *Narodnoe Khozyaistvo SSSR v 1958 Godu*; *Planovoe Khozyaistvo*, *No.* 3, 1959.
[a] Millions of pairs.

equipment. The rise in output in relation to capacity was in part due to the completion of investment projects started earlier. The output of such projects increased once the initial period of adaptation was over and when the supply of raw materials improved. The other factors contributing to improve the performance of new as well as of the old capital stock were better organization of work, reduction of stoppages caused by breakdowns and bottlenecks and, in some cases, introduction of additional shifts. The data on increases in output and capacity during the new seven-year plan show that, except in the shoe industry, none of these factors is expected to play a comparable part in the future.

The differences in the changes in incremental capital-output ratios in other countries are not easily explainable for lack of sufficient information. The very high increase in the incremental capital-output ratio in industry in Czechoslovakia and Eastern Germany may be due to the same reason as in the Soviet Union. The very steep decline in the incremental capital-output ratio in Czechoslovak agriculture reflects, partly, the expected improvement in yields over the preceding period, when output was low owing to unfavourable weather. The planned fall in the capital-output ratio in agriculture is not, however, sufficiently large to offset the effect of considerable increases in transport and industry, the share of which in total investment is planned to increase. That the over-all incremental capital-output ratio is not to increase during the new plan may be partly due therefore to the decline in the share of investment allocated to the non-productive sector.

In Hungary, the stability of the incremental capital-output ratio in industry is due to the fact that, like Poland but unlike the other countries, Hungary does not intend to embark upon construction of new large investment projects in highly capital-intensive industry. The substantial rise in the incremental capital-output ratio in agriculture is probably due to the planned mechanization of agriculture associated with the policy of accelerated collectivization. Increases in the ratios for other sectors are also probable and in addition there may be a rise of non-productive investment in relation to the total.

Conclusion

During the nineteen fifties as a whole, high rates of economic expansion were achieved by the centrally planned economies; both the large share of resources allocated to investment and the relatively low incremental capital-output ratio contributed to this expansion. It is notable, however, that the drive to raise the share of investment in national income was slowed down after 1953 and that there has been a tendency to alter the allocation of investment in favour of sectors producing consumer goods and services. It was also a salient feature of the period that the incremental capital-output ratio tended to be substantially higher at the end than it was at the beginning; moreover, in several countries, further increases in this ratio are implied in their long-term plans of economic development.

The low capital-output ratio prevailing during the period as a whole stemmed from a number of factors. Notable among these were the relatively high degree of utilization of productive capacity, the ample supply of labour, the comparatively long life of fixed assets and, not least, the pattern of investment allocation.

Although the objective of policy with regard to the allocation of investment was not to achieve the largest increases in output per unit of current investment but to create the conditions necessary for sustaining high

rates of growth in the longer run, the restrictions on investment in non-productive activities and in agriculture, where capital requirements per unit of output were heavy, were important in lowering the over-all capital-output ratio. On the other hand, the high construction costs and the large share of construction in total investment, together with the relative neglect of efficiency criteria in selection of investment projects, tended to reduce the influence of these factors in lowering the incremental capital-output ratio.

In the new circumstances created by several years of rapid economic expansion, appreciable modifications in the various aspects of investment planning and policies have been proposed or introduced. The changes which have already occurred and the views and suggestions expressed in various countries indicate that the general tendency is to impart a greater flexibility to the system. The scope of purely administrative decisions by the central authorities has been reduced, while greater reliance has been placed on the initiative of lower echelons and on the use of efficiency criteria in planning.

The new attitude towards obsolescence and the emphasis placed on the international division of labour through a greater co-ordination of national plans have tended directly to lower unit costs of output. The purpose of the intended changes in the methods of price determination has been to create a price system which will more closely reflect the relative cost of inputs and will form a more adequate basis for decisions intended to reduce the "real" cost of output. And finally, the extended use of coefficients of effectiveness as a basis of choice between investment projects and, even more, the tendency to make partial use of such coefficients in the allocation of investment among sectors, clearly increases the part played by "economic accounting" in investment planning. Implementation of these measures may well play a significant part in counter-balancing the effect of other factors tending to reduce the rate of growth of the centrally planned economies at the present stage of their development.

Part II

CURRENT ECONOMIC DEVELOPMENTS

Chapter 4

RECENT TRENDS IN INDUSTRIAL COUNTRIES

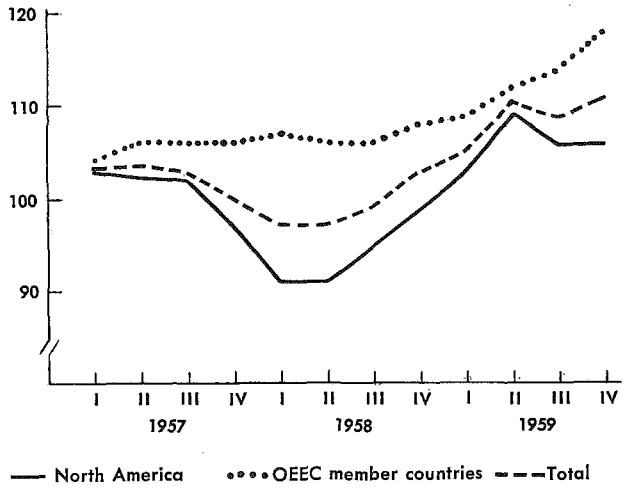
Economic recovery in the industrial group of countries, which began about the middle of 1958, continued at an accelerating pace in 1959. It can be seen from table 4-1 that the revival in economic activity in the second half of 1958 was barely sufficient to raise the total volume of production for that year to the level of 1957. In the year 1959, however, which represented the first full year of the current economic upswing, gross national product was over 5 per cent higher in real terms than in the preceding two years. The advance in production was particularly pronounced in North America which had experienced a greater decline in economic activity during the 1957/58 recession.

The rapid growth of production in 1959 was largely the result of an upswing in industrial activity. Agricultural production did not generally make a significant contribution to the rise in the gross national product. In North America the output of agricultural products was maintained at the high level reached in 1958, while in western Europe an increase in the grain harvest in 1959 was partly offset by a lower output of dairy products, fruit and vegetables caused by dry weather. In France, however, where industrial production in 1959 was only moderately above the level of 1958, a rise of 5 per cent in agricultural production made a relatively important contribution to the growth of total output.

Chart 4-1 gives an indication of the course of industrial production in western Europe and North America during the past three years. It can be seen that in western Europe, where the volume of production reached a plateau in the early part of 1958, expansion was resumed at a slow pace in the second half of that year, but accelerated in 1959. In North America, on the other hand, the steep fall in production in the latter part of 1957 and the early months of 1958 was followed by a rapid advance in industrial activity which continued until the third quarter of 1959. After an interruption

Chart 4-1. North America and OEEC Member Countries: Indices of Industrial Production, 1957-1959

(Seasonally adjusted; 1956 = 100)



Source: United Nations Division of General Economic Research and Policies; based on Organisation for European Economic Co-operation, *General Statistical Bulletin*, and official national sources.

Table 4-1. Industrial Countries: Gross National Product and its Major Components, 1957-1959[a]

(At constant prices; as percentages of 1957 gross national product)

Year	Gross national product	Personal consumption		Government consumption	Fixed investment			Change in inventories	Exports and imports of goods and services		
		Total	Durables		Total	Residential construction	Machinery and equipment		Balance	Exports	Imports
1957....	100.0	67.1	6.2	13.3	18.3	3.9	8.3	0.6	0.7	11.2	−10.6
1958....	99.6	68.1	6.0	13.5	17.7	4.1	7.3	0.1	0.3	11.1	−10.8
1959....	105.1	71.2	6.7	14.0	19.0	4.6	7.8	1.1	−0.2	11.7	−11.8

Source: United Nations Division of General Economic Research and Policies, based on replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies; Organisation for European Economic Co-operation, *General Statistical Bulletin* (Paris), and official national sources.

Figures for 1959 in this chapter are preliminary estimates of Governments or of the United Nations Division of General Economic Research and Policies.

[a] Including Denmark, Federal Republic of Germany, France, Italy, Netherlands, Norway and the United Kingdom in western Europe; and Canada and the United States in North America. Calculated, except for Canada, on the basis of purchasing power parities, as established for the purposes of table 32 of Organisation for European Economic Co-operation, *Comparative National Products and Price Levels*, Milton Gilbert and Associates (Paris, 1958). Data for Canada included on the basis of the official exchange rate. Exports and imports of goods and services represent the sum of the figures for the individual countries.

owing to the steel strike, the rise in production continued in the last quarter of 1959. Chart 4-1 also shows that not only has industrial activity in western Europe been more stable than in North America, but the rate of growth of industrial output has been greater since 1956, the year preceding the recent economic set-back.

All major sectors of industry, with the notable exception of coal and shipbuilding, participated in the recovery of production. Particularly significant was the rise in production of steel and durable consumer goods stimulated by a rapid growth in domestic and foreign demand. There was also a noticeable acceleration in the rate of growth of chemicals and a pronounced recovery in the textile and construction industries.

The rise in industrial activity was accompanied by a fall in demand for coal in western Europe and Japan. A number of factors were responsible for this development, including a declining trend in the share of solid fuels in total energy consumption and, in western Europe, a relatively mild winter followed by an exceptionally good summer. Although production was cut down in the major producing countries and imports from outside areas were reduced, pit-head stocks of coal continued to mount during the year and the industry remained depressed. Since the outlook for coal consumption is considered poor in the foreseeable future, plans have been announced by some governments in western Europe involving a revision of long-term coal production targets and the closure of marginal mines. The shipbuilding industry was—and continues to be—adversely affected by widespread excess capacity in the major shipping fleets of the world; this is reflected in the large number of ships that are laid up and in the low level of freight rates.

The different rates of growth of production recorded in various industrial countries in 1959 were, as explained below, determined largely by the timing of the revival of demand and by the pace of its expansion. Generally, ample labour and equipment were available during 1959 and supply conditions did not, except in a few specific instances, act as a limiting factor upon the growth of output. As shown later in this chapter, there was some tightening in the labour market in the course of the year in most countries of western Europe, and shortages of labour were encountered in some localities and industries, notably in the construction industry. Moreover, some of the industries producing consumer durable goods and the sheet steel industry supplying them reached capacity or near capacity levels of production in the course of the year. In the United States a temporary steel shortage had the effect of depressing production towards the end of the year and in Canada a prolonged industrial dispute in primary wood and wood-fabricating industries checked the expansion of production in the third quarter of the year.

The expansion of production in 1959 was accompanied by an increase in demand for labour and a general reduction in the levels of unemployment. It did not, however, lead to a pronounced acceleration in the rate of increase of wages and earnings, which in most countries tended to lag behind the growth of productivity in industry. This, together with a significant drop in import prices of primary products in 1958 and the early months of 1959, was largely instrumental in keeping wholesale and retail prices of manufactured goods generally stable in 1959. As a result of these developments, the share of profits in total income, which had declined during the recession, showed a marked recovery in most countries.

The volume of foreign trade, which had fallen during the recession, showed an even more vigorous recovery than domestic production. Particularly marked was the rise in trade in manufactured goods, owing partly to a recovery in consumption of textiles and more particularly of durable consumer goods. A progressive liberalization of trade in western Europe also contributed to this development. The upsurge in trade in manufactured goods affected mainly the trade of industrial countries with one another. Imports of primary products from the rest of the world rose more slowly, while exports to primary producing areas did not yet reflect the recovery in the import capacity of the latter which resulted from the improvement in their export earnings.

The upswing in economic activity did not give rise to serious balance of payments difficulties in any industrial country. The balance of payments position of western Europe as a whole, which had improved considerably in 1958, showed a further, though smaller, improvement in 1959. In North America, on the other hand, the balance of payments deteriorated in 1959—in the United States for the second year in succession. A number of special factors, such as the prolonged steel strike in the United States and an appreciable reduction in cotton shipments, contributed to this development. Following a recovery in exports and a slower rise in imports after the middle of 1959, however, there was an improvement in the United States foreign balance in the second half of the year, a trend which continued into the early months of 1960.

As the economic upswing gathered momentum in the latter part of 1959 and early in 1960, some governments became concerned over the speed of expansion in domestic demand. It was feared that, unless the growth of demand was restrained, inflationary pressures would develop, leading to an acceleration in the rate of increase in wages and prices and, in some cases, to balance of payments difficulties. As a result, a number of measures were taken by governments aimed at slowing down the pace of the expansion. Thus far these have consisted largely of raising discount rates and generally tightening credit conditions—measures which have usually tended to depress residential construction. In some instances governments have also planned to slow down the rate of increase in public consumption and investment expenditure, and in a few instances specific poli-

cies to moderate the rise in consumer expenditure and in housing investment have been announced.

In the early months of 1960 it was generally anticipated that despite such steps aggregate demand would continue to expand in western Europe at about the same rate as in the preceding year. Notwithstanding the reduction in idle equipment and labour resources and the emergence of certain sectoral bottlenecks in some countries, most governments considered over-all supply conditions such as to permit a rate of growth in total product for 1960 comparable to that recorded in 1959. In the absence of further and more rigorous restrictions on demand, therefore, the pace of expansion of western Europe as a whole was expected to be maintained in 1960.

Prospects appear less certain in North America. In the United States expectations of the government and private business at the beginning of 1960 were for a continued rise in total output during the current year. However, expectations at that time as to the sale and production of certain key commodities, notably steel and motor-cars, appear to have been somewhat over-optimistic. The Federal Reserve Board's seasonally adjusted index of industrial production, after rising to a record high in January 1960, declined slightly in February and March and levelled off in April. Since the phase of unusually rapid inventory building appears to be drawing to a close, while little advance is at present expected in government expenditure, and since residential construction has been declining, the further growth of demand will depend very much on the realization of recently announced intentions relating to business fixed investment and on a better showing of consumption, especially of durables. It is not, of course, possible to anticipate the measures that the government may take to stimulate demand should the recent trend of production continue.

Major factors in the expansion of demand

The pattern of rising demand in the industrial group of countries during the second half of 1958 and throughout most of 1959 bore some similarity to that experienced in the first phase of the upswing which followed the 1952 economic set-back in western Europe and the 1953/54 recession in North America. The dominant factors in the revival and expansion of final demand[1] in both periods were a rapid rise in residential construction, public investment and consumer expenditure on durables. In western Europe and Japan there was also a significant rise in export demand, especially from North America; exports to primary producing countries did not rise appreciably until the latter part of 1959. In the United States, however, no stimulus to production was received from foreign demand during 1958 and most of 1959—contrary to experience during the early stages of the previous upswing.

The public sector played an important part in cushioning the recession and in stimulating the recovery. Apart from the effect of the well-known "built-in stabilizers" in slowing down the recession, deliberate anti-cyclical measures were adopted by most governments. These included an expansion of public investment, a lowering of interest rates and easing of credit conditions and, in a few cases, reductions of direct and indirect tax rates. Particularly significant was the expansive role of the public sector in North America in sustaining the volume of aggregate demand during the 1957/58 recession and in providing a powerful impetus to the expansion of production in the first phase of the recovery.[2]

The revival in final demand and the general improvement in business expectations resulting from these developments were accompanied in many countries by a reversal of the process of inventory liquidation experienced in the course of the recession. Inventory movements were particularly important in North America. In the United States inventory decumulation, which had reached unprecedented proportions during the recession, continued, though at a decelerating rate, for some time after the recovery in final demand. This trend was, however, reversed in the latter part of 1958, and inventory accumulation reached an unusually high rate in the first half of 1959, when the addition to non-farm business stocks accounted for over 60 per cent of the rise in the volume of gross national product. This partly reflected action taken by the steel consuming industries to build up abnormally high stocks of steel, as well as of finished products, in anticipation of a steel strike or higher steel prices. Consequently, when the steel strike actually began around the middle of July, it did not directly affect production outside the steel industry for some time; by October, however, stocks of steel and durable goods had been greatly reduced and industrial production declined on a broad front. Inventory accumulation at a relatively rapid rate was resumed after the strike and continued into the early months of 1960. Since the steel strike was so widely anticipated, its effect on production for the year 1959 as a whole was correspondingly diminished; this was because part of the growth of output in the first half of the year was intended to compensate for the expected decline in the second half.

[1] The term "final demand" is used to signify gross national expenditure less changes in inventories.

[2] For details of the measures taken by the various governments and for an analysis of the role of the public sector in North America, *see* United Nations, *World Economic Survey, 1958* (sales number: 59.II.C.1), pages 184 to 189 and 195 to 197.

INTER-COUNTRY DIFFERENCES IN THE EXPANSION OF DEMAND

Despite a general similarity in the pattern of recovery in the various industrial countries, there were some differences in the timing and rate of revival. In the United States final demand began to recover during the second quarter of 1958. It was initially stimulated by a rapid rise in government consumption, which had started during the recession, and by an increase in residential construction after the middle of the year. There followed a moderate revival in business expenditure on plant and equipment in the last quarter of 1958 and an upturn in consumption of durables, especially motorcars, which was reflected in a fall in the share of personal disposable income devoted to savings. The influence of these developments in final demand was strongly reinforced by the inventory movements described above.

During the second half of 1959 there was a moderate decline in the volume of government consumption and in consumer expenditure on durables and a more pronounced fall in housing investment. Shortages of steel and of steel-using products had an adverse effect on production and sales of automobiles and on business expenditure on equipment, which rose more slowly than anticipated. Housing investment, as shown below, was retarded by shortage of credit.

In Canada the primary impetus to higher production came from an expansion in personal consumption and substantial additions to business inventories which had been heavily reduced in 1958. A recovery in export demand and business expenditure on machinery and equipment also contributed to the expansion of demand in the second half of 1959. In contrast to the situation in the United States, however, in Canada the volume of fixed investment declined in 1959. The aggregate demand thus rose relatively less—by some 3.5 per cent in real terms, as compared with a rise of over 6.5 per cent in the United States (see table 4-2).

During most of the period of recovery, North American imports rose rapidly while the volume of exports remained almost unchanged until about the middle of 1959. Although United States exports rose faster than imports in the second half of 1959, for the year as a whole there was a sharp deterioration in the real export balance, for the second year in succession. Canada also experienced a deterioration in its external balance in 1959, partly owing to a restocking of imported goods and a recovery in business outlays on machinery and equipment, which have a relatively high import content.

As in North America, the economic recession in Japan, which had set in about the middle of 1957, came to an end in the second quarter of 1958. The growth in aggregate demand was slow at first and was initially stimulated by a rise in export demand and in public investment. A revival in business fixed investment during 1959 accelerated the process of expansion, which attained the dimensions of a major economic upswing in the second half of that year.

In western Europe a rate of growth of production amounting to about 5 to 6 per cent was recorded during 1959 in Denmark, the Federal Republic of Germany, Italy and the Netherlands, where the revival of demand began at approximately the same time as in North America—that is, about the middle of 1958. The growth of production in these countries in 1958 and 1959 was strongly stimulated by a rapid rise in export demand, fixed investment—both residential and industrial—and durable consumption. In Denmark a steep rise in construction activity, both private and public, was accompanied by a pronounced increase in consumption in the latter part of 1958 and early in 1959. Despite the adoption of restrictions on construction in the second quarter of 1959, production continued to rise until the latter part of the year. In Italy exports rose faster than imports in 1958 and 1959 and the real foreign balance improved in both years. On the other hand, the rapid rise in domestic demand in Denmark and the Federal Republic of Germany was accompanied by an even faster expansion in the volume of imports than of exports. In Denmark a substantial rise in imports of agricultural raw materials, partly owing to shortages caused by a dry summer, and of capital goods and consumer durables, was largely responsible for the pronounced deterioration in the real foreign balance.

In Finland, Norway, Sweden and the United Kingdom the revival of economic activity started somewhat later, during the latter part of 1958. In 1959 gross national product rose in these countries by about 4 to 5 per cent in real terms above the level of the preceding year.[3] In Finland, Norway and Sweden exports gave a major impetus to the expansion in 1959, although in Finland and Sweden a large part of the increase in exports of forest products during the first part of the recovery was met from stocks which had increased to a relatively high level during the recession. In Norway and Sweden exports rose faster than imports and the real foreign balance improved in 1959. In Finland, however, substantial additions to the inventories of imported raw materials and a steep rise in the demand for durable consumer and producer goods—which have a high import content—resulted in a relatively faster rise in the volume of imports than of exports. In Finland and Sweden additional strength was derived from an increase in fixed investment and from a rise in government consumption. In Norway a decline in fixed investment consisted essentially of a reduction in imports of

[3] In the United Kingdom gross domestic product estimated from expenditure shows an increase of 3 per cent, whereas an estimate based on income and output suggests a rise of 4 per cent. It is believed that the actual rate of growth was probably nearer to that suggested by the income and output statistics. In order to take account of this statistical discrepancy, the rate of growth in the gross national product in 1959 is shown as 3.5 per cent in the following tables.

Table 4-2. Gross National Product and its Major Components, 1957-1959[a]

(At constant prices; as percentages of 1957 gross national product)

Country and year	Gross national product	Personal consumption	Government consumption	Fixed investment	Change in inventories	Exports and imports of goods and services		
						Balance	Exports	Imports
Western Europe[b]								
1957	100.0	64.6	14.0	19.4	1.5	0.5	23.0	−22.5
1958	101.9	65.9	14.3	19.8	1.1	0.8	23.8	−23.0
1959	106.0	68.2	15.1	20.9	0.9	0.8	25.7	−24.9
Belgium								
1957	100.0	71.3	10.0	15.5	1.3	2.0	35.1	−33.1
1958	99.2	70.1	10.0	14.4	0.7	3.9	36.1	−32.3
1959	100.7	70.1	...	...	...	...	...	...
Denmark								
1957	100.0	67.4	12.4	17.3	2.1	0.9	34.9	−34.0
1958	102.2	69.6	12.8	18.4	−0.5	1.9	38.0	−36.1
1959	106.9	74.9	13.2	21.1	0.8	−3.2	40.1	−43.2
Finland[c]								
1957	100.0	59.7	14.4	26.2	...	−0.2	22.7	−23.0
1958	100.0	57.7	14.7	25.8	...	1.7	22.4	−20.6
1959	105.1	61.0	15.3	28.2	...	0.6	25.2	−24.6
France								
1957	100.0	67.3	15.4	18.4	0.9	−2.0	13.8	−15.8
1958	102.1	67.2	15.3	18.9	1.9	−1.1	14.5	−15.6
1959	104.0	67.7	16.1	18.9	0.9	0.3	15.4	−15.1
Germany (Federal Republic)								
1957	100.0	59.6	12.3	21.5	2.6	4.1	25.5	−21.4
1958	102.8	62.3	13.4	22.6	1.5	3.0	26.8	−23.8
1959	108.7	65.4	14.5	24.9	1.2	2.6	30.4	−27.9
Italy								
1957	100.0	66.6	11.1	21.7	0.5	—	15.3	−15.3
1958	104.2	68.6	12.2	21.7	0.8	0.9	16.1	−15.1
1959	111.1	71.9	12.6	23.5	0.9	2.2	18.8	−16.5
Netherlands								
1957	100.0	61.1	13.0	24.6	3.4	−2.0	53.3	−55.4
1958	101.9	61.5	12.5	22.3	0.8	4.8	58.1	−53.3
1959	106.7	63.5	12.5	24.4	1.7	4.5	64.3	−59.8
Norway								
1957	100.0	60.4	11.5	28.5	0.8	−1.3	44.4	−45.7
1958	100.3	60.2	11.7	30.3	−0.5	−1.4	45.4	−46.8
1959	105.5	62.5	12.2	29.4	0.1	1.3	49.7	−48.4
Sweden								
1957	100.0	61.2	16.6	20.1	2.2	−0.1	30.8	−30.9
1958	100.3	62.7	17.2	21.7	−0.2	−1.0	30.8	−31.8
1959	104.9	64.8	18.1	23.5	−1.2	−0.4	32.7	−33.1
United Kingdom								
1957	100.0	66.9	15.4	15.4	1.4	0.9	25.4	−24.6
1958	100.5	68.5	15.3	15.5	0.7	0.6	25.3	−24.8
1959	103.5	71.1	15.7	16.2	1.1	−0.7	25.6	−26.3
North America[d]								
1957	100.0	65.1	16.8	17.1	0.3	0.7	6.9	−6.2
1958	98.2	65.7	17.1	15.9	−0.5	—	6.3	−6.3
1959	104.7	69.1	17.6	17.3	1.3	−0.7	6.3	−7.0
Canada								
1957	100.0	67.3	12.4	25.1	0.6	−5.2	22.6	−27.8
1958	100.8	69.1	13.0	23.8	−1.6	−3.2	22.9	−26.1
1959	104.3	72.3	12.7	23.6	0.9	−5.3	23.4	−28.7
United States								
1957	100.0	65.1	17.0	16.5	0.3	1.1	5.9	−4.8
1958	98.1	65.7	17.3	15.3	−0.4	0.2	5.2	−5.0
1959	104.7	69.1	17.9	16.8	1.3	−0.4	5.3	−5.6

Source: See table 4-1.

[a] Data conform as far as possible to the OEEC system of national accounts.

[b] Data for Denmark, Federal Republic of Germany, Finland, France, Italy, the Netherlands, Norway, Sweden and the United Kingdom combined on the basis of 1954 prices and exchange rates.

[c] Changes in inventories are included in personal consumption.

[d] Data for Canada and the United States combined on the basis of 1954 prices and exchange rates.

ships and therefore did not have a serious effect on output.

In the United Kingdom the volume of aggregate demand and production had remained almost stagnant, with minor ups and downs, since the last quarter of 1955. The initial impetus to the revival of demand in the latter part of 1958 was provided by a steep rise in durable consumption explained below. The growth of production accelerated during 1959 as a result of a continued rapid increase in durable consumption and in housing investment, which was reinforced in the second half of 1959 by an increase in the volume of public investment. Another important expansive factor was a marked recovery in exports after the first quarter of 1959. The volume of exports to North America and to other industrial countries rose throughout 1959, and exports to the primary producing countries recovered in the latter part of that year. Imports, however, rose even faster than exports, partly owing to inventory replenishment, and the real foreign balance deteriorated in 1959.

In a third group of western European countries — Belgium and France—the recovery did not set in until early in 1959 and did not gather momentum until the second half of that year. The dominant factor in the growth of production in both cases was a rapid rise in export demand generated by the revival of activity in the other industrial countries. In Belgium, where the recession had been relatively severe and prolonged, industrial production at the end of 1959 had barely regained the level attained during the second quarter of 1957. Indications are that the gross national product in 1959 was only moderately above the level of 1957.

The decline in production in France in the course of 1958, on the other hand, had been relatively mild. During the last two years of the previous upswing, which had lasted from 1953 to 1957, growing domestic demand pressures, reinforced by speculative movements of capital, had led to heavy losses of gold and foreign exchange reserves. In order to deal with the external disequilibrium, the government introduced a *de facto* devaluation of the franc by 20 per cent in the latter part of 1957, and imposed severe restrictions on imports. At the same time, in order to curb the domestic demand pressures, the government reduced subsidies and raised indirect taxes and public service charges. These measures resulted in a steep rise in wholesale and retail prices in 1958. As the rise in wage rates lagged behind retail prices, real wage rates and personal consumption declined moderately in that year. Moreover, the volume of public consumption, which had been rising steeply in the preceding two years, levelled off in the course of 1958. The slackening in private and public consumption was instrumental in retarding the growth of business investment and in easing the pressure of domestic demand. These developments, which were accompanied by an improvement in the external balance in 1958, resulted also in a mild decline in industrial production after the first quarter of that year which continued until early 1959.

The devaluation of the franc by over 17 per cent in December 1958 did not, therefore, occur within the context of a deteriorating foreign exchange position and excess pressures of domestic demand, as the 1957 devaluation had done. It was largely intended to improve the country's competitive position as part of an overall programme of import liberalization, participation in the European Economic Community, and establishment of external convertibility in concert with other western European countries. Increases in wage rates were restrained throughout 1959, and were roughly in proportion to the advance in retail prices, which amounted to only 6 per cent.

The dominant factors in the revival of demand in France in 1959 were a rapid rise in the volume of exports and an increase in public consumption. The pronounced growth in the volume of exports was made possible partly by the slackening of domestic demand, noted earlier, and partly by a fall in export prices in terms of foreign currency. Since the volume of imports declined moderately in 1959—accompanying a slowing down in the rate of inventory accumulation—there was a substantial improvement in the foreign balance for the second year in succession.

CHANGES IN VOLUME AND COMPOSITION OF FIXED INVESTMENT

The total volume of fixed investment, which had declined sharply in North America and had generally levelled off in the other industrial countries during the 1957/58 recession, recovered in 1959. The primary factors in this recovery were a rapid growth in residential construction, stimulated by government policies, and a rise of public fixed investment. Apart from residential construction, fixed investment demand in the private sector played a relatively small part in the expansion of economic activity in 1959.

Public investment was stepped up during the recession and the early phase of recovery to offset the slackening in fixed investment in the private business sector. It can be seen from table 4-3 that in most countries for which the relevant data are available investment in the public sector in 1959 rose appreciably faster than private investment. In Canada, France and Norway this helped in sustaining the level of fixed investment demand; in most other industrial countries the rapid expansion in public investment made a substantial contribution to the growth of total fixed investment.

Slow recovery in industrial investment

Business expenditure on fixed investment did not generally play a major part in the revival of aggregate demand in the latter part of 1958 and during most of

1959. There was a moderate rise in business fixed investment outside manufacturing, notably in the commercial and service sectors, in line with the growth of total product. It was the behaviour of investment by manufacturing industry, in equipment and construction of factories, especially the latter, that was largely instrumental in retarding the rate of expansion of business fixed investment as a whole. Except in Denmark, the Federal Republic of Germany, Italy, Japan and the Netherlands, the volume of manufacturing investment either declined in 1959 or rose at a slower pace than the gross national product and total fixed investment.

Table 4-3. Total Gross Fixed Domestic Investment and Investment in Private and Public Sectors, 1957-1959

(At constant prices; percentage change from preceding year)

Country and item	*1957*	*1958*	*1959*
Western Europe			
Denmark			
Total	6	6	15
Private	7	5	17
Public	2	10	8
Finland[a]			
Total	−3	−1	9
Private	−5	−3	10
Public	10	6	6
France[a]			
Total	10	2	—
Private	11	4	−1
Public	3	−13	11
Germany (Federal Republic)			
Total	—	5	10
Private	...	5	9
Public	...	6	21
Netherlands[a]			
Total	3	−9	10
Private	3	−10	8
Public	3	−8	16
Norway			
Total	3	6	−3
Private	3	7	−5
Public	3	4	3
Sweden			
Total	4	8	8
Private	2	11	5
Public	7	4	14
United Kingdom			
Total	4	1	5
Private	5	3	3
Public	4	−3	7
North America			
Canada			
Total	5	−5	−1
Private	4	−7	−3
Public	11	3	11
United States			
Total	—	−7	10
Private	−1	−10	10
Public	9	8	8
Japan[b]			
Total	17	10	15
Private	19	4	12
Public	14	25	21

Source: See table 4-1.

[a] Public investment includes only investment by general government. Other categories of public investment are included in private investment.

[b] Fiscal year beginning 1 April of the year stated.

The failure of fixed investment in manufacturing to expand on a significant scale in 1959 can be attributed largely to the persistence of a substantial volume of idle capacity in many sectors of industry despite the growth of production during 1959. There had been a general tendency for productive capacity in manufacturing to rise at a faster rate than demand and production during the industrial investment boom which ended in 1957. This tendency, which was a major factor in the 1957/58 recession in most countries, resulted in a progressive growth of excess capacity in industry. Since production fell while productive capacity continued to expand during the recession, the volume of idle capacity increased still further. The recovery in demand and production in the second half of 1958 and in 1959 was not sufficient as yet to take up the available slack, except in a few durable goods sectors. In these circumstances incentive for increasing productive capacity was relatively weak; fixed investment in manufacturing rose at a slow pace in 1959, or even declined in some instances.

In the United States there was a steep fall in industrial investment during the 1957/58 recession; and although industrial production began to recover in May 1958, and rose steadily and rapidly thereafter, business fixed investment in manufacturing continued to decline until the end of 1958, though at a slower rate than during the recession. It can be seen from table 4-4 that the rise in this component of demand during 1959 was comparatively moderate; in the last quarter of that year the volume of business expenditure on plant and equipment in the manufacturing sector was still about 25 per cent lower than the pre-recession peak reached in the third quarter of 1957. It was largely because of this sluggishness in manufacturing investment that the total volume of business fixed investment in the last quarter of 1959 was still about 10 per cent lower than the level attained before the recession. Developments in industrial and total business investment in Canada during 1958 and 1959 were generally similar to those in the United States. However, despite a recovery in business purchases of new machinery and equipment after the first quarter of 1959, fixed investment in the manufacturing sector during the year was moderately lower than in 1958.

In western Europe, Denmark, the Federal Republic of Germany, Italy and the Netherlands experienced a significant rise in manufacturing investment in 1959, as shown in table 4-4. In these countries, as noted above, the recovery had begun relatively early and in-

dustrial production had expanded rapidly since the middle of 1958. Apart from the stimulus of rising production, which resulted in a gradual reduction in the volume of idle capacity, certain governmental measures also contributed to the growth of industrial investment in Denmark and the Netherlands. In the former country liberal depreciation regulations were introduced as early as the middle of 1957 and provision was made for tax-free allocations to investment funds and for guarantees of private loans for productive purposes in certain areas. In the Netherlands the investment allowance suspended in 1957 was reintroduced in May 1958.

Table 4-4. Gross National Product, Total Gross Fixed Domestic Investment, Investment in Manufacturing and in Housing, 1957-1959

(At constant prices; percentage change from preceding year)

Country and item	1957	1958	1959
Western Europe[a]			
Gross national product	4	2	4
Gross domestic fixed investment, total	5	2	6
Manufacturing	3	−1	1
Housing	5	−1	6
Denmark			
Gross national product	6	2	5
Gross domestic fixed investment, total	6	6	15
Manufacturing	31	4	14
Housing	19	−6	28
Finland			
Gross national product	1	—	5
Gross domestic fixed investment, total	−3	−1	9
Manufacturing[b]	1	−1	...
Housing	−3	−9	...
France			
Gross national product	6	2	2
Gross domestic fixed investment, total	10	2	—
Manufacturing[c]	11	5	−7
Housing	11	—	1
Germany (Federal Republic)			
Gross national product	5	3	6
Gross domestic fixed investment, total	—	5	10
Manufacturing	−2	—	9
Housing	−2	3	8
Italy			
Gross national product	6	4	7
Gross domestic fixed investment, total	9	—	8
Manufacturing[d]	10	−4	7
Housing	14	—	7
Netherlands			
Gross national product	2	2	5
Gross domestic fixed investment, total	3	−9	10
Manufacturing[d]	−5	−12	11
Housing	13	−4	4
Norway			
Gross national product	2	—	5
Gross domestic fixed investment, total	3	6	−3
Manufacturing[b]	11	−2	−1
Housing	12	−9	−1
Sweden			
Gross national product	4	—	5
Gross domestic fixed investment, total	4	8	8
Manufacturing[b]	−1	17	3
Housing	6	4	4
United Kingdom			
Gross national product	1	1	3.5
Gross domestic fixed investment, total	4	1	5
Manufacturing	5	−5	−9
Housing	−4	−6	13
North America[e]			
Gross national product	2	−2	7
Gross domestic fixed investment, total	1	−7	8
Manufacturing	1	−30	2
Housing	−5	8	18
Canada			
Gross national product	1	1	3
Gross domestic fixed investment, total	5	−5	−1
Manufacturing	2	−28	−4
Housing	−10	22	−5
United States			
Gross national product	2	−2	7
Gross domestic fixed investment, total	—	−7	10
Manufacturing	1	−30	3
Housing	−4	7	20

Source: See table 4-1.

Note: Apparent inconsistencies between movements of gross domestic fixed investment and components for several countries and periods reflect offsetting changes in components not shown.

[a] *See* footnote *b* to table 4-2.

[b] Manufacturing and mining.

[c] Total business fixed investment.

[d] Manufacturing, mining, public utilities and construction industry.

[e] *See* footnote *d* to table 4-2.

In the Federal Republic of Germany and in Italy production had been rising more rapidly from 1953 to 1957 than in most other industrial countries, with the result that there was less excess capacity in these countries than elsewhere. Moreover, the economic set-back in these two countries during the first half of 1958 was relatively mild and of brief duration; consequently, at the start of the recovery in economic activity, the volume of idle equipment was not as great as in other major industrial countries, notably the United Kingdom and the United States. There was nevertheless no significant rise in industrial investment in the Federal Republic of Germany in the course of the first year of the current economic upswing. During this period investment was concentrated largely on rationalization schemes, prompted by shortages of labour, rather than on extension of capacity. As production rose under the stimulus of demand for housing and for exports, the volume of excess capacity was gradually reduced. At the same time there was a substantial recovery in the inflow of orders after the end of 1958 which resulted in a steady increase in the backlog of orders. Industrial investment showed a marked revival after the first quarter of 1959 and expanded rapidly during the remainder of the year.

It can be seen from the table 4-4 that no comparable revival in industrial investment was experienced by other western European countries in 1959. Except in a few sectors of industry, these countries possessed ample productive capacity throughout 1958 and most of 1959 to meet the rise in demand. In Norway, the United Kingdom and probably also in Belgium, fixed investment in manufacturing declined from 1958 to 1959 for the second year in succession. This occurred despite the adoption during 1958 and 1959 of measures to stimulate such investment. In France, where the volume of aggregate demand remained generally unchanged in 1958 and the early part of 1959, business fixed investment slowed down in 1958 and declined in 1959. In Sweden the removal of the investment tax at the end of 1957 and the freeing of blocked investment funds by the Government between May 1958 and September 1959 was followed by a very large rise in manufacturing investment in 1958 and a further, but much more moderate, advance in 1959.

Although the volume of industrial investment rose slowly in most of the industrial countries, the rapid growth in production during 1959 led to a reduction in the volume of excess capacity in the course of the year and to a general improvement in business expectations and investment demand. In the United Kingdom, for example, although the volume of fixed investment in manufacturing for the year 1959 as a whole was lower than in 1958, the trend was moderately upwards after the first quarter of that year. Qualitative information suggests similar developments in some of the other countries in the latter part of 1959.

Residential construction and government policy

The most buoyant component of fixed investment during 1959 was residential construction. This category of investment had borne the brunt of the restrictive policies followed in the latter phase of the recent economic upswing during 1956-1957. It was adversely affected by rising interest rates, tight money policies and also, in some countries, by specific restrictions imposed on public and private housing construction. The slackening in demand in 1957/58 led governments to reverse their restrictive credit policies and in many instances to take direct steps aimed at encouraging residential construction. Most countries progressively reduced rates of interest and eased credit conditions in the course of 1958 and some also early in 1959. In a few countries housing construction by public authorities was also stepped up.

It can be seen from table 4-4 that investment in housing rose appreciably faster than total product and total fixed capital formation in 1959 in Denmark, the United Kingdom and the United States. In the Federal Republic of Germany and Italy the increase in residential construction was roughly in line with the growth of the gross national product and of total fixed investment. In France, where private business investment suffered a set-back, the volume of residential construction was generally maintained. Although in Norway housing investment for the year 1959 as a whole was not higher than in the preceding year, the rise in this component of demand in the latter part of 1958 and the first half of 1959 played an important part in the first stage of the recovery.

As production gathered speed during 1959, some governments became concerned that aggregate demand was growing too rapidly. It was feared that, in the absence of new restrictions, there would be mounting inflationary pressures leading to an acceleration in the rate of wage and price increases. Some countries were also concerned over the adverse influence of a rapid rise in domestic demand on their external balance, both on current and capital account.

A few governments introduced fiscal measures designed to increase the income of the public sector in relation to its expenditure in 1960. Most countries raised interest rates in the course of 1959 and early 1960, and in some instances governments also embarked on a policy of tightening credit conditions. Experience, as for example in the latter phase of the preceding economic upswing, suggests that general monetary restrictions tend to produce their greatest initial impact upon residential construction.

In the United States the easy credit policy followed during the recession was gradually reversed beginning as early as August 1958, when the index of industrial production was still about 7 per cent below its pre-recession peak. As recovery progressed the degree of restraint exercised on credit markets was increased. Discount rates of the Federal Reserve banks, which had been raised in September and November 1958 from 1.75 to 2.5 per cent, were raised further in three successive stages, in March, May and September, 1959 to 4 per cent and open market operations were used to influence member banks' reserves. These measures reflected the concern of the monetary authorities regarding the possibility of inflationary price increases and the deficit in the balance of payments.

The effect of the monetary restrictions was to exert considerable pressure on the financing of construction. A number of adjustments were made in the federal housing and home financing programmes so as to facilitate the flow of private funds into home financing and sustain an adequate level of home building.[4] Despite these measures and despite a significant rise in assistance under federal programmes that supply funds directly to the home mortgage market, the volume of residential construction, which had risen rapidly for a year, declined after the middle of 1959. This trend continued into the early months of 1960, when the Federal Reserve authorities adopted a more relaxed attitude towards credit expansion.

[4] For details of these measures, see *Economic Report of the President* (Washington, D.C., January 1960), pages 47 to 49.

In Canada too, interest rates were allowed to rise after the middle of 1958 and a tight money policy was followed throughout 1959. The upward trend in housing construction which began early in 1957 was reversed in the early months of 1959 following a reduction in government aid to housing and in the availability of mortgage funds. Despite some increase in housing construction in the last quarter of 1959, which was associated with the absorption of new mortgage money made available by the government, residential construction for the year as a whole was moderately lower than in 1958.

By contrast with North America, the industrial countries of western Europe and Japan continued the easy money policy adopted during the 1957/58 economic set-back throughout 1958 and the first part of 1959. Discount rates were actually lowered early in 1959 in Belgium, the Federal Republic of Germany, Finland, France, Japan and the Netherlands (see table 4-5).[5] Moreover, in France, following a slackening in demand for consumer durables, restrictions on consumer credit were also relaxed later in that year.

As the economic upswing gathered momentum in the second half of 1959, however, certain countries of western Europe also began to show some concern over the possibility of inflationary demand pressures. The first major country in which this occurred was the Federal Republic of Germany where, as mentioned earlier, there was a significant recovery in industrial investment after the first quarter of 1959 and a rise in the backlog of orders from the beginning of that year. These developments, together with shortages of labour in certain sectors of the economy, were primarily responsible for the decision of the authorities to embark on a restrictive credit policy in the second half of 1959. The Deutsche Bundesbank raised its discount rate from 2.75 to 3 per cent in September. In the following month the discount rate was raised further to 4 per cent and at the same time the minimum reserve requirements of commercial banks were increased by 10 per cent from the beginning of November. In December it was announced that as from the beginning of 1960 the minimum reserve requirements would be raised by a further 10 per cent. Additional restrictions on credit were imposed in March when the government also proposed to restrain fixed investment by reducing depreciation allowances.

Although these measures were taken primarily for the purpose of reducing domestic demand, they also had important international repercussions, especially in view of the progressive liberalization of capital transfers in western Europe. The raising of interest rates had the effect of attracting funds from abroad, thereby intensifying the problem of chronic surplus in the balance of payments of the Federal Republic of Germany. Conscious of this problem, the authorities took steps to discourage the inflow of foreign capital by raising the minimum reserve requirements against foreign liabilities to the maximum permissible level as from the be-

[5] Changes in the discount rates of central banks are shown in table 4-5 to give a general indication of easing or tightening of credit conditions. Differences in the absolute levels of the discount rates between the countries do not necessarily reflect corresponding differences in the degree of credit restraint. Nor do they imply equivalent differences in short-term interest rates.

Table 4-5. Rates of Discount of Central Banks
(Percentage per annum)

Country	End of June 1958	Change during 1958 (second half)	Change during 1959 (first half)	Change during 1959 (second half)	Change during 1960 (January-March)	End of March 1960
Western Europe						
Belgium	4.00	−0.50	−0.25	0.75	—	4.00
Denmark	5.00	−0.50	—	0.50	0.50	5.50
Finland	6.50	—	−0.50	—	—	6.00
France	5.00	−0.50	−0.50	—	—	4.00
Germany (Federal Republic)	3.00	—	−0.25	1.25	—	4.00
Italy	3.50	—	—	—	—	3.50
Netherlands	3.50	−0.50	−0.25	0.75	—	3.50
Norway	3.50	—	—	—	—	3.50
Sweden	4.50	—	—	—	0.50	5.00
United Kingdom	5.00	−1.00	—	—	1.00	5.00
Japan	7.67	−0.37	−0.37	0.37	—	7.30
North America						
Canada[a]	1.97	1.77	1.62	0.01	−2.12	3.25
United States (New York)	1.75	0.75	1.00	0.50	—	4.00

Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics* and International Monetary Fund, *International Financial Statistics.*

[a] Based on the rate prevailing in the last week of the period stated.

ginning of 1960. In the meantime, however, the United Kingdom lost about $100 million in gold and foreign exchange reserves in November and December 1959, over and above the losses that can be accounted for by special payments made during those two months. Since there were no developments in current transactions which could explain this change in the United Kingdom's balance of payments, this loss has generally been attributed mainly to short-term capital outflow resulting from rising short-term interest rates in North America and certain western European countries.

It was partly to discourage the outflow of short-term capital and partly as a general caution against too rapid a rate of growth in demand that a number of other western European countries followed the example of the Federal Republic of Germany in raising their interest rates towards the end of 1959 and early in 1960. In November 1959 the Netherlands Bank lifted its discount rate from 2.75 to 3.5 per cent, and the Belgian National Bank raised its official discount rate from 3.25 to 4 per cent in December. In Sweden the central bank rate was raised from 4.5 to 5 per cent in the middle of January 1960, and the minimum liquidity ratios of the commercial banks, which had already been increased in July 1959, were raised further by 5 per cent. About a week later, the United Kingdom raised the bank rate from 4 to 5 per cent, but no other steps were taken to tighten credit until the end of April, when certain restrictions were reintroduced on hire-purchase transactions and the London clearing banks were asked to make a special deposit with the Bank of England, equivalent to one per cent of their total deposits, by the middle of June. In Denmark, where the government had taken a number of measures to restrain the expansion of construction activity earlier in the year, the National Bank discount rate was raised from 4.5 to 5 per cent in September 1959; a further increase to 5.5 per cent took place in January 1960. In Japan also the discount rate was raised in December 1959 and the Bank of Japan resumed sales of securities from its portfolio to help slow the increase in money supply.

THE ADVANCE IN PERSONAL CONSUMPTION

Personal incomes and consumption, which had risen more slowly during the 1957/58 recession or had even declined, recovered in 1959. The expansion of aggregate demand and production resulted in a substantial recovery in the rate of growth of real personal disposable income. As shown later, the volume of civilian employment, which had declined or stagnated during the recession, rose moderately in 1959. There was also in most countries a pronounced increase in hours worked per week in industry and in a few instances an acceleration in the rate of advance in hourly earnings. In Belgium, where aggregate demand rose only moderately in 1959, personal consumption was maintained at the level of the preceding year.

It can be seen from table 4-6 that, although the rate of growth of personal consumption was appreciably higher in 1959 than in 1958, there was a tendency for it to lag behind the rate of expansion of the national product in all countries with the exception of Canada,

Table 4-6. Gross National Product and Personal Consumption, 1957-1959

(At constant prices; percentage change from preceding year)

Country and year	*Gross national product*	*Personal consumption*
Western Europe[a]		
1957	4.3	3.8
1958	1.9	2.0
1959	4.0	3.5
Denmark		
1957	5.8	3.3
1958	2.2	3.4
1959	4.7	7.6
France		
1957	6.2	5.3
1958	2.1	−0.2
1959	1.8	0.8
Germany (Federal Republic)		
1957	5.4	6.0
1958	2.8	4.6
1959	5.7	5.0
Italy		
1957	6.3	4.1
1958	4.2	3.1
1959	6.6	4.8
Netherlands		
1957	2.1	−0.7
1958	1.9	0.7
1959	4.7	3.3
Norway		
1957	2.2	1.9
1958	0.3	−0.3
1959	5.2	3.8
Sweden		
1957	3.7	2.1
1958	0.3	2.5
1959	4.5	3.3
United Kingdom		
1957	1.4	2.1
1958	0.5	2.3
1959	3.5	3.8
North America[b]		
1957	1.8	2.5
1958	−1.8	1.0
1959	6.6	5.2
Canada		
1957	0.7	3.0
1958	0.8	2.7
1959	3.5	4.5
United States		
1957	1.9	2.5
1958	−2.0	0.8
1959	6.8	5.2

Source: See table 4-1.
[a] See footnote *b* to table 4-2.
[b] See footnote *d* to table 4-2.

Denmark and probably the United Kingdom.[6] In Canada there was a fall in the proportion of personal disposable income allocated to savings, which was associated with a rise in the volume of consumer credit. A pronounced improvement in the terms of trade in Denmark contributed to a steep rise in real personal incomes and consumption. In the United Kingdom, despite a rapid rise in personal disposable income explained below, private consumption appears to have increased at about the same rate as, or only moderately faster than, the gross national product.

The slower rise in personal consumption than in total output in most countries can be explained partly by a change in the distribution of income between wages and profits during 1958 and 1959. The share of profits in total income, which had generally declined during the 1957/58 recession, recovered in 1959. Moreover, dividend payments were maintained almost at the pre-recession level in 1958 and rose only moderately during 1959 so that retained profits fell sharply in 1958 and rose equally sharply in 1959. Just as the maintenance of wage incomes and dividend disbursements in the face of declining profits helped to support the level of consumption in 1958, so the shift back to profits in 1959 tended to hold down personal incomes and consumption in relation to the national product.

A similar effect on personal income and consumption during the two years resulted from the operation of the "built-in stabilizers"—changes in unemployment compensation payments and in personal tax obligations in relation to personal incomes. In the United Kingdom, however, a reduction of personal tax rates in the April 1959 budget more than offset the adverse influence of these factors on the rise in personal disposable income, which therefore increased faster than the national product in 1959.

Apart from these considerations, a number of special factors also operated in some countries in the direction of restraining the growth of personal disposable income and of consumption in relation to total product. In the Federal Republic of Germany a reform in old-age pensions and relief payments in 1957 had produced a very sharp increase in these transfer payments in 1957 and 1958. During 1959 there was only a small rise in this component of personal income. In the United States an appreciable increase in government outlays for the support of agricultural prices, owing to the bumper crop of 1958, and payments made to farmers for participation in the acreage reserve, helped to raise personal incomes in relation to gross national product in 1958. These factors did not operate in 1959, when agricultural production was maintained at the level of the preceding year and payments under the acreage reserve scheme were terminated.

Although total personal consumption rose more slowly than the national product, consumer expenditure on clothing and on durables increased appreciably faster in most countries. The marked rise in these two components of private consumption played a significant part in the revival of demand in the latter part of 1958 and in its rapid expansion in 1959. Consumer expenditure on clothing, which had declined in most countries in 1958, rose appreciably during 1959, as shown in table 4-7.

Even more significant as an expansive factor was the

[6] See footnote *3*.

Table 4-7. Personal Consumption and its Major Components, 1957-1959
(At constant prices; percentage change from preceding year)

Country	*Total consumption*			*Food*[a]			*Clothing*			*Durables*[b]		
	1957	*1958*	*1959*	*1957*	*1958*	*1959*	*1957*	*1958*	*1959*	*1957*	*1958*	*1959*
Western Europe[c]	4	2	3	...	...	...	...	...	...	9	6	9
Belgium	3	−2	—	2	1	...	9	−10	...	8	−1	...
Denmark	3	3	8	4	4	4	2	—	8	7	2	16
Finland	−2	−3	6	−2	—	3	−10	−14	8	−6	−8	13
France	5	—	1	3	—	1	8	−3	−1	14	—	1
Germany (Federal Republic)	6	5	5	6	4	4	5	−2	3	5	7	6
Italy	4	3	5	3	3	5	3	—	4	8	11	9
Netherlands	−1	1	3	—	3	1	−6	−1	4	11	—	9
Norway	2	—	4	−1	−3	3	3	−1	8	1	−3	1
Sweden	2	2	3	−1	1	1	2	2	—	8	1	8
United Kingdom	2	2	4	2	1	2	2	−1	4	9	14	19
North America[d]	2	1	5	...	...	...	...	...	...	1	−7	12
Canada	3	3	5	4	2	6	3	2	5	−3	1	5
United States	2	1	5	1	−1	5	3	3	5	1	−7	13

Source: See table 4-1.

[a] Including also beverages and tobacco, except in Denmark, Finland, France, Norway and the United States.

[b] For Belgium, Finland, the Netherlands and Norway, only household durable goods.

[c] See footnote *b* to table 4-2.

[d] See footnote *d* to table 4-2.

upsurge in consumption of durables. It can be seen from tables 4-7 and 4-8 that except in France and Norway purchases of durables, especially of passenger cars, rose much faster than total consumption and the national product in 1959. In France, where demand did not begin to move strongly upward until the latter part of 1959, total consumption remained almost stagnant and purchases of motor-cars declined in that year despite the easing of restrictions on hire-purchase. The rapid growth in consumption of durables in Denmark, Finland and the Netherlands, which rely on imports for a large part of their supplies, was partly responsible for the deterioration of their real foreign balance, which was particularly marked in Denmark and in Finland.

Apart from the stimulus of rising personal incomes and favourable income expectations, a number of special factors tended to increase the volume of expenditure on durables in some countries. In the United States part of the increase in car sales in 1959 may represent the delayed effects of the exceptional bunching of sales in 1955 which was followed by below-normal sales in subsequent years. The recovery in durable consumption in that country and in Canada in 1959 was accompanied by a pronounced expansion of consumer credit and by a fall in the proportion of personal disposable income devoted to savings. In the United Kingdom the rapid increase in durable consumption in 1958 and 1959 was initially stimulated by a progressive relaxation of previously imposed hire-purchase restrictions, which were ultimately abolished in October 1958. The outstanding volume of hire-purchase and other instalment credit, which had risen by 25 per cent in 1958, increased further by over 50 per cent in 1959. Reductions in purchase tax rates on many durable goods in the 1959 budget provided a further significant stimulus to consumption of durables.

Table 4-8. The Volume of Consumer Expenditure on Motor-Cars,[a] 1957-1959

(Percentage change from preceding year)

Country	*1957*	*1958*	*1959*
Canada	−6	−1	12
Denmark	14	5	51
Finland	−6	−20	47
France	6	11	−4
Germany (Federal Republic)	8	31	12
Italy	−3	7	15
Japan[b]	36	8	16
Netherlands	...	−13	43
Norway	50	10	—
Sweden	18	−3	10
United Kingdom	6	30	16
United States	—	−22	30

Source: See table 4-1.
[a] Generally based on sales or registration of new passenger cars.
[b] Fiscal year beginning 1 April of the year stated.

Developments in employment, wages and prices

The expansion of output in 1959 led to an increase in demand for labour. Total civilian employment rose fairly steadily in most countries in the course of the year. The growth in the number of unfilled vacancies confirms the picture of increased demand for labour. The labour market situation was, however, far from uniform. There were pronounced inter-country differences reflecting partly the stage of recovery reached in each case.

Particularly significant was the rise in employment in Canada, Denmark, the Federal Republic of Germany, Italy, Japan and the United States which, as mentioned earlier, experienced a rapid rate of growth in output in 1959. On the other hand, in Belgium and France, where the economic upturn lagged behind that in other industrial countries, the level of employment in 1959 was lower than in the preceding year (see table 4-9).

As usual in the early stages of an economic upswing, there was a tendency in 1959 for employment to rise more slowly than production. This can be partly explained by a recovery in the number of hours worked per man, following a decline during the 1957/58 recession. A major reason for the relatively faster growth of production, however, was a substantial rise in output per man-hour which resulted from a better utilization of manpower and equipment, and from technological innovations.

The increase in employment resulted in a gradual reduction in the volume of unemployment and in most countries the ratio of unemployment to the civilian labour force in 1959 was lower than in the preceding year. Nevertheless the average ratio of unemployment was higher in 1959 than it had been two years earlier in all countries except Denmark, the Federal Republic of Germany and Italy. In the Federal Republic of Germany unemployment declined to the lowest level in the post-war period. The North American countries also experienced a fall in unemployment in 1959, despite the fact that the labour market in the United States was seriously affected by the steel strike. The ratio of unemployment to the civilian labour force, seasonally adjusted, which by May had fallen to 4.9 per cent, moved upwards in the following months to reach a peak of 6 per cent by October. For the year as a whole, however, the unemployment ratio was lower than in 1958 but still well above the 1957 level. Despite the reduction of unemployment in Italy in 1959, a large volume of unemployment and under-employment persisted. In some western European countries there were reports of labour shortages in particular localities or industries. The growth of demand

Table 4-9. Changes in Employment and Unemployment, 1957-1959

Country and year	Total civilian employment (percentage change from preceding year)	Employment in manufacturing (percentage change from preceding year)	Unemployment[a] (percentage)
Belgium			
1957	2	1	3.8
1958	−1	−4	5.2
1959	−2	−2	5.9
Canada			
1957	3	—	4.3
1958	—	−5	6.6
1959	3	1	5.6
Denmark			
1957	—	2	10.2
1958	2	—	9.6
1959	5	5	6.1
Finland			
1957	—	−3	0.3
1958	−1	−6	0.5
1959	2	3	0.4
France			
1957	2	3	0.8
1958	1	1	0.9
1959	−1	−2	1.7
Germany (Federal Republic)			
1957	3	3	3.4
1958	1	1	3.5
1959	3	—	2.4
Italy			
1957	2	2	9.0
1958	1	−2	9.0
1959	2	...	8.7
Japan			
1957	...	12	3.1
1958	...	2	3.9
1959	...	8	3.4
Netherlands			
1957	1	—	1.3
1958	—	−6	2.4
1959	1	1	1.9
Norway			
1957	1	—	1.4
1958	−1	−3	2.3
1959	—	—	2.2
Sweden			
1957	—	—	1.9
1958	—	−2	2.5
1959	1	−1	2.0
United Kingdom			
1957	—	—	1.6
1958	−1	−2	2.2
1959	—	—	2.2
United States			
1957	—	−2	4.3
1958	−2	−10	6.8
1959	3	5	5.5

Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* and national sources.

[a] The percentage of unemployment relates generally to the ratio of registered applicants for work or surveyed unemployed to the total civilian labour force or to the civilian labour force available for hire. Unemployment percentages are not, however, comparable between countries owing to differences in definition.

and of output did not, however, bring about a general tightness in the labour market.

The increase in demand for labour did not result in an acceleration in the rate of growth of wages and prices in 1959. It can be seen from table 4-11 below that except in Denmark and Norway hourly earnings in manufacturing rose at about the same rate as—or slower than—in the preceding year. In Denmark and Norway a reduction in standard hours worked per week was partly responsible for a faster rise in hourly earnings than in 1958. On the other hand there was a pronounced slackening in the rate of increase in wages in Belgium and France where recovery in demand and employment began later. In addition, in France wage claims and awards were moderated as a result of an appreciable slowing down in the rate of increase in consumer prices during 1959. In the Netherlands, likewise, wages rose more slowly in 1959 than in 1958, when compensatory allowances had been paid on account of a 25 per cent increase in rents introduced in August 1957.[7]

Wholesale prices of manufactured goods remained generally stable, and the cost of living index was on the average only about 1 to 2 per cent above the level of 1958 (see table 4-10). The rise in the cost of living index in most countries was concentrated in the second half of 1959. In France, however, the devaluation of the franc and the elimination of certain subsidies at the end of 1958 was followed by a relatively rapid rise in wholesale and retail prices in the early months of 1959. Prices increased more moderately in the second half of the year.

An examination of the major components of the cost of living index reveals that prices of consumer goods other than food remained generally stable in most countries and in some instances even declined moderately in 1959 while prices of services rose throughout the year. The latter represented the continuation of a long-term trend, resulting largely from a persistent lag in growth of productivity behind wage increases in most of the service sectors of the economy. In some countries rent increases authorized by the government also contributed to a rise in the cost of housing.

The advance in the cost of living index during the second half of 1959 was due partly to a change in food prices. In western Europe, where food import prices continued to fall, retail food prices remained generally stable in the first half of 1959. Prices rose, however, in the second half of the year, largely owing to shortages of dairy products and of certain vegetables caused by a summer drought. In North America a continued decline in food prices in the early months of the year, resulting from greater supplies of meat and some dairy products, offset increases in the prices of services and small advances in the prices of non-durable goods other than

[7] The change in wage policy in August 1959, whereby the possibility of inter-industry differentiation in wage increases was introduced, had little influence on the average wage level for 1959.

Table 4-10. Cost of Living Indices, 1957-1959
(Percentage change from preceding year)

Country	All items			Food		
	1957	1958	1959	1957	1958	1959
Belgium	3	1	2	3	1	1
Canada	4	2	2	4	3	—
Denmark	3	1	3	−5	2	4
Finland	11	7	2	13	5	2
France	3	15	6	1	19	2
Germany (Federal Republic)	1	4	2	3	3	2
Italy	1	3	—	—	4	−3
Japan	3	−1	2	4	−2	1
Netherlands	7	2	2	5	—	2
Norway	3	5	2	—	8	2
Sweden	4	5	1	2	3	2
United Kingdom	4	3	1	3	2	1
United States	3	3	1	3	5	−2

Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics.*

food. Food prices stopped declining after about the middle of the year, thereby allowing the cost of living index to begin rising slowly.

A major factor in maintaining the relative stability of retail prices in 1959 was the behaviour of prices of manufactured consumer goods other than food. It can be seen from table 4-11 that wholesale prices of manufactured goods remained stable in most of the industrial countries. This was partly accounted for by the fact that import prices of raw materials continued to decline in the early part of the year and were on the average lower in 1959 than in 1958. The pronounced drop in the prices of raw materials in 1958 and the early months of 1959 was in the process of working its way through the economy during most of 1959.

A more important element, however, in the stability of wholesale and retail prices of manufactured goods was the behaviour of labour cost per unit of output. As mentioned above, the expansion in demand and production after the middle of 1958 resulted in a rapid growth in productivity in manufacturing. As the increase in hourly earnings in manufacturing in 1959 was relatively moderate, there was a general tendency for labour cost per unit of output to decline or to rise at a slower pace than in the preceding year, as shown in table 4-11.[8]

In some countries measures taken by governments also contributed to the relative stability of prices in 1959. In the Federal Republic of Germany and in France

[8] The data shown in table 4-11 in most countries cover wage cost per unit of output for production workers only. The conclusion drawn in the text would be reinforced if account were taken of salaried workers. The number of such workers does not fall in proportion to production workers during a recession and increases more slowly during a period of economic expansion. In the United States, for example, the index of total wage and salary disbursements per unit of manufacturing output declined by some 3 per cent from 1958 to 1959, compared with a fall of only one per cent in wage cost per unit of manufacturing output shown in table 4-11.

Table 4-11. Cost Components and Wholesale Prices of Manufactured Goods, 1957-1959
(Percentage change from preceding year)

Country and year	Output per man-hour	Hourly earnings	Wage cost per unit of output	Import prices of raw materials	Wholesale prices of manufactured goods
Belgium					
1957	4	10	5	−2	4
1958	5	5	—	−11	−5
1959	7	2	−5	−2	−1
Canada					
1957	—	6	6	...	3
1958	3	3	—	...	—
1959	5	4	−1	...	1
Denmark					
1957	5	6	1	...	2
1958	3	4	—	−12	−2
1959	3	7	4	−6	−1

(Continued on following page)

Table 4-11. Cost Components and Wholesale Prices of Manufactured Goods, 1957-1959 (*continued*)

(Percentage change from preceding year)

Country and year	Output per man-hour	Hourly earnings	Wage cost per unit of output	Import prices of raw materials	Wholesale prices of manufactured goods
Finland					
1957	7	5	−2	15	12
1958	3	5	2	14	10
1959	2	5	3	−5	—
France					
1957	4	8[a]	4	6	5
1958	5	12[a]	6	−2	7
1959	8	6[a]	−2	16	7
Germany (Federal Republic)					
1957	9	9	—	4	2
1958	6	7	1	−11	1
1959	7	6	−1	−7	−1
Italy					
1957	5	5	−1	5	2
1958	6	4	−1	−16	−3
1959	...	...	...	−6	−2
Japan					
1957	...	...	...	6	4
1958	...	...	...	−13	−7
1959	...	...	...	−5	1
Netherlands					
1957	2	14	12	5	3
1958	3	8	5	−7	−2
1959	8	3	−4	−4	—
Norway					
1957	3	6	3	...	4
1958	—	4	5	...	−3
1959	7	9	1	—	—
Sweden					
1957	4	6	2	3	4
1958	3	5	2	−7	—
1959	6	5	−1	−6	—
United Kingdom					
1957	1	5	4	4	3
1958	1	4	3	−13	1
1959	5	4	−1	−3	—
United States					
1957	4	5	1	—	3
1958	3	3	−1	−7	1
1959	6	4	−1	−5	1

Source: United Nations Division of General Economic Research and Policies; Organisation for European Economic Co-operation, *General Statistical Bulletin;* and national sources.

[a] Hourly wage rates.

imports of food products were liberalized and import duties on many food articles were reduced or temporarily suspended. In France the government also fixed maximum prices and profit margins for many food items. In Norway, where about two-thirds of private income is tied to the cost of living index, subsidies on cheese and milk were increased. In the United Kingdom a reduction of purchase tax rates on many consumer durable items in the April 1959 budget contributed to a decline in the price of these goods. In addition to specific measures aimed at reducing prices for certain products, some governments have undertaken consultations with the representatives of various industries in order to encourage voluntary price reductions. Most governments have also made general appeals for restraint in wage claims.

The recovery of foreign trade

Recovery in the industrial countries in 1958/59 was accompanied by a revival in foreign trade. Despite intercountry differences in the timing and pace of the upturn, as shown above, no serious disturbances in the balance of payments occurred apart from the movements of short-term capital already discussed.

By the fourth quarter of 1958 the volume of imports of the industrial countries as a whole was some 5 per cent higher than in the fourth quarter of 1957, and the full year 1959 showed a 13 per cent advance in imports over 1958, as shown in table 4-12. This represented a considerably more vigorous expansion than that which occurred in total output or even in industrial production alone.

Table 4-12. Quantum and Unit Value of Exports and Imports, and Terms of Trade, 1956-1959
(Indices, 1956 = 100)

Item	*1957*	*1958*	*1959*
Quantum			
Exports:			
All industrial countries[a] [b]	106	103	113
Western Europe	106	108	121
North America[b]	106	94	94
Imports:			
All industrial countries[a]	105	104	117
Western Europe	105	106	117
North America	100	101	117
Unit Value			
Exports:			
All industrial countries[a]	103	101	99
Western Europe	103	101	98
North America	104	103	104
Imports:			
All industrial countries[a]	103	97	94
Western Europe	103	96	93
North America	102	98	97
Terms of trade			
All industrial countries[a]	100	104	105
Western Europe	100	105	105
North America	102	105	107

Source: United Nations Division of General Economic Research and Policies.
[a] Western Europe, North America and Japan.
[b] Excluding United States exports of military goods.

The rate of growth of imports was particularly high in North America, where the volume of imports in 1959 topped that of 1958 by as much as 16 per cent, compared with a corresponding rate of advance of 10 per cent in western Europe. This reflected the deeper recession in North America than in western Europe, and the stronger upsurge in output that followed it. It should also be noted that North American imports had levelled off well before the onset of the recession, and inventories of some imported goods may therefore have been run down quite far by mid-1958, when the recovery began. In addition there was an exceptional increase in United States imports of steel in anticipation of and during the strike in its steel industry.

Rates of increase in imports varied considerably as between individual countries, partly reflecting inter-country differences in the pattern of recovery (table 4-13). Among the highest rates of import expansion were those recorded by the Federal Republic of Germany and Japan, where the revival in activity was prompt and vigorous, as in North America, and in Denmark, where the sharp increase in imports was associated with rising consumption of durables and with requirements for agriculture and construction.

In Norway, Sweden and the United Kingdom, where the revival of activity began later than in the countries just mentioned, imports rose more moderately. Inventory liquidation in Sweden moderated the expansion of imports, while in Norway a decline in the imports of ships had the same effect. In Italy imports lagged behind the vigorous rise in industrial activity, this being chiefly

Table 4-13. Quantum of Exports and Imports by Country, 1956-1959
(Indices, 1956 = 100)

Country and item	*1957*	*1958*	*1959*
Belgium-Luxembourg			
Exports	98	100	113
Imports	102	101	113
Denmark			
Exports	107	117	122[a]
Imports	102	110	127[a]
France			
Exports	110	115	137
Imports	106	105	103
Germany (Federal Republic)			
Exports	114	118	135
Imports	112	120	144
Italy			
Exports	105	110	136
Imports	109	102	111
Netherlands			
Exports	105	115	129
Imports	103	99	110
Norway			
Exports	102	102	113
Imports	102	102	112
Sweden			
Exports	109	109	117
Imports	107	109	115
United Kingdom			
Exports	102	97	102
Imports	104	104	111
Canada			
Exports	102	102	105
Imports	96	88	98
United States			
Exports[b]	109	92	91
Imports	102	106	127
Japan			
Exports	112	115	137
Imports	125	103	130

Source: Organisation for European Economic Co-operation, *General Statistical Bulletin*, No. 1, 1960; United States Department of Commerce, *Total Export and Import Trade of the United States* (Washington, D. C.); Statistical Office of the United Nations.
[a] January to September.
[b] Excluding military goods.

due to an excellent harvest in 1958 which reduced the need for food imports. Slackness of demand in France, together with the currency devaluation of December 1958, held French imports below their 1958 volume until the closing months of 1959.

The expansion in imports was led by manufactures. Although the quantum of imports of primary products also recovered, the advance was smaller than the rise in manufactures. Imports of foodstuffs advanced moderately, and imports of beverage crops also increased in quantity. Meat, dairy products and coarse grains played an important part in the expansion of trade in foodstuffs. A meat shortage which persisted in the United States into the early months of 1959 and drought in northwestern Europe combined with growing consumption to stimulate imports. Several European countries, notably France and Italy, reduced their total imports of food in consequence of good harvests, and in the case of France also as a result of a levelling off of consumption.

In the six countries for which indices of the volume of imports of raw materials are available, as shown in table 4-14, it seems that such imports rose in the first nine months of 1959 in all instances except that of France, where industrial production was also lower in this period than in the corresponding period of 1958. In the Federal Republic of Germany, the Netherlands and the United States, imports of raw materials rose approximately in line with—or only slightly more than —manufacturing activity in 1959. Since the total volume of imports advanced much faster than manufacturing in all these cases, it is evident that the expansion was concentrated in manufactures. In the United Kingdom and Japan imports of raw materials rose much faster than the output of manufacturing—just as the decline in such imports had been greater than in manufacturing activity from 1957 to 1958.

The rapid growth of the import trade in manufactures in the industrial countries is due to several factors. In the United States it appears to reflect in part a growing interest of consumers in manufactures of foreign make, especially as income rises. Trends in the growth of United States imports are discussed further below. Imports in 1959 were also affected considerably by the steel strike, which led to higher imports of steel and steel-using products.

The upsurge in imports of manufactures by western European countries is due in part to the progressive liberalization of quantitative and tariff obstacles to such trade. But it is also associated with the shift in the pattern of consumption towards durables discussed above. Since the production of consumer durables, especially motor vehicles, is concentrated in a few countries, rising consumption elsewhere is bound to lead at once to higher imports. Moreover, in 1959 imports of the producing countries themselves rose significantly because of the easing of restrictions on trade in these goods. Even apart from trade in the finished goods, however, the shift to highly fabricated durable consumer products has no

Table 4-14. Manufacturing Production and Imports of Raw Materials, 1956-1959
(Indices, 1956=100)

Country and item	1957	1958	1958 (January–September)	1959 (January–September)
France				
Manufacturing production	114	120	119	117
Imports of raw materials	108	100	102	95
Germany (Federal Republic)				
Manufacturing production	105	110	107	114
Imports of raw materials	121	111	110	119[a]
Netherlands				
Manufacturing production	102	102	100	108
Imports of raw materials	104	101	98	110
United Kingdom				
Manufacturing production	102	101	100	104
Imports of raw materials[b]	102	96	94	103
United States				
Manufacturing production	101	95	92	106
Imports:				
Crude materials and semi-manufactures	99	96	93	110
Crude materials	100	94	92	103
Japan				
Manufacturing production	118	119	117	144
Imports of crude materials and fuels	118	98	97	129

Source: United Nations Division of General Economic Research and Policies.
[a] Including the Saar.
[b] Weighted average of basic materials and fuels.

doubt created all kinds of new opportunities for trade in a wide variety of semi-manufactures, especially those of metal.

There was also an increase in imports of textiles and footwear accompanying the recovery of non-durable consumption and the liberalization of trade in these products in western Europe. On the other hand, imports of capital goods increased rather moderately, in general, as might have been expected in the light of the slow pace of recovery in investment in plant and equipment discussed earlier.

Changes in the commodity composition of imports were of considerable importance in determining the nature of shifts in their geographic distribution. Since it was manufactures that predominated in the rise in import demand, imports of industrial countries from one another generally increased more rapidly then their imports from primary producing countries.

The same shift in the geographic distribution of imports had occurred during the upward phase of the previous expansion, as may be seen from the following data (in billions of dollars):

Changes in imports of industrial countries[a]

	From 1954 to 1955	*From 1958 to 1959*
All imports	4.6	4.0
Imports from		
Industrial countries	3.6	3.0
Primary producing countries	1.0	1.0

Source: United Nations Division of General Economic Research and Policies.

[a] Data relate to first three quarters of each year.

In both cases the reason for the shift was essentially the same—namely, that the most dynamic elements in the expansion of activity were concentrated generally in sectors of the economy which have a relatively low coefficient of import demand from the primary producing countries.

Trade between Canada and the United States and among the countries of western Europe advanced rapidly, as did the imports of North America from western Europe. The one channel of trade among industrial countries that did not reflect the general growth of exchanges of manufactures was that going from North America to western Europe. The failure of western Europe's imports from North America to recover appreciably until late in 1959 was due partly to the importance of foodstuffs and industrial materials in this trade, partly to the actual and anticipated effects of the United States steel strike, and partly to factors affecting demand for United States manufactures which will be analysed below.

Imports of industrial countries from primary producing countries rose relatively slowly up to the middle of 1959, but the pace of expansion quickened to some extent in the latter months of the year as the industrial recovery gathered momentum. There was some firming in the currently quoted prices of individual commodities, notably of rubber, wool and tin, and to a lesser extent of other non-ferrous metals. But this did not bring about any general upturn in import prices. On the contrary, average import prices of industrial countries remained significantly below the 1958 level throughout 1959. Import prices were thus even weaker in 1959 than they had been in 1955, as may be seen from the data below (indices for first nine months of each year, corresponding period of previous year = 100):

	1955	*1959*
Import unit value		
Industrial countries	101	97
North America	99	98
Western Europe	102	96
Export unit value		
Industrial countries	101	98
North America	100	101
Western Europe	101	97
Terms of trade		
Industrial countries	100	101
North America	101	103
Western Europe	99	101

Source: United Nations Division of General Economic Research and Policies.

The main reason for the slow response of import prices to the expansion of economic activity in the industrial countries in 1959 is to be found partly in the changing structure of imports discussed above and partly in the easy supply position resulting from greatly expanded productive capacity in primary products during the past several years. Average export prices of the industrial countries as a whole were also slightly lower in the first nine months of 1959 than in the corresponding period of 1958, but the terms of trade improved slightly between the two years. This is a reversal of the cyclical pattern of the terms of trade which has been observed on other occasions in the past, when import prices of industrial countries have tended to rise significantly during the upward phase of the cycle owing to short-term inelasticity of suppply in the face of growing demand.

Some deterioration in the terms of trade of industrial countries seems to have occurred in the closing months of 1959 as import unit values began to reflect higher commodity prices.

While emphasis has been placed above on cyclical factors affecting the share of primary producing countries in the imports of industrial countries, it should be noted that longer-term factors have also been at work to reduce that share. During the past decade, in fact, the composition of output in the industrial countries has shifted towards durable producer goods, durable consumer goods and services—all of which have a low average coefficient of imports from primary producing countries. This, together with the weakness of commodity prices, has caused the share of these countries

in total imports of the industrial countries to decline steadily, as may be seen from the following percentages:

Share of primary producing countries in total imports of industrial countries

1950	43.0
1955	36.9
1959 (first half)	34.2

Source: United Nations Division of General Economic Research and Policies.

Developments in the exports of industrial countries follow to some extent from what has already been said about the rate of growth of imports and their geographic distribution. Exports of these countries to one another increased by over 10 per cent in volume from the first nine months of 1958 to the corresponding period of 1959, all major components of this trade participating in this advance with the very important exception noted above—North American exports to western Europe. As shown in table 4-15, the volume of exports from western Europe to North America rose by more than one-third from 1958 to 1959, and from Japan to North America probably even faster. The increase in intra-European trade was more modest—about 10 per cent—partly because of the slower advance in European demand and partly because of the absence of any special stimulus such as that provided by the steel strike in the United States.

Exports of industrial countries to primary producing countries declined in volume from the first nine months of 1958 to the corresponding period of 1959, and this was true of shipments from western Europe as well as from North America. This reflects a dual lag—not only the relatively slow growth in imports of industrial countries from primary producing countries (and hence in the foreign exchange availabilities of the latter countries) but also the lag between any advance in export earnings of primary producing countries and the corresponding expansion of their imports in response to consequential increases in their orders from overseas. The long lead time required for deliveries of capital goods is particularly important in this connexion.

It will be seen from table 4-15 that the volume of exports of the industrial countries to the primary producing countries had increased more from 1956 to 1957, and declined less from 1957 to 1958, than those to one another. In the earlier stages of the 1953-1957 upswing, exports of the industrial countries to one another had increased more rapidly than to the primary producing countries, just as they did in 1959. It was not until the final stages of the boom, when trade among the industrial countries themselves was beginning to level off, that the primary producing countries began to take deliveries in peak volume of capital equipment and other goods ordered earlier as a result of the previous improvement in their own export earnings. This pattern of cyclical change in the trade of primary producing countries has been noted repeatedly in the course of the post-war period, and developments in 1958-1959 appear to suggest that that pattern is in process of being repeated once more, at any rate in its essential features.

In western Europe the highest rates of expansion were recorded by the exports of Italy and France. The

Table 4-15. Quantum of Exports[a] by Major Areas of Destination, 1956-1959
(Indices, 1956 = 100)

Area of origin	*Area of destination*			
	Industrial countries			
	North America	*Western Europe*[b]	*Total*[c]	*Primary producing countries*
All industrial countries[c]				
1957—year	99	107	106	109
1958—year	99	102	101	106
1958—January–September	96	99	98	105
1959—January–September	117	106	109	100
Western Europe[b]				
1957—year	103	106	106	107
1958—year	112	106	107	109
1958—January–September	105	103	104	107
1959—January–September	144	113	118	103
North America				
1957—year	98	106	104	111
1958—year	91	89	90	101
1958—January–September	90	87	89	100
1959—January–September	97	82	90	93

Source: United Nations Division of General Economic Research and Policies.

[a] Excluding special category exports of the United States.

[b] Member countries of the Organisation for European Economic Co-operation.

[c] Including Japan.

devaluation of December 1958 supplied a strong stimulus to French exports. Although export prices in terms of francs rose rapidly thereafter, part of the competitive price advantage resulting from the devaluation was retained even by the end of the year. The expansion of Italian exports reflected the growth of consumer demand for a wide range of manufactures, including passenger cars and textiles and clothing in the United States as well as in western Europe. To this was added increased import demand for fruit and vegetables in several European countries which had poor crops. A somewhat slower advance was recorded by the exports of the Federal Republic of Germany. The slow recovery of industrial investment in western Europe and the slackness of demand in under-developed countries generally slowed down the expansion of German exports, in which capital goods have a considerable weight. Exports from the Netherlands benefited from the increased demand for meat and dairy products in European countries as well as from the expansion of trade in industrial consumer goods. The revival of exports from Belgium-Luxembourg was largely due to higher United States import demand for steel and to the expansion of trade in textiles and clothing.

The expansion of exports from Denmark reflected increased import demand for meat and dairy products in several European countries as well as the buoyancy of trade in manufactures. Lumber, wood-pulp and paper, as well as steel and various finished manufactures, contributed to the expansion of exports from Sweden. Exports from the United Kingdom advanced less rapidly than those of other western European countries owing to the slackness of import demand in its major markets in the overseas sterling area, to which exports declined. Despite substantial advances in British exports to North America and several European countries, total exports from the United Kingdom rose by little more than 5 per cent.

The flow of trade in western Europe is now being gradually affected—and is likely to be more significantly influenced in the future—by recent developments in the direction of economic integration. Already in the past year trade among the members of the European Economic Community (EEC) (the Benelux countries, France, the Federal Republic of Germany and Italy) expanded faster than the group's imports from other western European countries, as table 4-16 shows. While the degree of discrimination in favour of other members of the group which has resulted from measures taken thus far is slight, it is possible that intra-group trade was stimulated by action taken by private business in the expectation of a progressive implementation of the Treaty of Rome.[9]

[9] It should be noted that the rapid growth of intra-EEC trade in 1959 was partly accounted for by French exports to other member countries, which reflected to a considerable extent the effect of the devaluation of the French franc.

Table 4-16. European Economic Community (EEC): Changes in Imports, January-November, 1958 and 1959

(Millions of dollars)

Area of origin	*1958*	*1959*	*Percentage change, 1958 to 1959*
World	20,890	21,694	3.8
EEC countries	6,189	7,246	17.1
France	1,070	1,434	34.1
Other EEC countries	5,119	5,812	13.5
Other OEEC countries	3,502	3,773	7.7
Rest of world	11,119	10,675	−4.0

Source: European Economic Community, *Commerce extérieur*, No. 1 (Brussels), January 1960.

Although that treaty was signed in March 1957, and the Community formally came into being on 1 January 1958, the first concrete measures under the treaty were not introduced until 1 January 1959, and even these did not result in any major discrimination for the time being. This was because the 10 per cent cut in tariffs under the treaty was unilaterally extended to imports of industrial goods and of non-liberalized agricultural products from member countries of the General Agreement on Tariffs and Trade (GATT) wherever such tariffs exceeded the future common external tariff of the Community. In addition bilateral arrangements with individual non-member countries helped to reduce quota restrictions on a reciprocal basis and thereby ease quota discrimination.

Efforts to establish a broader free trade area within western Europe, embracing other members of the Organisation for European Economic Co-operation (OEEC) as well as the members of the European Economic Community, had broken down at the end of 1958. While various interpretations have been given of the difficulties encountered at that time, it appears that differences of opinion on the degree of integration to be achieved, on the institutional framework required, and on the establishment of a common external tariff were crucial.

Following this breakdown, seven European countries (Austria, Denmark, Norway, Portugal, Sweden, Switzerland and the United Kingdom) decided to establish the European Free Trade Association (EFTA). While the objectives of this group were to eliminate all tariff and quantitative restrictions on intra-trade in industrial products over a ten-year period—beginning with a 20 per cent reduction in tariffs by 1 July 1960—high priority was also placed on reaching a suitable agreement with the European Economic Community, paying due regard to the commercial interests of third countries and the principles and obligations of GATT. It would be premature at this stage to attempt to forecast how far the pattern of trade of western Europe, which has developed on a unified basis since the war, may be affected

by the creation of the EEC and the EFTA. Much depends on the nature of any accommodation of views reached between the two groups.

CHANGES IN BALANCES OF PAYMENTS

Since the imports of the industrial countries from the rest of the world rose in 1959 while their exports fell, the combined balance of trade shifted in favour of the rest of the world by $2 billion (table 4-17). At the same time capital outflow and economic aid to the primary producing countries were maintained at approximately the previous year's level. Consequently the primary producing countries, which had lost $1 billion of their reserves in 1958, were able to resume accumulation of reserves in 1959.

Within this broad framework, there was a very large shift in balances between western Europe and North America, as table 4-17 indicates.

Table 4-17. Trade and Changes in Foreign Exchange Reserves, 1958 and 1959
(Millions of dollars)

Country and year	Total trade			Change[a] in official gold and foreign exchange reserves
	Exports	Imports, c.i.f.	Balance	
Belgium-Luxembourg				
1958	3,046	3,129	−83	332
1959	3,269	3,405	−136	−116
Denmark				
1958	1,288	1,366	−78	58
1959	1,396	1,601	−205	83
France				
1958	5,118	5,609	−491	341
1959	5,614	5,086	528	1,008
Germany (Federal Republic)[b]				
1958	8,807	7,361	1,446	592
1959	9,805	8,478	1,327	−211
Italy				
1958	2,577	3,216	−639	764
1959	2,895	3,341	−446	878
Netherlands				
1958	3,218	3,625	−407	415
1959	3,606	3,939	−333	−34
Norway				
1958	744	1,310	−566	58
1959	810	1,316	−506	13
Sweden				
1958	2,088	2,366	−278	26
1959	2,206	2,400	−194	−48
United Kingdom				
1958	8,880	10,096	−1,216	796
1959	9,312	10,806	−1,494	−333
TOTAL, OEEC COUNTRIES:				
1958	40,380	44,184	−3,804	3,710
1959	43,740	46,716	−2,976	1,440
Canada[c]				
1958	5,045	5,726	−681	112
1959	5,365	6,310	−945	−72
United States[c d]				
1958	16,350	14,117	2,233	−2,275
1959	16,339	16,733	−394	−1,075
Japan				
1958	2,876	3,033	−157	337
1959	3,456	3,598	−142	461

Source: United Nations Division of General Economic Research and Policies; Organisation for European Economic Co-operation, *Foreign Trade Statistical Bulletin*, series I, and *General Statistics*, part I (Paris), April 1960; International Monetary Fund, *International Financial Statistics* (Washington, D. C.), January 1960.

[a] Changes in 1959 include gold transferred from reserves of individual countries to the International Monetary Fund in connexion with increases in quotas. Up to the end of December 1959, western European countries had transferred $504 million, the United States, $343.7 million and Canada and Japan, $62.5 million each. Reserves of western European countries exclude claims against the European Payments Union and bilateral claims arising from its liquidation at the end of 1958.

[b] Trade of the Saar included from July 1959.

[c] Imports reported f.o.b. adjusted to c.i.f. by adding 10 per cent to f.o.b. value.

[d] Excluding exports of military goods.

The greater pace of the upswing in North America was accompanied by a movement in the trade balance in favour of western Europe which was intensified by certain long-term trends reviewed below, as well as by the effects of the United States steel strike. As a result of these developments, as indicated in the table below, the improvement in western Europe's balance with North America greatly exceeded the rise in its import balance with the rest of the world, so that in the aggregate the trade deficit declined by some $900 million in 1959. Meanwhile, as shown in table 4-17, the combined export balance of Canada and the United States of $1.6 billion in 1958 was converted into an import balance of $1.3 billion in 1959.

Trade of OEEC countries with rest of world
(Billions of dollars)

	Total		*North America*		*Other*	
	1958	*1959*	*1958*	*1959*	*1958*	*1959*
Exports	19.8	20.9	4.0	5.3	15.8	15.6
Imports	23.2	23.4	6.4	6.1	16.7	17.3
Balance	−3.4[a]	−2.5[a]	−2.4	−0.8	−0.9	−1.7

Source: Organisation for European Economic Co-operation, *General Statistical Bulletin*, No. 4, 1960.
[a] Balances, which relate to trade with the rest of the world, differ from those shown in table 4-17, which relate to total trade.

Several European countries recorded an improvement in their trade balance in 1959, including France, Italy, the Netherlands, Norway and Sweden. The improvement was greatest in the case of France where an import balance of $490 million incurred in 1958 was converted into an export balance of over $500 million during the year 1959. In this instance it was the timing of recovery—which did not begin until late in 1959—in combination with currency devaluation that made the improvement possible: the devaluation gave an impetus to exports at a time when demand abroad was recovering, while the slackness of domestic demand ensured adequate export supplies, and enhanced the effect of devaluation in curtailing import demand. In Denmark, the Federal Republic of Germany and the United Kingdom, on the other hand, the rapid response of imports to rising activity resulted in a deterioration of trade balances.

The growth of official gold and foreign exchange reserves in western Europe and Japan continued in 1959, while United States reserves declined further. In western Europe the rate of reserve accumulation was, however, sharply reduced despite an improvement in the area's trade balance (table 4-17) as a result of a considerable rise in the outflow of official capital, chiefly to the United States and to international institutions. Government capital transactions other than intra-European settlements included advance repayments of debts to the International Monetary Fund and to the United States by France and the United Kingdom, advance repayment of government debt by the Federal Republic of Germany, which also made substantial prepayments on account of armaments orders placed in the United States, and gold transfers by all western European countries to the International Monetary Fund in connexion with increases in members' quotas. Payments under these headings totalled approximately $1.8 billion in 1959. To this must be added as a charge against official reserves some $300 million transferred from the French reserve to commercial banks in settlement of foreign exchange advances they had made to the Government in earlier years.

In spite of very substantial loan repayments by the French Government, which amounted to some $960 million, the official reserves of France increased by $1 billion in 1959 in consequence of the sharp improvement in the trade balance, of a reflux of speculative funds after the devaluation which is estimated to have amounted to $450 million during the first quarter of the year, and of a substantial inflow of private capital for long-term investment.

By contrast the official reserves of the Federal Republic of Germany recorded their first major decline since 1950. This was primarily attributable to the increased outflow of capital, official and private—including purchases by the German public of foreign securities and the placement of German banking funds in London and other financial centres. The rise in the net outflow of capital and donations amounted to over $1 billion in 1959. While the Federal Government's policy measures had been successful in reversing the inflow of foreign exchange, they had not led to a change in the underlying position of the Federal Republic of Germany: once interest rates were raised and credit tightened in the latter part of the year, and non-recurrent capital transactions were completed, reserve accumulation was resumed as short-term funds flowed back into the country and the export surplus increased once more.

Up to September 1959 the reserves of the United Kingdom increased moderately despite some deterioration of the trade balance. By the end of the year, however, reserves were somewhat lower than they had been at the end of 1958. Loan repayments in 1959 totalled $750 million of which $450 million represented advance repayments. But for these and for $163 million of gold transferred to the International Monetary Fund in con-

nexion with the quota increase, the United Kingdom's reserves would have risen by $280 million.

During the closing months of 1959 there was an outflow of short-term funds in consequence of the tightening of credit in the Federal Republic of Germany and in the United States. As mentioned earlier, the raising of bank rate in the United Kingdom was intended partly to realign United Kingdom short-term interest rates with those prevailing in other financial centres.

The balance of payments of the United States

Recovery from the 1958 recession in the United States was associated with an increase in the over-all deficit in its balance of payments. The net outflow of gold and dollars, which had amounted to over $3 billion in 1958, rose to more than $4 billion[10] in 1959. Although the gold drain of 1958 subsided, and the rest of the world again took the major part of United States settlements in the form of dollars, the size of the deficit, and the growth of the volume of outstanding dollar liabilities in relation to the United States gold reserve gave rise to some apprehension.

The increase in the United States deficit was due to a sharp contraction in the merchandise trade surplus. The upturn in business activity was accompanied by an unusually vigorous expansion of imports which began in the last quarter of 1958 and continued into the middle of 1959. Imports of finished manufactures increased from 1958 to 1959 by nearly one-third, with passenger cars in the lead, but large increases were also recorded by a wide range of other commodities, as table 4-18 indicates. To the rapid flow of imports of manufactures were also added higher imports of industrial materials associated with the recovery of industrial production and the rebuilding of stocks in the United States. The volume of imports of crude and semi-finished materials rose 18 per cent as compared with a 15 per cent increase in industrial production from the first nine months of 1958 to the corresponding period of 1959. The rise in imports was accelerated by increased purchases of steel in anticipation of and during the strike in the United States steel industry.

While imports were thus recovering rapidly, exports continued to decline during the first six months of the year. The decline was limited to only a few commodities, most of which were affected by special circumstances: coal exports were curtailed as a result of the mounting surpluses in Europe, and steel exports may have reflected the impending steel strike—although, as shown below, price factors may also have been involved. In addition, exports of railway equipment fell off in consequence of the completion of some major deliveries, and a decline in exports of commercial aircraft reflected the fact that deliveries of new types of jet aircraft had not yet begun, while exports of other types had fallen off. Most important of all, foreign buyers of United States cotton were postponing purchases in anticipation of lower export prices for the current crop year. On the other hand, the decline in exports of machinery was virtually arrested and there was some revival in exports of automobiles and parts, as shown for the full year 1959 in table 4-19.

The gathering momentum of recovery abroad was reflected in a substantial increase in United States exports in the second half of 1959, especially of industrial

Table 4-18. United States Imports, 1958 and 1959
(Millions of dollars)

Item	*1958*	*1959*	*Increase*
Total	12,786	14,987	2,201
Meat	337	393	56
Wool	165	224	59
Rubber	248	382	134
Wood and paper	1,430	1,676	246
Iron and steel and manufactures thereof	308	690	382
Machinery (excluding automobiles)	664	887	223
Automobiles and parts	488	735	247
Textile manufactures	637	837	200
Chemicals	282	347	65
Miscellaneous manufactures	652	786	134

Source: United States Department of Commerce, *Total Export and Import Trade of the United States* (Washington, D. C.), January-December, 1959.

[10] Excluding the United States subscription to the International Monetary Fund.

Table 4-19. United States Exports,[a] 1958 and 1959
(Millions of dollars)

Item	*1958*	*1959*	*Increase or decrease (−)*
Total	15,660	15,598	−62
Food	2,382	2,520	138
Fats and oils (inedible)	259	412	153
Cotton	656	446	−210
Coal	534	388	−146
Iron and steel mill products	563	372	−191
Machinery	3,682	3,665	−17
Automobiles and parts[b]	1,087	1,136	49
Aircraft	217	160	−57
Railway equipment	209	104	−105
Chemicals	1,343	1,476	133

Source: United States Department of Commerce, *Total Export and Import Trade of the United States*, January-December, 1959.
[a] Excluding special category exports.
[b] Including service equipment.

materials, and to a lesser extent of manufactures. At the same time the rise of imports began to slow down appreciably. The resulting tendency for the export balance on merchandise account to increase continued into the early months of 1960.

It was not yet possible, early in 1960, to tell whether current developments indicated yet another shift in the United States balance of payments. The placing of recent balance of payments fluctuations in the United States in correct perspective calls for an examination of the manner in which the external transactions of that country have been developing since the early post-war years.

POST-WAR TRENDS

During the early post-war years the United States was the world's chief exporter of manufactures and of industrial materials, as well as the major supplier of foodstuffs for relief shipments. At the same time world-wide shortages limited the expansion of imports, and merchandise export surpluses averaging around one-half of total exports were recorded during the years 1947 to 1949, as shown in table 4-20. Although the United States Government made available grants and loans averaging $6 billion per annum to aid foreign countries in financing the deficit in their balance of payments, the rest of the world nevertheless had to draw upon its gold and dollar reserves to settle deficits with the United States. By 1950, however, the export surpluses had been significantly reduced, and, although United States Government grants and loans also declined, such transfers, together with the outflow of United States private capital, exceeded the surplus on current account, and the rest of the world was able to begin rebuilding its depleted gold and dollar reserves. This process continued at an average annual rate of $1.5 billion through 1956. After a brief reversal in 1957, the net outflow of gold and dollars was resumed in 1958 —at more than twice the previous average rate, and it continued at an even faster pace in 1959. Thus, the developments of 1958-1959 represent a change not of kind but only of degree in the United States balance of payments; the outflow of gold and dollars dated back as far as 1950, and it was only the scale of the outflow that was new.

Although the deterioration in the United States balance of payments in 1958 was associated with a sharp contraction of the commercial current surplus from the previous year's level, which had been inflated by developments accompanying the Suez crisis, the export surplus was higher than in any year from 1950 to 1955. It was, however, well below the level of 1948 and 1949, and a further contraction in 1959 brought the export surplus close to its post-war low.

Changes in the character of government disbursements abroad and an increase in the outflow of private capital were important factors in the rise in the over-all deficit of the United States in 1958-1959. Government economic grants declined from an average of $4.5 billion in 1948/49 to under $2 billion in 1958/59, while military expenditures abroad rose from $0.7 billion to an average of over $3 billion in 1958/59. The decline in grants did not involve an equivalent relief to the balance of payments since the recipient countries probably reduced the corresponding imports as well—at least to a large extent. On the other hand, the rise in military expenditures abroad had a considerable impact on the balance of payments since they represent cash payments additional to those made for commercial imports of goods and services.

Just as the fall in government grants did not bring a corresponding relief to the balance of payments, so the rise in the outflow of private capital from an average of $0.7 billion in 1948/49 to over $2.4 billion in 1958/59 did not involve an equivalent deterioration in the balance. This was because part of the increase in capital outflow was matched by corresponding exports of equipment, especially where the outflow took the form of direct investment. However, the relative increase in portfolio investment[11] during the past decade—shown in table 4-21—was not as certain to lead to a parallel growth in the demand for United States exports as a similar advance in direct investment would have been. In addition, western Europe has recently been taking a larger share of United States capital than in the past,[12] and this may have meant that a higher proportion of equipment has been purchased locally or from nearby sources than is typically the case where investment moves to the under-developed areas.

Viewed in broader perspective, it cannot be said that the outflow of private capital has imposed a burden on the United States balance of payments, despite the relative increase in portfolio investment and the rise in the share of investment in Europe. This is because the building up of assets abroad has led to a growing inflow of current earnings. After allowing for increased United States payments on foreign capital investment in the United States, net income from investment rose from $1.1 billion in 1948 to $2.1 billion in 1959.

While in the early and middle nineteen fifties government overseas military expenditure, grants and loans, and the outflow of private capital together financed the surplus on current account, leaving a moderate margin to permit accumulation of gold and dollar reserves by the rest of the world, by 1958 and 1959 such payments greatly exceeded net exports of goods and services, and

[11] The rise in portfolio investment in 1958 was partly due to increases in foreign security issues in the United States when interest rates were relatively low; with the tightening of credit during 1959, this development was arrested and the share of portfolio investment in the total outflow of private capital dropped once more.

[12] While the share of western Europe in United States direct investment abroad has fluctuated over a wide range during the post-war years, it did not exceed 20 per cent in any year from 1948 to 1955. In 1959 it rose to 36 per cent.

Table 4-20. Summary of United States Balance of Payments, 1947-1959

(Billions of dollars)

Item	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Commercial current transactions													
Exports of goods[a]	16.0	13.2	12.1	10.1	14.1	13.3	12.3	12.8	14.3	17.3	19.4	16.2	16.2
Imports of goods	−6.0	−7.6	−6.9	−9.1	−11.2	−10.8	−11.0	−10.4	−11.5	−12.8	−13.3	−12.9	−15.3
Balance	10.0	5.6	5.3	1.0	2.9	2.5	1.3	2.4	2.8	4.5	6.1	3.3	0.9
Earnings of foreign investment (net)	0.9	1.1	1.1	1.2	1.6	1.4	1.5	1.8	2.0	2.0	2.2	2.2	2.1
Other commercial transactions (net)[b]	0.4	−0.2	—	−0.3	0.1	0.1	−0.5	−0.5	−0.4	−0.6	−0.2	−0.4	−0.6
Total commercial current balance[b]	11.3	6.5	6.3	1.9	4.6	4.0	2.3	3.7	4.4	5.9	8.1	5.1	2.4
Government transactions (net)													
Military expenditures	−0.5	−0.8	−0.6	−0.6	−1.3	−2.0	−2.3	−2.4	−2.6	−2.8	−2.8	−3.4	−3.1
Unilateral transfers[a]	−1.9	−3.8	−5.1	−3.6	−3.1	−2.1	−2.0	−1.8	−2.0	−1.8	−1.8	−1.8	−1.8
Capital[c]	−7.0	−1.0	−0.7	−0.2	−0.2	−0.4	−0.2	0.1	−0.3	−0.6	−1.0	−1.0	−1.7
United States private capital	−1.0	−0.9	−0.6	−1.3	−1.1	−1.2	−0.4	−1.6	−1.2	−3.0	−3.2	−2.8	−2.1
Over-all balance	0.9	—	−0.7	−3.8	−1.1	−1.7	−2.6	−2.0	−1.7	−2.3	−0.7	−3.9	−6.3
Total gold and foreign capital[cd]	−1.9	−1.2	−0.1	3.6	0.6	1.2	2.3	1.7	1.4	1.5	−0.2	3.4	5.6
Gold[c] (inflow−)	−2.2	−1.5	−0.2	1.7	−0.1	−0.4	1.2	0.3	—	−0.3	−0.8	2.3	1.1
Foreign capital[cd]	0.3	0.3	0.1	1.9	0.7	1.6	1.1	1.4	1.4	1.8	0.6	1.1	4.6
Errors and omissions	0.9	1.2	0.8	0.1	0.5	0.5	0.3	0.2	0.4	0.7	0.7	0.4	0.8

Source: United States Department of Commerce, *Balance of Payments of the United States* and *Survey of Current Business* (Washington, D. C.).

[a] Excluding military grant aid and exports in connexion with such aid.

[b] Including private remittances.

[c] Including United States subscriptions to the International Monetary Fund and International Bank for Reconstruction and Development, which totalled $3.1 billion in 1947 and $1.375 million in 1959.

[d] Increase in short-term dollar assets plus inflow of long-term foreign capital.

Table 4-21. United States Private Capital Outflow, 1948-1959

Year	Total	Net direct investment (millions of dollars)	(percentage of total)	Other long-term (millions of dollars)	Short-term (millions of dollars)
1948.....	906	721	81	69	116
1949.....	553	660	119	80	−187
1950.....	1,265	621	49	495	149
1951.....	1,068	528	49	437	103
1952.....	1,158	850	73	214	94
1953.....	369	721	195	−185	−167
1954.....	1,619	664	41	320	635
1955.....	1,211	779	64	241	191
1956.....	2,980	1,839	62	607	534
1957.....	3,211	2,072	64	831	308
1958.....	2,844	1,094	38	1,444	306
1959.....	2,145	1,204	56	845	96

Source: United States Department of Commerce, *Balance of Payments of the United States*, Statistical Supplement, and *Survey of Current Business* (Washington, D. C.).

their level could be supported only by a more rapid running down of net United States reserves. The pressure of external demand for dollar goods had diminished, and countries were using excess dollars to augment their reserves rather than for additional imports.

The shift in import demand

Among the underlying factors which have contributed to the present United States balance of payments position, the shift in the trend of import demand since about 1955 must be accorded prominence. Historical data for the United States suggest that imports of goods and services had been rising more slowly than total output for at least eighty years prior to 1950. In table 4-22 data are presented which relate imports to various components of domestic activity or expenditure. It will be seen that from 1929 to the mid-nineteen fifties total imports of goods and services declined as a percentage of total output; and that, in addition, there were declines in imports of crude materials and semi-manufactures in relation to domestic manufacturing activity, in imports of crude and manufactured foodstuffs in relation to domestic food consumption,[13] and in imports of finished manufactures in relation to domestic non-food commodity consumption.

Since about 1955, however, all these ratios seem to have turned upwards, except that of crude material imports to domestic manufacturing activity—and even here the long-term decline appears to have been halted. The upward movement has been sufficient to carry the overall ratio of imports to total output two-thirds of the way back to the 1937 figure from the post-war low; and the import coefficient of finished manufactures has even surpassed the level reached in 1929. The question naturally arises whether these shifts reflect a permanent change in the United States economy or not. However, the experience of five years is too brief to warrant a conclusion that the downward trend in the ratio of imports to national output of the previous eighty years or more has finally been reversed. It is nevertheless possible to point to some of the factors which seem to have contributed to the developments of recent years.

In the first place, the relationship between imports of crude materials and semi-manufactures and domestic

[13] The increase shown from 1929 to 1937 in imports of foodstuffs reflects a drought in the United States in the latter year.

Table 4-22. United States Import Demand, Selected Pre-War Years and 1948-1959
(Percentage)[a]

Year	Ratio to gross national product: Imports of goods and services: Total	Excluding military expenditure	Merchandise imports	Ratio to manufacturing production: Imports of crude materials and semi-manufactures: Crude materials	Semi-manufactures	Total	Ratio to food consumption: Imports of food: Crude food	Manufactured foods	Total	Ratio to non-food commodity consumption: Imports of finished manufactures
1929.....	6.1	6.1	4.4	5.2	3.5	8.7	5.2	2.3	7.5	3.8
1937.....	5.9	5.9	4.3	4.5	3.1	7.6	7.5	3.0	10.6	3.2
1948.....	4.4	4.1	2.9	3.0	2.3	5.3	4.4	1.4	5.8	1.8
1950.....	4.5	4.3	3.2	3.2	3.1	6.3	4.5	1.8	6.5	2.1
1951.....	4.4	4.0	2.9	2.8	2.7	5.5	4.7	1.9	6.6	2.1
1952.....	4.4	3.9	3.0	2.9	2.6	5.5	4.5	1.9	6.4	2.3
1953.....	4.7	4.0	3.0	2.6	2.7	5.3	4.6	1.9	6.5	2.3
1954.....	4.5	3.8	2.8	2.6	2.5	5.1	3.8	1.9	5.7	2.3
1955.....	4.7	3.9	2.9	2.7	2.5	5.2	3.9	1.9	5.8	2.5
1956.....	4.9	4.2	3.1	2.7	2.5	5.2	3.9	1.9	5.8	3.0
1957.....	5.0	4.3	3.1	2.7	2.5	5.2	3.9	1.9	5.8	3.2
1958.....	5.4	4.6	3.3	2.7	2.6	5.3	4.0	2.3	6.3	3.6
1959.....	5.7	5.0	3.7	2.7	2.9	5.6	4.0	2.4	6.6	4.4

Source: Based on data from *Economic Report of the President* (Washington, D. C., January 1960); United States Department of Commerce, *Foreign Trade of the United States, 1936–1949* and *Total Export and Import Trade of the United States*, various issues (Washington, D. C.).

[a] Percentages based on values in constant 1954 prices.

manufacturing activity seems to have been stabilized[14] for a considerable period. Undoubtedly the factors which tended to depress this ratio in the past are still operating—notably the tendency to economize on raw materials as technology progresses, to create synthetic substitutes especially for agricultural raw materials, and to raise the degree of fabrication of final output. But these tendencies are now apparently being offset by others. Particularly important is the growth of United States company operations overseas in the extractive industries, supplying a large part of the increment in domestic demand for petroleum products and metallic minerals at lower cost than is possible at home. It should be noted, however, that the constancy of the raw material import coefficients in real terms does not mean that the value of imports has kept pace with that of the domestic output of manufactures; on the contrary, import values have continued to decline in relative terms because of the drop in import prices in relation to domestic prices for manufactures.

Imports of foodstuffs have likewise been fairly stable as a proportion of total food consumption during recent years.[15] The tendency for this ratio to decline appears to have been offset partly by a significant increase in imports of sugar under quota and partly by an expansion in imports of high quality food products, the demand for which is relatively elastic as income rises. Here again, the stability of the import ratio in real terms does not hold in terms of current value, because of the sharp drop in coffee prices in recent years.

The most striking increases in imports have been in finished manufactures, the value of which quadrupled from 1948 to 1959, as shown in table 4-23. About two-fifths of the increase was concentrated in machinery[16] and transport equipment, and more than one-half of this increase consisted in turn of motor vehicles. Nevertheless the expansion of imports was rather widely distributed and affected virtually all categories of finished goods.

Some of the factors involved in these rapid increases are the same as those affecting United States exports of manufactures during this period, and will be dealt with more fully below. In particular, there was a considerable increase in exportable supplies of manufactures from other countries at competitive prices. In addition, however, foreign-made manufactures acquired a greater acceptability in the United States market during the nineteen fifties, and in some cases even catered to needs which domestic producers had overlooked, notably in the case of small cars. As the volume of imports grew without any significant tendency for protection to in-

[14] The sharp upturn in the ratio of imports of semi-manufactures to domestic manufacturing activity in 1959 may be temporary, reflecting the effects of the steel strike.

[15] The upturn in imports of manufactured foodstuffs in 1958 reflects, at least in part, abnormally high imports of meat and meat products as a result of domestic shortage.

[16] In table 4-22 imports of finished manufactures have been related to domestic non-food commodity consumption even though these imports include aircraft and machinery. Even in 1959, however, aircraft and machinery accounted for under one-sixth of total imports of finished manufactures, most of which were still in the consumer category. The increase in imports of aircraft and machinery accounted for about 8 per cent of the rise in total imports.

Table 4-23. United States: Imports of Finished Manufactures, 1948 and 1959
(Millions of dollars)

Item	*1948*	*1959*	*Increase or decrease (−)*
Total finished manufactures	1,309	5,168	3,859
Total, excluding newsprint	896	4,502	3,606
Machinery and vehicles	154	1,622	1,468
Automobiles and parts	35	844	809
Aircraft and parts	5	68	63
Agricultural machinery	81	169	88
Electrical machinery	5	246	241
Other	28	295	267
Metal manufactures	5	112	107
Cotton, wool and silk manufactures	117	449	332
Burlap	131	91	−40
Photographic materials	8	50	42
Scientific and professional instruments	3	37	34
Musical instruments	10	25	15
Toys, athletic and sporting goods	5	59	54
Clocks, watches and parts	60	74	14
Art works and antiques	18	62	44
Printed matter	14	38	24
Other	371	1,883	1,512

Source: United States Department of Commerce, *Foreign Trade of the United States, 1936–1949,* and *Total Export and Import Trade of the United States,* January-December 1959.

crease, foreign manufacturers gained greater confidence in entering the United States market, and were prepared more and more to incur the heavy advertising and other expenditures required to strengthen their position.

Imports of services have also increased rapidly in recent years. Apart from the growth in overseas military expenditure, noted previously, there has been a particularly rapid increase in tourism, outlays rising from $631 million in 1948 to $1,575 million in 1959; these expenditures are relatively income-elastic.[17] Imports of shipping services have also risen very sharply—from $646 million in 1948 to $1,712 million in 1959, as a result of the rebuilding of European and Japanese mercantile marines. It may be noted that the relatively slower growth of exports of services has resulted in shifting the balance of service payments (excluding investment income) against the United States to the extent of $400 million from 1948 to 1959.

The over-all significance of the rise in the United States import coefficient during the past decade may be seen in relation to its impact upon the balance of payments. In 1948 the total current balance on commercial items amounted to $6.5 billion, as shown in table 4-20, and this balance declined to $5.1 billion in 1958 and $2.4 billion in 1959. If the ratio of imports[18] to national product had been the same in 1959 as in 1948, the active balance on current account in 1959 would have been nearly $5 billion larger than it was in fact.

The lag in exports

While in the United States import demand has risen faster than domestic income, the demand for its exports in its major foreign markets has increased less since 1948 than income in those markets. This development in itself need not necessarily have had an adverse effect on the external balance of the United States, since income abroad increased more rapidly than in that country. Nevertheless, the lag in demand for United States exports was in fact such as to reduce both the ratio of exports to gross national product in the United States and its export surplus. As table 4-24 shows, the ratio of imports from the United States to the gross national product of western Europe and Latin America declined quite sharply from 1948 to 1958, and a lesser decline

[17] The 150 per cent increase in tourist outlays from 1948 to 1959 compares with a 76 per cent increase in personal disposable income. However, tourist expenditure in 1948 was abnormally low.

[18] Excluding overseas military expenditure.

Table 4-24. Demand for United States Exports in Four Major Markets, Pre-War and 1948-1959

(Index, 1953 = 100; percentage)[a]

Area and item	*1938*	*1948*	*1953*	*1958*	*1959*
OEEC countries					
Index of gross national product	76	76	100	123	128
Ratio to gross national product					
Total merchandise imports	18.6	15.1	15.6	17.8	18.7
Merchandise imports from United States	1.9	3.0	1.5	1.8	1.7
Latin America					
Index of gross national product	...	81	100	125	...
Ratio to gross national product					
Total merchandise imports	...	14.7	12.7	13.1	...
Merchandise imports from United States	...	8.1	6.2	6.2	...
Canada					
Index of gross national product	43	76	100	115	120
Ratio to gross national product					
Total merchandise imports	14.6	20.1	19.2	17.5	18.7
Merchandise imports from United States	9.2	14.0	14.1	12.1	12.4
Japan					
Index of gross national product	78[b]	65	100	136	...
Ratio to gross national product					
Total merchandise imports	19.0	5.5	12.7	13.2	...
Merchandise imports from United States[c]	...	4.1	4.0	3.9	...
United States					
Index of gross national product	50	80	100	108	115
Ratio to gross national product					
Total merchandise exports[d]	3.5	4.9	3.2	3.7	3.7

Source: United Nations Division of General Economic Research and Policies.

[a] Percentages based on values in constant prices.

[b] 1934–1936 average.

[c] Data on imports from United States by Japan, excluding Korea and Formosa, are not available for 1934–1936. The share of imports from the United States in the total imports of the pre-war Japanese customs area was 32 per cent.

[d] Excluding military goods.

occurred also in the case of Canada and Japan. In western Europe and Japan the relative significance of imports from the United States dropped even though imports in general increased faster than incomes.

It should be stressed, however, that a deterioration in the United States export position after 1948 was only to be expected. Its exports in that year were twice their pre-war volume while the level of total world exports was no higher than in 1938. The post-war lag in exports, great as it was, still left the United States with a larger share of world exports and of those of industrial countries than it had in 1938.

The abnormally high volume of exports from the United States in 1948 reflected the fact that output there had risen considerably above pre-war levels while in the rest of the world it had barely regained its pre-war position, as table 4-25 shows. In the circumstances the United States was able to supply to the rest of the world a greatly increased volume of goods during the early post-war years, while capacity and output abroad were being restored and expanded and demand pressure was intense. The expansion of capacity in other industrial countries after 1948 increased the supplies available in the rest of the world for domestic use as well as for export, and inevitably reduced the scope for any further growth of United States exports.

In fact, since 1948 the volume of United States non-military exports increased by only one-fifth, while total world trade nearly doubled, and exports of all industrial countries rose even faster, as indicated below (indices of export quantum, 1953 = 100):

	1938	*1948*	*1958*	*1959*
World[a][b]	74	74	132	144
Industrial countries[b]	67	69	138	150
United States[b]	53	105	126	125
Non-industrial countries	85	81	123	135

Source: Based on data from the Statistical Office of the United Nations.

[a] Excluding the exports of the USSR, eastern Europe and China (mainland).

[b] Excluding United States exports of military goods.

The impact of recovery in the rest of the world on United States exports was most pronounced during the years up to 1953, when demand for United States exports declined in relation to domestic output in several of that country's principal markets, and United States non-military exports declined in absolute terms while the volume of world trade increased by one-third. After 1953 the cyclical upswing in the industrial countries of western Europe was accompanied by a more than proportionate increase in their demand for United States products, but the ratio of imports from the United States to the gross national product in that area remained below the 1948 level. Moreover, in the case of Canada, which is the second largest market for United States exports, the ratio declined.

Even the modest 20 per cent increase in the volume of exports of the United States from 1948 to 1958/59 was achieved mainly as a result of a substantial expansion of agricultural exports (see table 4-26), in which shipments under various government programmes played an important role, while exports of non-agricultural materials and semi-manufactures and of finished manufactures advanced at well below the average rate.

The buoyancy of United States agricultural exports reflected on the one hand the slow recovery after the war of per capita food production levels in many under-developed countries, and the continued dependence of western Europe on imports of certain basic foods and agricultural raw materials, and on the other hand the substantial surpluses of agricultural commodities in the United States which the Government was willing to make available to the rest of the world under grants or on very advantageous terms.

Table 4-25. United States and Rest of World:[a] Commodity Production, Pre-war, 1948 and 1958
(Indices, 1953 = 100)

Area and year	*Manufacturing*	*Mining*	*Agriculture*
United States			
1937	44	61	70[b]
1948	76	91	88
1958	100	101	111
Rest of world[a]			
1937	68	70	84[a]
1948	68	74	80
1958	137	127	114
Western Europe			
1937	72	93	87[a]
1948	69	78	74
1958	136	110	113

Source: United Nations Division of General Economic Research and Policies.

[a] Excluding USSR, eastern Europe and China (mainland).

[b] Average 1934–1938.

Table 4-26. United States Exports[a] by Commodity Classes: Quantum Indices, 1937 and 1948-1959
(1953 = 100)

Year	*Total*[a]	*Agricultural products*	*Non-agricultural raw and semi-manufactured materials*	*Finished*[a] *manufactures*
1937	53	70	65	43
1948	105	104	123	100
1953	100	100	100	100
1958	126	156	134	113
1959	125	166	128	109

Source: United Nations Division of General Economic Research and Policies; based on data from United States Department of Commerce, *Total Export and Import Trade of the United States* and *Foreign Trade of the United States, 1936–1949*, and United States Department of Agriculture, Foreign Agricultural Service, *Quantity Indexes of United States Agricultural Exports and Imports*, January 1960 (Washington, D. C.).

[a] Excluding military goods.

At the end of the war, the United States had served as the foremost supplier of relief shipments of foodstuffs and agricultural materials, of which a large part was government-financed. These exports, under army and civilian relief programmes and later under the European Recovery Program, declined in the early nineteen fifties. After 1954 mounting United States surpluses were channelled abroad under Public Law 480 and other government programmes. Thus agricultural exports expanded rapidly—by two-thirds in real terms between 1953 and 1959. As table 4-27 shows, the entire increase in the value of agricultural exports in recent years reflects increased government activity in this field. In fact these data tend to understate the role of government, since the growing volume of sales financed by means of short-term government credits, or at subsidized prices, are not included under the heading "government programmes". Out of $2.4 billion of agricultural exports outside government programmes in the fiscal year ending June 1959, about one-third represented sales at less than domestic market prices.

Table 4-27. United States Exports of Agricultural Commodities, Fiscal Years 1948 to 1959[a]
(Billions of dollars)

Year[b]	Total agricultural exports	Shipments under government programmes		Government shipments as percentage of total agricultural exports
		Total	Local currency sales	
1948.....	3.5	1.6	—	46
1949.....	3.8	1.6	—	42
1954.....	2.9	0.4	—	14
1958.....	4.0	1.2	0.7	30
1959.....	3.7	1.3	0.7	35

Source: United States Department of Agriculture, Foreign Agricultural Service, *Statistical Abstract of the United States, 1959* and *Agricultural Exports, Fact Sheet, January 1960* (Washington D. C.).

[a] Values for government-financed programmes are obtained from different sources than those for total exports, and are therefore not fully comparable in regard to valuation, shipping period, etc.

[b] Fiscal year ending 30 June of year stated.

Exports under government programmes include wheat, rice, corn and other coarse grains, butter and other dairy products, vegetable fats and oils, and cotton. The proportion of exports under government programmes has ranged from around one-third of total exports of cotton and corn to two-thirds or more of exports of wheat, inedible oils and dairy products. Total exports of these commodities have increased since 1953 at rates substantially above the average for all agricultural exports.

To the extent that the rise in agricultural exports in recent years has taken place under government programmes, it has made only a limited contribution towards reducing the over-all deficit of the United States. Only about one-third of exports under government programmes has been accounted for by cash sales for dollars, chiefly of cotton; the rest represents donations, barter transactions and local currency sales, proceeds of which are made available for use in the receiving countries partly in the form of government loans and grants. Such transactions are therefore accompanied by a corresponding outflow of government funds from the United States or, in the case of barter transactions, by commodity imports of identical value.

Exports of non-agricultural industrial materials increased slowly from 1948 to 1958, but like agricultural exports they staged a major recovery from their post-war low of 1953. This group includes coal and petroleum, iron and steel and non-ferrous metals, and industrial materials of chemical origin, exports of which depend very largely on demand in other industrial countries. While the post-war trend of demand has been rising, United States exports have fluctuated widely because of the United States role as marginal supplier of several of these commodities. Since 1953 they have nonetheless been more buoyant than finished manufactures.

United States share of world exports of manufactures

United States exports of manufactures have lagged not only in relation to total United States exports but also in relation to exports of manufactures from other industrial countries. As table 4-28 indicates, the United States share in world markets for manufactures, which had almost doubled from 1938 to 1948, has since declined to something close to the pre-war level. The United States market share was well sustained during the period of general economic upswing in 1956 and 1957 but bore the brunt of the 1958 setback, and

Table 4-28. Share of United States and Other Major Industrial Countries[a] in Their Combined Exports of Manufactures, Pre-war and 1948-1959
(Percentage)

Year	United States	United Kingdom	Federal Republic of Germany	Other western European countries	Japan	Canada
1938..	21	23	23[b]	21	7	5
1948..	38	28	2	23	1	8
1953..	27	22	14	26	4	7
1954..	26	21	15	27	5	6
1955..	25	20	16	28	5	6
1956..	26	20	17	25	6	6
1957..	26	19	18	25	6	6
1958..	24	19	19	26	6	6
1959..	22	18	20	28	7	5

Source: United Nations Division of General Economic Research and Policies.

[a] Belgium-Luxembourg, Canada, Federal Republic of Germany, France, Italy, Japan, Netherlands, Sweden, United Kingdom and United States.

[b] Whole of German Reich.

dropped still further in 1959, partly because of the steel strike.

The evidence strongly suggests that by far the most important factor in the decline in the United States share in world markets for manufactures—whether since 1948 or since 1953—has been the increase in productive capacity in relation to demand in the rest of the world. While productive capacity has undergone massive expansion, especially in western Europe and Japan, the pressure of domestic demand against capacity has been greatly eased as more and more of the backlog of investment and consumption since the Second World War has been made good. Thus the volume of supplies of manufactures available for export at competitive prices has been greatly increased. While it is difficult to assemble data on the relationship of demand to productive capacity adequate for present purposes, the commodity production trends shown in table 4-25 are in themselves significant of what has taken place—production of manufactures in private enterprise economies outside the United States having doubled from 1948 to 1958 while United States output rose less than 30 per cent.

It is true that after an initial drop in the United States market share from the abnormally high level of 1948, which was associated primarily with the recovery of the export potential of the Federal Republic of Germany and Japan, the share seems to have become relatively stable, and from 1953 to 1957 shifts were relatively small. The reason for this, however, was that following the changes resulting from the immediate post-war reconstruction period, increases in capacity in the rest of the world were matched or over-matched by increases in demand. First came the pressures of demand resulting from higher defence expenditures and associated investment in western Europe following the Korean conflict; and once that conflict was over, there followed a large-scale boom in business fixed investment and consumption of durables. The manufactures which predominate in United States exports are producer and consumer durables, and it was precisely in this field that exportable supplies from western Europe were held back during the period of defence expansion and the subsequent boom in investment and durable consumption. Thus, while the capacity of the western European engineering industries was rapidly extended all through the nineteen fifties, the full implications of this development for United States exports did not become clear until demand eased in 1958 and 1959. It was then that the cumulative impact of the expansion of the previous decade became suddenly apparent in a marked drop in the United States share in markets for machinery and transport equipment.

An additional factor has been the differentiation in consumer durables which has accompanied the growth of a mass market for these goods outside North America in recent years. United States consumer durables are designed in accordance with consumer requirements in the United States, where average real income is still substantially higher than in other industrial countries, let alone in under-developed countries. The United States has therefore tended to lose markets not necessarily because its prices are higher than those of comparable foreign products—product for product—but because the average foreign consumer cannot afford the grade of product that the United States produces. This has been especially important in the case of passenger cars, but it also helps to explain why the United States failed to improve its position as a supplier of some of the household durables when import discrimination was abandoned by other countries.

Rapid technological progress in western European countries and Japan in recent years has also stiffened the competition United States producers had to face in export markets. The dynamism of some of the European economies and of that of Japan in recent years has resulted in rapid changes in production methods and in the ready adoption of new techniques. This development was frequently fostered by United States firms through licensing arrangements or direct participation in manufacturing operations. To the extent that the competitive advantage held by the United States had in the past depended on its advanced technology, the narrowing of the technological gap between that country and the older industrial countries would have tended to weaken its position in foreign markets.

The decline in the world market share of the United States from 1948 to 1959 was due in part to the fact that import demand for manufactures in some of the principal United States markets, such as Latin America, increased more slowly than import demand of the world as a whole. Incompleteness of data for 1948 makes it difficult to tell how much of the decline from 1948 to 1959 was due to the geographic distribution of United States exports. It is estimated, however, that about one-half of the decline in the United States share from 1953 to 1958 was due to the concentration of United States exports of manufactures in the western hemisphere, which is shown in the following table:

Country and area	*Value of imports[a] of manufactures in 1958 (indices, 1953 = 100)*	*Percentage share in exports of manufactures in 1958*	
		From major exporters	*From United States*
World	153	100.0	100.0
Canada	126	9.9	29.7
Latin America	148	14.1	31.7
Western Europe	167	30.7	15.9
United States	149	10.2	
Other	159	35.2	22.7

Source: United Nations Division of General Economic Research and Policies.

[a] Calculated on the basis of data from major exporters of manufactures listed in table 4-28.

Even after allowing for the unfavourable geographic distribution of exports, however, the United States lost

ground to other exporters in a number of major markets, notably in Canada, Latin America, and in primary producing countries outside the sterling area (table 4-29). The decline was relatively moderate in western Europe, and there were gains in Japan, as well as in the oversea sterling area and in some of the non-dollar countries of Latin America, where discriminatory restrictions against dollar imports were largely eliminated. In the latter group of countries, major United States credits for the purchase of equipment probably also contributed to the gains.

Table 4-29. Share of United States in Combined Exports of Manufactures from Major Industrial Countries[a] to Principal Markets, 1953 and 1958
(Percentage)

Area	*1953*	*1958*
Industrial countries		
Western Europe	14	13
Canada	81	77
Japan	60	65
Other countries		
Latin America:		
Dollar countries	72	65
Other countries	41	48
Oversea sterling area	12	13
Other[b]	20	15

Source: United Nations Division of General Economic Research and Policies.
[a] Countries as listed in table 4-28.
[b] Dependencies of countries in continental western Europe, non-sterling countries in Middle East and Asia, European countries other than members of Organisation for European Economic Co-operation, USSR, and China (mainland).

The contraction of the United States share in markets for manufactures from 1953 to 1958 was reflected in all major categories of machinery, in cars, and in other types of transport equipment, except for railway vehicles, which received a boost from very large credits of the Export-Import Bank for railway renewal in Latin America. Up to 1958 United States exports of chemicals did rather better, as shown in table 4-30, but they lost ground in 1959. United States exports of cotton fabrics did well, but ground was lost—chiefly to Japan—in exports of synthetic textiles.

In several of the categories of exports in which there was a decline in the United States market share there also occurred a substantial increase in United States imports. This was especially true of a number of machinery items, including tractors, office machinery and certain kinds of electrical machinery, where the United States export share declined by one-fourth or more between 1953 and 1958 while United States imports rose at a substantially higher rate than the average for all machinery items. A number of the items involved are being produced abroad on a substantial scale by subsidiaries of United States companies which were established originally to supply the countries in which they are located and to take advantage of local restrictions against imports, or to overcome problems arising from discrimination against imports from the dollar area. Expanding operations of these subsidiaries may well have curtailed exports of identical products made in the United States. Moreover, some of the companies involved shipped their products made abroad for sale in the United States market.[19]

Table 4-30. Share of United States in Combined Exports of Selected Manufactures from Major Industrial Countries,[a] 1953 and 1958
(Percentage)

Item	*1953*	*1958*
Total manufactures	27	24
Chemicals	30	30
Cotton fabrics	19	18
Synthetic fibre fabrics	23	16
Iron and steel	20	15
Other metals and manufactures	15	19
Non-electrical machinery	41	36
Electrical machinery, apparatus and appliances	32	26
Passenger cars and chassis	31	14
Other transport equipment	33	28

Source: United Nations Division of General Economic Research and Policies.
[a] Countries as listed in table 4-28.

While the expansion in capacity in western Europe and Japan was the primary factor in the shift in the United States balance of payments, there are some indications that price considerations may also have contributed to this development to some extent. Considering the whole period from 1950 to 1959, the export unit value indices shown in table 4-31 do not suggest a marked deterioration in the competitive position of the United States in export markets for manufactures. An initial improvement in the relative position of the United States was followed by a deterioration towards the end of the period. It is, however, likely that the major realignment of exchange rates which took place in 1949 was somewhat greater than would have been strictly necessary to equalize western European export prices with those of the United States in terms of dollars. This is because it was considered important at that time not merely to establish new parities, but also to convince traders that the new parities could be successfully maintained. If so, prices may have been higher for exports of the United States than of its competitors both in 1950 and 1959. In 1950, however, the strong competitive position of western Europe as regards its export prices was

[19] J. H. Dunning, in his study, "American Investment in British Manufacturing Industry" (London, 1958), estimated that the following proportions of United Kingdom exports to the United States were produced by firms with United States participation: tractors and sewing machines, over 75 per cent; office machinery, 50 to 75 per cent; road vehicles and scientific instruments, etc., 35 to 50 per cent. These were among the most rapidly expanding United Kingdom exports to the United States.

Table 4-31. Export Unit Values[a] for Manufactures, 1950-1959
(Indices, 1953 = 100)

Year	World	United States	United Kingdom	France	Federal Republic of Germany	Japan
1950	86	89	84	81	80	...
1951	103	99	98	95	92	...
1952	104	100	105	107	101	104
1953	100	100	100	100	100	100
1954	98	99	99	99	97	96
1955	99	100	101	101	99	93
1956	103	105	105	105	101	97
1957	107	112	108	109	103	98
1958	107	113	110	103	106	91
1959	107	115	110	95	105	89[b]

Source: Statistical Office of the United Nations, and official national sources.
[a] In terms of United States dollars.
[b] January-June.

offset by its inability to supply the goods in the quantities required. There were therefore much fuller order books and much longer delays in delivery in western Europe than in the United States for several years. In these circumstances western Europe was unable to take full advantage of its favourable price position. As supplies became more readily available from western Europe and Japan at the end of the period under review, it became possible for importers of manufactures to pay more attention to price considerations, and these may therefore have played some part in recent developments even though there may have been little long-run change in the United States competitive position since 1950. This appears to be borne out in the case of producer durables, which are important in United States exports, by the data in table 4-32. Shifts between 1950 and 1958 in United States prices relative to those of three of the countries shown in that table were small, and a major deterioration in the United States price position occurred only by comparison with Italy where available evidence suggests that prices had been significantly higher than those of other industrial countries in 1950.

While data on export prices of comparable products in various countries are particularly difficult to come by, there is evidence in one or two cases that United States prices for certain products may be significantly higher than those of certain countries in western Europe. The data in table 4-33, for example, suggest that this may be true for steel. It is impossible, however, to say how typical this particular situation may be of export markets in manufactures in general.

Table 4-32. United States and Selected Western European Countries: Price Index[a] for Producer Durables, 1953 and 1958

(1950 = 100)

Country	1953	1958
Belgium	122	135
France	142	140
Germany (Federal Republic)	123	132
Italy	110	116
Netherlands	123	136
United Kingdom	124	148
United States	111	134

Source: Organisation for European Economic Co-operation, *General Statistical Bulletin* (various issues).
[a] National accounts implicit price deflators (in terms of dollars) for machinery and equipment.

Table 4-33. United States and Major Western European Countries: Basic Export Prices[a] for Selected Steel Products, 1955 and 1959
(Dollars per ton)

Item and country	30 March 1955	1 January 1959
Merchant bars		
United States	104.7	128.3–135.6[b]
Members of European Coal and Steel Community[c]	100.0	80.0– 93.0[b]
United Kingdom	98.0	107.5–116.6[b]
Wire rods		
United States	107.2	144.8
Members of European Coal and Steel Community[c]	104.0	96.0
Joists		
United States	103.6	133.2
Members of European Coal and Steel Community[c]	94.0	94.0
United Kingdom	102.0	109.2

Source: European Coal and Steel Community, High Authority, *General Report of the Activities of the Community*, 1956 and 1959 (Luxembourg).
[a] F.o.b. port of shipment, exclusive of taxes.
[b] According to product.
[c] Over-all basis prices for exports from Belgium-Luxembourg, the Federal Republic of Germany, France, Italy and the Netherlands.

It appears that the main factors in the recent deterioration in the United States balance of payments have been the shift in the United States propensity to import during the past five years, the rise in productive capacity in relation to demand in the rest of the world, and the expansion in the outflow of funds from the United States in connexion with military expenditures overseas. While all these factors have been operating for some years, the apparent suddenness of the shift in 1958 was due primarily to the easing of demand in the rest of the world at that time, affecting both import requirements and exportable supplies. However, despite the almost continuous outflow of gold and dollars from the United States during the past decade, the foreign exchange position of the United States remains much stronger than that of any other industrial country, as may be seen from the relationship between gold and dollar holdings and imports shown for a number of countries in 1959 in table 4-34.

Table 4-34. Ratio of Official Gold and Foreign Exchange Reserves to Imports (c.i.f.), 1959

Country	*Percentage*
United States[a]	118.3
Canada[a]	30.8
Total OEEC countries	44.1
Belgium	38.1
Denmark	18.1
France	36.5
Germany (Federal Republic)	52.6
Italy	87.0
Netherlands	35.1
Sweden	20.1
United Kingdom	30.5
Japan	33.6

Source: International Monetary Fund, *International Financial Statistics* and Organisation for European Economic Co-operation, *General Statistical Bulletin*, part I, No. 4, April 1960.

[a] Imports adjusted to c.i.f. by addition of 10 per cent to f.o.b. values.

Current situation and outlook[20]

The upswing in economic activity which began about the middle of 1958 continued into the early months of 1960. Despite some uncertainty as to the future course of production in North America, it is generally anticipated that for the year 1960 as a whole the gross national product in the industrial group of countries will be higher in real terms than in the preceding year. The rate of growth in total product will, however, probably be lower than that recorded in 1959.

Judging from government anticipations and the available economic indicators, the slowing down in the rate of growth of production in 1960 will result largely from developments in the United States, which alone accounts for over half the output of the group. The revenue estimates contained in the United States budget for the fiscal year 1961[21] are based on the assumption of a gross national product of $510 billion in 1960. This implies a rate of increase of about 5 per cent[22] in the real value of the gross national product in 1960 as compared with a rate of over 6.5 per cent in 1959.

The course of industrial production in recent months and the behaviour of certain major components of demand, discussed below, has created some uncertainty as to whether total output in the United States will reach the level assumed in the budget. Economic activity has tended to fall short of the expectations held in business circles at the beginning of the year. The seasonally adjusted index of industrial production, having climbed steeply immediately after the settlement of the steel strike, declined moderately in February and March and levelled off in April.

In western Europe, on the other hand, it is expected that the rate of expansion in economic activity will be maintained in 1960. Most countries in that region anticipate little or no change in the rate of expansion. A moderate slowing down in the growth of production expected in the Federal Republic of Germany and probably one or two smaller countries should be largely offset by the acceleration in the pace of expansion anticipated in Belgium and France where, as mentioned earlier, the revival of production began relatively later.

Canada, like western Europe, also expects to maintain the rate of increase in production at the level of about 3.5 per cent recorded in 1959. In Japan, on the other hand, the government anticipates a slowing down in the rise of the gross national product in the fiscal year beginning 1 April 1960. This is expected to result from a lower increase in public consumption and fixed investment expenditure, a slowing down in the growth of export demand and a levelling off in the rate of inventory accumulation.

The primary difference in the economic outlook between western Europe and North America is to be found in the relationship between the anticipated growth of demand and the available productive resources in the two areas. In some western European countries there is a possibility of sectoral and regional labour shortages and bottlenecks in productive capacity which would tend to limit the growth of production. In North America, on the other hand, it is not supply but demand

[20] Based in part upon replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies.

[21] Fiscal year ending 30 June 1961.

[22] The increase of about 5 per cent in 1960 is based on the assumption that the expected gross national product of $510 billion is calculated at end-1959 prices.

conditions that are expected to determine the pace of economic expansion in 1960.

Inter-regional differences in supply conditions

In western Europe, shortages of labour, especially in the construction industry, have already been encountered in Denmark and the Federal Republic of Germany, both of which anticipate a smaller rise in total production in 1960 than in 1959. There has been a steady rise in the backlog of orders in the Federal Republic of Germany since the beginning of 1959, and recent information [23] indicates that the degree of capacity utilization at the beginning of 1960 had regained the average level recorded in 1955. It is primarily on account of labour shortage, however, that the Federal Republic of Germany expects a slower rise in total product in 1960, despite buoyant demand conditions. The anticipated increase of 4 to 5 per cent in the gross national product is expected to result largely from an increase in productivity.

In the Netherlands, Sweden and the United Kingdom, although there are no over-all shortages in the supply of labour and in productive capacity, certain sectoral and regional bottlenecks have been encountered. In Sweden, shortages of skilled workers are reported in the engineering industries and in construction. In the United Kingdom there is still a substantial volume of unemployment and spare capacity, especially in the heavy engineering industry and in the north. Shortages of labour are, however, being experienced in the Midlands and in the south. Moreover, the sheet steel and certain light engineering industries—in particular the motor-car industry—have for some time been operating at full, or near full, capacity. Most major producers of cars and of durable household goods are, however, bringing into operation or planning further substantial capacity increases which will probably suffice to meet the anticipated increase in demand in these sectors in 1960.[24] Despite certain supply difficulties, these three countries expect to maintain a rate of growth for the year 1960 broadly equal to that attained in 1959.

In the other western European countries supply conditions are comparatively easier. In Belgium and France, where recovery started relatively later, ample labour supply and productive capacity are available to permit an acceleration in the modest rate of growth recorded in 1959. In both countries the rate of expansion in total product in 1960 will be determined largely by the behaviour of demand. In Italy, too, despite vigorous economic growth in 1959, sufficient labour reserves are available to permit a substantial further rise in employment and production. Similarly in Finland and Norway, no serious labour shortages have been encountered, and productive capacity is considered to be ample to permit a rate of growth in production comparable to that of 1959.

Unlike some of the western European countries mentioned above, no serious supply difficulties exist in North America which might impede a further rapid growth of production in 1960. In April 1960 the number of unemployed workers in the United States was still about 5 per cent of the civilian labour force on a seasonally adjusted basis. As regards productive capacity, it would appear from the latest survey conducted by McGraw-Hill[25] that the manufacturing industry in the United States was operating at about 85 per cent of capacity in the early months of 1960. A further addition of 5 per cent to manufacturing capacity is expected in 1960 as a result of planned investment schemes. In Canada, too, ample labour resources are available, and although operating rates rose during 1959, considerable free capacity still exists in most industries. The primary reason for the easier supply conditions in the United States than in most countries of western Europe is that idle labour and equipment resources were comparatively larger in that country at the start of the recent recession and the decline in production during the recession was appreciably greater. As a result, although production has risen faster in the United States since the end of the recession, unemployment and excess capacity remain higher than in most western European countries.

Prospects for demand

While the expansion of demand is expected to continue in western Europe in 1960 at about the same rate as in 1959, prospects appear to be less certain in North America. The main stimulus to higher economic activity in both areas is expected from business fixed investment, which rose only moderately in 1959. On the other hand public investment and residential construction are likely to rise more slowly—and in North America, in fact, residential construction has been declining since the middle of 1959.

The steady growth in industrial production since the middle of 1958 has resulted in a gradual reduction in the volume of idle capacity. This, together with a pronounced increase in business profits in 1959, was largely instrumental in bringing about a general improvement in business expectations. It is these factors that are primarily responsible for the current plans of businessmen to raise expenditure on modernization of equipment and on enlargement of productive capacity. An additional incentive for such outlays is derived in some countries from labour shortages.

Typical of developments in several countries was the upward revision of business fixed investment intentions

[23] Communicated by the IFO-Institut für Wirtschaftsforschung (Munich).

[24] National Institute of Economic and Social Research, *Economic Review* (London), No. 7, January 1960.

[25] "Business' Plans for New Plants and Equipment, 1960-1963", *13th Annual McGraw-Hill Survey*, 29 April 1960.

in the United Kingdom at the end of 1959 as the gap between output and capacity was progressively narrowed. Under the revised schedules, private fixed investment was expected to rise by 14 per cent in manufacturing and by 20 per cent in other industries and services, compared with a decline of 5 per cent in manufacturing and little change in other industries and services anticipated in the August 1959 survey. A large part of the upward revision in manufacturing resulted from the plans of the two major industries—steel and motor cars —which had, as noted earlier, been operating at or near capacity in the latter part of 1959.

Most of the other western European countries also anticipated early in 1960 a substantial rise in business investment demand. France and Norway which, like the United Kingdom, had experienced a fall in industrial investment in 1959, expected a pronounced recovery in this component of demand. In the former, the steep rise in fixed investment by the nationalized industries in 1959 is expected to slacken, but private business fixed investment is expected to rise by about 10 per cent in 1960. In Norway the volume of fixed investment in manufacturing and mining, which declined slightly in 1959 for the second year in succession, is expected to increase by about 10 per cent in the current year. On the other hand, investment in ships is expected to continue its declining trend. To stimulate industrial investment the Norwegian Government reintroduced, as from the beginning of 1960, a provision under which those types of machinery which are not produced in the country can be imported duty-free. It also proposed to abolish the tax on undistributed profits with effect from the income year 1959.

A continued rapid growth in industrial investment is expected to be a major dynamic factor in the expansion of demand in the Federal Republic of Germany, Italy, the Netherlands and Sweden. A marked acceleration in the rate of growth of industrial investment is expected in the latter country. According to business investment plans, the volume of fixed investment in manufacturing and mining will rise by 13 per cent in 1960, as compared with 3 per cent in the preceding year. In the Netherlands the volume of fixed investment in business enterprises, including public corporations, which had increased by over 8 per cent in 1959, is expected to rise by about 14 per cent in 1960. In the Federal Republic of Germany and Italy, likewise, the boom in industrial investment experienced in the latter part of 1959 is expected to continue with increasing vigour in the current year.

A rapid expansion in industrial investment is also expected in North America. In Canada, where this component of investment had declined moderately in 1959, manufacturers expect to raise the value of their expenditure on plant and equipment by over 11 per cent in 1960 according to the survey taken at the end of 1959. An even steeper rate of growth is expected in fixed investment outlays by forest and mineral product companies.

In the United States, according to the survey conducted jointly by the Department of Commerce and the Securities and Exchange Commission in late January and February of 1960, businessmen expect to increase their expenditure on plant and equipment by 14 per cent in 1960 as compared with an increase of 7 per cent in 1959. In the manufacturing sector the increase is expected to be as much as 25 per cent compared with 6 per cent in the preceding year. As in the case of the United Kingdom, particularly large increases in fixed investment are planned in the steel and motor-car industries. These anticipations appear to be confirmed by the McGraw-Hill survey of business investment plans conducted in the second half of March and early April 1960, which shows a 16 per cent increase in business expenditure on new plant and equipment for 1960. According to this survey, about two-thirds of this year's planned expenditure on fixed investment in manufacturing will be for replacement and modernization of equipment, and only about one-third for the expansion of capacity.

It is important to note that, despite the general increase in the degree of utilization of resources, ample productive capacity exists in the capital goods sector of the industrial countries to permit the realization of the anticipated business expenditure plans. Mention has already been made of the wide-spread excess capacity in heavy engineering in the United Kingdom. In the United States likewise, according to the McGraw-Hill survey, the machinery industry was operating at less than 80 per cent of capacity at the end of 1959 and was planning to increase its productive capacity by a further 5 to 6 per cent in 1960. Nor are business investment plans likely to be influenced to any significant extent by tightening credit conditions. Most of the planned capital expenditure can be financed out of internal resources, namely, depreciation allowances and retained profits. In the United States, for example, depreciation allowances alone in 1960 are expected to amount to about two-thirds of the anticipated business expenditure on plant and equipment.

A downward revision of business investment plans could, however, result if total demand failed to expand at the rate anticipated at the time when these plans were being formulated. Such developments in demand could result from government restrictive measures or from other factors, such as unduly optimistic expectations of entrepreneurs as to future sale prospects. It is uncertain, for example, how far the two surveys of business investment intentions in the United States reflect business reaction to the recent slackening trend of sales and output.

Residential construction, which rose rapidly in the first phase of the current economic upswing, is generally expected to slacken in 1960—and in some countries to

decline—largely as a result of tight money policies pursued by governments. In a few instances, however, shortages of labour and of certain construction materials are expected to be the main limiting factors.

In North America, where credit was tightened early in the upswing, residential construction is expected to decline in 1960, in Canada for the second year in succession. In the United States the number of privately owned dwelling units started declined, on a seasonally adjusted basis, after April 1959, and by the first quarter of the current year the number of these starts was over 15 per cent lower than in the corresponding period of 1959. Expenditure on non-farm residential construction, after rising rapidly for about a year, fell in the second half of 1959 and showed a further downward trend in the early months of 1960. In April 1960 mortgage conditions became easier and the Federal Housing Administration lowered minimum down payments on certain categories of houses with a view to encouraging residential construction.

No fall in the volume of housing investment is expected in western Europe in 1960, except in Sweden, although the rate of growth of such investment may decline. In some countries the slowing down is attributed to the tight credit policies adopted in the latter part of 1959 and the early months of 1960. In Denmark and the Federal Republic of Germany construction may be hampered also by labour shortages[26] and in the United Kingdom by inadequate supplies of certain building materials. In France and Norway on the other hand, where the volume of residential construction had declined moderately in 1959, some recovery is expected in this component of investment during 1960.

It is largely as a result of expected differences in the behaviour of residential construction that total fixed investment is expected to show a divergent trend in western Europe and North America. If current business investment plans are realized, the rate of growth in total fixed investment should be maintained and may even accelerate in western Europe. In the United States, on the other hand, the increase in business expenditure on plant and equipment would be partly offset by the expected fall in housing investment—compared with the substantial increase in 1959—and this would slow down fixed investment as a whole. In Canada, where fixed investment outlays levelled off in 1959, a moderate recovery in such outlays is anticipated in 1960.

Changes in the volume of government expenditure on goods and services are not expected to be very significant in most countries. A moderate reduction in the rate of growth of government expenditure is anticipated in France, Norway and Sweden. In the United Kingdom, on the other hand, the volume of public consumption is expected to rise by about 4.5 per cent in 1960 as compared with a rise of 2.5 per cent in 1959, partly because of a substantial increase in defence expenditure. The Federal Republic of Germany also expects an increase in defence expenditure, but part of this will be reflected in a rise in imports of armaments from abroad rather than an increase in domestic demand. In the United States the expenditure estimates of the fiscal 1961 budget submitted to Congress envisage an increase in public consumption for the calendar year 1960 of about 2 per cent, as compared with a rise of over 5 per cent in 1959. At the time of writing, however, legislative action on the budget had not as yet been completed.

Personal consumption should continue its upward trend in 1960, the rate of increase in the various countries being determined largely by the pace of expansion in total product and in personal disposable income. In some countries, however, there are indications of a slowing down in the rapid expansion of consumer expenditure on durables experienced in 1959. Were such a slowing down to materialize, it could have a significant effect on production, and may also influence business investment plans.

In the United Kingdom a lengthening of delivery dates of some popular car models suggests some unsatisfied demand for motor-cars, but the boom in demand for other durables has already eased. Towards the end of April the government imposed some moderate restrictions on hire-purchase sales of motor-cars and certain other consumer durables. In the United States the automobile industry, which plays a dynamic role in the economy of the country, appears currently to be operating well below capacity. Earlier anticipation of a substantial rise in car sales in 1960, for the second year in succession, have proved over-optimistic, and there has been some involuntary accumulation of inventories; domestic car inventories, which had been run down during the steel strike, reached a record high level by the end of March 1960. As a result, according to business reports, production schedules for the second quarter of the year involve a drop of about 10 per cent from the first quarter. These developments are largely responsible for a steady fall in steel production since January and have also contributed to the weakness in industrial production mentioned earlier.

Export demand is expected by governments to continue its upward trend in 1960 and to provide an important stimulus to the growth of production. Exports of the industrial group of countries to the primary producing areas, which recovered in the latter part of 1959, are expected to rise further in 1960. This would result from a rise in the foreign exchange earnings of the primary producting countries, following a firming tendency in the prices of primary products and an increase

[26] In Denmark, where the number of buildings under construction at the beginning of 1960 was about 25 per cent higher than a year earlier, new housing starts were temporarily banned in Copenhagen and its environs and in certain other large cities towards the end of February. In the Federal Republic of Germany, special incentives were introduced at the end of 1959 to encourage construction activity during the winter season and thereby relieve pressures in the labour market at the seasonal peak.

in the volume of shipments of such commodities owing to the expansion of production in the industrial countries. The volume of trade among industrial countries is also likely to expand considerably, and to reflect the higher level of business outlays on machinery and equipment and of consumer expenditure on durables.

If the expectations mentioned above are generally realized, the balance of payments trend in western Europe and North America since 1957 may be halted or even reversed. Stronger domestic demand pressures in western Europe than in North America may tend to shift the balance of payments between the two areas in favour of the latter to some extent. A deterioration in balance of payments positions is, for example, expected by the governments of the Federal Republic of Germany, France, the Netherlands and the Scandinavian countries.

In the United States, the government expects that the improvement in the balance of payments experienced in the second half of 1959 will continue in 1960. The adverse effect of the steel strike on the trade balance has disappeared, and shipments of cotton, which had declined steeply in 1959, are expected to increase in 1960. Imports are likely to grow more slowly than in 1959 in sympathy with domestic output and income; and exports may benefit from the improved foreign exchange position of primary producing countries and from the economic upswing in western Europe. This upswing is expected to have a considerable impact on demand for metal products and machinery for which the United States is an important marginal supplier.

Governments anticipate that the expansion in final demand will be accompanied by further additions to stocks by traders and manufacturers, providing added stimulus to the growth of production. Substantial interregional differences are, however, expected in inventory behaviour during 1960. In western Europe as a whole, inventory building may provide a more powerful impetus to production in 1960 than in 1959. Provisional estimates of inventory changes in 1959 indicate a relatively low level of inventory accumulation for the area as a whole—about the same rate as in the preceding year. A more rapid building up of stocks is expected in 1960. A particularly high rate of inventory accumulation is expected in Sweden, where stocks declined in 1959, and in the Federal Republic of Germany, France, the Netherlands and Norway, where only moderate additions were made to stocks in the preceding year. In the United Kingdom, on the other hand, where stocks rose appreciably in the second half of 1959, no significant acceleration is expected in inventory accumulation in 1960.

Inventory movements accounted for about one-fourth of the rise in the volume of gross national product from 1958 to 1959 in the United States and for an even larger proportion in Canada. It is not likely in either country that such additions to stocks as may take place in 1960 will stimulate production as much as in 1959.

In the United States inventory accumulation proceeded at a rapid rate in the latter part of 1959 and in the early months of 1960, largely to replenish stocks which had been run down during the steel strike. The increase in the rate of inventory accumulation accounted for about 40 per cent of the rise in the gross national product from the last quarter of 1959 to the first quarter of 1960. Part of the growth of stocks, however, especially in the automobile and steel industries, was, as noted above, involuntary, resulting from the failure of final sales to match expectations. Production schedules in these industries have consequently been cut for the second quarter of 1960. The rate of increase in stocks during the remainder of 1960 is likely to be considerably lower than that recorded in the first quarter.

Wages and prices

As in 1959, prices are expected to remain generally stable or to rise only moderately in the industrial countries. Sectoral shortages may lead to some price increases in excess of those experienced in 1959. There is, however, in most countries no serious risk of aggregate demand running far ahead of aggregate productive capacity in the near future.

On the cost side import prices of primary products, which had fallen steeply during the 1957/58 recession, firmed early in 1959 and rose only gradually during the remainder of the year. Owing to the existence of wide-spread excess productive capacity for most primary products, however, the anticipated rise in world demand for these commodities is not likely to produce major increases in their prices during 1960.

Nor are other components of costs—wages and property income—expected to lead to a pronounced rise in prices. In some countries labour costs per unit of output, which remained stable and in many cases even declined in 1959, are expected to show a mild upward tendency. In the absence of a corresponding reduction in profit margins, which generally rose faster than wages in the first phase of the upswing, total unit costs of production will also tend to increase moderately. An advance in labour cost per unit of output in certain western European countries is expected to result partly from a slower rise in productivity in 1960, owing to the fact that much of the slack which had developed during the recession was taken up in the first phase of the upswing. The increase in demand for machinery and equipment in 1960 should, however, fall on industries which have relatively large margins of unused capacity. This, together with the additions being made to productive capacity in industry as a whole, should permit a further substantial rise in output per man-hour.

A tendency for wage rates and hourly earnings to advance more quickly is expected in some countries and may also have the effect of raising labour costs per unit of output. In the Netherlands, where wage rates rose

by 3 per cent in 1959, an average wage increase of approximately 8 per cent is expected for 1960. Wage contracts recently concluded in Sweden and in the United Kingdom also indicate a more rapid rise in wage rates and in hourly earnings in these countries for 1960. In Denmark and Norway, on the other hand, where a reduction in standard hours worked per week was partly responsible for a sharp upturn in hourly earnings in 1959, a slower increase is expected for 1960.

The extent of price increases which may result from the pressure of costs in 1960 should not, however, be exaggerated. In the Netherlands, for example, the pronounced acceleration in the rate of wage increases mentioned above is expected to be offset by a corresponding advance in productivity, so that consumer prices for 1960 are expected to be, on the average, only about 2 per cent higher than in 1959. This moderate price rise is expected to result almost exclusively from the direct effect of government measures abolishing the milk subsidy and raising rents by 20 per cent as from the beginning of April. In the United Kingdom also, a price rise of about 1 to 2 per cent is considered likely in 1960 on the assumption that profit margins do not rise further.[27] A more pronounced advance in prices—over 4 per cent—is expected in Sweden where a general turnover tax of 4 per cent was imposed as from the beginning of 1960. In France, on the other hand, consumer prices are expected to increase less than in the preceding two years—by less than 3 per cent, as compared with a rise of over 12 per cent in 1958 and about 6 per cent in 1959.

[27] *See* National Institute of Economic and Social Research, *Economic Review*, No. 8 (London), March 1960.

To summarize the preceding discussion, it would appear that in North America the rate of growth of aggregate demand and production in 1960 will be lower than that recorded in the preceding year of recovery from recession. This would result partly from a decline in the rate of increase in fixed investment in the United States owing to a lower level of residential construction activity. A slackening in the rate of growth of automobile sales and in the pace of inventory accumulation is also expected to retard the pace of the upswing. The anticipated improvement in the foreign balance is not likely to be large enough to offset fully the adverse influence on production of domestic demand in the private sector. In the public sector, likewise, the estimates contained in the fiscal 1961 budget envisage a lower rise in public consumption for the calendar year 1960 than in the preceding year. The final form of the budget is not yet known, however, nor is it possible to anticipate any special measures that the government may take to provide additional stimulus to economic activity should the need arise.

In western Europe, unless serious restrictive measures are taken by governments, the rate of expansion in aggregate demand is likely to be maintained during 1960. A number of regional and sectoral bottlenecks may be encountered in the supply of labour and in productive capacity in some countries. These should not, however, have a significant influence on the over-all rate of growth of production of this area, especially as the countries concerned are in a position to meet deficiencies in commodity supply through expansion of imports.

Chapter 5

RECENT TRENDS IN PRIMARY EXPORTING COUNTRIES

The 1958/59 upswing in economic activity in the industrial countries occasioned a significant increase in the rate of consumption of raw materials and, with some delay, a modest expansion in demand for purposes of inventory. Much of the increased flow of materials originated in the primary exporting countries and was reflected in increased exports. Though there were some notable increases in price, available capacity—supplemented by withdrawals from stocks which producers had accumulated in the 1957/58 recession—was generally sufficient to sustain the higher rates of absorption. As a result export volume expanded in most countries to a much greater degree than export prices. For the primary exporting countries as a group this effect was accentuated by conditions in world markets for foodstuffs: in most cases supplies remained or became excessive, prices tended to sag and where export earnings increased it was entirely the result of expansion in the volume of shipments.

In most of the primary exporting countries production increased between 1958 and 1959 not only in the case of export commodities but also in the case of many of the major items of domestic consumption. Some of this expansion was fortuitous—in most regions 1958/59 was climatically a much better year than 1957/58—but a large part of it was the result of earlier investment, both agricultural and industrial, and some of it grew out of the critical balance of payments situation which had developed in a number of countries in 1957/58, leading to restraints on imports and the encouragement of import-saving activities.

In total, the combined effect of reduction in imports and expansion in exports was a considerable improvement in the balance of trade of the primary exporting countries. As a result, foreign exchange reserves, which had been heavily drawn upon in 1957 and 1958, were partly restored in 1959.

Most of the countries whose external accounts got seriously out of balance in 1957/58 took steps to deflate domestic demand. In some countries in which inflationary forces were strongest general stabilization programmes were adopted, aimed simultaneously at better internal and external equilibrium. These programmes tended to achieve most where external developments—on current or capital account—were most favourable and domestic supplies could be duly augmented by imports. Elsewhere import cuts and restraints on domestic demand were often inimical to local production and investment, and in some cases their effect persisted long after external balance had been restored.

Thus, although 1959 brought a wide-spread easing of balance of payments difficulties, it saw much less improvement in domestic economies either among countries in which inflation was still rampant or among countries in which growth had been retarded—whether automatically or by official action—by the 1957/58 recession in export prices.

International trade and its impact on external balances

During the nineteen fifties the quantum of exports from the primary exporting countries increased at an average rate of just over 4 per cent a year. The expansion between 1958 and 1959—almost 10 per cent—was the largest of the decade, surpassing those of the post-Korean readjustment of 1952-1953 and the investment boom of 1954-1955. This large increase did not bring a comparable gain in foreign exchange earnings to the primary exporting group, however, for the average unit value of their exports, which had declined by 5 per cent between 1957 and 1958, declined by a further 3 per cent between 1958 and 1959. The rise in the value of their exports of about 6 per cent between 1958 and 1959 did little more than restore the 1957 level of proceeds. As a result of the 1957/58 recession in prices, the average growth in export earnings over the decade dropped below that in export quantum, to rather less than 4 per cent a year.

Fluctuations in export earnings tend to have a direct effect on import demand, usually with some months' delay and sometimes prolonged beyond the duration of the impulse. Thus the decline in export earnings between 1951 and 1952 was reflected in a comparable decline in import expenditure in 1953, and the rise in earnings that began in 1954 carried forward to a maximum increase in imports between 1956 and 1957, by which time the growth in exports had already fallen below the average for the decade. Similarly the cutback

in imports occasioned by the 1957/58 recession continued into 1959, despite the recovery in exports. Import expenditure in 1959, almost 10 per cent below the 1957 peak, was about 60 per cent above the 1950 level. As a result of the rise in prices this increase in expenditure purchased only 46 per cent more goods than in 1950.

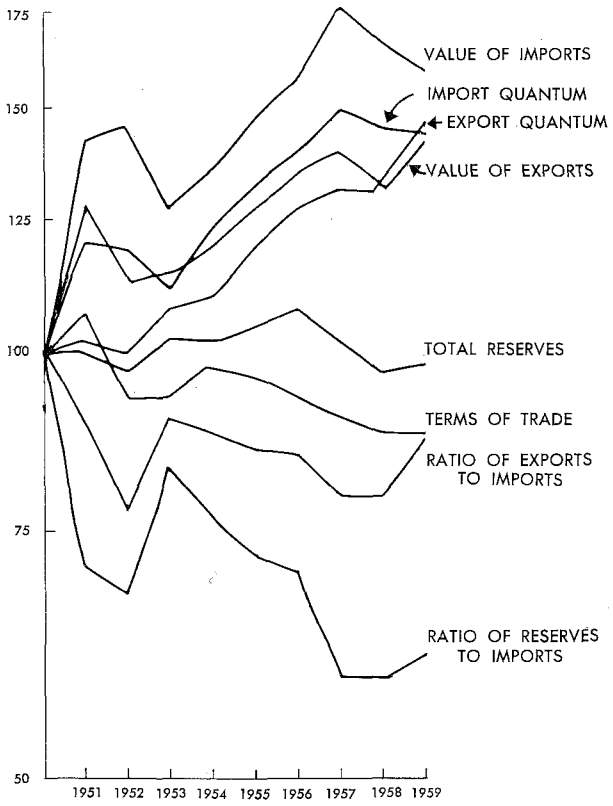
Over the decade the expansion in the volume of exports—about 44 per cent—was more or less the same as the expansion in the volume of imports. As export prices had declined fairly steadily since 1951 and in 1959 were about 3 per cent below the 1950 level, the 44 per cent increase in volume realized an increase of less than 40 per cent in value. The terms of trade of the primary exporting countries, having become progressively less favourable since 1954, were about 14 per cent below the 1950 figure in 1959.

Under the influence of deteriorating terms of trade and a widening gap between export receipts and import expenditure, the foreign exchange reserves of the primary exporting countries declined sharply between 1956 and 1958, and in 1959 were no greater than they had been in 1950. The ratio of reserves to imports dropped from about 77 per cent in 1950 and 62 per cent in 1953 to less than 45 per cent in 1958; a slight recovery in 1959 brought the ratio to about 61 per cent of its 1950 figure.

There was a slight rise in the index of primary commodity prices in the course of 1959.[1] As a result of the recovery in export earnings and the further cutback in import expenditure, the merchandise trade gap of the primary exporting countries was greatly reduced, and this was instrumental in reversing the downward movement in reserves. While these developments relieved the immediate strain on the balance of payments, the end of the decade found the primary exporting countries in a much weaker position on external account than they had been at the beginning (see chart 5-1).

Chart 5-1. Primary Exporting Countries: Indices of Exports, Imports, Terms of Trade and Reserves

(1950=100)



Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* International Monetary Fund, *International Financial Statistics* (Washington, D. C.).

CYCLICAL MOVEMENTS IN TRADE, 1957-1959

The price index of primary commodities moving in international trade reached its cyclical low in the first quarter of 1959. It had declined by 14 per cent from its peak at the time of the Suez crisis two years earlier and it stood at its lowest point of the decade, 5 per cent below the 1950 average. Following the downswing in price and in the demand for raw materials in the industrial countries, the export earnings of the primary exporting countries declined fairly steadily during 1957/58, reaching their low point in the third quarter of 1958. The recovery in industrial demand which got under way in mid-1958 was reflected in a marked expansion in shipments later in the year, so that although prices continued to fall, by the end of 1958 export earnings had regained the rate of a year earlier and by the third quarter of 1959 were running 10 per cent above the corresponding 1958 figure and 4 per cent above the corresponding 1957 figure.

[1] Movements in commodity prices in 1959 are analysed in United Nations, *Commodity Survey, 1959* (sales number: 60.II.D.1), which reviews in some detail the course of production and trade in 1958/59 and the impact of these developments on the primary exporting countries.

Influenced to a large extent by earlier movements in export earnings, import expenditure did not begin to decline until early in 1958, but then it continued downward until early in 1959: in terms of annual rates, the reduction was from over $36 billion in the fourth quarter of 1957 to less than $30 billion in the first quarter of 1959. The effect of rising incomes then began to show and by the third quarter of 1959 import expenditure, though still 7 per cent below the corresponding 1957 rate, was above the corresponding 1958 rate.

Under the impact of these divergent trends, the ratio of exports (valued f.o.b.) to imports (valued c.i.f.) dropped sharply from 95 per cent to 84 per cent during 1957, rose erratically during 1958 to a peak of 99 per cent in the first quarter of 1959, and then began to decline again as the flow of imports increased. The widest swing was recorded by Latin America where the export-import ratio fell from 109 per cent to 84 per cent during 1957 and then rose to 123 per cent in the first quarter of 1959 when imports were at an annual rate of less than $7 billion, 10 per cent below the 1950-1958 average. There was also a wide fluctuation in the Asian non-sterling group of countries: from 96 per cent to 86 per cent during 1957, rising to 111 per cent by the second quarter of 1959. In the independent sterling group the export-import ratio swung from 100 per cent in the first quarter of 1957 to 85 per cent in the second quarter of 1958, back to 100 per cent in the third quarter of 1959. In the dependencies of western Europe the ratio moved in a much narrower and generally lower range.

The cyclical movement was most marked among the countries whose principal exports are industrial materials. The decline in demand in 1957/58 resulted in a reduction in both the volume and the price of internationally traded raw materials; the 1958/59 recovery induced a corresponding upswing in volume and price. Export earnings of countries exporting principally metals and ores and rubber tended to recover from the low rates recorded in the first half of 1958. In the case of the wool and oil-seeds exporters, the low point was reached in the third quarter of 1958; earnings tended to improve thereafter. This was true of the cotton exporters, too, even though prices continued to decline—though at a diminishing rate—until the last quarter of 1959 (see chart 5-2).

In the wake of the reversal in the trend in earnings came a rise in import expenditure. Imports into the raw material exporting countries generally reached their lowest rate in the first quarter of 1959: thereafter there was some recovery, though in the metals, rubber and oil-seeds groups fourth quarter imports were still below the 1957 average.

Among the food exporting countries short-term movements in export earnings were subject less to cyclical and more to seasonal factors. With the exception of meat, moreover, prices tended to continue to drift downward throughout the period. The effect was most marked in the case of the sugar exporters but by the end of 1959 it was the coffee group that showed the least sign of regaining 1957 rates of earnings. Imports of this group—unlike those of the other food groups—also remained well below the 1957 average.

In the aggregate, the rise in exports in the course of 1959 just about counterbalanced the decline in 1958. Total earnings in 1959 thus regained the 1957 level (see table 5-1). Of the groups whose earnings had declined between 1957 and 1958, only the entrepôt traders and the exporters of rubber or metals and ores registered a full recovery in 1959; for the remainder the recovery between 1958 and 1959 was insufficient to make good the reduction between 1957 and 1958.

The only groups to experience a second successive reduction in earnings were those exporting sugar and petroleum products, and the decline between 1958 and 1959 was somewhat less than that in the preceding interval. In the sugar group almost all constituent countries were affected; in the petroleum products group the reduction was concentrated largely in the Netherlands Antilles where the value of exports dropped off after the first quarter of 1959 to rates well below the average for the nineteen fifties.

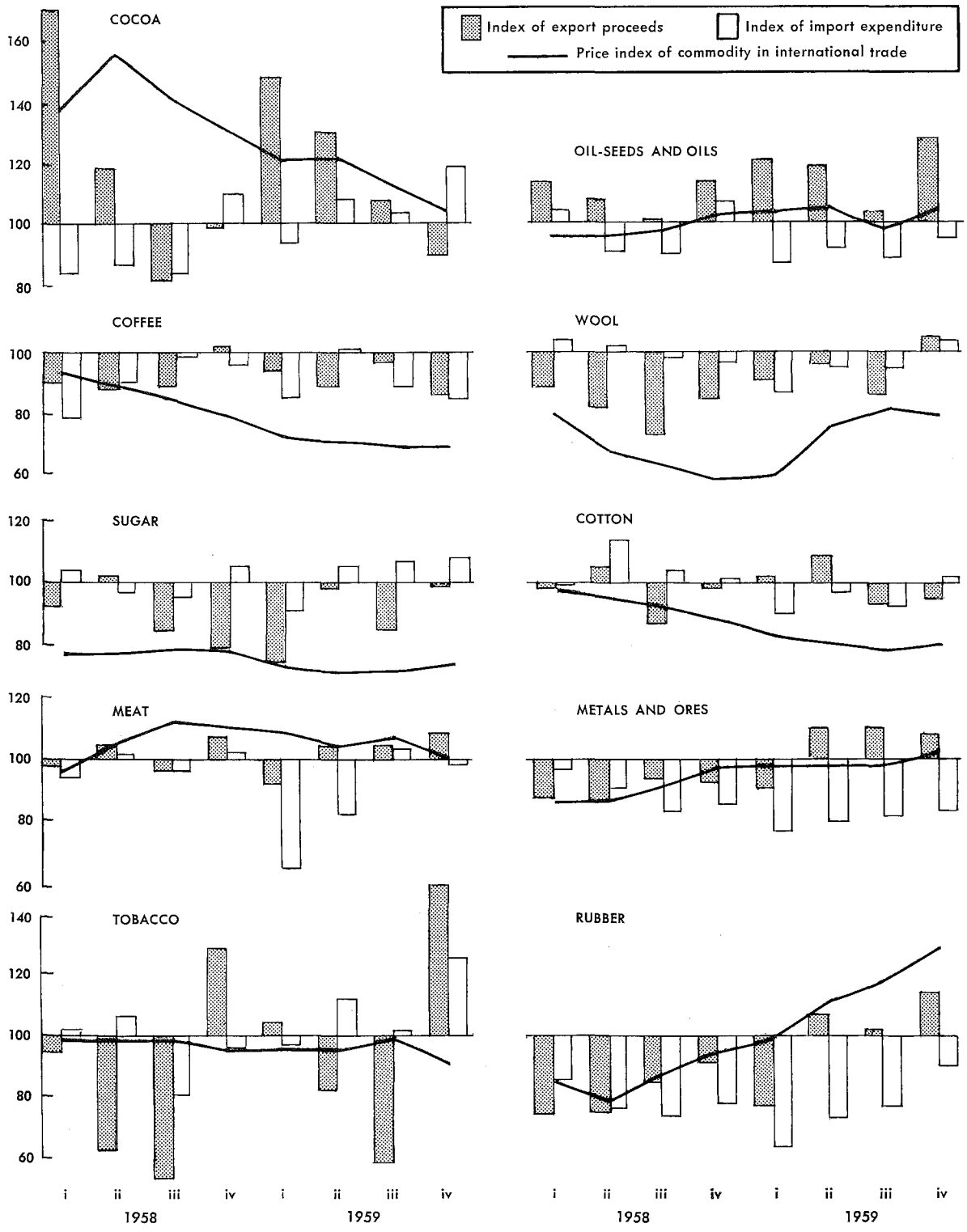
Only one other group—that whose major export is wine—earned less in 1959 than in 1958. This reflects changes in the dollar value of shipments from Algeria: the decline in 1959 was largely the result of a reduction in export crops, but it was also affected by the devaluation of the franc.

The remaining groups increased their export proceeds in both periods—very slightly in the case of the fruit exporters in 1958 and the cocoa exporters in 1959 and the meat exporters in both years. Only the oil-seeds and crude petroleum groups registered two successive gains of appreciable proportions.

One of the notable features of trade movements over the cycle was the fact that in the face of considerable fluctuation in the value of exports from the primary exporting countries their volume continued to expand. It did not fall between 1957 and 1958 with the reduction in demand in the industrial countries, and between 1958 and 1959 it increased by about 10 per cent. The sustaining elements in 1958 were the exporters of crude petroleum, oil-seeds and some of the foodstuffs, especially sugar, coffee, fruit and meat. Except for the sugar group—which was the only one to show a decline in export quantum between 1958 and 1959—these were among the groups leading the expansion during the recovery phase of the cycle. There was also an over-average expansion in the volume of shipments from

Chart 5-2. Changes in Prices of Selected Commodities and in Export Proceeds and Import Expenditure of Groups of Countries Exporting Them[a]

(1957 average = 100)



Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* International Monetary Fund, *International Financial Statistics.*

[a] For composition of country groups, *see* footnotes to table 5-1.

Table 5-1. Changes in Merchandise Trade

(Value, millions of dollars; index, preceding year = 100)

Country group exporting mainly	Exports f.o.b.			Imports c.i.f.		
	Value	Index		Value	Index	
	1957	1958	1959[a]	1957	1958	1959[a]
Rice[b]	595	84	116	705	85	107
Sugar[c]	1,598	91	93	1,775	101	99
Meat[d]	1,376	101	101	1,858	98	89
Bananas[e]	234	101	105	303	96	102
Citrus fruit[f]	662	100	110	1,549	98	98
Cocoa[g]	314	118	101	371	91	116
Coffee[h]	2,775	93	100	3,011	91	100
Tea[i]	1,732	91	107	2,622	83	103
Wine[j]	759	102	85	1,559	104	99
Tobacco[k]	565	85	117	921	96	115
Oil-seeds and oils[l]	1,115	109	106	1,620	98	95
Cotton[m]	1,741	97	103	2,399	104	92
Wool[n]	4,400	82	115	4,696	100	96
Non-apparel fibres[o]	471	90	107	537	89	89
Rubber[p]	1,894	83	122	1,817	79	98
Metals and ores[q]	2,410	90	116	3,289	89	90
Petroleum, crude[r]	4,807	108	107	2,739	89	96
Petroleum products[s]	1,217	93	94	1,520	94	92
Imported goods[t]	1,664	93	110	2,228	91	106
TOTAL, primary exporting countries[u]	30,600	95	106	35,600	94	96

Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* International Monetary Fund, *International Financial Statistics.*

[a] *Preliminary; based, in the cases noted below,* on less than twelve months' data.

[b] Burma and Thailand.

[c] Barbados; British Guiana; China (Taiwan); Cuba, 9 months (exports only in the 1958–1959 comparison); Dominican Republic; Fiji, 9 months; Guadeloupe, 9 months; Jamaica; Martinique, 9 months; Mauritius; and Réunion.

[d] Argentina; Ireland; and Paraguay.

[e] Ecuador; Honduras, 9 months; and Panama.

[f] Israel; Lebanon, 9 months; and Spain.

[g] Cameroun and Ghana.

[h] Angola; Brazil; Colombia; Costa Rica; El Salvador; Ethiopia; Guatemala; Kenya; Malagasy Republic; and Uganda.

[i] Ceylon and India.

[j] Algeria and Portugal.

[k] Greece and Turkey.

[l] Former French West Africa (excluding Guinea), 9 months; Libya, 9 months; Nigeria, 9 months; and Philippines.

[m] Former French Equatorial Africa; Mexico; Mozambique, 9 months (exports only in the 1958–1959 comparison); Nicaragua; Sudan; and United Arab Republic.

[n] Australia; New Zealand; Union of South Africa; and Uruguay (imports, 9 months).

[o] Pakistan and Tanganyika.

[p] Cambodia; Federation of Malaya; Indonesia; Liberia (not included in the 1958–1959 comparison); North Borneo, 9 months; and Republic of Viet-Nam.

[q] Belgian Congo and Ruanda-Urundi; Bolivia (exports only in the 1958–1959 comparison); Chile, 6 months; Cyprus; Federation of Rhodesia and Nyasaland; Jordan; Morocco; Peru; Republic of Korea; Sierra Leone, 9 months; Surinam; and Tunisia.

[r] Brunei (not included in the 1958–1959 comparison); Iraq (exports, 9 months); Kuwait (exports only), 9 months; Saudi Arabia (exports only in the 1958–1959 comparison); Trinidad; and Venezuela.

[s] Aden; Netherlands Antilles, 9 months; and Sarawak, 9 months.

[t] Hong Kong and Singapore.

[u] Excluding Ireland, Greece, Portugal, Spain and Turkey, but including estimates for a number of smaller countries and territories omitted from the commodity groupings.

the tobacco, cocoa and metals and ores groups. A comparable increase in the quantum of exports from the rice group failed to restore the 1957 volume. Exports from the rubber and tea groups—though above the 1958 level—also fell short of 1957 quantums. Exports from the wool group, on the other hand, having declined only fractionally between 1957 and 1958, were well above the 1957 quantum in 1959 (see table 5-2).

By and large, the increased quantities shipped by the primary exporting countries were sold only at lower prices: on the average, export unit values, which had declined by more than 5 per cent between 1957 and 1958, declined further by almost 3 per cent between 1958 and 1959. The only country groups in which quantum and unit values did not move in opposite directions were those exporting mainly sugar—where volume and price were both lower—and those exporting mainly oilseeds, wool, rubber and metals and ores, where both variables were higher.

Though export unit value, averaged over all primary exporting countries, was somewhat lower than in 1958, results for country groups ranged widely—from a de-

Table 5-2. Indices of Export and Import Quantum, Unit Value and Terms of Trade[a]
(Corresponding portion of preceding year = 100)

Country group exporting mainly	Exports f.o.b.				Imports c.i.f.				Terms of trade	
	Quantum		Unit value		Quantum		Unit value			
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959
Coffee[b]	104	120	89	84	95	102	96	99	93	85
Cocoa[c]	91	117	136	86	95	119	102	98	133	89
Tobacco[d]	92	128	96	91	103	114	95	100	102	91
Sugar[e]	107	99	86	92	111	101	97	97	88	95
Vegetable fibres[f]	100	109	96	95	108	92	96	100	100	96
Fruit[g]	104	121	98	95	103	102	95	99	103	96
Petroleum, crude[h]	110	110	99	96	90	97	100	100	99	97
Rice[i]	79	116	107	100	89	108	98	99	109	101
Tea[j]	92	107	99	100	89	107	94	96	106	104
Oil-seeds[k]	108	111	103	105	100	99	100	100	103	105
Meat[l]	104	100	98	101	103	93	90	96	108	105
Wool[m]	99	108	84	106	101	96	100	100	84	106
Metals and ores[n]	92	113	94	109	85	94	100	98	94	112
Rubber[o]	89	102	92	120	80	100	99	97	93	124
Average, all primary exporting countries[p]	101	110	95	97	98	99	97	97	98	99

Source: United Nations Division of General Economic Research and Policies; Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* International Monetary Fund, *International Financial Statistics.*

[a] Group indices are derived from country indices weighted by the dollar value of 1958 exports and imports; 1959 indices are preliminary, based in the cases noted below on less than twelve months' data.

[b] Brazil; Colombia; Costa Rica; El Salvador, 9 months; Ethiopia; Guatemala, 9 months; and Malagasy Republic, 9 months.

[c] Cameroun, 9 months, and Ghana, 6 months.

[d] Greece and Turkey.

[e] China (Taiwan), 11 months; Cuba (exports only), 9 months; and Dominican Republic.

[f] Mexico, 11 months; Nicaragua; Pakistan, 11 months; Sudan; UAR (Egypt); and UAR (Syria), 9 months.

[g] Ecuador; Honduras, 9 months; Israel; and Panama.

[h] Iraq, 9 months; Trinidad and Tobago; and Venezuela.

[i] Burma, 8 months, and Thailand.

[j] Ceylon, and India, 11 months.

[k] Nigeria, 6 months, and Philippines, 11 months.

[l] Argentina and Ireland.

[m] Australia; New Zealand; Union of South Africa; and Uruguay, 9 months.

[n] Belgian Congo; Bolivia (exports only); Cyprus; Federation of Rhodesia and Nyasaland; and Peru, 10 months.

[o] Federation of Malaya, 9 months; Indonesia; and Republic of Viet-Nam, 11 months.

[p] Excluding Ireland, Greece, Portugal, Spain and Turkey, but including estimates for a number of smaller countries and territories omitted from the commodity groupings.

cline of about a sixth in the case of the coffee exporters to an increase of about a fifth in the case of the rubber exporters. In general it was the countries exporting industrial materials that gained most from the changes in prices and those exporting foodstuffs that experienced the reductions. The only exceptions were the meat and vegetable fibre groups: the former was a food group registering a rise in the unit value of exports as a result of higher beef prices, and the latter a raw material group registering a reduction in the unit value of exports as a result of lower cotton prices. Among the food exporters the rice and tea groups registered only a fractional reduction in export unit value, but this was largely the result of the rise in price of rubber shipped from Thailand and of rubber and coconut oil shipped from Ceylon, which offset the effects of a marked decline in the unit value of rice and a slight decline in the unit value of tea. Like most of the food exporters, the petroleum group registered a second decline in export price. The only group to register two successive increases in price was that whose principal export is oil-seeds and oils; the main stimulus in this case came from copra, but other oil-seeds prices tended to move sympathetically and some secondary products of these countries also enjoyed favourable markets: cocoa in 1958 and abaca in 1959.

Though the cyclical swing in export prices and receipts tended to induce a similar swing in import expenditure, the lag in the latter was sufficient to keep the 1959 total below that of 1958. Thus, imports into the primary exporting countries, after declining 6 per cent between 1957 and 1958, declined a further 4 per cent in the following interval. Most of the groups experienced two successive cuts; none maintained a continuous increase in imports: the only groups whose imports in 1959 were greater in value than in 1957 were those exporting mainly cocoa, wine and tobacco. In the cocoa group this was the result of an upsurge in imports in 1959 following an expansion in the incomes of cocoa farmers as they sold the large 1958/59 crop to the local marketing board at the same price as had been fixed for the small 1957/58 crop. In the wine group the rise in imports into Algeria in 1958 was sustained in 1959. Greece was in a similar position in the tobacco group though in this case the chief impulse in 1959 came from a rise in expenditure in Turkey.

For the rest, the value of imports in 1959 was below

the 1957 level by proportions ranging from 5 per cent or less in the groups exporting principally bananas, imported goods, cotton and wool, to 20 per cent or more in the groups exporting mainly rubber, metals and ores, and non-apparel fibres.

The flow of goods into the primary exporting countries did not decline as sharply as total import expenditure. There was a slight cyclical dip in the price index of manufactures entering international trade which, in combination with the decline in the average prices of foodstuffs and fuels and tanker freight rates, brought about a reduction in the unit value of their imports. This averaged about 3 per cent between 1957 and 1958 and slightly less than that in the following interval. In terms of quantum, therefore, the decline in imports was not much more than 2 per cent between 1957 and 1958 and only about one per cent between 1958 and 1959.

The largest reductions in import quantum were registered by the groups exporting industrial raw materials and fuels: after declining in two successive years, imports into the petroleum, rubber and metals and ores groups in 1959 were a seventh or more below the 1957 level. Despite some recovery in 1959, the flow of imports into the coffee, tea and rice groups was also below the 1957 level. At the other end of the scale, the cocoa, tobacco, fruit and sugar groups received a substantially larger volume of imports in 1959 than in 1957 or 1958.

Though the average terms of trade of the primary exporting countries deteriorated in both periods—by more than 2 per cent between 1957 and 1958 and by about one per cent between 1958 and 1959—the distribution of the change differed considerably from one interval to the next. The gains between 1957 and 1958 accrued largely to the food exporting groups—cocoa, meat, rice, tea and fruit; the gains between 1958 and 1959 accrued largely to the industrial raw materials groups—rubber, metals and ores, and wool. The meat, tea, rice and oil-seeds groups gained in both intervals; the coffee, sugar and petroleum groups experienced a progressive worsening of their terms of trade. Not only for these last three groups but also for the groups exporting chiefly tobacco, fibres and fruit, the terms of trade in 1959 were less favourable than in 1957.

CHANGES IN THE DIRECTION AND COMPOSITION OF TRADE

The expansion in exports from the primary exporting countries in 1959 was directed overwhelmingly to the industrial regions: in terms of value the largest relative increase (about one-fourth) went to Japan, the largest absolute increase (about $0.5 billion) to North America. Exports to western Europe were almost $0.4 billion above the 1958 figure, but still below the 1956-1957 level. There was a sizable advance in the value of exports to the centrally planned countries, especially eastern Europe and the Soviet Union. Trade among the primary exporting countries themselves, however, was somewhat lower in value than in 1958: the lag was chiefly in intra-regional movements, especially in the Middle East, southern and south-eastern Asia and Oceania, reflecting —among other things—crop changes, the continuing spread of petroleum mining and refining and the effects of import controls.

Imports into the United States from the primary exporting countries increased by rather less than $0.5 billion—or almost 8 per cent—between 1958 and 1959. By far the largest element in this increase was in purchases from South-East Asia which were almost a fourth greater than in 1958—reflecting an expansion in quantum as well as higher prices for such materials as rubber, copra and abaca. On a smaller scale, imports from Oceania and Africa were also significantly greater: the former increased by almost 60 per cent, largely as a result of further expansion of the meat trade and a recovery in wool shipments, while the latter—chiefly rubber, wool, ferro-alloys and ores—were about 10 per cent higher. Purchases from Latin America rose only fractionally in value and as part of the increase went into bond, imports for consumption were actually lower than in 1958, coffee, sugar, petroleum, lead and zinc showing the most notable reductions. A decline in the value of petroleum purchases was the chief factor in reducing United States imports from the Middle East.

Imports into western Europe from the primary exporting countries were only 2 per cent above the 1958 value: increases in purchases from Oceania (of almost 9 per cent) and Latin America and the Middle East (of about 4 per cent) were partly offset by reductions (of about 2 per cent) in the value of shipments from Africa and southern and south-eastern Asia. These reductions do not reflect cuts in the quantum of imports for consumption: they are accounted for largely by the decline in the prices of various foodstuffs—notably coffee and sugar—by the devaluation of the French franc which reduced, in particular, the dollar value of imports from Africa, and by a change in the pattern of rubber trading which reduced the flow of rubber to the Soviet Union by way of the United Kingdom.

Foodstuffs remain the largest category of export from the primary exporting countries (see table 5-3). In terms of value, however, it is a category that has shown virtually no growth since 1956. The value of exports to western Europe, the largest market, after having expanded somewhat between 1957 and 1958, appears to have dropped back in 1959 to below the 1956 level. Good local harvests were largely responsible for this but lower prices—especially for coffee and cocoa—also contributed to it. The value of exports to North America, by contrast, after having dipped slightly in 1957, increased somewhat in 1959 when an expansion in shipments of meat (largely from Oceania) and fruit and fish (largely from Latin America) more than offset a contraction in the value of shipments of the beverage crops and sugar.

Table 5-3. Primary Exporting Countries: Distribution of Exports by Destination and by Commodity Category

(Value, millions of dollars; index, 1956 = 100)

Export category and year	Industrial countries	Centrally planned countries	Primary exporting countries	North America	Western Europe	Latin America	Middle East	Southern and south-eastern Asia
Total								
Value:								
1956	20,780	629	7,090	6,620	12,780	1,200	820	1,375
Index:								
1957	101	139	108	100	100	113	107	106
1958	97	146	99	98	96	103	96	99
1959[a]	102	179	96	107	98	104	101	92
Foodstuffs								
Value:								
1956	7,400	142	1,830	2,700	4,430	270	290	384
Index:								
1957	100	190	108	98	101	117	114	108
1958	101	160	100	99	103	113	98	100
1959[b]	100	...	...	104	98	...	...	...
Raw materials[c]								
Value:								
1956	7,190	438	1,100	1,590	4,720	230	91	250
Index:								
1957	99	146	108	96	100	111	103	90
1958	83	158	92	82	83	91	85	75
1959[b]	92	...	...	104	85	...	...	...
Fuels								
Value:								
1956	3,520	2	2,680	1,410	1,940	500	265	332
Index:								
1957	111	—	108	111	106	112	94	128
1958	123	—	103	122	120	108	98	135
1959[b]	127	...	...	123	125	...	...	...
Other goods[c]								
Value:								
1956	2,645	42	1,435	930	1,672	194	165	404
Index:								
1957	95	98	106	97	93	106	122	98
1958	86	155	95	83	87	86	101	81
1959[b]	101	...	...	87	106	...	...	...

Source: United Nations, *Monthly Bulletin of Statistics*, February 1960, and *Commodity Trade Statistics*, Statistical Papers, Series D; *Direction of International Trade*, Statistical Papers, Series T, a joint publication of the Statistical Office of the United Nations, the International Monetary Fund and the International Bank for Reconstruction and Development; United Nations Division of General Economic Research and Policies.

[a] Preliminary estimate based on eleven months' imports into the industrial countries, and between six and twelve month exports to the primary exporting countries and centrally planned countries.

[b] Preliminary estimate, based on nine months' imports into North America, western Europe and Japan.

[c] Crude metals are included with semi-manufactures in "other goods".

Oceania was the only region to earn more from exports of foodstuffs to the industrial countries in 1959 (see table 5-4). The increase was a substantial one and stemmed chiefly from a rise in both volume and price of meat and dairy products. With the decline in coffee and cocoa prices, earnings of Africa and Latin America were appreciably smaller. This was largely a result of the reduction in dollar value of sales to western Europe, though shipments of foodstuffs to the United States yielded Latin America 4 per cent less than in 1958 and Africa 8 per cent less.

Exports of raw materials, which had declined sharply between 1957 and 1958, recovered somewhat in 1959. Shipments to North America surpassed the 1956 figure in value, large increases being registered in rubber, fibres, vegetable oils and hides and skins. Imports into the United States from Africa and southern and south-eastern Asia rose by more than 40 per cent between 1958 and 1959 and there were sizable increases in the value of purchases from other regions. There was no corresponding expansion in raw materials exports to western Europe, but, as indicated above, this was largely the

Table 5-4. Exports of Selected Categories of Goods to Industrial Countries
(Value, millions of dollars in the first three quarters of 1958; index, 1958 figure = 100)

Exporting region and period	*Total*	*Foodstuffs*	*Raw materials*[a]	*Fuels*	*Manufactures*[a]
Primary exporting countries					
Value: 1958	15,970	6,148	4,848	3,645	1,329
Index: 1959	105	99	111	103	118
Latin America					
Value: 1958	5,124	2,729	937	1,109	349
Index: 1959	104	98	122	103	101
Africa[b]					
Value: 1958	3,901	1,802	1,507	136	456
Index: 1959	100	88	105	130	120
Middle East					
Value: 1958	2,948	288	277	2,308	75
Index: 1959	103	93	124	101	127
Southern and south-eastern Asia					
Value: 1958	2,444	690	1,288	86	379
Index: 1959	112	100	113	122	127
Oceania					
Value: 1958	1,554	639	839	6	71
Index: 1959	116	135	102	105	123

Source: United Nations, *Commodity Trade Statistics*, Statistical Papers, Series D.
[a] Metals are included with "manufactures".
[b] Including dependencies of western European countries in the Caribbean and South-East Asia.

result of a change in the pattern of rubber trade: direct buying by the centrally planned countries diverted shipments from South-East Asia that had previously gone to the United Kingdom. The value of exports from Oceania to western Europe—largely of wool—was also below the 1958 level. With exports to Japan substantially above the 1958 level, however, the effect of larger United States purchases and higher prices was an increase in raw materials exports from each of the regions, including Oceania and South-East Asia.

Petroleum exports continued to grow in value, although—because of a decline in the price of crude oils and the limitation placed upon United States imports by official quotas—at a somewhat slower pace. Exports to western Europe increased by about 4 per cent between the first three quarters of 1958 and the corresponding portion of 1959; there was a smaller increase in exports to North America, and as a result of lower prices and a relative slackening in intake in the second half of the year, receipts from exports to the United States for the year as a whole were somewhat below the 1958 figure. Though the proportion of western European imports coming from the Middle East continued to exceed 85 per cent of the total, the rate of expansion in exports from this source was rather less than in exports from other regions. The Middle East also lost ground slightly in the United States: its share of total petroleum imports dropped from 17 to 16 per cent.

All regions earned more from exports of manufactures to the industrial countries in 1959. The largest increase—about a fourth—was in exports from southern and south-eastern Asia, in which textiles and tin played a major role. Higher receipts from copper—shipped chiefly to western Europe—were mainly responsible for the increase in the value of exports from Africa. In the case of Latin America, however, an expansion in sales of copper to western Europe and Japan was largely offset by a decline in receipts from lead and zinc shipped to North America: United States imports of non-ferrous metals and ores, for consumption, were up 9 per cent in total but down 13 per cent from Latin America.

Among the primary exporting countries the chief beneficiaries of economic recovery in Japan were the exporters of fibres, rubber and metals and ores. There was a major increase in shipments from the wool exporters—about a third in total between 1958 and 1959—especially from Australia and the Union of South Africa. A somewhat smaller increase occurred in exports from the cotton group, with an expansion in shipments from Mexico, Nicaragua and the Sudan—as well as India and Uganda—more than offsetting reductions in those from the United Arab Republic (Egypt). Even greater than the expansion in Japanese imports from the wool group was the rise in the value of imports from the Philippines—mainly of abaca—and from the rubber group, notably the Federation of Malaya. Expansion in the rubber trade also affected exports from Thailand, more than offsetting a contraction in exports from Burma, the other member of the rice group. A decline in rice shipments was largely responsible for a reduction in the value of exports from China (Taiwan) which was not counterbalanced by increases in shipments from other countries in the sugar group. All the members of the metals and ores group, but especially Chile, the

Federation of Rhodesia and Nyasaland, and Peru—registered considerable increases in their exports to Japan. In total, exports from Africa were more than double their 1958 value, exports from Oceania, southern and south-eastern Asia and Latin America increased by about a fourth, and exports from the Middle East by about 9 per cent.

Trade among the primary exporting countries themselves, after declining about 8 per cent between 1957 and 1958, was generally at a lower level in 1959 than in 1958. This reflects, in part, the wide-spread cutback in imports noted in the previous section; it also reflects the general improvement in the 1958/59 harvest which tended to reduce the need of many deficit countries to import a number of commodities, especially foodstuffs. In some instances expansion in domestic industries also tended to reduce the import bill, either by increasing local output—as in the case of petroleum in Argentina and Brazil, for example—or by diverting the demand for imports from a more processed to a less processed form of the commodity, as in the case of continued spread of such industries as textile spinning and weaving and petroleum refining.

Regionally, there was a significant reduction in trade between Latin America and Africa, affecting Argentina and Brazil in particular, as well as Morocco (as an importer) and the Federation of Rhodesia and Nyasaland (as an exporter). There was also a reduction in the exports of India and the Philippines to Latin America and in the imports of Argentina, Colombia and Mexico from countries in southern and south-eastern Asia; this more than offset an expansion in the value of exports from Hong Kong, the Federation of Malaya and Singapore, much of which went to Brazil. While exports of southern and south-eastern Asia to Latin America were thus lower than in 1958, trade in the opposite direction was somewhat greater, partly as a result of increased exports from Brazil and increased imports into Hong Kong and India. Trade between Latin America and Oceania tended to decline, largely because of a reduction in Australian exports. There was also a decline in trade with the Middle East in which a reduction in imports into Israel was a major component. The United Arab Republic (Egypt) also imported less from Latin America but exported more to the region. Trade within Latin America on the other hand was greater than in 1958, a decline in exports from Brazil and Paraguay—particularly to Argentina—being more than offset by an increase in exports from Argentina, Chile and Peru, largely to Brazil, Colombia, Costa Rica, El Salvador and Uruguay.

Another element in inter-regional trade that declined between 1958 and 1959 was exports from the Middle East to southern and south-eastern Asia: this was largely the result of smaller shipments from the United Arab Republic (Egypt) and reduced imports by Ceylon, Indonesia and Singapore. Trade in the opposite direction, by contrast, tended to expand in value despite a decline in the imports of the Sudan and the United Arab Republic: exports from Ceylon, Hong Kong, Pakistan and Thailand and imports of Iraq were all well above 1958 levels. Among Middle Eastern countries, however, trade showed little disposition to expand: increases in trade with Turkey and exports from Lebanon were offset by a reduction in trade with the United Arab Republic and imports into Jordan.

Except with Latin America, African trade was generally higher in 1959 than in 1958. Exports to southern and south-eastern Asia of the Federation of Rhodesia and Nyasaland, Uganda and the Union of South Africa, for example, and exports to Africa from Pakistan and Singapore were all markedly greater, more than compensating for a reduction in exports from Ceylon and India and in imports into Indonesia and the Philippines. There was also an increase in trade with Australia, notably in imports by the Union of South Africa. Within the region, trade with Morocco declined: Algeria imported more but exported less, while the Union of South Africa exported more but imported less.

In southern and south-eastern Asia the expansion in exports to Africa and the Middle East was offset in part by a contraction not only in exports to Latin America but also in intra-regional trade. The principal elements in the latter were reductions in trade with China (Taiwan) and Thailand, in exports from Burma, Hong Kong, the Republic of Viet-Nam and Singapore, and in imports into India, Indonesia, Pakistan and the Philippines. These reductions outweighed a number of expanding elements: trade with Ceylon, exports of Indonesia, Pakistan and the Philippines, and imports into Hong Kong, the Republic of Korea and Singapore.

Trade between India and Oceania was at a lower level than in 1958. Indonesia also exported less to Oceania, but there were compensating increases in the value of shipments from the Federation of Malaya, Pakistan and Singapore. Ceylon and Hong Kong took more from Oceania than in 1958 but, largely as a result of the decline in sales to India, Australian exports to southern and south-eastern Asia were below the 1958 level. Australian exports to New Zealand were also lower, but trade in the opposite direction was somewhat higher.

Trade between the primary exporting countries and the centrally planned countries was generally at a higher level in 1959 than in 1958. The principal increase was in shipments to the Soviet Union, which had declined slightly between 1957 and 1958; exports to eastern Europe expanded moderately in both intervals while exports to mainland China were actually lower in the first half of 1959 than in the first half of 1958, as indeed were imports from the centrally planned countries as a whole.

Among the countries registering the most marked expansion between 1958 and 1959 in the value of trade

with eastern Europe and the Soviet Union were Argentina, Brazil and Uruguay, Ceylon and Indonesia, Iraq and, on a smaller scale, Ghana. A number of other countries exported considerably more to these regions in 1959 than in 1958—Cameroun, the Union of South Africa and the Sudan, India, the Federation of Malaya and Singapore, Australia and Colombia, for example. Algeria and the United Arab Republic (Syria) both recorded an expansion in imports. Against these increases were reductions in the trade with Turkey, in the exports of Morocco and the United Arab Republic (Syria), and in the imports of India and the United Arab Republic (Egypt).

Quantitatively, the most significant changes in trade with mainland China were reductions in the case of Hong Kong and the Federation of Malaya and an expansion in the case of Indonesia. India, Singapore, Australia, the Sudan and the United Arab Republic (Egypt) all exported more to mainland China in 1959 than in 1958. On the other hand, Brazil, the United Arab Republic (Syria) and Thailand all sold less to mainland China than in 1958. On the import side the principal increases were registered by Indonesia and Iraq, and the principal reductions by Morocco and Hong Kong, the Federation of Malaya and Singapore.

The value of imports of the primary exporting countries from the industrial countries declined, in the aggregate, by about 3 per cent between 1958 and 1959. The decline was sharpest—almost 7 per cent—in the case of purchases from North America; imports from western Europe were about 2 per cent below the 1958 level, and there was actually an increase—of almost 9 per cent—in imports from Japan.

The switch to Japan as a source of supply was most noticeable in southern and south-eastern Asia where imports from North America and western Europe declined by between 2 and 3 per cent while imports from Japan were almost an eighth greater. It was also marked in Latin America where purchases from western Europe showed little change between 1958 and 1959 while those from North America declined by about 13 per cent and those from Japan rose by about 9 per cent. In Oceania the contraction was concentrated on western Europe; imports from North America and Japan were about a fourth higher. In the Middle East there was a general expansion in imports ranging from about 3 per cent in those from western Europe to about 18 per cent in those from Japan. In Africa, by contrast, there was a general reduction of between 4 and 5 per cent in those from all the industrial sources.

The most marked reductions in imports from western Europe were registered among the countries in which stabilization measures had involved quantitative or other controls—as in Argentina, Brazil, Indonesia, New Zealand, Pakistan and the Sudan for example—or in which demand had been depressed by the 1957/58 downswing in export prices, as in Australia, the Belgian Congo, the Federation of Rhodesia and Nyasaland, Peru, Singapore, the Union of South Africa and the United Arab Republic (Egypt). With the exception of Australia, Singapore and the United Arab Republic (Egypt), all these countries also cut their imports from North America, in most instances severely. There were also major reductions in the flow of trade from North America to Iraq, Mexico, Nicaragua, the Philippines and the Republic of Korea. In most of the countries just mentioned, the reduction in imports did not extend to Japan. The exceptions were Argentina, the Belgian Congo, Brazil, Pakistan, Singapore and the Sudan where the cutback affected Japan as well as the other industrial countries.

The decline in imports into the primary exporting countries between 1958 and 1959 was very general, not only geographically, but also in respect of commodity. Luxury imports having in many cases been reduced to a minimum in earlier periods of foreign exchange stringency, the 1958/59 restraints tended to limit expenditure on other types of goods as well. To judge by changes between the first three quarters of 1958 and the corresponding portion of 1959 in exports from the industrial countries, indeed, the cuts imposed on capital goods were somewhat deeper than the average. Imports of machinery and vehicles were down by about 6 per cent, compared with 5 per cent for all manufactures, 2 per cent for fuels and raw materials and less than one per cent for foodstuffs. The only major category of manufactures imports of which were greater in the first three quarters of 1959 than in the corresponding period in 1958 was chemicals (see table 5-5).

The sharpest cuts in imports from the industrial countries were registered in Latin America: all the principal categories of goods with the exception of raw materials and chemicals were affected, fuels and capital goods most (19 and 12 per cent respectively). The main incidence of this reduction was borne by North America: imports from western Europe—over 90 per cent of which consist of manufactures—were less than one per cent lower and imports from Japan, almost all manufactures, about 5 per cent higher. For the year as a whole United States exports to Latin America were over 14 per cent below the 1958 level, the largest reductions being in metals (31 per cent), fuels (20 per cent) and capital goods (19 per cent); only agricultural raw materials and chemicals—other than fertilizers—showed any expansion.

Cuts in imports of Oceania from the industrial countries were only slightly less severe, but in this case western Europe sustained the main impact and imports of capital goods were reduced less than those of other manufactures while fuel imports were increased. The United States exported more to Oceania in 1959 than in 1958; substantial increases in shipments of manufactures—especially of machinery and transport equipment—more than offset reductions in other categories of goods.

Table 5-5. Imports of Selected Categories of Goods from Industrial Countries
(Value, millions of dollars in the first three quarters of 1958; index, 1958 figure = 100)

Importing region and period	Total	Foodstuffs	Raw materials[a]	Fuels	Manufactured goods			
					Total	Chemicals	Machinery and vehicles	Other manufactures[a]
Primary exporting countries								
Value: 1958	15,557	1,751	587	405	12,814	1,431	5,947	5,436
Index: 1959	96	100	103	92	95	106	94	93
Latin America								
Value: 1958	5,889	459	155	120	4,155	500	2,209	1,446
Index: 1959	92	93	103	81	92	103	88	92
Africa[b]								
Value: 1958	4,083	516	118	167	3,282	305	1,378	1,600
Index: 1959	95	103	95	97	94	103	93	93
Middle East								
Value: 1958	1,974	208	100	57	1,609	155	742	712
Index: 1959	102	111	102	88	102	114	104	96
Southern and south-eastern Asia								
Value: 1958	3,367	522	156	47	2,641	356	1,101	1,184
Index: 1959	99	98	112	104	98	114	101	91
Oceania								
Value: 1958	1,244	46	58	14	1,126	116	517	494
Index: 1959	93	93	96	108	92	97	95	88

Source: United Nations, *Commodity Trade Statistics*, Statistical Papers, Series D.

[a] Metals are included with "other manufactures".

[b] Including dependencies of western European countries in the Caribbean and South-East Asia.

Japan also increased its sales to Oceania, especially of manufactured consumer goods, the value of which was about a sixth above the 1958 level.

In southern and south-eastern Asia the principal cut was in imports of manufactured consumer goods; imports of raw materials, fuels and chemicals were well maintained. Purchases of capital goods were fractionally above the 1958 level, a sizable increase in imports from Japan compensating for cuts in imports from other areas, especially North America: United States exports of machinery and transport equipment to the region registered a marked decline between 1958 and 1959.

The Middle East increased its imports of foodstuffs from North America and—to a much smaller extent—of manufactures from western Europe. The largest relative increase was in imports of chemicals, chiefly from western Europe. Within the category of manufactures, there was a cut in imports of consumer goods from North America and western Europe—though not from Japan—but a slight increase in the value of machinery and vehicles. Capital goods imports appear to have been stepped up later in the year—especially to the Sudan and Turkey—and for the year as a whole United States exports of these items to the region were about 11 per cent above the 1958 level. On a smaller scale, shipments of capital goods from Japan to the Middle East registered a much sharper increase.

Exports from the industrial countries to other primary exporting countries—Africa and the Caribbean dependencies—were below 1958 rates in the first three quarters of 1959 but seem to have risen somewhat in the last quarter. Except in the case of purchases from Japan, the largest relative reduction was in capital goods, but other manufactures were also lower in value, as were raw material and fuel shipments; the only increases were in foodstuffs and chemicals. This is true of United States exports to Africa for the year as a whole: shipments of foodstuffs were almost 60 per cent higher and of chemicals over 10 per cent higher, but the value of machinery and vehicle exports—the largest major category—was 5 per cent below the 1958 figure.

CHANGES IN THE BALANCE OF TRADE

Between 1958 and 1959 foreign trade receipts of the primary exporting countries increased by more than $1.7 billion. The expansion was wide-spread, involving about two-thirds of the countries and accounting for 83 per cent of total exports. These proportions were the reverse of those registered between 1957 and 1958 when contraction in export earnings was almost as wide-spread: it involved nearly 60 per cent of the countries and about two-thirds of total exports. Conversely, the proportion of countries registering a decline in earnings of 10 per cent or more dropped below a third of the 1957-1958 figure, and the proportion of exports for which these countries accounted was only a fifth of the corresponding 1957-1958 figure (see table 5-6).

Table 5-6. Primary Exporting Countries: Distribution of Changes in Exports and Imports

Ratio (preceding year=100)	Exports f.o.b.				Imports c.i.f.			
	Number of countries		Export receipts (billions of dollars)		Number of countries		Import expenditure (billions of dollars)	
	1958	1959[a]	1958	1959[a]	1958	1959[a]	1958	1959[a]
87.4 and under	25	7	7.3	1.0	17	13	7.1	3.8
87.5 to 92.4	10	7	5.8	1.8	13	14	6.4	7.6
92.5 to 97.4	9	11	1.9	1.8	18	10	6.1	2.2
97.5 to 102.4	14	14	6.8	3.5	11	17	5.2	7.0
102.5 to 107.4	11	12	3.2	6.5	3	12	2.4	6.4
107.5 to 112.4	10	10	0.8	6.0	10	6	3.2	2.1
112.5 to 117.4	3	6	0.8	2.6	4	2	0.6	0.5
117.5 and over	3	18	1.8	7.1	4	6	0.9	1.3
TOTAL[b]	85	85	28.5	30.4	80	80	31.9	30.9

Source: United Nations Division of General Economic Research and Policies, based on International Monetary Fund, *International Financial Statistics*.

[a] Preliminary, based on less than twelve months' trade in some cases.

[b] For list of countries included, *see* footnotes to table 5-1.

On the import side there were changes of comparable magnitude. Between 1958 and 1959 total expenditure of the primary exporting countries fell by more than $1.2 billion. This, however, was not a reversal of the previous trend: imports had been reduced by about $2.0 billion in the previous interval. The proportion of countries increasing their imports rose from about a third in 1957-1958 to almost one-half in 1958-1959, but the rise was entirely in the category of minor increments: the proportion of countries registering an expansion of 8 per cent or more was lower than between 1957 and 1958.

The combined effect of these two changes was a reduction of almost $3 billion in the trade deficit of the primary exporting countries: from a peak of $5 billion in 1957 the deficit had dropped below $1.5 billion in 1959, the smallest gap since 1954 when total trade was about 15 per cent smaller. The proportion of countries improving their trade balance—that is, making it more active or less passive—increased from a half in the 1957-1958 interval to over two-thirds in 1958-1959. Between 1957 and 1958, with export earnings generally lower, the largest category—39 per cent of the total—was of countries whose trade balance had become relatively more passive; between 1958 and 1959 the largest category—44 per cent—was of countries with a less passive balance. Proportionately, the increases between 1958 and 1959 were larger in the categories of countries whose balances changed from passive to active or became more active.

The only groups of countries whose trade balance deteriorated between 1958 and 1959 were those whose principal export is cocoa, tobacco or wine (see table 5-7). In the case of the cocoa and tobacco groups, an expansion in imports—chiefly into Ghana and Turkey—was responsible; in the case of the wine group, an increase in the deficit was the result of a reduction in exports—chiefly from Algeria.

The only other groups whose exports were lower than in 1958 comprised the countries exporting mainly coffee, sugar or petroleum products. In these groups, however, there were also reductions in imports, and these were sufficient to bring about a slight narrowing of the trade gap.

By far the largest contribution to the over-all reduction in the trade deficit came from the raw materials and fuel exporting groups. The countries exporting mainly wool, crude petroleum, metals and ores, rubber or cotton together accounted for about 80 per cent of the net change in the balance of trade. Over 60 per cent of this reflected increased export earnings, the remainder was derived from reduced spending on imports. Of these groups, those exporting wool, rubber or petroleum expanded the total value of their trade, the expansion of exports exceeding the contraction in imports. In the cotton group import cuts were general and sizable and, in the aggregate, much greater than the increase in exports, which was confined largely to Mexico and the Sudan.

As in the case of the cotton group, the merchandise deficits of the meat and oil-seeds groups were reduced to a greater extent by cuts in imports—which were particularly severe in Argentina and the Philippines—than by expansion in exports. Similarly, import cuts in Pakistan played the principal part in transforming the balance of the non-apparel fibres group from passive to active. The only groups to improve their trade balance in the face of an increase in the value of imports were those whose principal exports are tea, bananas, rice or imported goods: each of the members of these groups registered an appreciable increase in export proceeds.

For primary exporting countries, in the aggregate, the

Table 5-7. Changes in the Balance of Trade of Selected Groups of Countries

Country group[a] exporting mainly	Change between 1958 and 1959 (millions of dollars)			Balance of trade as percentage of total trade		Number of countries in which, in comparison with 1958, the balance of trade in 1959					
	Exports f.o.b.	Imports c.i.f.	Balance of trade	1958	1959	Was more active	Moved from passive to active	Was less passive	Was less active	Moved from active to passive	Was more passive
Petroleum, crude	166	−85	251	18	23	2	—	1	—	—	—
Rubber	333	−34	367	4	15	3	—	2	—	—	—
Non-apparel fibres	29	−52	81	−6	3	1	—	1	—	—	—
Metals and ores	343	−345	688	−16	−2	1	3	3	—	—	4
Cocoa	5	53	−48	4	−2	1	—	—	—	1	—
Coffee	−6	−14	8	−3	−3	1	—	6	1	—	3
Wool	535	−210	745	−13	−4	—	1	2	—	1	—
Rice	79	42	37	−9	−5	—	1	1	—	—	—
Meat	9	−208	217	−13	−7	—	2	—	—	—	1
Oil-seeds	72	−82	154	−13	−7	—	—	2	—	—	2
Bananas	11	5	6	−10	−7	1	1	—	—	—	1
Petroleum products	−66	−111	45	−11	−10	1	—	1	—	—	1
Imported goods	149	117	32	−13	−12	—	—	1	—	—	1
Cotton	53	−198	251	−19	−13	—	1	5	—	—	—
Sugar	−11	−11	—	−13	−13	—	—	6	—	—	4
Tea	105	70	35	−16	−14	—	—	1	—	—	1
Tobacco	80	128	−48	−30	−29	—	—	—	—	—	2
Citrus fruit	63	−36	99	−39	−34	—	—	2	—	—	1
Wine	−119	−12	−107	−35	−42	—	—	1	—	—	1
TOTAL,[b] primary exporting countries	1,700	−1,200	2,900	−7	−2	11	9	35	1	2	22

Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* International Monetary Fund, *International Financial Statistics.*

[a] For composition of groups, *see* footnotes to table 5-1. Owing to lack of import data for 1959, the following countries are omitted: Brunei, Kuwait and Saudi Arabia (crude petroleum group); Liberia (rubber group); Bolivia (metals and ores group); Mozambique (cotton group) and Cuba (sugar group).

[b] Including, in the first five columns, estimates for countries omitted from the commodity groupings.

proportion of import expenditure not covered by export earnings, after having climbed rapidly from less than 2 per cent in 1953 to more than 14 per cent in 1957, dropped back during the current cycle—to 13 per cent in 1958 and to below 5 per cent in 1959.

FINANCING THE BALANCE

The foreign exchange reserves of the primary exporting countries, which had been built up slowly between 1952 and 1956 and drawn down sharply in the two following years, benefited to a considerable extent from the improvement in merchandise trade in 1959. Official gold and foreign exchange holdings were appreciably higher at the end of the year than at the beginning and there was also an increase in the holdings of commercial banks.

With the narrowing of the trade gap the need to borrow abroad was much less than it had been in 1957 and 1958. Instead, there was a greater amount of repayment of debts incurred previously. The amount of investment capital flowing from the industrial to the primary exporting countries also seems to have been smaller than in 1957 or 1958. This reflects the stringency that developed on a number of the major capital markets in the course of the 1958/59 recovery, the deterrent effects on investment of the disinflationary policies pursued by some of the primary exporting countries in defending their balance of payments in 1958, and the relative unattractiveness of investment prospects in the primary commodity field, at least in the short run. In general, capacity to produce most of the raw materials seemed ample for immediate needs; even the flow of capital into petroleum production was at a much lower level than in earlier years, with marked effects on such countries as Venezuela whose exchange reserves at the end of 1959, though twice the amount held at the beginning of the decade, were only half the end-1957 figure.

With the recovery in demand came a rise in the prices of a number of raw materials—including, in particular, rubber, and copper and zinc—that had fallen to relatively low levels in 1957/58. Along with better utilization of existing capacity this tended to raise the profitability of many international companies, but the outflow of dividend payments—reflecting the relatively poor operating results of the previous year—appears generally to have been at a somewhat lower level in 1959. Furthermore, there was a sizable increase—almost one-eighth—in the output of gold in the primary exporting countries, largely in the Union of South Africa.

The net effect of these changes on the over-all balance of payments of the primary exporting countries may be

represented in the following broad figures (billions of dollars):

	1957	*1958*	*1959*
Merchandise trade deficit.....	5.0	4.4	1.5
Change in official reserves.....	−0.6	−1.0	0.2
Net movement of other current and capital items.....	4.4	3.4	1.7

A major element in the wide swings in official reserves during the cycle was the movement in the trade of Oceania and the Union of South Africa: after being more or less in balance on merchandise account in 1956, this group of countries registered a surplus of almost $0.2 billion in 1957, a deficit of about $0.7 billion in 1958 and a surplus somewhat less than that of 1957 in 1959. The effect of eliminating these countries from the reckoning is to accentuate the loss of reserves in 1957 and to moderate both the loss in reserves in 1958 and the recovery in 1959.

Thus, excluding Australia, New Zealand and the Union of South Africa:

	1957	*1958*	*1959*
Merchandise trade deficit.....	5.1	3.8	1.6
Change in official reserves.....	−1.3	−0.4	−0.1
Net movement of other items..	3.8	3.4	1.5

As a summary of the changes in the balance of payments of the less developed countries, however, these figures are distorted by the abnormal capital movements which took place in Venezuela during the period. A considerable inflow of capital in 1957—associated largely with the sale of petroleum concessions—was followed by a rapid drawing down of reserves in 1958 and 1959, in the wake of a rise in non-trade payments and a sizable outflow of capital. If Venezuela is also excluded from the accounting, it is seen that the major loss of reserves in the less developed countries occurred in 1957, the year of record imports; the loss in 1958 was negligible and the recovery in 1959 appreciably greater than for the primary exporting countries as a whole.

Thus, excluding Venezuela as well as Australia, New Zealand and the Union of South Africa:

	1957	*1958*	*1959*
Merchandise trade deficit.....	5.6	4.5	2.5
Change in official reserves.....	−1.8	—	0.3
Net movement of other items..	3.8	4.5	2.8

Though the rise in the aggregate reserves of the primary exporting countries in 1959 was small in relation to the large losses of the two preceding years, many countries regained their 1958 position and some recovered to the 1957 level. The offsetting reductions tended to be concentrated in a few countries. The largest increases were among the countries whose terms of trade improved most notably between 1958 and 1959—the Federation of Malaya and Indonesia, the Union of South Africa and Australia and Chile, for example—but import cuts and increases in export volume as well as oversea borrowing also played a part, as in the case of Argentina and India. The largest reductions were not necessarily the consequence of fluctuations in trade; capital movements and non-trade payments were of major importance not only in Venezuela, but also in several other countries, including in particular the Belgian Congo, Cuba and the United Arab Republic (Egypt).

The role of the major institutions

In the wake of improving trade balances the primary exporting countries reduced their borrowing from abroad. Drawings from the three major credit institutions—the International Bank for Reconstruction and Development (IBRD), the International Monetary Fund (IMF) and the United States Export-Import Bank—which had risen to a peak of over $1.14 billion in 1958, were cut to not much more than three-fourths of that figure in 1959. And, as repayments were substantially larger—doubling in the case of IMF—net drawings registered an even sharper decline: at approximately $0.4 billion in 1959, they were just about half the 1958 figure.

Stand-by agreements and other credit arrangements made by IMF with the primary exporting countries amounted to $193 million in 1959, slightly less than in 1958, but because net drawings were substantially below the high 1958 level the amount of stand-by credit in effect at the end of 1959 was slightly larger—$182 million compared to $168 million at the end of 1958. While the credits arranged with Chile, Pakistan and the Union of South Africa had lapsed, new arrangements had been entered into with the Dominican Republic and Morocco and the accommodation available to Colombia had been enlarged. With the exception of Latin America, all the primary exporting regions reduced their indebtedness to IMF in the course of 1959, repaying the credits that had been advanced to ease balance of payments strain during the 1957/58 downswing. In Latin America repayments by most of the major borrowers were overshadowed by a large credit extended to Argentina in support of its stabilization programme.

In the case of IBRD there was a notable decline in new lending to Latin America (from $174 million in 1958 to $67 million in 1959) and to southern and southeastern Asia (from $209 to $106 million), offset in part by a major expansion in loans arranged with countries in the Middle East (from zero to $134 million). However, the only region to increase its net drawings from IBRD in 1959 was Africa where the Sudan and the Union of South Africa and, on a smaller scale, the Gabon Republic, Ruanda-Urundi and Ethiopia all borrowed more than in 1958. The largest loan again went to India, though both this and its net drawings were substantially below the high 1958 level; the decline in Indian drawings, indeed, accounted for about 80 per cent of the total reduction in disbursements. Other large loans were negotiated in 1959 with Algeria, Iran and the United Arab Republic, but net drawings against these were all small. Australia, a large borrower in earlier years, was a net repayer in 1959.

Transactions of the United States Export-Import Bank were again concentrated heavily in Latin America: net disbursements in the Middle East and Asia—chiefly to India and Iran—totalled less than $40 million, little more than in 1958, while Oceania was again a net repayer. The principal recipients in Latin America were Argentina and Peru; sizable disbursements in Brazil, Chile, Colombia and Mexico were offset to an appreciable extent—completely in the case of Brazil—by repayments of earlier advances. The total of new loans was severely reduced between 1958 and 1959—measured net of cancellations, from $474 million to $220 million to Latin America, from $189 to $12 million to southern and south-eastern Asia and from $66 to $20 million to the Middle East. This contraction reflects not only the diminution in need, compared with 1958, but also the result of a reorganization of the Bank's finances which restricted direct borrowing from the United States Treasury and increased its dependence on the open capital market.

On a much smaller scale, there was a marked increase in the operations of the International Finance Corporation (IFC). In 1957 the Corporation had contributed a total of rather less than $5 million to the capital of five enterprises in the primary exporting countries; in 1959 it participated in the initiation or expansion of fifteen enterprises, contributing about $9.5 million in capital. Chile and Peru were the major fields of investment in 1959, but the Corporation also helped to finance firms in Brazil, Colombia and El Salvador, and outside Latin America, in Australia, India and Thailand. Most of the loans were designed to assist in the expansion of existing firms; they involved the mobilization of domestic capital to an extent of between two and three times the IFC contribution and in some cases—notably projects in Brazil (pulp) and Colombia (biscuits)—they were associated with other external capital.

Other capital movements

The flow of capital from the industrial to the primary exporting countries slackened in 1959 not only in so far as it was channelled through the international institutions but also in respect of other types of movements, particularly in the private sector. This was partly the result of the reduction in demand for credit that followed the cutback in oversea purchases of many of the primary exporting countries. But it also reflects changes in the capital market in the industrial countries: domestic investment was more attractive in 1959 both in comparison with 1958 and in relation to opportunities in the primary exporting countries. Credit tended to become tighter and more expensive, especially in countries in which the authorities were anxious to prevent the recovery from taking on inflationary characteristics, and marginal borrowers from the primary exporting countries are likely to have been deterred.

In a number of the primary exporting countries, moreover, the effects—direct and indirect—of measures taken in 1957/58 in protection of the deteriorating external balance continued to hold down the level of internal economic activity. The demand for private capital showed no marked recovery—in some cases, indeed, there was a net outflow of funds in 1959—and with the improvement in external accounts the need for official borrowing was greatly reduced.

The main element in the reduction seems generally to have been private long-term capital. In the United States, for example, the net movement of funds to the primary exporting countries dropped from about $1.8 billion in 1958 to about $1.6 billion in 1959 but the government share of this remained more or less unchanged—at about $0.8 billion (including Japan). Of the outflow of private capital, the long-term component dropped from a net figure of about $0.8 billion to about $0.6 billion, while within this long-term component the decline was in direct investment, which amounted to about $0.5 billion in 1958 but less than $0.3 billion in 1959. As direct investment of United States funds in western Europe and Canada showed a sharp increase in this interval, the economic upswing evidently occasioned a significant diversion of long-term private capital away from the primary exporting countries.

The reduction in Export-Import Bank disbursements contributed to a decline in the outflow of long-term government capital from the United States, but this was partly offset by an increase in short-term movements. The decline was concentrated in Latin America; government advances to other areas—both long-term and short-term—were above the 1958 level. Government grants also showed a tendency—though much slighter—to contract in the case of Latin America and expand in the case of Asia and Africa: on balance they were at much the same figure as in 1958—$1.2 billion, more than three-fourths of total unilateral United States transfers to the primary exporting countries.

New commitments of the United States Development Loan Fund in 1959 amounted to about $460 million, mostly for investment in basic facilities in the field of power and communications and at interest rates well below the market level. As almost all the $700 million placed at its disposal since its inception in 1957 had been committed by the beginning of 1959, these new arrangements entailed additional appropriations.

The outflow of private capital from the United Kingdom was also at a reduced rate in 1959. There was a contraction in short-term movements in the wake of the declining trade surplus with the rest of the sterling area, and, in the aggregate, private capital exports dropped by the equivalent of between $0.2 and $0.3 billion. The system of Exchequer loans, worked out in 1958, was not greatly used; the amount lent in 1959 was not much over £8 million. Among these was a credit of £3 million to Nigeria, supplementing a Commonwealth

Assistance Loan of £12 million. More active was the export credit guarantee system which continued to assist in the financing of transactions involving capital goods; the largest credits made available in 1959 were those forming part of the international lending to India. Activities of the Colonial Development and Welfare Fund also seem to have been at a somewhat higher level than in 1958: available resources—at £140 million over the five-year period 1959-1964—were appreciably greater than those actually disbursed in the preceding period.

Credits associated with the export of capital goods were also a major form of lending by the Federal Republic of Germany. In addition, a number of government loans were extended to various under-developed countries to help finance imports of capital goods —among them DM 200 million to Ghana, DM 170 million to Pakistan and DM 30 million to Ethiopia. In June the Federal Republic added the equivalent of $100 million to the joint public-private loan to Chile negotiated in the United States. And in October a fund, equivalent to about $450 million, was set up by the Federal Republic for the purpose of guaranteeing the capital of subsidiaries of German firms newly invested in less developed countries.

France was another country helping, by means of commercial credits, to finance the Indian development plan. The main vehicle for French lending, however, was the FIDES (Investment Fund for Economic and Social Development) programme which was reinstated in 1959 following the constitutional reorganization of the Community in the previous year. Among the loans originating in the Netherlands were private commercial credits to the extent of $60 million made available to Cuba and a short-term advance of 6 million florins to Surinam pending the issue of longer-term bonds on the Dutch market. Yugoslavia was the source of a $10 million credit for Indonesia.

Disbursements commenced on the grants arranged in 1958 from the Oversea Fund of the European Economic Community to various African countries, including Cameroun, the Malagasy Republic, Somalia and Togo. New grants arranged in 1959 also went mainly to Africa, the largest to the Malagasy Republic, the Republic of the Upper Volta and the Sudanese Republic. By October the total number of projects being financed by the Fund amounted to forty-six, for which grants equivalent to about $26 million had been agreed.

A number of African countries—Ethiopia and Guinea, for example—were among the recipients of loans from the Soviet Union. The largest of these, however, went to India (the equivalent of about $378 million) towards the third five-year plan and to Iraq (about $138 million). Most of these loans were at relatively low interest rates—2.5 per cent or less—and were linked to specific projects for which Soviet equipment and technical aid were to be provided. A line of credit was extended to the United Arab Republic (Egyptian Region) to help finance the first stage of the High Aswan Dam; early in 1960 this credit—equivalent to about $110 million—was supplemented by a further $250 million towards subsequent stages of construction. Credits were also made available to the Syrian Region to assist in its industrialization programme as well as a number of irrigation schemes.

Changes in reserves

After two years of strain in which, notwithstanding a large influx of capital, the over-all current account deficit of the primary exporting countries had eaten into their official foreign exchange reserves to the extent of about $1.6 billion, or 10 per cent of 1956 holdings, the improvement in external balance between 1958 and 1959 allowed some of the incoming funds to be used for rebuilding reserves. In total the increase in 1959 amounted to about $0.2 billion. Exclusion of Venezuela—in which there were abnormal capital movements during the cycle—raises the recovery in 1959 to about $0.5 billion. Inclusion of the foreign exchange holdings of the commercial banks increases the degree of recovery still further—to between $0.8 and $0.9 billion, about half the total loss sustained in the two previous years. Such figures do not take into account the implications—in terms of contingent liabilities carried over into the future—of the debt incurred by many of the primary exporting countries as a result of defensive borrowing during the 1957/58 period of balance of payments strain.

In one sense, the swing in gold and foreign exchange holdings was fairly wide-spread: in 1958 over half the primary exporting countries had their official reserves reduced; in 1959 almost two-thirds registered an increase (see table 5-8). In another sense, the swing was far from typical: only about a third of the primary exporting countries lost reserves in 1958 and gained them in 1959. The proportion making gains in both years was slightly greater. Among the countries in which a swing was registered, however, there were several in which the over-all movement was very large: it exceeded $300 million in the case of Argentina, India and Australia and ranged from $70 to $150 million in the case of the Federation of Malaya, Mexico, Indonesia and Pakistan. Except in the case of the Belgian Congo, swings in the opposite directions—gains in 1958 and losses in 1959—were all relatively small. A somewhat higher proportion of countries—about a fifth—registered losses in both years, among them Venezuela, Cuba and the United Arab Republic (Egypt), where in absolute terms the declines were particularly steep.

Where reserves declined between 1957 and 1958 and recovered in 1959, the swing in export earnings was a major factor in some but by no means all countries. The increase in exports between 1958 and 1959 was the

Table 5-8. Primary Exporting Countries: Distribution of Changes in Official Gold and Foreign Exchange Reserves

Index of reserves at end of year (end of preceding year = 100)	*1958*		*1959*	
	Number of countries	*Millions of dollars*	*Number of countries*	*Millions of dollars*
Less than 80	8	−861	5	−648
80 to 89	6	−395	5	−135
90 to 99	10	−100	6	−60
100 to 109	8	45	10	150
110 to 119	6	124	9	249
120 to 129	4	90	2	170
130 and over	5	163	10	652
TOTAL[a]	47	−934	47	378

Source: International Monetary Fund, *International Financial Statistics.*

[a] The principal exclusions—due to lack of precise data—are Afghanistan, Haiti, Paraguay and the dependencies of western European countries.

principal element in the recovery of reserves in the Federation of Malaya, Indonesia and the Republic of Viet-Nam in the wake of the rubber boom, in the Federation of Rhodesia and Nyasaland (copper), in Australia (wool and meat), and in Nigeria and the Sudan where fluctuations in harvest were partly responsible for an upsurge in ground-nut and cotton shipments. But even in these cases changes in export proceeds were not the only factor: a cutback in imports played a significant part in the Federation of Rhodesia and Nyasaland, Indonesia, the Republic of Viet-Nam and the Sudan and a larger inflow of capital contributed to the expansion in reserves in Australia, the Republic of Viet-Nam and the Sudan.

A reduction in imports was largely responsible for the recovery in reserves in Argentina, Mexico, Nicaragua and Pakistan, though all save Nicaragua also managed to earn somewhat more from their exports, while Argentina and Mexico enjoyed a higher level of capital inflow. Among the other countries registering a recovery in reserves, an accretion of capital was the predominant factor in Ecuador, Honduras, India and Thailand, where a rise in export earnings also contributed, in the United Arab Republic (Syria) where a reduction in imports was an additional factor and in Peru and Saudi Arabia where both import and export changes helped to improve the merchandise balance (see table 5-9).

Where a rise in reserves in 1959 followed a rise—against the general trend—in 1958, the explanation of the second increase, unlike that of the first, lay chiefly in movements in merchandise trade. In Chile, New Zealand, the Philippines and the Union of South Africa the principal factor was a reduction in imports: this had been initiated during the period of balance of payments strain in 1957/58 and its effects continued into the period of expanding export earnings. The result was a very considerable improvement in the balance of trade: about 10 per cent of total trade in the Philippines and the Union of South Africa and almost double that proportion in Chile and New Zealand.

In the case of the Union of South Africa the effect on reserves of the reduction in the trade deficit was enhanced by a large increase in gold production—as earlier mining investment came to fruition—which more than offset an outflow of private capital. In Chile, where there seems to have been a sharp decline in payments of dividends and other non-trade items in the wake of low copper prices in 1957/58, there was some relaxation of control over imports as the external balance improved: this followed an acceleration in internal activity and a tendency to replace prohibitions and prior deposits by conventional, but higher, rates of duty.

In almost all the other countries whose reserves increased in 1959 as well as in 1958—in Bolivia, Burma, Hong Kong, Iraq, Israel, Lebanon and Tunisia, for example—it was the expansion in export proceeds in 1959 that made the principal and in some cases the only contribution. In Tunisia a reduction in imports was also a factor while in Lebanon there was a rise in invisible current account receipts and in Iraq a decline in invisible current account payments. In Colombia the trade balance was slightly less active than in 1958; whereas in 1958 the rise in reserves was largely the result of a drastic cut in imports in the face of an unfavourable capital account, in 1959 it was caused chiefly by an inflow—in part a repatriation—of capital.

There were a few countries in which movements in reserves were in opposition to the general cyclical swing: after expanding in 1958 they contracted in 1959. In all cases except Ghana and Jordan—where an increase in imports was chiefly responsible—the decline in reserves in 1959 was largely the result of changes in the flow of capital. Higher expenditure on imports was a contributory factor in Panama and—along with lower export receipts and a reversal in the flow of non-trade items—in Costa Rica and Uruguay, too. In the Belgian Congo, Cambodia and Morocco, however, the decline in reserves occurred in the face of a substantial improvement in the balance of merchandise trade: it was almost entirely the result of an outflow of private capital.

Table 5-9. Elements in the Balance of Payments of Selected Primary Exporting Countries

(Millions of dollars)

Country[a]	Trade balance[b]		Net transactions[c] with						Other transactions, net balance		Change in reserves[d]	
			IBRD		IMF		Export-Import Bank					
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959
Uruguay	4	−92	6	6	—	—	−1	−1	8	72	17[e]	−15[e]
Jordan	−85	−100	—	—	—	—	—	—	96	99	11	−1
Ghana	26	−30	—	—	—	—	—	—	−10	32	16	7
Lebanon	−182	−204	2	4	—	—	—	—	188	218	8	18
Costa Rica	−7	−23	1	2	—	—	1	2	13	14	8	−5
Ceylon	−1	−53	3	1	—	—	—	—	−12	10	−10	−42
Algeria	−651	−766	−0	−1	—	—	—	—	651	767	[f]	[f]
Malagasy Republic	−30	−44	—	—	—	—	—	—	6	59	−24	15
Turkey	−68	−88	—	−1	17	−3	1	−2	32	66	−18	−28
Panama	−76	−79	−4	—	—	—	1	1	98	70	19	−8
Tunisia	−2	−11	—	—	—	—	—	—	50	60	48	49
China (Taiwan)	−70	−74	—	—	—	—	−2	−0	75	75	3	1
Colombia	61	55	1	−1	5	−15	41	18	−110	−9	−2	48
Hong Kong	−281	−292	—	—	—	—	—	—	323	312	42[g]	20[g]
Former French West Africa[h]	−69	−38	−1	−1	—	—	—	—	70	39	[f]	[f]
Haiti	−4	−4	—	1	3	2	1	—	0	1	—	—
Brazil	−110	−92	−5	12	38	−20	111	−8	−45	91	−11[i]	−17[i]
UAR (Egypt)	−190	−180	—	—	—	−3	5	—	177	140	−8	−43
West Indian Territories[j]	−93	−83	—	—	—	—	—	—	96	89	3[g]	6[g]
Ecuador	28	32	4	8	−5	—	−1	−2	−30	−33	−4	5
El Salvador	8	12	2	−1	—	6	—	—	−12	17	−2	0
UAR (Syria)	−77	−71	—	—	—	—	—	—	53	81	−24	10
Ethiopia	−16	−13	2	4	—	—	4	−1	2	5	−8	−5
Dominican Republic	−12	−6	—	—	—	—	—	—	10	−4	−2	−10
East African Territories[k]	4	21	—	—	—	—	—	—	−21	−35	−17[g]	−14[g]
India	−599	−512	149	88	—	—	2	12	217	495	−231	83
Burma	−11	2	5	5	−3	−4	—	—	40	16	31	19
Thailand	−84	−60	3	10	—	—	−0	7	70	47	−11[i]	4[i]
Cuba	−125	−58	—	—	—	—	11	5	40	−63	−74	−116
Venezuela	722	935	—	—	—	—	3	1	−1,110	−1,298	−385	−362
Paraguay	−4	0	−0	−1	1	−2	2	2	−1	4	−2[e]	3[e]
Malaya[l]	−110	119	—	1	—	—	—	—	105	24	−5	144
Cambodia	−20	−12	—	—	—	—	—	—	24	7	4[e]	−5[e]
Israel	−288	−252	—	—	−4	—	−7	5	346	283	47	36
Republic of Viet-Nam	−169	−150	—	—	—	—	—	—	191	151	22	1
Morocco	−56	−3	—	—	—	—	—	—	64	−4	8[i]	−7[i]
Mexico	−394	−254	17	1	—	—	52	10	244	255	−81[i]	41[i]
Australia	−395	−105	17	−8	—	—	−1	−1	178	220	−201	106
Guatemala	−43	−24	4	−0	—	—	−0	−1	13	17	−26	−8
Nicaragua	−14	−2	2	−0	−2	−2	−0	1	10	4	−4	1

(Continued on following page)

Table 5-9. Elements in the Balance of Payments of Selected Primary Exporting Countries (*continued*)

(Millions of dollars)

Country[a]	Trade balance[b]		Net transactions[c] with						Other transactions, net balance		Change in reserves[d]	
			IBRD		IMF		Export-Import Bank					
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959
Honduras	−5	7	1	1	−4	4	1	1	−1	−10	−8	3
Philippines	−165	−65	8	8	—	−6	8	7	155	73	6	17
Iraq	260	268	—	—	—	—	−0	−0	−232	−260	28[i]	8[i]
Nigeria	−87	−5	8	8	—	—	—	—	57	8	−22[g]	11[g]
Pakistan	−94	−22	12	18	—	—	3	−1	46	43	−33	38
Union of South Africa	−588	−279	14	21	36	−36	−14	−13	564	418	12	111
Argentina	−239	16	—	—	—	73	50	59	32	40	−157[i]	188[i]
Peru	−54	19	5	1	10	−10	46	47	−9	−42	−2	15
Indonesia	241	413	—	—	—	−9	10	−5	−258	−315	−7[i]	84[i]
Belgian Congo	42	176	18	8	—	—	—	—	−30	−313	30	−129
New Zealand	−96	174	—	—	—	—	−1	−1	140	−104	43	69
Rhodesia and Nyasaland	−117	49	31	28	—	—	—	—	80	−63	−6[i]	14[i]
Chile	−29	130	8	5	11	—	24	23	2	−90	16	68
Republic of Korea	−362	−264	—	—	—	—	—	—	392	265	30	1
Sudan	−45	29	—	20	5	1	—	—	13	22	−27	72
TOTAL, COUNTRIES LISTED	−4,821	−1,953	313	247	108	−24	350	165	3,090	2,066	−960	501

Source: International Monetary Fund, *International Financial Statistics;* United States Export-Import Bank, *Semi-Annual Report to Congress* (Washington, D. C.); Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin* (Washington, D. C.); United Kingdom Colonial Office, *Digest of Colonial Statistics* (London); replies to the United Nations questionnaire of October 1959 on economic trends, problems and policies.

[a] Countries are arrayed in increasing order of the ratio of the change in the balance of trade between 1958 and 1959 to total trade in 1958.

[b] Exports f.o.b. minus imports c.i.f.; estimated in some countries on the basis of less than twelve months' data in 1959.

[c] For each institution, disbursements minus repayments.

[d] Gold and foreign exchange holdings of monetary authorities, other official entities and deposit money banks except as noted.

[e] Net change in United States banks' short-term liabilities.

[f] Change in reserves included in "Other transactions".

[g] Changes in sterling balances; between January and September in 1959.

[h] Excluding Guinea.

[i] Official reserves.

[j] Barbados, British Guiana, Jamaica and Trinidad.

[k] Kenya, Tanganyika and Uganda.

[l] Brunei, the Federation of Malaya, North Borneo, Sarawak and Singapore.

Most of the countries which lost reserves in both 1958 and 1959 belonged to the groups whose principal export is coffee, sugar or cotton, commodities for which the international market showed little or no improvement during 1959. They included Brazil, El Salvador, Ethiopia and Guatemala, Cuba and the Dominican Republic and Turkey and the United Arab Republic (Egypt). Of these, however, only Turkey—where there was a major increase in imports—registered a deterioration in trade balance; the others, by dint of import cuts—except in Brazil—and expansion in the quantum of exports, managed to improve their merchandise accounts. In the coffee exporters the factors mainly responsible for the change in reserves lay in the other components of the current account; in the other countries capital movements were the chief cause. In the case of Cuba, the Dominican Republic, Guatemala and the United Arab Republic (Egypt) the reduction in reserves was a relatively large one, amounting in the Dominican Republic to a loss of almost 20 per cent and in Cuba of more than 30 per cent.

The two other countries experiencing successive reductions in reserves were Ceylon and Venezuela. In Ceylon the loss in 1959—amounting to between a fifth and a fourth of gold and foreign exchange holdings—was associated with an upsurge in imports, in the face of fairly static export earnings. In Venezuela, on the other hand, the massive decline in reserves—about one-third—does not reflect any major deterioration on merchandise account; for despite a reduction in crude petroleum prices, export earnings appear to have been well sustained. Rather was it the result of the movement of funds in the petroleum sector, aggravated by some speculative outflow following a deterioration in the state of internal equilibrium and some consequential rumours of devaluation.

The production and use of supplies

After a marked slackening in 1957/58, production in the primary exporting countries resumed its growth more strongly in 1958/59. There were relatively few countries in which the gross domestic product was smaller in 1959 than in 1958, even on a per capita basis. The principal reason for the improvement lay in better weather and larger crops but the expansion was generally wide-spread, affecting mining and manufacturing as well as agriculture, production for the domestic market as well as for export.

In most countries total supplies rose less than domestic production: the contribution of imports was markedly smaller than in 1958, even when import quantum did not in fact decline. The use to which supplies were put also showed a notable change: a significantly higher proportion went into exports than in 1958. This was largely the result of the recovery in demand in the industrial countries, but it also reflects—as does the relative decline in imports—the efforts that were made to correct external accounts which had been thrown out of balance by the upsurge in imports in 1957 and the decline in primary commodity prices in 1958.

Notwithstanding the dramatic change that occurred in the role of the external sector—reducing very sharply its net contribution to available supplies—the expansion in domestic production was generally sufficient to allow for an increase in total and, in a majority of countries, even in per capita consumption. The improvement in food harvests was a determining influence in this respect. More dependent on imports, fixed capital formation showed a much less uniform result: among the major primary exporting countries there were as many reductions between 1958 and 1959 as there were increases.

The over-all slackening in the rate of investment meant a slowing down of a number of development programmes. Where the effort to reduce inflationary pressures was supported by an expansion in domestic production, it was instrumental in bringing into closer alignment total supplies and the claims being made upon them. Where inflation was most severe and its causes most deeply embedded in institutions and policies, however, the restraints on imports and investment tended to exert indirect restraints on production and in these countries the extent to which demand and available resources were brought into better balance tended to be much smaller and much more tentative. Conversely, where declining export prices continued to depress incomes, government revenue and expenditure and total demand, imbalances of the opposite nature tended to emerge; and there were also instances in which the effects of earlier disinflationary measures continued to be felt in the economy long after improvements in the volume and terms of trade had eased the strains on the balance of payments which they had been designed to meet.

CHANGES IN DOMESTIC SUPPLY

In spite of rapid advances in manufacturing in recent years, agriculture is still the largest single contributor to total domestic product in most of the primary exporting countries. And it was largely because output in this sector in 1958/59 was generally well above that of the preceding year—gains of more than 5 per cent were recorded in thirty-nine countries and territories (see table 5-10)—that expansion in the gross domestic product in the primary exporting countries was greater and more widely spread between 1958 and 1959 than between 1957 and 1958.

Since weather conditions are a prime determinant of

Table 5-10. Primary Exporting Countries: Indicated Change between 1958 and 1959 in Gross Domestic Product and Selected Components[a]

Country[b]	Agriculture	Mining	Electricity	Manufacturing	Gross domestic product
Tunisia	F	−E	C	...	...
Burma	D	C	...	C	C
Thailand	D	F	D	...	C
Federation of Malaya	B	A	A	C	C
Sudan	F	...	...	...	F
Cuba	A	...	D	...	...
Morocco	D	C	A	...	...
El Salvador	−B	−B	−B	A	−B
Guatemala	A	...	E	B[c]	A
Ecuador	C	...	...	B[d]	C
Philippines	C	D	E	D	C
UAR (Egypt)	C	A	...	B	B
Union of South Africa	B	D	C	A	B
Ceylon	B	...	D	...	B
Mexico	E	A	C	C	C
Nigeria	C	...	D	...	C
Israel	E	F	D	C	D
Belgian Congo	D	D	...	−C	C
Iraq	−E	E	B	−C	B
New Zealand	B	B	D	A	B
Australia	F	A	C	...	B
Ghana	D	A	C	...	D
Rhodesia and Nyasaland	D	F	D	−B	B
India	D	C	E	C[d]	C
Pakistan	−B	...	...	C	−B
Venezuela	A	C	F	D	C
UAR (Syria)	−E	...	E	D	A
Colombia	B	E	C	C	C
Republic of Korea	B	E	D	C	B
Algeria	−B	−B[e]	C	C	...
China (Taiwan)	−B	−B	D	D	B
Peru	A	...	...	...	B
Bolivia	C	−C	E	...	...
Indonesia	B	C	...	...	B
Iran	A	...	...	...	...
Turkey	−C	...	D	B[d]	A
Chile	B	C	C	D	C
Brazil	C	C	C	D	B
Uruguay	−C	...	...	...	...
Argentina	−C	F	−B	−D	−B
TOTAL	C[f]	C[g]	C[h]	B[i]	B[f]

Source: United Nations Division of General Economic Research and Policies; Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* Food and Agriculture Organization of the United Nations, *Monthly Bulletin of Agricultural Economics and Statistics* (Rome); replies to the United Nations questionnaire of October 1959 on economic trends, problems and policies.

[a] Based in most cases on "indicators" derived from official and semi-official statistics on trade, production and public finance. Where "indicators" were used, changes in gross domestic product and its components reflect changes in the output of as many items of goods and services as were reported, combined in accordance with weights derived from national accounts of recent years. The indicated changes are necessarily tentative, being based in some cases on less than a full year's figures, both for the sectors shown and for other sectors for which estimates were made. The symbols indicate a percentage range of increase or decrease (−): A = −1 to 1; B = 2 to 5; C = 6 to 10; D = 11 to 15; E = 16 to 20; F = 21 and over.

[b] Countries are arrayed in ascending order of rate of increase in retail prices as measured by the arithmetic average of the change in the cost of living index during 1959 and between 1958 and 1959.

[c] Including electricity.

[d] Including mining.

[e] Excluding petroleum.

[f] Based on countries for which symbols are indicated, weighted by average gross national product in dollars in 1952–1954.

[g] Latin America, Asia (excluding Japan) and Africa.

[h] Based on countries for which symbols are indicated, plus Cyprus, Hong Kong, Kenya, Malagasy Republic, Panama, Puerto Rico, Tanganyika, Trinidad, Uganda and Republic of Viet-Nam.

[i] Latin America and Asia (excluding Japan).

agricultural production, there was some geographic concentration of changes in production. Particularly large increases occurred in Africa and Oceania, reflecting, in a number of countries, recovery from an unusually bad harvest in the preceding year. Somewhat smaller, but still appreciable, increases were registered in many South-East Asian countries and in parts of Latin America. Perhaps the least uniform region was the Middle East where agricultural output rose substantially in Israel and moderately in the United Arab Republic (Egypt), but declined considerably in Turkey, Iraq and the United Arab Republic (Syria). There were also declines in Algeria, in the River Plate countries of Latin America, and in China (Taiwan) and Pakistan, but in few cases were they of major proportions.

Though in many primary exporting countries the leading food crops—maize and rice, for example—constituted an important element in this expansion of output, in others export crops accounted for most of the growth. In Brazil, for example, total agricultural output would have changed but little had it not been for the expansion in coffee production; in the Sudan most of the increase in agricultural output was in the form of cotton, while export crops played a major role in the agricultural gains of the Federation of Rhodesia and Nyasaland (tobacco and tea), Ghana (cocoa) and Israel (citrus fruit). In Burma and Thailand a recovery in rice production was largely instrumental in raising agricultural output and gross domestic product. In Argentina on the other hand, in spite of a larger wheat crop, agricultural output declined in the wake of a sizable reduction in meat production. In Australia, the 1959 wheat harvest was more than double the size of the drought-reduced crop of the previous year and the wool clip was also larger; in New Zealand, wool was also an expanding element and along with meat was largely responsible for an increase in agricultural production, the output of dairy products showing no significant change.

In most of the other primary exporting countries agricultural output consists to a much larger extent of food production for domestic use. Thus the main elements accounting for the growth of agricultural output in 1959 were wheat in Tunisia and Morocco, rice and other grains and pulses in India, maize—along with cotton—in Mexico, cereals and potatoes in Bolivia, and manioc, cassava and ground-nuts as well as coffee in the Belgian Congo. Conversely, a reduction in food crops was the main cause of a decline in the gross domestic product originating in agriculture in a number of other countries: lower wheat and rice production in Algeria, a smaller output of wheat and many other food items in Turkey and Iraq, and a major decline in the wheat and maize crops, as well as a smaller wool clip, in Uruguay. In the United Arab Republic (Syria) most arable crops were somewhat above the extremely low 1958 level but total farm output was reduced by losses of livestock and a consequent decline in pastoral production.

Activity in mining—a less important contributor to gross domestic product than agriculture in most primary exporting countries but a crucial sector in some—was generally at a higher rate in 1959 than in 1958. The rise reflects the influence of the recovery of demand in the industrial countries which permitted a better utilization of existing capacity and, in some instances, the bringing into production of new mines on which work had begun at the time of the 1955 investment boom.

Copper production in the primary exporting countries rose by almost a fourth between 1958 and 1959; only in Mexico and Peru was there a significant lag, while in the Belgian Congo, Chile and Northern Rhodesia, a substantial increase in copper production was the major component in the expansion in the product of the mining sector. Lead and zinc production in the primary exporting countries, on the other hand, did not participate in the recovery; in the case of lead indeed there was a further decline in output—of about 7 per cent. Among the major producers, Australia registered a small increase in zinc output and a somewhat larger reduction in lead output, while production of both metals declined in Mexico and Peru, following the imposition of import quotas by the United States. Tin production rose during the year as export quotas were enlarged, but for the year as a whole output was only slightly—less than 4 per cent—above the 1958 level: the bulk of the increment in consumption had been drawn from stocks. Only Bolivia and Thailand produced significantly more in 1959 and even in these countries production remained well below the 1957 level.

Some major advances took place in petroleum production but, largely as a result of reductions in Kuwait and Qatar, the rate of expansion in the primary exporting countries dropped below the 8 per cent that had been registered between 1957 and 1958. The Saharan oilfields of Algeria entered into production, there was further expansion in western Africa and several other small producers—Burma, Chile, Colombia, Morocco, Trinidad and Turkey, for example—showed over-average rates of increase. In Argentina the effects of the 1957 petroleum legislation began to be felt: the combined output of the State Petroleum Corporation (Yacimientos Petrolíferos Fiscales) and of private companies under contract to the Corporation rose by about a fourth, effecting a significant saving of foreign exchange. A comparable increase in production was achieved by the Brazilian petroleum monopoly (Petrobras). In Bolivia, flooding caused an appreciable reduction in output, while in Peru the scale of operations of the industry was temporarily reduced during a dispute over domestic price regulation; in both countries less petroleum was produced in 1959 than in 1957. Among the major producers, Iran and Iraq registered increases in output well above the average; in Venezuela, however—largely as a result of the restraints placed on United States imports—the rate of expansion was somewhat below the average

and the 1959 output fell just short of the record 1957 figure.

Electricity generation continued to be a dynamic element in the primary exporting economies: after an increase of about 8 per cent between 1957 and 1958, there was an increase of about 10 per cent between 1958 and 1959. Among the few countries in which the output of electricity failed to expand in 1959 were Argentina, where manufacturing activity declined, and Morocco and the Federation of Malaya, where consumption of power by lead and tin mines was less than in 1958. In eastern Africa, where total electricity production expanded by about 10 per cent, there was some readjustment of supply: the increase in consumption in Kenya and Tanganyika was drawn almost entirely from the newly available hydroelectric facilities in Uganda. There were particularly large increases in the output of electricity in India, the Philippines, the United Arab Republic (Syria), Trinidad and Venezuela.

One of the reasons for the continuing expansion in electricity production is the growth of manufacturing industry; on the whole this seems to have been at a slightly more rapid pace in 1959 than in 1958. The downswing in commodity prices in 1957/58 and the decline in export earnings that this induced in a number of countries rarely exerted an entirely negative effect on domestic industry. In most primary exporting countries the reduction in internal incomes was less than the reduction in export proceeds—largely because of producer price policies, stabilization and support measures or fiscal adjustments—whereas the resultant pressure on the balance of payments was often sufficient to bring about a cut in imports, either through a depreciating currency or through direct quantitative controls. In many cases the result was some stimulation of domestic manufacturing, except in a few countries where import controls cut deeply not only into supplies of finished consumer goods but also into the flow of raw materials and components on which local factories depended.

Among the countries in which there was a marked expansion in manufacturing output between 1958 and 1959, foreign exchange stringency and limitation of imports played a part in Brazil, Colombia, the Philippines and the United Arab Republic (Syria) and, to a less extent, Burma where the main stimulus came from the larger 1958/59 rice crop. In China (Taiwan) devaluation in 1958 helped to increase the effective degree of protection of domestic manufactures and there was an appreciable increase in output. The decline in the value of the local currency in 1958 also provided some protection for secondary industry in Chile, though the main impetus for expansion in 1959 seems to have originated in the Government's construction programme. In Venezuela, industry benefited from additional protection granted in a customs tariff revision in 1958.

Industrial development continued at a fairly brisk pace in such countries as India, Israel, Mexico and Pakistan, all of which recorded rates of increase in manufacturing output above the primary exporting country average in 1959. Expansion was more moderate in Algeria, Australia, Ecuador, the Federation of Malaya, Guatemala, the Republic of Korea and Turkey. In the United Arab Republic (Egypt) the rapid rise of the previous four years tended to level off, in New Zealand and the Union of South Africa industrial growth came more or less to a halt, while in the Federation of Rhodesia and Nyasaland, the Belgian Congo, Iraq and Argentina there was actually a decline. In most of these countries the deflationary impact of changes in the foreign trade sector in 1958—and again in 1959 in the case of Guatemala, Turkey and the United Arab Republic (Egypt)—played a significant part in reducing or retarding the rate of growth of demand for the products of local industry. Poor 1959 crops also contributed in Algeria, Argentina and Iraq, disturbed domestic conditions constituted an important factor in Algeria, the Belgian Congo and Iraq, while in Argentina and Turkey the cutting back of demand was an explicit part of a stabilization programme.

In India one of the most notable developments was the bringing into operation of new steel capacity: at about 2.5 million tons, steel production in 1959 was a third greater than in 1958. The combined output of Australia and the Union of South Africa—the other major producers—was less than 2 per cent above the 1958 level, but as a result of the expansion in India and, on a smaller scale, in Chile and Turkey, steel output in the primary exporting countries increased by almost 11 per cent between 1958 and 1959, compared with only about 2 per cent between 1957 and 1958.

India was also among the countries registering a substantial increase in cement production in 1959. More than half the cement producers among the primary exporting countries raised their output by over 10 per cent between 1958 and 1959. However, as there was a decline in output in almost a third of the primary exporting countries—including Argentina, Ecuador, El Salvador, Guatemala, Hong Kong, Jordan, Northern Rhodesia, Pakistan, Peru, Uganda and the Union of South Africa —the over-all expansion was only about 8 per cent. This compares with a rate of growth of rather less than 7 per cent in the preceding period.

CHANGES IN THE USE OF RESOURCES[2]

Gross domestic expenditure in the primary exporting countries was generally higher in 1959 than in 1958 (see table 5-11). In real terms, the indicated increase exceeded the probable growth in population so that, on the average, there was a rise in per capita expenditure. The most marked expansion occurred in some of the

[2] The conclusions expressed in this section are of a very tentative nature: in many cases they are based on "indicators" covering less than the full year. They should therefore be regarded as suggestive rather than definitive, illuminating general trends rather than precisely measured developments.

Table 5-11. Primary Exporting Countries: Indicated Change between 1958 and 1959 in Total Supplies and their Use[a]

Country[b]	Total supplies[c]	Total consumption	Gross capital formation		Gross domestic expenditure	Exports	
			Fixed investment	Rate of stock accumulation		(in 1958 prices)	(in import equivalent)
Countries with low investment ratios							
UAR (Egypt)	B	B	E	—	B	C	−B
Pakistan	−B	−B	−B	...	−B	−D	−D
India	C	C	B	+	C	C	D
Federation of Malaya	C	B	−C	...	B	C	G
Philippines	B	B	C	+	B	A	C
Nigeria	C	B	E	—	B	F	F
Ghana	E	D	F	+	D	E	C
Sudan	F	C	−D	+	C	J	I
Indonesia	B	B	−D	...	B	−B	D
Countries with intermediate investment ratios							
Guatemala	A	A	−C	+	−B	E	A
Turkey	B	A	B	—	A	I	H
UAR (Syria)	A	−B	C	—	−B	C	A
Ceylon	C	B	F	...	C	−B	B
Ecuador	C	C	−B	—	C	D	B
Mexico	B	B	B	+	B	C	A
Colombia	C	B	C	—	B	D	B
Thailand	B	B	B	+	B	D	D
Burma[d]	B	B	A	...	B	E	F
China (Taiwan)	B	B	D	—	B	D	C
Republic of Korea	B	B	−B	—	B	B	E
Brazil	C	B	D	+	B	F	B
Chile	C	C	F	...	C	F	G
Argentina	−C	−C	−B	—	−C	B	C
Countries with high investment ratios							
Belgian Congo	A	A	−E	—	−C	D	F
New Zealand	−B	−B	−D	+	−C	B	E
Union of South Africa	A	A	−C	—	−B	C	C
Rhodesia and Nyasaland	B	A	−C	+	−B	F	H
Australia[e]	B	B	C	+	B	D	F
Venezuela	B	C	−E	+	B	C	B
Israel	C	C	A	...	C	G	F
Iraq	B	B	A	—	A	E	E

Source: United Nations Division of General Economic Research and Policies; replies to the United Nations questionnaire of October 1959 on economic trends, problems and policies.

[a] In the absence of official figures many of the symbols in this table are based on "indicators" derived from national statistics of trade, production and public finance. Where "indicators" were used, changes in expenditure reflect "apparent disappearance" (production minus exports plus imports, with due allowance for inventory changes whenever possible). Consumption was measured by the apparent disappearance of major food items, major textile items and major consumer durables. Fixed capital formation was measured by the apparent disappearance of cement, steel, machinery and major producer durables. In some countries an index of construction activity was also used in assessing investment changes. Changes in external accounts were based on balance of payments statements wherever possible, otherwise on merchandise exports and imports adjusted for other current items in the light of 1958 figures, as well as for price changes between 1958 and 1959. In most cases the "indicators" were computed in real (physical) terms; where values were used, they were reduced to a constant price basis (usually the 1958 level) by means of the most appropriate available deflator. Where official estimates were used, they were preliminary figures. In general, the "indicators" were based on a comparison of figures for at least the first there quarters of 1959 with those for the corresponding period in 1958. The symbols indicate a percentage range of increase or decrease (−): A=−1 to 1; B=2 to 5; C=6 to 10; D=11 to 15; E=16 to 20; F=21 to 30; G=31 to 40; H=41 to 50; I=51 to 59; J=60 and over.

[b] Grouped in accordance with ratio of gross capital formation to gross domestic product, generally in the period 1956 and 1957; low ratios are less than 12 per cent, intermediate ratios 12 per cent to 20 per cent, high ratios over 20 per cent. Within each group, the countries are arrayed in ascending order of increase in the average money supply.

[c] Gross domestic product plus imports. For method of computing change in product, *see* footnotes to table 5-10.

[d] Fiscal year ending in September 1959.

[e] Fiscal year ending in June 1959.

countries in which 1958 had brought a halt or a decline —Ghana, the Sudan, Chile and India, for example, and to a less extent Ceylon, Colombia and Thailand. Among the relatively few countries in which growth of expenditure was above the average in both intervals were Israel and, at a lower rate, Australia and Brazil. At the other end of the scale were a number of countries in which expenditure in 1959 was no greater—or actually less—than in 1958. These included some in which gains between 1957 and 1958 had been average or better—New Zealand, Guatemala and Turkey, for example—and some which in the previous interval had also been characterized by a halt or a decline, such as the Belgian Congo, the Federation of Rhodesia and Nyasaland, the Union of South Africa, the United Arab Republic (Syria) and Pakistan.

In the aggregate, gross domestic expenditure increased less than gross domestic production. This reflects the impact of the external sector: in most countries imported supplies either contracted or expanded to a smaller degree than domestic production, while part of the increment in production was in export commodities, subsequently shipped abroad. Though available supply thus increased less than production, the expansion was generally large enough to sustain a rise in per capita consumption. There were exceptions, however: in Argentina, the United Arab Republic (Syria) and Pakistan, per capita consumption declined for the second successive year; in the Federation of Rhodesia and Nyasaland and in the Union of South Africa, 1959 was the second year without an advance. In New Zealand, the Belgian Congo, Guatemala and Turkey, a slight decline between 1958 and 1959 followed a moderate gain in the preceding interval. In the United Arab Republic (Egypt), the per capita level of consumption was just about sustained. The most notable increases in consumption were in Israel, Venezuela and Chile, where there had been gains in the previous interval also, and in Ghana, India, the Sudan and to a less extent Indonesia, where consumption had been reduced somewhat in 1958.

The rate of capital formation fluctuated more erratically and within much wider limits, and its average increase between 1958 and 1959 was only about half of that of domestic production. The largest increases in fixed investment occurred in Ghana, Nigeria, the United Arab Republic (Egypt), China (Taiwan) and Australia, where there had been expansion between 1957 and 1958, as well as in Chile, Ceylon and Brazil, where 1958 brought a contraction. There was a swing in the opposite direction in the Sudan where a substantial reduction followed a comparable increase. The Belgian Congo, Venezuela, Indonesia and the Federation of Rhodesia and Nyasaland, on the other hand, registered their second successive decline in fixed capital formation.

Few countries, if any, reduced consumption between 1958 and 1959 in order to release resources for an expansion in investment; in almost all instances consumption and investment moved in the same direction. Among the small number of exceptions were the United Arab Republic (Syria) and Turkey, where investment increased while, mainly as a result of poor domestic crops, consumption declined.

Far more countries held down or reduced their domestic expenditure in 1959 in order to improve their external balance. In most cases this reflects special restraints affecting imports, as in New Zealand, the Federation of Rhodesia and Nyasaland and the Union of South Africa. But in a number of countries efforts to expand exports also contributed to this diversion of resources, as in Argentina, Guatemala and Pakistan.

Most of the other countries in which the level of investment was reduced between 1958 and 1959—Ecuador, the Federation of Malaya, the Republic of Korea, the Sudan and Venezuela, for example—managed to increase per capita levels of consumption. This was chiefly the result of expansion in domestic production, though supplies were augmented somewhat in the case of Ecuador and the Federation of Malaya by an increase in imports.

The effect of fluctuations in external accounts upon domestic investment is illustrated by a number of countries—including Brazil, Ceylon, Chile, Colombia, India, the Philippines and Thailand—in which fixed capital formation was cut back in varying degrees in 1958 in the wake of a deteriorating balance of payments, and allowed to expand again in 1959 when reserve positions had strengthened.

In contrast to this, some countries managed to raise the level of investment in both intervals. Some of these—Ghana, Israel and Nigeria, for example—had escaped the general worsening of external accounts in 1958, and some registered a degree of recovery, as in Australia, or further gains, as in Israel and Nigeria, in 1959. But a few—including China (Taiwan), Mexico and the United Arab Republic (Egypt)—maintained their growth in both years in the face of a continuing deterioration in their terms of trade. This reflects increases in domestic production and in the inflow of capital and aid, but in the case of Mexico and the United Arab Republic (Egypt) it also involved a substantial drawing down of foreign exchange reserves.

Changes in domestic expenditure and its financing in particular countries

In general, reductions in the level of fixed investment between 1958 and 1959 tended to predominate among countries with the highest relative rate of capital formation. Among the countries in which the ratio of capital formation to domestic product was more than one-fifth, for example, only Australia increased investment in 1959; in the rest—most mineral and wool exporters—the aftermath of the recession was reflected in a lower rate of investment. Among countries in which capital

formation absorbs a smaller proportion of the gross product, increases tended to predominate, though in the group with the lowest investment ratios—less than 12 per cent of the domestic product—almost half the countries failed to invest more in 1959 than in 1958.

Countries with low investment ratios

Almost all the low investment countries, having a greater volume of supplies at their disposal than in 1958, raised their per capita levels of consumption in 1959. The most notable gains were in Ghana, where there was an upsurge in imports, and in India and the Sudan, where agricultural recovery allowed the losses of 1957-1958 to be made good.

Trends in capital formation were more diverse: there were substantial reductions in some of the countries whose terms of trade had deteriorated between 1957 and 1958 (the Federation of Malaya, Indonesia and the Sudan) and substantial increases in some of the countries in which—as a result of a more favourable movement in the terms of trade—incomes had been raised in 1958 (Ghana, Nigeria and, to a less extent, the Philippines). In India and the United Arab Republic (Egypt) —where 1958 had also brought difficulties on external account—the pattern of expenditure in 1959 was influenced more strongly by official development plans; while in Pakistan, changes in domestic expenditure reflect the fact that it was the only country in the group not to have more resources at its disposal in 1959 than in 1958.

To Indonesia 1959 brought a degree of improvement in the state of economic equilibrium. Externally this reflects an expansion in export earnings and a contraction in imports, induced in part by an increase in oversea demand and a favourable swing in the terms of trade and in part by devaluation of the rupiah and changes in the system of export taxes and import controls. Internally, civil conditions were less disturbed than in 1958, the government deficit was smaller, food crops were generally better, total production—which had declined between 1957 and 1958—registered a per capita increase and the rate of price rise moderated. The cut in imports, however, combined with difficulties in internal transport and distribution, prevented any notable increase in per capita consumption. Though there was a further decline in fixed capital formation, the average volume of money in circulation was substantially greater than in 1958, at least in the first half of the year, government borrowing again being the major force behind the expansion. In August, however, there was a drastic currency and exchange reform: the value of high denomination bank notes was cut by 90 per cent, and 90 per cent of all bank deposits in excess of 25,000 rupiahs (about $500 at one of the principal import rates of exchange) was frozen and placed at the disposal of the Government as a long-term loan. With foreign assets as well as government and private credit continuing to increase, however, the expansion of the money supply was resumed later in the year.

In the Federation of Malaya—which, like Indonesia, felt the impact of both downswing and upswing of the 1957-1959 cycle—private investment was slow to recover from the 1957/58 set-back: with the tin industry still operating below capacity while the buffer stock was being reduced, and electricity consumption and coal mining well below 1957 levels, a sizable increase in government spending was offset by further contraction in private capital formation. The effect of the rubber boom, however, was strongly expansionary: there was a major increase in foreign assets, and private credit rose rapidly with the need to finance a much higher level of export and import trade.

In the Sudan the swings in activity in the 1957-1959 period were influenced partly by the cycle in the world textile industry and partly by wide fluctuations in the domestic cotton crop. The combination of small crop and low prices caused balance of payments difficulties in 1958, and though export earnings recovered in 1959, the effects of controls placed on imports and of retrenchment in investment carried over from 1958. With better food harvests and higher cotton incomes, however, per capita levels of consumption were above those of 1958. As in the Federation of Malaya, the recovery in foreign assets exercised a strong expansionary force, but this was counteracted to some extent in the Sudan by contraction in the public sector as the Government's cash position moved from deficit to surplus.

In Pakistan there was also some recovery in reserves in 1959, but this was the result of cutting back imports well below the average for the decade. Though government capital expenditure was fractionally higher than in 1958, the cash deficit was actually below the 1958 figure, while lower output in agriculture tended to reduce not only the volume of exports but also the level of domestic incomes and investment. Pakistan, indeed, was the only country in the low investment group in which gross domestic expenditure declined between 1958 and 1959.

India and the Philippines were among the countries in which investment, having been cut back in 1958 in the wake of a deteriorating external balance, was allowed to expand again in 1959 with the strengthening of the reserve position.

In India there was a significant expansion in available supplies, for, in addition to the wide-spread gains in agricultural and industrial production, described in the preceding section, there was a rise in the volume of imports. The bulk of the increment was absorbed in higher per capita consumption, making good the preceding year's decline, but there was also a rise in fixed capital formation as the Government resumed the increase in its development plan outlay. On the whole, domestic industry made a greater contribution to the supply of investment goods than in previous years, not only in respect of steel and cement—capacity for producing which registered a sharp increase—but also in

respect of many items of plant and equipment such as diesel engines, textile machinery, pumps, machine tools and transport equipment. Government borrowing from the banking system was the chief component in the expansion in money supply, but the cash deficit was smaller than in 1958 and the pressure on prices was also slightly less.

Though the 1958 cut in imports into the Philippines carried forward into the following year—so that import expenditure in 1959 was actually below the 1955-1956 level—the reduction was chiefly in respect of consumer goods: receipts of capital goods were higher in 1959 than in 1958. Improved food crops and a marked increase in local industrial output kept per capita consumption up to the 1958 level while capital formation rose appreciably as a result of an increase in public as well as private investment. The Government's cash deficit was somewhat smaller than in 1958, however; the main factor expanding the money supply was the rise in private credit.

In the low investment group, the largest increases in fixed capital formation between 1958 and 1959 occurred in Ghana, Nigeria and the United Arab Republic (Egypt). In these countries there was a notable acceleration in the rate of growth, compared with the preceding period, supported by a high level of imports and some deterioration of the external balance.

In Ghana the small, high-priced 1957/58 cocoa crop had brought an increase in revenue to the public sector but—because of the relatively low producer price fixed by the marketing board—a reduction in incomes to the farmer; the large, lower priced 1958/59 crop had the reverse effect. In 1959, consequently, the expansion of government spending—not least on a new development plan—coincided with a considerable increase in private spending. Much of this was accommodated by a major expansion in imports and, although export production was also much greater than in 1958—except in the mining sector where there was only a nominal gain—the balance of trade turned sharply from active to passive. A large proportion of the increment in private spending was on current consumption and consumer durables, but there was also a notable increase in private construction and—a relatively new phenomenon—in private industrial investment.

A similar sequence of events occurred in Nigeria, though the gain in production was smaller, because of reductions in the ground-nut and cotton crops: exports were enlarged by running down stocks that had accumulated in 1958. Development expenditure in the major sectors is officially estimated to have been over 50 per cent greater in 1958/59 than in the preceding year: this includes considerable increases in private commercial and industrial building, and new investment in the petroleum industry, as well as a major expansion in public capital formation.

In the United Arab Republic (Egypt) there was a considerable expansion in cotton shipments in the wake of a recovery in the world textile industry and special efforts on the part of the Government to encourage sales for convertible currencies. As a result of a further decline in export prices, however, combined with the virtual cessation of rice shipments—water shortage having reduced production—export earnings were again reduced. There was a larger outflow of capital, occasioned by the repayment of an International Monetary Fund loan and settlements agreed to with the United Kingdom and the Suez Canal Company, so that, although imports were cut sharply, reserves were run down at a more rapid pace than in 1958 and the external sector exerted a stronger deflationary effect. Though manufacturing output was only slightly above the 1958 level, larger food crops—augmented by supplies of wheat from United States surplus stocks—helped to sustain per capita consumption. While the total volume of imports was reduced, it not only remained well above the 1953-1957 average but also contained a much higher proportion of capital goods, thus facilitating a major increase in fixed investment, particularly in the public sector. The sharp rise in development outlays—as well as an increase in the cotton purchases of the Cotton Commission—caused some deterioration in the Government's cash position, reversing the improvement which had followed the restraint on expenditure in the three preceding years. The predominant element in the increase in the money supply, however, was the rise in credit to the private sector associated chiefly with the financing of larger cotton exports.

Countries with high investment ratios

Most of the countries in which capital formation absorbs more than a fifth of the gross domestic product are particularly sensitive to movements in foreign funds, especially in connexion with major export industries. These industries tended to reflect the cyclical swings of 1957-1959 and exports recovered strongly in 1959 from the 1957-1958 recession. Nevertheless, with earnings in 1958 at a relatively low level and excess capacity tending to emerge, investment in the export industries did not recover correspondingly in 1959 and this in turn contributed to an over-all dip in fixed capital formation.

Where the downswing in prices and earnings between 1957 and 1958 had given rise to more general measures of restraint in protection of the balance of payments, the reduction in investment between 1958 and 1959 was not confined to the export industries. And the recovery in export earnings in 1959 did not always exercise a general reflationary effect over the whole economy. Except in the export industries, therefore, production tended to lag and in several of the countries in this group this lag—combined with a more or less severe cut in imports—was reflected in a lower level of per capita consumption.

The only countries in the high investment group to

experience a deterioration in the terms of trade between 1958 and 1959 were Israel and the petroleum exporters, Iraq and Venezuela. The wool exporters (Australia, New Zealand and the Union of South Africa) and the copper exporters (the Belgian Congo and the Federation of Rhodesia and Nyasaland) all participated in the recovery in raw material prices and experienced an improvement in their terms of trade.

In Israel, domestic output of most capital goods—including stone and cement, metals, machinery and vehicles—rose by 10 per cent or more, but, although import expenditure was maintained in total, imports of capital goods were somewhat lower: construction remained more or less at the 1958 level while investment in agriculture was appreciably less. Much of the increase in output was due to better use of existing capacity, with number of workers and hours of work both showing a significant rise. A substantial rise in exports served to reduce the external deficit and movements in foreign assets were expansionary. The sharp rise in domestic expenditure, however, was financed chiefly by a more or less parallel rise in private credit. The government sector was mildly contractionary: the cash budget, which had moved into surplus in 1958, remained in surplus in 1959.

Both Iraq and Venezuela were in the process of economic readjustment in 1959, partly in response to internal political developments and partly as a result of the violent changes that had taken place in the world petroleum situation since the Suez crisis of 1956/57. In Iraq, petroleum production and exports increased substantially again from the low level of 1957; in Venezuela, where petroleum output regained the 1957 level after the sharp cutback of 1958, United States import restrictions and the large movement of capital referred to earlier in this chapter tended to complicate the course of events in 1959.

Gains in the petroleum sector in Iraq were partly offset by serious reductions in agricultural output: per capita consumption levels were just about maintained but capital formation was below the 1958 level. The increase in foreign assets was an expansionary factor in the money supply, but an even larger component of the rapid rise during 1959 was an increase in credit to the private sector. Government transactions tended to exert a restraining influence, but, in the wake of the poor harvest, wholesale prices rose rapidly during the year.

In Venezuela, where there was a sharper decline in capital formation, it was the petroleum sector that was largely responsible, though there was also a cutback in construction in the public sector. Increased activity in domestic manufacturing and farming—stimulated to some extent by a larger measure of tariff protection—helped to raise incomes. Along with fiscal changes that involved higher taxes on the petroleum industry, this was reflected in a sizable increase in per capita consumption. With revenue rising the government deficit on cash account was appreciably reduced; but the main contractionary force on the money supply in 1959 was the continued and steep decline in foreign assets.

In the Belgian Congo, the Federation of Rhodesia and Nyasaland, New Zealand, and the Union of South Africa, external factors were much more favourable in 1959 than they had been the previous year: terms of trade had improved and export earnings were appreciably higher than in 1958. The effects of restraints imposed earlier in protection of the balance of payments tended to linger on, however, despite the adoption of official policies that were generally reflationary. The level of investment was significantly below that of 1958 and there was also a decline in per capita consumption. Except in the Belgian Congo, whence there was a considerable flight of private capital, reserves recovered strongly, but the amount of private credit showed little disposition to rise. In New Zealand, prices, after increasing appreciably during 1958, remained fairly stable, the number of unfilled vacancies declined and the demand for imports—which had threatened external equilibrium in 1957—was evidently held at a reduced level for most of 1959. The rate of price increase also slackened in the African countries and unemployment, which had emerged in 1958, particularly in the Belgian Congo, remained at a generally higher level in the urban areas. It was only later in the year that in New Zealand expansionary forces began to take over: the volume of foreign assets continued to increase but the principal impetus came from increased borrowing by the public sector as the budgetary position moved from cash surplus to deficit.

Developments in Australia differed from those in the other wool exporting countries largely because of official decisions taken during the 1957/58 downswing in commodity prices: instead of adopting defensive measures to protect the external balance, the Government pursued a fiscal and monetary policy designed to offset the impact of declining farm incomes and foreign assets. The level of public investment was raised and credit conditions were eased both through a budget deficit and by increasing bank liquidity. In the event a large inflow of capital prevented the rapid decline in reserves that had been feared. A considerable expansion in agricultural output, a partial recovery in export prices and a continuing inflow of capital reversed the downward movement of reserves in 1959, without any cutback in imports. Per capita consumption was maintained and, led by the public sector, there was a marked increase in investment. The traces of slack that had appeared in the economy in 1958 tended to disappear: under the influence of an expansion in both public and private borrowing as well as in foreign assets, unemployment declined, unfilled vacancies increased, and the rise in prices became somewhat more rapid.

Countries with intermediate investment ratios

Most of the countries in which the ratio of capital formation to domestic product lies in the range of 12

to 20 per cent managed to maintain or raise their per capita levels of consumption between 1958 and 1959. The exceptions included Argentina, the United Arab Republic (Syria), Guatemala and Turkey, where the domestic product failed to rise above the 1958 level. Most of these countries also increased their fixed capital formation, generally to a greater extent than their consumption. The exceptions in this case included Guatemala, Ecuador, the Republic of Korea and Argentina. And, except in the case of Ceylon, all these countries increased their export quantums, while in none of them did the capacity to import generated by their exports fall below the 1958 level.

Where reductions in investment occurred, balance of payments strains were usually a causative or contributory factor: Ecuador was the only country in this group in which imports were not cut back sharply in 1959.

In Guatemala, for example, the deterioration in the terms of trade which had necessitated defensive measures in 1958 continued in 1959. Early in the year a tariff system superseded the import licensing arrangement that had been devised in 1958; in May many rates were doubled in an effort to improve trade balances and further restraints were imposed towards the end of 1959. Though the volume of exports was expanded, receipts fell short of those of 1958 and the two preceding years. There was a decline in total as well as per capita consumption, and the level of investment was again reduced. And, under the influence of declining reserves, the average money supply contracted.

In Argentina—the other country in which per capita levels of consumption and investment declined between 1958 and 1959—the degree of imbalance, internal and external, was far more severe and deep-seated. Imports, which had declined slightly in 1958, were cut back severely in 1959, and as exports were well maintained, the balance of trade became active, for the first time since 1954; there was also an inflow of capital, reserves rose considerably and the free market value of the peso appreciated somewhat in the second half of the year. In this case the 1957/58 downswing in commodity prices had brought a measure of relief: import prices were lower, and as export prices were slightly higher, the terms of trade actually improved. Part of the reduction in imports was in respect of petroleum, facilitated by a major expansion in domestic production; but cuts in various other imports made more difficult the task of bringing internal demand and supply into closer alignment. Taxes were increased and public payrolls pruned, credit restraints were tightened and losses reduced on government-operated facilities. Though somewhat diminished, the over-all deficit remained large, however, and with prices continuing to rise rapidly several major adjustments were made to wage rates. These did not avert strikes, however, and industrial production suffered. Supplies were also reduced by a decline in livestock production which affected export capacity as well as domestic consumption. Though attempts were made to curtail the supply of credit to the private sector, limiting it to "productive" purposes, this remained, quantitatively, the dominant factor in the rise in money supply.

The other countries in which the rate of investment was reduced between 1958 and 1959—Ecuador and the Republic of Korea—managed to increase per capita levels of consumption. This was the result of expansion in domestic production for, although imports were more or less maintained in Ecuador, there was a sharp cut in the Republic of Korea. Though the terms of trade became less favourable in Ecuador, the foreign sector continued to add to the money supply; as the Government's cash position moved into deficit, the public sector also became expansionary. The principal component in the increase in money, however, continued to be the borrowing of the private sector. Private credit continued to expand in the Republic of Korea too, but its effect was overshadowed in the course of 1959 by the effect of government retrenchment in the wake of a reduction in foreign aid. This reduction was largely responsible for the fact that the decline in total fixed investment occurred in the face of an increase in domestic construction.

In contrast to the countries in which investment declined between 1958 and 1959, those registering a marked increase in investment all imported more than in 1958, whether their terms of trade improved, as in Ceylon and Chile, or worsened, as in Brazil, China (Taiwan) and Colombia. With the exception of China (Taiwan), these were all countries in which investment had been cut back in 1958 as the external balance deteriorated. As reserves were strengthened in 1959—from oversea borrowing or expanding export earnings—there was a resurgence of investment.

In China (Taiwan) there was a steep rise in private credit, part of which went to finance a larger output of textiles and other local manufactures. Agricultural production, however, tended to lag behind rising money incomes, and though a drop in rice exports helped to maintain domestic supplies, there was a reduction in the available amount of wheat and flour and ground-nuts and oil. As investment increased, government borrowing from the banking system also tended to rise and, although changes in foreign assets exerted some countervailing influence, there were signs of some acceleration in price movements.

Imports into Colombia were allowed to expand somewhat between 1958 and 1959 and, though they remained well below the 1950-1957 average, the increase helped to ease the strain on resources occasioned by a resumption of a higher rate of capital formation. Limitations on borrowing by the private sector, coupled with a rapid rise in the volume of funds frozen in the form of de-

posits in advance of imports, tended to put a brake on the expansion of money, notwithstanding a deterioration in the Government's cash position, and prices remained fairly stable in the second half of 1959. Domestic food production increased only slightly, however, and it was deemed necessary to impose restraints on exports of a number of items early in the year. As money incomes rose, moreover, restraints were also placed on imports, partly through higher duties in a revised tariff system and partly through the higher advance deposits. The most buoyant elements of production were in the export sector—coffee, and petroleum and other minerals—and exports absorbed a relatively higher share of the increment in the domestic product than either consumption or investment.

This was the case in Brazil also where there was an even sharper recovery in capital formation, sustained—to a somewhat greater degree than in Colombia—by increased imports of investment goods. Stabilization efforts were intensified in the period from mid-1958 to mid-1959, but under the influence of higher domestic prices for export crops whose external price was falling, a series of wage increases, a reversal in the downward trend in foreign assets and a further expansion in public investment, pressures again began to mount. The fulfilment of the Government's undertaking to purchase the unsold balance of the coffee crop at the end of the 1958/59 season, moreover, set in motion a new upsurge in money: by the end of the year the supply stood at 36 per cent above the corresponding 1958 figure. With available resources under greater internal strain than in 1958, there was a noticeable acceleration in the rate of price rise.

In Chile, the state of external imbalance was alleviated not only by an expansion of export volume and oversea credit—as in the case of Brazil and Colombia —but also by a significant improvement in the terms of trade. This facilitated some relaxation of import control and a tendency to switch from restraint by licence and prior deposit to the use of a custom tariff with higher rates of duty. Evidence of the improved state of external accounts lies in the recovery in reserves and the stability of the rate of peso exchange on the free market. Internally, however, the resumption of growth increased inflationary forces again and, at least in the first half of the year, prices were rising more rapidly than in 1958, notwithstanding wide-spread gains in output.

Between 1958 and 1959, Ceylon registered a recovery in the rate of growth as sharp as that of Chile. As in Chile, it was facilitated by an improvement in the terms of trade, but as the volume of exports declined and capital inflow was smaller, the substantial increase in imports into Ceylon resulted in a rapid drawing down of reserves. Internally, on the other hand, production of agriculture and industry was sufficient to sustain an appreciable increase in per capita consumption without evidence of undue additional strain arising from incomes generated by the upsurge of investment. The decline in foreign assets acted as a brake on the expansion in the supply of money caused chiefly by government borrowing to cover the widening cash deficit.

The final group of countries consists of those in which there was no more than a moderate rise in fixed capital formation between 1958 and 1959. In Thailand, and to a less extent Burma, this rise was supported by an increase in imports and an improvement in the terms of trade. In Mexico and the United Arab Republic (Syria), by contrast, it occurred in spite of a cut in imports and a worsening in terms of trade. In Turkey the contribution of imports to total supplies was relatively greater, but, as the terms of trade deteriorated, it was obtained only by diverting a larger proportion of output to export markets, running down reserves and increasing foreign liabilities. Turkey and the United Arab Republic (Syria) were among the very few countries in which fixed capital formation was increased in 1959 in the face of a reduction in per capita consumption.

The rise in fixed capital formation in the United Arab Republic (Syria) was the sharpest in this group: it reflects a considerable increase in public spending — largely in connexion with the Orontes river valley development and the refining and pipeline distribution of petroleum. In contrast to this expansion, there was a decline in personal consumption—the result of another poor agricultural season. A deeper cut in consumption was averted by a ban on the export of wheat and barley and a further drawing down of inventories, but no relief came from imports: these were reduced in the wake of a major loss of reserves in 1958. Towards the end of the year, however, an agreement was concluded with the United States for the importation of $9.4 million worth of grain under Public Law 480. Though there was a sizable increase in the Government's cash deficit, the principal component of the expansion in money supply during 1959 was the rise in advances to the agricultural sector: in the drought-stricken areas debt limits were extended and new loans widely granted to help in the financing of forthcoming crops.

In Turkey, personal consumption was held back partly by the stabilization measures taken in 1958—one of the results of which was a trebling in the lira cost of most imported goods—and more directly by poor harvests in 1959. Cereal stocks were drawn down but later in the year there was a sizable increase in imports of consumer goods which helped to prevent any further decline in total consumption. Most of the increase in imports between 1958 and 1959, however, represented capital goods, reflecting a marked rise in private investment. The expansionary effects of developments in the private sector were largely offset not only by the running down of foreign assets but also by contraction in the public sector and an appreciable reduction in the Government's cash deficit.

The pattern of expenditure in Burma and Thailand

was strongly influenced by swings in agricultural output: a drop in consumption and exports followed the poor 1957/58 rice harvest, a comparable expansion followed the good 1958/59 crop. In Burma, imports—after being drastically curtailed in 1958—were allowed to increase moderately in 1959; investment which had not been reduced in 1958 showed little further advance, however; though there was a tendency for private borrowing to increase in the course of the year, the main expansionary force continued to be the government deficit. In Thailand, by contrast, investment had declined between 1957 and 1958 and the increase in supplies that became available in 1959 was used not only to expand exports and consumption but also to restore the level of fixed capital formation, and in this the private sector tended to predominate.

In Mexico the principal dynamic element was also agriculture: the increment in output in 1959 went partly into private consumption, partly into exports and partly into stocks. While construction recorded an appreciable increase, imports of capital goods were well below the 1958 level and total fixed investment increased to much the same extent as in the preceding period. Despite a worsening of terms of trade, the merchandise balance was less passive than in 1958 and reserves increased. The improvement in food supplies, combined with a sizable expansion in domestic production of manufactures, was sufficient to sustain an increase in per capita consumption without any noticeable acceleration in the upward movement of prices. With the foreign sector becoming more strongly expansionary, however, the effect of a further increase in public and private borrowing from the banking system was a 16 per cent rise in the money supply in the course of the year.

CHANGES IN DOMESTIC BALANCE

On the whole, 1959 was a year of wide-spread improvement in several of the aspects of internal economic equilibrium in the primary exporting countries. The basic cause for this was the expansion in production, both of export commodities and of foodstuffs and manufactures for domestic consumption. As indicated in the preceding section, the increase in domestic supplies made it possible not only to meet the requirements, at 1958 levels, of a somewhat larger population, but also in many cases to raise real per capita consumption. In the export sector, increased absorption of raw materials by foreign markets helped to take up the slack—in employment and in utilization of plant—that had developed in 1958, particularly in the mining sector. It also helped to reduce, if not liquidate, some of the stocks that had accumulated in 1958—of metals, wool and ground-nuts, for example—thereby reducing the burden of financing them.

Along with advances on the supply side, there was some tendency for demand to expand somewhat less rapidly than in earlier years. In a number of countries the relative lag in domestic demand was the direct consequence of the decline in the price that producers had received for commodities such as metals and fibres exported in 1958. In other countries it stemmed from the defensive measures taken in 1957/58 when the balance of payments came under strain. These measures were designed primarily to curb the demand for imports, as a supplement or alternative to direct controls; in most cases, however, since they consisted of higher taxes, cuts in public expenditure, restraints on hire-purchase transactions and on bank lending and the freezing of additional funds in prior deposits for future imports, their effect was fairly widely diffused throughout the economy and, in varying degree, deflationary.

Notwithstanding these indications of slackening strain on available resources, however, problems of imbalance remained severe in most of the countries in which inflation had previously attained the rapid price-wage-cost-price spiral. Here there tended to be fewer signs of improvement, sometimes because production failed to advance, sometimes because of a further deterioration in the terms of trade, but generally because of the deep-seated nature of the forces involved, entrenched as they are, in some cases, in institutional arrangements.

Moreover, there were several instances of emerging disequilibrium of the opposite character, reflecting deficiency in demand. These occurred chiefly in countries in which the downswing in commodity prices had left the export sector—or a major component of it—in a depressed condition. But even where the external balance had recovered fairly strongly in 1959, this was not invariably followed by recovery in the domestic economy: there were some countries in which reversal of official restraining policies was not sufficient to induce a renewal in the process of economic growth.

Changes in money supply

With economic activity in the primary exporting countries at an appreciably higher level in 1959 than in 1958, there was a marked rise in the supply of money. The proportion of countries in which there was a decline in money supply—measured as an average between the change in the course of the year and the change in average from the preceding year—dropped from a fourth in 1958 to a tenth in 1959. In 1958, the proportion of countries showing some acceleration in the rate of increase in money supply was less than a third; in 1959, it was well over half. In 1958, the proportion showing some deceleration in the rate of increase was over 40 per cent; in 1959, it was less than 30 per cent (see table 5-12).

The acceleration in the rate of increase in 1959 did not occur among the countries in which the money supply had been rising very rapidly; indeed among the countries with increases of more than a sixth there were fewer registering more rapid increases between 1958

Table 5-12. Primary Exporting Countries: Distribution According to Changes in the Supply of Money

Index of change in money supply[a] (corresponding figure in preceding year = 100)	Number of countries in which, in relation to the preceding year, the index was			Total
	Lower	Similar	Higher	
99 or less				
1958	7	3	0	10
1959	1	2	1	4
101 to 106				
1958	6	2	1	9
1959	3	2	4	9
107 to 117				
1958	3	4	2	9
1959	5	2	9	16
118 and over				
1958	1	2	9	12
1959	2	1	8	11
Total				
1958	17	11	12	40
1959	11	7	22	40

Source: United Nations Division of General Economic Research and Policies, based on International Monetary Fund, *International Financial Statistics.*

[a] An arithmetic average of the change during the year and the change in the average between successive years.

and 1959 than between 1957 and 1958. The acceleration was concentrated among the countries with moderate rates of expansion: in the group in which money supply was rising by less than one-sixth a year, the proportion in which the rate increased was four times as great in 1959 as in 1958.

The contrast between 1958 and 1959 in respect of movements in money supply is explained in part by fluctuations in foreign assets. In 1958, a shrinking of foreign assets was the predominant factor in more than half of the countries in which the supply of money contracted during the year and it was a contrary factor in less than a fourth. In 1959, by contrast, movements in foreign assets were generally expansionary: indeed they were the major component of the increment in money supply in almost a fourth of the countries in question, and an important subsidiary component in two-thirds of the remainder (see table 5-13).

Reductions in private credit were relatively rare, especially in 1959. In 1958, such reductions were a major factor in the decline in the money supply in at least one country, a contributory factor in at least two others and among countries with a rising money supply, they were contractionary in at least four countries. In 1959, however, private borrowing was reduced in only two countries of the forty on which this analysis is based.

On the whole the transactions of the government sector with the banking system were strongly expansionary. This was true of both years, though the effect of it was relatively greater in 1958 than in 1959. In 1958, government borrowing tended to offset the contractionary effect of the foreign sector in almost all cases in which there was a reduction in foreign assets; in very few cases among countries in which the money supply rose, however, did the government sector exert a negative effect. In 1959, on the other hand, when expansion was far more wide-spread, government operations were a restraining influence in more than a fourth of the primary exporting countries.

The main deflationary impulse from the government sector in 1959 came from the increase in the proportion —from about 15 per cent to about 25 per cent—of countries in which there was a budgetary surplus on cash account. In several of the countries in which such surpluses were registered, moreover, the change from the preceding year was a large one—in excess of 20 per cent of government's total 1958 expenditure. In addition, in 1959, fewer Governments moved from surplus to deficit or increased their deficit than had been the case in 1958 (see table 5-14).

Taking into account the fact that the money supply serves to finance not only the "real" movements of the gross domestic product but also a large and variable range of transactions arising from the transfer of titles and other self-balancing items that have no counterpart in the national accounts, there was nevertheless a broad proportionality between changes in real gross domestic expenditure from 1958 to 1959 and changes in the supply of money. In most primary exporting countries the expansion in money supply tended to be relatively greater than the expansion in real expenditure. In Australia, Ecuador, Ghana and India, however, it was expenditure that rose relatively more rapidly, while in some countries—the Federation of Rhodesia and Nyasaland and Guatemala, for example—there was a contraction in both, and in others, such as New Zealand, Pakistan, the Union of South Africa and the United Arab Republic (Syria), the average supply of money showed a slight rise in the face of a decline in total real expenditure. The countries in which the two variables were furthest out of line—Argentina, Brazil, Chile, Indonesia, for example—were generally those with deep-seated inflationary pressures; here the expansion in money supply was closely associated with rapidly rising domestic prices (see chart 5-3).

Changes in prices

One of the effects of the wide-spread increases in domestic production—particularly of foodstuffs—was a noticeable slackening in the rate of increase in retail prices. Also contributing to this was a decline in world prices of cereals, beverage crops and fuels which, in combination with the relative stability in the price of manufactures entering world trade, resulted in an average reduction of 3 per cent in the import unit value of the primary exporting countries.

Table 5-13. Primary Exporting Countries: Changes in the Supply of Money and its Components[a]

Country	Change during 1958		Change during 1959	
	Percentage	Contributing factors[b]	Percentage	Contributing factors[b]
Dominican Republic	26	*g* **P** *o*	−15	*f* **O**
Venezuela	10	**G** *p*	−5	**F** *o*
Republic of Korea	35	*f* *g* **P**	−1	*g* **O**
Jordan	10	**F** *p*	−1	*f* *g* **O**
Ethiopia	−1	**F** *o*	1	*g* **P**
Nicaragua	−3	**F**	1	*f* **G**
Union of South Africa	−2	*f* *g* **P**	1	**F** *p*
El Salvador	−6	*p* **O**	2	*g* **P**
Sudan	11	**G**	2	**F** *p*
Guatemala	−9	**F** *o*	3	**G** *p*
Honduras	−1	**F** *o*	3	**F** *p*
Indonesia	42	*f* **G** *p*	3	*f* **G** *p*
Turkey	17	*f* *g* **P** *o*	4	**P** *o*
Pakistan	5	**G** *p*	5	*f* **G** *p*
Philippines	9	**G** *p*	6	*f* *g* **P**
India	3	**G** *p*	7	*f* **G** *p*
Australia	−2	**F** *o*	8	*f* **G** *p*
UAR (Egypt)	−6	*f* **O**	9	*g* **P**
Ceylon	4	**G** *p*	10	**G** *p*
Iran	31	*f* *g* **P**	10	**P**
Israel	15	*f* **P**	10	*f* **P**
Paraguay	20	*g* *p* **O**	10	*g* **P** *o*
Colombia	21	*f* *g* **P** *o*	13	**F** *g* **P**
Ecuador	−1	*f* **G** *o*	13	*f* *g* **P**
New Zealand	−1	**G** *p*	13	*f* **G**
Peru	8	**G**	14	**F** *g* *p*
China (Taiwan)	33	**F** *g* **P**	14	*g* **P**
Mexico	6	**G** **P** *o*	16	*f* *g* *p* **O**
Burma	19	**F** *g* *o*	16	*f* **G** *p* *o*
Federation of Malaya	1	**F** *g* *p*	17	**F** *g* *p*
UAR (Syria)	−2	**F**	17	*f* *g* **P**
Iraq	20	**F** *g*	17	*f* *p* **O**
Ghana	−4	**G** *o*	18	**F** *p* **O**
Lebanon	5	**F** *p*	21	*f* **P** *o*
Cuba	−3	**F** *o*	26	**G** *p* *o*
Bolivia	3	*f* **G** *p*	28	*f* **G** *p*
Chile	35	*f* **G** *p*	31	**F** **G** **P**
Brazil	21	*g* **P**	36	*f* *g* **P**
Uruguay	23	*g* **P**	40	*f* **P**
Argentina	46	**G** **P**	44	*f* *g* **P**

Source: United Nations Division of General Economic Research and Policies, based on International Monetary Fund, *International Financial Statistics.*

[a] Holdings of notes and coin outside the monetary system and demand deposits of the private sector in commercial and central banks. Change in the money supply is equal to the aggregate net change in the indicated components: foreign assets minus liabilities (**F**) represent as far as possible the domestic monetary effects of foreign transactions; credit to the private sector (**P**) represents claims of the banking system on individuals and businesses; credit to the government sector (**G**) is measured by net change—indebtedness minus deposits—in government dealings with the banking system; other (**O**) represents the net change in unclassified net assets minus the change in quasi-money.

[b] The principal component of the change is indicated by a capital letter; absence of a symbol indicates that the factor in question moved in the opposite direction to the total money supply.

In 1959, the proportion of countries in which the rise in the cost of living index—computed as an average of movement during the year and movement between successive years—was less than in the preceding interval increased from 33 per cent to 42 per cent; while the proportion in which prices had remained more or less stable increased from 21 per cent to 31 per cent. Among the countries in which there was a moderate—2 to 5 per cent—rise in retail prices, the proportion showing an acceleration in the rate of increase dropped to half of the 1958 figure (see table 5-15).

The effect of the improved harvest is discernible in a number of countries—notably Morocco, the Sudan,

Table 5-14. Primary Exporting Countries: Distribution of Changes in Government Budgetary Position

Change from preceding year	Number of countries in which the percentage ratio of change in the government balance[a] to total government expenditure in 1958 was				Total
	5 and under	6 to 10	11 to 20	21 and over	
Larger surplus					
1958	1	—	—	—	1
1959	—	1	—	1	2
Moved from deficit to surplus					
1958	1	1	2	—	4
1959	1	2	1	2	6
Smaller deficit					
1958	8	2	2	2	14
1959	4	5	4	—	13
Smaller surplus					
1958	1	—	—	—	1
1959	2	—	—	—	2
Moved from surplus to deficit					
1958	—	1	1	2	4
1959	—	1	—	1	2
Larger deficit					
1958	9	3	3	—	15
1959	5	5	3	1	14
Total					
1958	20	7	8	4	39
1959	12	14	8	5	39

Source: United Nations Division of General Economic Research and Policies, based on International Monetary Fund, *International Financial Statistics.*

[a] As measured by the net change—indebtedness minus deposits—in government dealings with the banking system; calendar year in most cases, year ending in September, October or November in the remainder.

Table 5-15. Primary Exporting Countries: Distribution According to Movement in the Cost of Living

Index[a] (corresponding figure in preceding year = 100)	Number of countries in which, in relation to the preceding year, the index was			Total
	Lower	Similar	Higher	
98 or less				
1958	5	0	0	5
1959	5	0	1	6
99 to 101				
1958	7	6	1	14
1959	12	6	3	21
102 to 105				
1958	6	12	12	30
1959	7	8	6	21
106 to 110				
1958	3	3	1	7
1959	3	3	3	9
111 to 120				
1958	1	2	5	8
1959	1	0	4	5
121 and over				
1958	0	2	1	3
1959	0	1	4	5
Total				
1958	22	25	20	67
1959	28	18	21	67

Source: United Nations Division of General Economic Research and Policies, based on Statistical Office of the United Nations, *Monthly Bulletin of Statistics.*

[a] An arithmetic average of the change during the year and the average change between one year and the next.

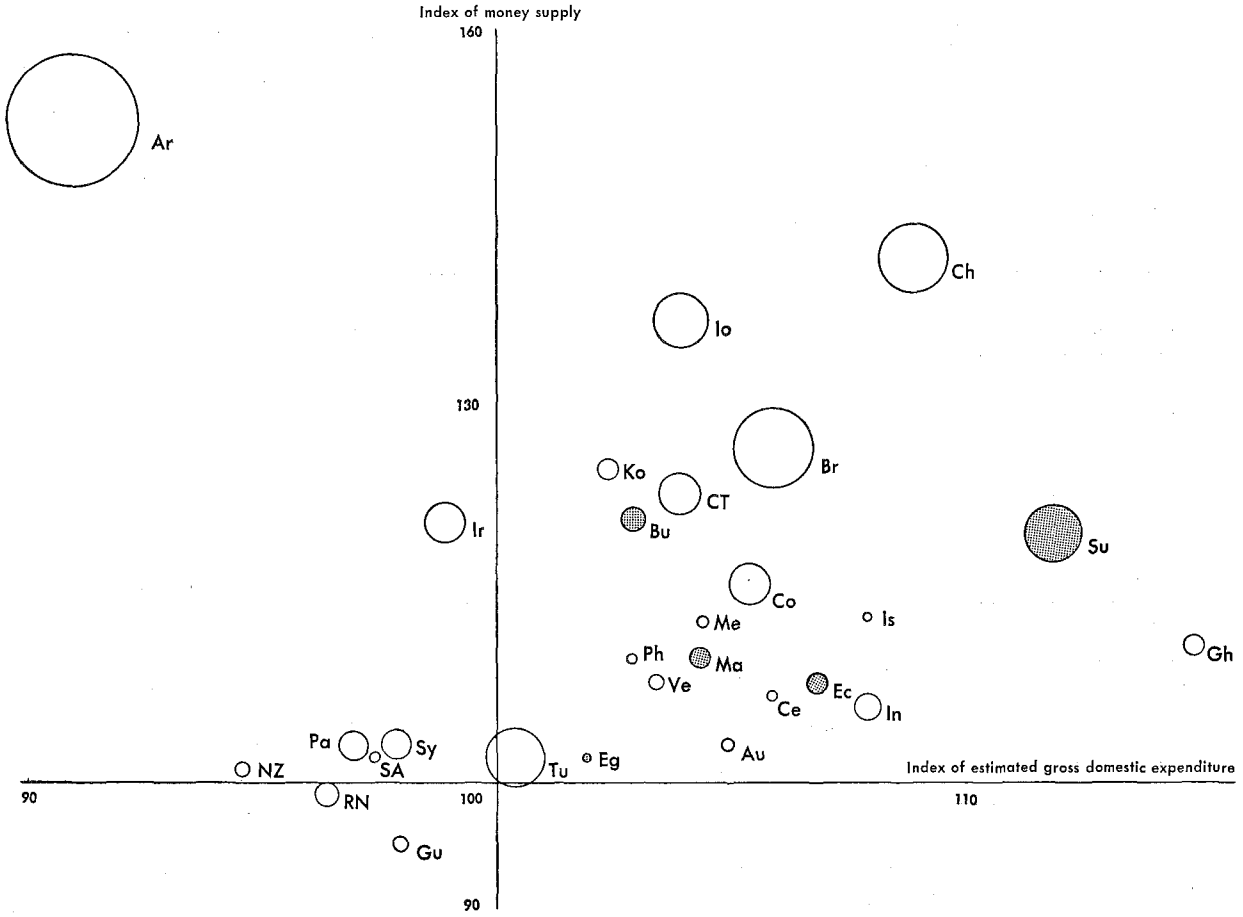
Thailand and Tunisia—in which the cost of living declined. The cost of living also declined in Costa Rica, El Salvador, Guatemala and Nicaragua, but the principal factor in these countries was the deflationary effects of low export prices and official monetary and fiscal action taken in defence of the external balance. In varying degrees, higher domestic production, lower rice prices and credit restraints were responsible for a further reduction in the average cost of living in Burma and the Federation of Malaya and for a stabilizing of prices in the Philippines. With the easing of external pressures in Burma, however, there was a reversal of official policy in 1959 and, with increased government borrowing and investment and some shortages in imported goods in the wake of the 1958 cutback, prices rose fairly rapidly during the second half of the year.

Good crops played an important part in reducing the rate of increase in prices in Mexico, though the loss of foreign reserves in 1958 also contributed to restrain domestic activity. In New Zealand and the Union of South Africa, it was the measures evoked by the deterioration of the external balance in 1958 that tended to shape the course of the domestic economy in 1959: there was a decline not only in imports but also in private credit and capital formation as well as in the rate of increase in prices. With the swing in the terms of trade and in the merchandise balance in 1959, official policy was reversed: the discount rate was lowered—in January in the Union of South Africa, in October in New Zealand—hire-purchase restrictions were relaxed and credit conditions eased. In neither country was there any expansion in private borrowing, however, and the most active sectors tended to be those catering for external demand. This was the case in the Federation of Rhodesia and Nyasaland, too, where there was a similar reversal of government policy in the wake of a recovering external balance.

In Australia, by contrast, official policy in 1958 had been less concerned with defending the balance of payments than with counteracting the deflationary impact on the domestic economy of the downswing in export prices and earnings. The result was a better sustained rate of growth. This was accompanied in 1959 by a slight acceleration in the rate of increase in prices, stimulated to some extent by a decline in the relatively low level of unemployment and, later in the year, by a rise in adjudicated wage rates.

In India, where manpower was one of the few re-

Chart 5-3. Index of Change between 1958 and 1959 in Average Money Supply[a] and Estimated Real Domestic Expenditure[b]
(1958=100)



Ar — Argentina	CT — China (Taiwan)	Ir — Iraq	Ph — Philippines
Au — Australia	Ec — Ecuador	Is — Israel	RN — Rhodesia and Nyasaland
Br — Brazil	Eg — UAR (Egypt)	Ko — Republic of Korea	SA — Union of South Africa
Bu — Burma	Gh — Ghana	Ma — Federation of Malaya	Su — Sudan
Ce — Ceylon	Gu — Guatemala	Me — Mexico	Sy — UAR (Syria)
Ch — Chile	In — India	NZ — New Zealand	Tu — Turkey
Co — Colombia	Io — Indonesia	Pa — Pakistan	Ve — Venezuela

Source: United Nations Division of General Economic Research and Policies.
Note: The area of the circle is proportionate to the change in the average level of prices (domestic, wholesale in most countries, cost of living in some). A shaded circle indicates a decline in price.
[a] Holdings of notes and coin outside the monetary system and demand deposits of the private sector in commercial and centra banks; average of end of month data.
[b] For method of estimating, *see* table 5-11.

sources not under strain, prices rose more rapidly than in Australia but not at a rate significantly higher than in the previous period. Government borrowing continued to be the most expansionary force, not offset in 1959 as it had been in 1958 by shrinking foreign assets. Like the external balance, the food balance was also better in 1959, following a substantially improved grain harvest. The government cash deficit was slightly smaller than in 1958: existing taxes were somewhat more fruitful and there was a small increase in wealth tax and in excise duties on domestically consumed goods —compensating for some reductions in export duties— and some adjustments in business taxes, shifting the burden from retained to distributed profits.

The Belgian Congo, Ghana, Pakistan and Venezuela also fall into the group registering moderate but somewhat more rapid increases in average prices in 1959. In the Belgian Congo the state of internal equilibrium was affected not only by the major downswing and recovery in export prices and trade but also by a considerable

degree of uncertainty regarding impending constitutional changes and their implications. A flight of capital offset the effect of the trade swing on foreign exchange reserves; imports were cut, the discount rate was raised and other steps were taken to protect the balance of payments. An increase in urban unemployment, however, induced the Government to expand its public works expenditure, enlarging its deficit and its borrowing from the central bank.

Expenditure in the public sector—on current as well as capital account—was also an expansionary force in Ghana. This was associated with the commencement of a new development programme and was financed in large measure from an increase in cocoa revenue both in 1958 (as a result of a higher average price) and in 1959 (as a result of a larger volume). The effect on government revenue of the decline in the world price of cocoa was offset to some extent by a cut of one-sixth in the producer price applicable to the 1959/60 crop. As, up to the end of 1959, cocoa bean collections from the new crop were much greater than those in the corresponding 1958 period, there was no immediate reduction in purchasing power in the private sector.

In Pakistan, too, government activities continued to be the principal expansionary factor. The movement in foreign assets ceased to exert the contractionary influence that it had in 1958, but the improvement in external balance had been achieved chiefly through a severe reduction in imports and, in combination with the relatively poor 1958/59 food crop, this began to affect urban prices. At the end of 1959, the cost of living stood about 12 per cent above the level of a year earlier.

The rise in prices in Venezuela in 1959 was less the result of new demand pressures than of substantial increases in customs duties on many manufactures, although wage increases decreed late in 1958, coupled with subsequent import control, also played a part. A rapid rise in unemployment—in the wake of a cutback in construction activity in 1958—was countered partly by an emergency public works programme and partly by the suspension of immigration. The rise in expenditure was financed from a considerable increase in tax rates, but the yield of these taxes declined in the second half of 1959 as a result of the reduction in petroleum prices. The large government surpluses of the period 1954 to 1957 thus gave way to substantial deficits in 1958 and 1959.

Among the countries in which inflationary forces have proved particularly powerful and deep-seated, there were a few to which 1959 brought an indication of some easing of internal strains. In Turkey this was achieved largely through a stabilization programme instituted at the time of the devaluation of the lira in mid-1958 and involving a more rational distribution of available foreign exchange among essential imports and a cutting back of public investment. Indonesia—which, unlike Turkey, enjoyed more favourable terms of trade in 1959 and a larger agricultural output—carried out its monetary and exchange reform in mid-1959: a cut in government borrowing combined with a recovery, later in the year, in the rate of importation helped to slow down the pace at which prices had been advancing. In Colombia, where credit was held in stringent control throughout 1958 and 1959, there was a more decisive slackening in strain: this was reflected not only in a slowing down in rate of price increase but also in marked appreciation of the free peso (see chart 5-4) despite a further deterioration in the world coffee market and an expansion in Colombian imports.

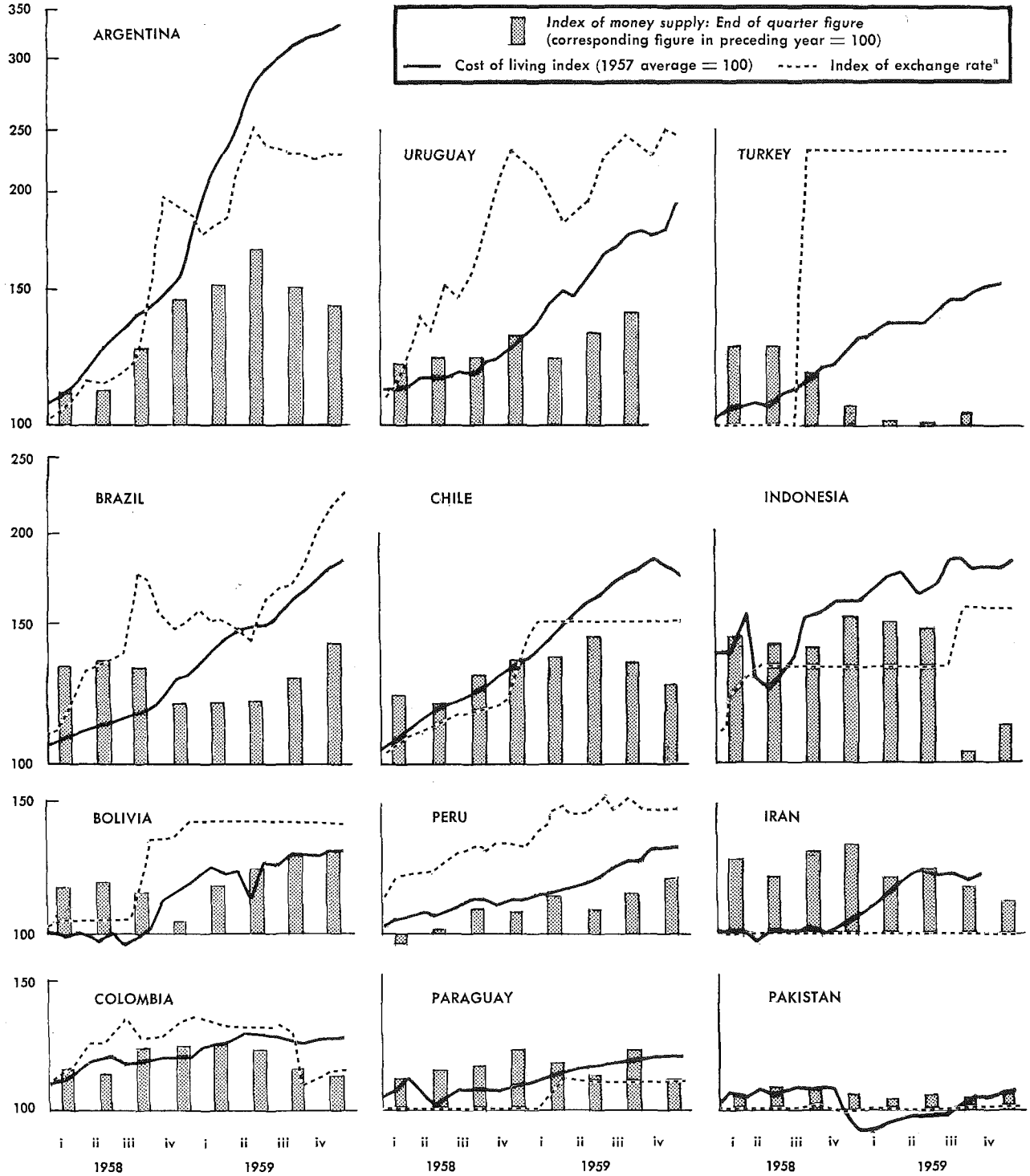
In Iran there were signs of an improvement in both internal and external balance in the second half of 1959, following a pruning of the development programme currently under way. In Argentina there were also signs of a reduction in instability towards the end of the year. but with domestic production below the 1958 level and imports severely curtailed, demand remained far out of line with available resources. The cost of living doubled in the course of the year and, though wage rates were raised substantially, average real earnings probably declined. The main effort to control aggregate demand, however, was directed to monetary and fiscal measures: reserve requirements were raised and the commercial banks exhorted to finance only investments designed to increase domestic production; the civil service was reduced slightly and public works expenditure cut back. The current deficit remained large, however, and despite sizable increases in transport charges the deficits of the autonomous public enterprises were not brought under control.

In Chile the situation was eased by increases in export prices and earnings and hence in government revenue. Expenditure on public works—especially housing—which had been cut in 1958 was allowed to expand without undue deterioration in the fiscal position. There was also some relaxation of credit in the private sector; this helped to stimulate production which had lagged in 1958, and though prices and wages continued to rise rapidly until mid-1959, supplies were in better balance with money demand in the second half of the year.

Developments in Peru were in some respects similar: the degree of imbalance was reduced in the second half of the year partly by increased production and partly by restraint on demand stemming from an increase in taxation—on business incomes, patent fees and imported goods in particular—coupled with administrative cuts in budgeted expenditure and, later in the year, a considerable rise in the central bank discount rate which helped to hold back private credit.

Efforts to improve the state of internal equilibrium in Brazil, China (Taiwan) and Paraguay were rendered more difficult by the further deterioration in the terms of trade, while in Uruguay production was substantially reduced by serious floods which caused wide-spread livestock losses and a considerable cut in the wheat crop.

Chart 5-4. Indicators of Economic Stability in Selected Countries



Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* International Monetary Fund, *International Financial Statistics.*

[a] Average number of units of national currency per United States dollar (1957 = 100); on the free market for Argentina, Bolivia, Brazil, Chile, Colombia, Peru and Uruguay; principal buying or export rate for China (Taiwan) and Turkey; principal selling or import rate for Indonesia and Paraguay.

Devaluation of the currency—general or partial—raised the cost of imports in China (Taiwan), Paraguay and Uruguay, while in Brazil the domestic financing of a larger coffee crop, a sizable proportion of which was withheld from export, induced a further expansion in money supply. In China (Taiwan) a large government bond issue was floated in April to soak up some of the money in private hands and in August a surtax of 15 to 40 per cent was levied in order to meet additional public expenditure—arising, in particular, from flood rehabilitation plans. In Brazil, government economies succeeded in reducing the fiscal deficit in the first half of the year, but with prices and wages still rising rapidly, the budgetary gap tended to widen again and inflationary forces received further strengthening. In Uruguay a general reform of the foreign exchange and trading system was adopted late in the year. This introduced a much freer market for the peso, imports being regulated by surcharges and prior deposits in much the same way as in Argentina. As in Argentina, however, claims on resources—arising from deficits in the public sector and a rapid rise in private credit—remained far out of line with available supplies: there had been a 50 per cent rise in the cost of living in the course of the year.

Outlook[3]

Many of the forces that helped to shape the course of developments in the primary exporting countries in 1959 were still operating in the early months of 1960. The impact of the cyclical upswing of activity in the industrial countries in 1958/59 was still being widely felt not only in respect to such direct factors as the current demand for particular primary commodities but also in respect to the indirect and delayed effects on personal and corporate incomes and public revenue of prices already quoted, exports already shipped and contracts already negotiated.

Among the characteristics of the economic situation that developed in the course of 1958/59 which have tended to persist is the contrast between rising or higher prices for many of the industrial raw materials and lower or declining prices for most of the foodstuffs. Of twenty-nine commodities of major importance in the international trade of the primary exporting countries, sixteen were quoted at higher average prices in the first quarter of 1960 than in the first quarter of 1959, and of these sixteen all save butter, ground-nuts and low-grown tea were raw materials. Conversely, of the thirteen commodities whose prices were below the corresponding 1959 average, all save petroleum and short staple cotton were foodstuffs (see table 5-16).

To judge by a comparison of prices in the first quarter of 1960 and those of the last quarter of 1959, most of the metals and fibres—with the exception of zinc and wool—were still rising, while among the foodstuffs only beef and ground-nuts showed a significant gain. Rubber prices, however, were tending to decline from the extremely high level reached in November, and the prices of most vegetable oils were drifting lower after the rise of 1958/59 occasioned by the relative shortage of copra supplies.

The relative weakness of the prices of most foodstuffs in international trade reflects the continued imbalance between the rates of expansion in consumption and production. In the case of several of these commodities, particularly the cereals, the effects of this imbalance have been obscured to some extent by national stabilization measures—notably the stock holding operations of

Table 5-16. Price Indices of Major Primary Commodities

Commodity	*Index, first quarter 1960 (first quarter 1959=100)*	*Index, first quarter 1960 (fourth quarter 1959=100)*
Cocoa (US/Ghana)	76	84
Tea, high-grown (Ceylon)	90	91
Cheese (UK/New Zealand)	91	88
Rice (Burma)	93	100
Coffee, hard *arabica* (US/Brazil)	93	102
Copra (Europe/Philippines)	94	99
Petroleum, crude (Saudi Arabia)	96	100
Sugar (Cuba, free)	96	100
Wheat (Australia)	97	101
Beef (UK/Argentina)	97	111
Cotton, short staple (UK/Texas M 15/16")	98	106
Maize (UK/Argentina)	99	102
Coffee, mild *arabica* (US/Colombia)	99	102
Palm oil (Europe/Belgian Congo)	101	99
Tin (UK)	103	100
Palm kernels (Europe/West Africa)	104	96
Lead (UK)	106	104
Copper (UK/Rhodesia)	109	104
Jute (US/Pakistan)	109	102
Tea (India)	110	92
Linseed oil (Europe/Argentina)	114	93
Manila hemp (US/Philippines)	119	105
Ground-nuts (Europe/Nigeria)	121	114
Zinc (UK)	122	98
Sisal (Europe/East Africa)	127	110
Wool (UK/Dominion, 48's)	127	99
Butter (UK/New Zealand)	128	91
Rubber, natural (US)	135	96
Cotton, extra long staple (UK/Egyptian Karnak)	151	127

Source: Statistical Office of the United Nations, *Monthly Bulletin of Statistics;* Commonwealth Economic Committee, *Intelligence Bulletin* (London); International Tin Council, *Statistical Bulletin* (Hague); Economist Intelligence Unit, *Hard Fibres* (London).

[3] This section is based in part on replies received from Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies.

the Commodity Credit Corporation in the United States —but most indicators suggest that the primary exporting countries are likely to earn less from their food exports in 1960 than they did in 1959. The prospects for compensating for lower prices by larger volumes in the way that many countries achieved in 1959 are much less hopeful: stocks in the hands of importers and users are generally substantially greater than they were at the beginning of 1959.

Estimates of the 1959/60 wheat crop show a slight increase in the primary producing countries but this appears to be concentrated in the net importing countries —India and Pakistan, Brazil and the Union of South Africa. In the major exporters—particularly Argentina and Australia—harvests are reported to be well below the 1958/59 level. The western European market is also likely to be smaller: except in Italy, domestic supplies are generally substantially higher than in 1958/59.

Rice supplies, which recovered strongly in 1958/59 from the poor crops of the previous year, are also likely to be appreciably larger in 1959/60. Production is reported to have increased in most areas, with the exception of Ceylon among the net importers and Italy and the Republic of Viet-Nam among the exporters. Though Burma, with a substantially greater crop, regards the outlook as "favourable", this judgement is based to a large extent on contracts already in hand; in Thailand export prices have declined fairly steadily from the peak figures set by the poor 1957/58 crop.

One of the food crops of which production and consumption have moved furthest out of line is coffee. The 1959/60 season brings no sign of better balance: with few exceptions—El Salvador, the Malagasy Republic, Nicaragua and Togo—crops are again higher and an over-all increase of more than a fourth is estimated. Export quotas under the International Coffee Agreement have been raised from less than 33 million bags to about 34 million bags (excluding African exports to France and Portugal), but in Brazil accumulated stocks withheld from the market are expected to reach 40 million bags by the end of the season. In 1959, several coffee exporters managed to maintain export earnings in the face of declining price by increasing the volume of sales. However, much of the increase went into rebuilding inventories that had been drawn down in 1958 and a further expansion of volume in 1960 will depend to a much greater extent on the opening up of new markets, particularly in areas other than North America and western Europe to which quota restrictions under the International Coffee Agreement do not apply. The prospect of a further reduction in coffee proceeds is exercising a restraining effect on public and private expenditures in East Africa as well as in a number of Latin American countries, including El Salvador and Guatemala.

Unlike coffee, the cocoa market is not overhung by a large accumulation of unsold stocks; but 1959/60 is bringing a further increase in production—estimated at 9 per cent or more—spread among almost all producers except Nigeria. The result will be a surplus—estimated by the Statistical Committee of the Food and Agriculture Organization Cocoa Study Group—at about 100,000 tons, or 10 per cent of the crop, available for replenishment of consumers' inventories which dropped to a relatively low level in 1958/59. Cocoa earnings in the first half of 1960 are likely to be appreciably lower than in the first half of 1959; the result for the year as a whole depends on consumers' reaction to lower prices as well as on the magnitude of mid-year crops—especially the *temporao* in Brazil—and prospects of 1960/61 production. Internal effects will be more varied: government revenues in West Africa will be reduced by the decline in the yield of export duties but producers' incomes are a function of official pricing policy as well as of the size of the crop. In Ghana, where producer prices for 1959/60 have been set 17 per cent below the 1958/59 level, some "falling away of farmer income" is expected.

Though at the opening of the 1959/60 season world stocks were at a record high level, market prospects for sugar—unlike those for most food crops—would seem to have improved in recent months. The most recent estimates of the 1959/60 crop indicate little if any advance on the 1958/59 figure and in some of the major exporters—Australia, Brazil, China (Taiwan), the Dominican Republic and the Union of South Africa, for example—an appreciable reduction is reported. The Cuban crop is fractionally below the 1958/59 level and almost a sixth of it is to be taken off the market by sales to the Soviet Union which are to proceed at the rate of a million tons a year for the five years 1959 to 1963 and in 1960 will help to draw down stocks accumulated in the two preceding years. Absorption by the United States may be somewhat less than in 1959, as domestic production is reported to be well above the 1958/59 level, for both beet and cane sugar. Import demand in western Europe, however, is likely to be substantially greater than in 1959, since the local beet crop is estimated as much as 14 per cent below the 1958/59 figure.

These changes are reflected in the assessments made by the International Sugar Council: between November 1959 and April 1960 its estimate of market supplies—available within the framework of the International Sugar Agreement—declined from 6.8 million tons to less than 6 million tons, while its estimates of "requirements" rose from 5.7 million tons to almost 6.4 million tons. Though this transformation of the balance from surplus to deficit had remarkably little impact on the spot market, prices quoted for future delivery increased perceptibly. Affecting the average unit value for 1960, however, is the fact that in the first quarter of the year not only free market quotations but also the price applicable to United States imports averaged less than in 1959, while the price of sugar moving under the

Commonwealth Agreement—after four successive increases—was reduced slightly from the 1959 figure.

Among the other food crops in which balance between production and consumption on the international market has tended to improve are the edible oil-seeds and oils, dairy products and meat. In the case of the vegetable oils, climatic factors played a major role in reducing the rate of increase in output: two years of drought cut the Philippine coconut crop, a dry 1959 summer cut European butter production and two poor seasons in West Africa resulted in a considerable reduction in the ground-nut harvest. Combined with price adjustments in the United States which helped to eliminate surplus stocks of butter, these declines in supply served to strengthen the international market in 1959. Higher prices for ground-nuts may contribute to an increase in export earnings in West Africa, but with producer prices fixed in several areas, farmers' incomes are expected to decline in 1960, especially in Nigeria.

Earnings from dairy products in 1960 depend partly on the extent to which European production recovers from the 1959 drought and partly on the extent to which high prices divert demand to margarine. As a result of differential price incentives, New Zealand is expecting to produce less butter in 1959/60 and more cheese, the market for which was judged "satisfactory" in the early part of 1960. Both prices, however, dropped about 10 per cent between the last quarter of 1959 and the first quarter of 1960.

Forecasts of meat production in 1960—based essentially on known and estimated changes in livestock numbers—suggest a somewhat smaller increase than in the previous period. In the primary exporting countries beef production is likely to be somewhat lower, and since import demand in the United States is expected to decline—as local supplies increase—export earnings are likely to be below the high level of the past two years. New Zealand expects a slight decline in mutton production also, following the heavy slaughtering of 1958/59, but as prices are recovering from the low 1959 level, total export proceeds may be somewhat higher.

Among the raw materials important in the international trade of the primary exporting countries, short staple cotton was the only one whose price in the first quarter of 1960 had not regained the level of a year earlier. This is one of the indications that total cotton receipts of the primary exporting countries in 1960 may be below the 1959 level. Another factor is a smaller 1959/60 crop, especially in Central America, and a smaller carry-over from the preceding season. The 1959/60 crop in the United States, by contrast, is more than a fourth greater than the previous one, the export subsidy at 8 cents per pound is 1.5 cents above the 1958/59 figure, and the figures of export sales registrations and actual shipments in the first half of the season would seem to bear out the prediction of the Department of Agriculture that United States exports will expand from 2.8 to 6.5 million bales. For the 1960/61 crop, moreover, the United States domestic support price is to be lowered a further 2 cents per pound, thus ensuring continued competitiveness of United States cotton on world markets.

Not all the cotton producers among the primary exporting countries are likely to lose ground on the world market in 1960, however: part of the upsurge in buying that followed the opening of the new season was reflected in contracts with several producing countries. In the United Arab Republic (Egypt), for example, the bulk of available supplies—carry-over as well as a somewhat greater 1959/60 crop—was sold, though not necessarily shipped, in the first few months of the season. Purchases by most of the major industrial countries—as well as India, where domestic cotton output was smaller than in 1958/59—increased competition for the remainder of the crop and, notwithstanding large crops in Peru and the Sudan as well as the United Arab Republic (Egypt), the prices of extra long staple fibres climbed steeply from the relatively low levels prevailing during most of 1959. In the Sudan where, largely as a result of the completion of the second phase of the Managil extension to the irrigated Gezira acreage, an appreciably larger crop is expected, the upswing in demand gave rise to heavy forward sales: more than an eighth of the crop had been disposed of before the opening of the export season on 1 March.

In contrast to cotton production, wool production in the primary exporting countries is estimated to be somewhat higher in 1959/60 than in the previous season. Among the major exporters only the Union of South Africa and Uruguay report a reduction, but an expansion of between 6 and 7 per cent is estimated in Australia. Though the price rise that characterized the early months of the season tended to level off as 1960 advanced, the combination of larger clip and higher prices resulted in a sizable expansion in the rate of export earnings. New Zealand looks forward to "a considerable increase in the total value of wool production" and Australia also expects higher farm income and oversea earnings.

The early portion of 1960 also brought higher prices —and higher earnings— to other fibre producers. In the case of jute the increase in earnings was partly based on—as well as tempered by—a reduction in the crop, both in India and in Pakistan. In the case of sisal and abaca, demand factors seem to have been more important, and the degree to which the higher rate of export earnings is sustained depends on the course of absorption in manufacturing and agriculture, especially in the industrial countries.

The maintenance of higher prices and higher rates of proceeds from rubber exports is likewise dependent on the course of industrial demand. With consumption continuing to exceed production, stocks of natural rubber have been heavily drawn down—a fact that should make

for market strength. Thailand expects to produce about 7 per cent more rubber in 1960 than in 1959, and output in other countries is also likely to increase. But on the supply side the principal threat comes from synthetic rubber which is more freely available than it was in 1959 and at prices which, in the first quarter of 1960, were one-third more favourable—relative to that of the natural product—than they were a year earlier. Planned releases from strategic stockpiles should also exercise a restraining effect on the market.

Though the proceeds of metal exports were running well above corresponding 1959 rates in the first quarter of 1960, the continuance of this is similarly dependent on the maintenance of demand. In the case of copper, producers derived some assurance of this from the long strike of United States smelters in the second half of 1959: this resulted in a rapid running down of stocks and permitted the absorption not only of the output of existing mines in the primary exporting countries but also of some additional metal from new facilities coming into operation in Peru.

There was also a rapid running down of tin stocks: the buffer pool was more than halved in the course of 1959. Export quotas have been steadily raised and for the second and third quarters of 1960 are within 2 per cent of pre-recession levels. Those quotas may not be entirely filled—Bolivia is reported to be having production difficulties and may deliver part of its output to the United States strategic stockpile on contracts outside the quota system that are still unfulfilled—but with price being held fairly steady by the operations of the buffer stock, export proceeds could expand by as much as the 60 per cent by which quotas have been increased.

Recovery in the rate of zinc consumption has led to the removal of the voluntary restraints on production that were in operation in most exporting countries throughout 1959. Restraints on lead production, however, have been continued in a number of countries. In February the International Lead and Zinc Study Group estimated that the promised cuts would reduce the surplus of current production over consumption to an annual rate of about 50,000 tons—2.5 per cent of total estimated lead consumption—in the first three quarters of 1960. Since then zinc prices, though well above the corresponding 1959 level, have weakened slightly, while lead prices—very little above the 1959 level—have tended to rise.

Prospects for the petroleum exporters are for a further increase in aggregate proceeds but at a lower rate than the average of recent years. Though consumption is expected to expand by much the same proportion as in 1959, the combined effect of the limitation of access to the United States market and the continued increase in output among the smaller producers—both exporters, such as in the Sahara and West Africa, and importers such as Argentina and Brazil—is likely to maintain the downward pressure on prices.

In the light of these commodity prospects the probability is that the value of total exports from the primary exporting countries will continue to increase, though possibly at a lower rate than between 1958 and 1959.[4] In this expansion the raw materials exporters are likely to be the main participants; exporters of foodstuffs are much less likely to increase their earnings.

In the wake of rising exports and easing of the balance of payments strains of the 1957/58 period, imports have continued to recover. Given the lag which tends to characterize the movement of imports relative to that of exports, the upward trend seems likely to continue through 1960. In varying degree controls over imports, direct and indirect, have been relaxed in most of the primary exporting countries, though they still remain operative in many, especially where inflationary forces are powerful or where development programmes are placing some pressure on resources. Consumer goods generally remain under greater restraint than raw materials and capital goods, and this distinction is likely to be reinforced in 1960 as a result of the rationalization of tariff systems in a number of countries—including Guatemala and Venezuela among others in Latin America—and of decisions regarding investment in the public sector in such countries as Ghana, Nigeria and the United Arab Republic. Distinctions as to origin, however, were greatly reduced in the course of 1959 with the wider convertibility of European currencies.

Apart from the countries in which higher protection of domestic industry is likely to influence the nature and perhaps the volume of imports, very few countries expect to spend less on imports in 1960 than in 1959. Among the few that do, a deterioration in commodity trade is the principal factor in such countries as the coffee exporters of East Africa, and a decline in aid and other non-trade receipts in such countries as the Republic of Korea. The course of imports depends in some cases (Ethiopia and Turkey, for example) on the availability of foreign credits, in others (in southern Africa, for example) on the rate at which the level of domestic activity recovers from the deflationary forces operating in 1958 and 1959, and in yet others (the Belgian Congo, Cuba, Indonesia and Morocco, for example) on political and other uncertainties which have tended to induce an outflow of capital. In the aggregate, however, the trend appears sharply upward from the relatively low rates of 1958/59.[5]

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[4] Preliminary returns from countries accounting for about one-fourth of the total exports of the primary exporting countries show a gain of almost 12 per cent between the first quarter of 1959 and the first quarter of 1960. This sample, however, over-represents the fibre exporters, where expansion was particularly marked, and under-represents the beverage crop exporters, where a lag in earnings is much more likely.

[5] Returns from the countries referred to in the previous footnote show first quarter imports in 1960 to be over 15 per cent above the corresponding 1959 figure and back at the record 1957 rate.

Though, as implied above, balance of payments strains will probably persist in many primary exporting countries, the over-all position seems unlikely to deteriorate to any marked extent. Reserves have been partly rebuilt. The resources available in the international institutions—including for the first time the Inter-American Development Bank—for compensatory or other forms of lending are substantially greater than before. And both organizational arrangements and statements of policy in the industrial countries suggest that notwithstanding continuing stringency on capital markets, the combined flow of public and private funds will be well maintained, at least in the aggregate.

In the United States the rate of disbursements by the Development Loan Fund should—on the basis of obligations already accepted—be appreciably higher in 1960 than in 1959. Its operations are to be concentrated to a greater extent in southern and south-eastern Asia. Unilateral transfers in prospect from western European countries show a similar tendency to concentration—in this case in Africa. In contrast, the operations of export credit facilities—which continue to increase—are being more widely used in helping to finance trade with the primary exporting countries.

One of the problems of external finance that is likely to emerge more sharply in 1960 in a number of the primary exporting countries is that of repaying as well as servicing oversea debts. After several years of relatively heavy borrowing, some of the less developed countries are reaching the stage when the financing of past debts absorbs a proportion of current earnings that cannot safely be increased.[6] At current rates of interest—6 per cent in the case of IBRD loans—both lender and borrower are under increasing compulsion to limit loans to those that are more or less self-liquidating from the point of view of foreign exchange. Infrastructural investment, vital for future growth but making no early impact on export promotion or import saving, may thus become more difficult to finance.

In one respect, however, the financing of external payments in 1960 should present no greater problem than in 1959 and a much smaller one than in 1958: food production in the deficit countries seems generally to be above the 1958/59 level. This reflects not only the larger wheat and rice crops referred to above, but also improvements in maize and other crops in a number of countries, including China (Taiwan), Cuba, Mexico, the Philippines and Turkey.

Though in India total agricultural output is reported to show no advance on 1958/59, food crops appear generally to have increased, and industrial crops—particularly cotton—to have decreased. But the most important development affecting the Indian food situation is the sale by the United States—largely for local currency—of 16 million tons of wheat and one million tons of rice to be delivered over a period of four years. With 4 million tons of wheat going into a food reserve, imports for consumption at the rate of 3 million tons a year should cover most of the Indian deficit: imports in the decade 1948-1958 have averaged about 2 million tons a year, though they were considerably more than that in the last three years. The Indian foreign exchange budget is thus relieved of a burden of between $200 and $300 million a year for the next four years.

One of the countries in which the food situation continues to be difficult is the United Arab Republic (Syria) where for the third successive year crops are expected to be well below normal. One of the results has been a further deterioration in the external payments position, necessitating additional restrictions on imports, particularly of consumer durables.

Production outside the agricultural sector is generally expected to be higher in 1960 than in 1959. Among the countries making specific forecasts, rising industrial production is expected to contribute to a 7 per cent increase in the gross national product in China (Taiwan) and to a 10 per cent increase in Israel. Libya predicts a rise of 9 per cent in the gross product, reflecting chiefly expanding activities outside the agricultural sector. In the Republic of Korea the rate of growth is expected to drop somewhat below 4 per cent while in El Salvador and Guatemala expansion in manufacturing is not expected to compensate for reductions in agricultural output.

In Brazil some branches of industry are expected to show a rapid expansion: steel output, for example, is scheduled to increase from 1.3 million tons in 1959 to 2.3 million tons in 1960, providing the country with more than 80 per cent of its current requirements in rolled products. In Venezuela a moderate rate of increase in industrial production is predicted, and in New Zealand industry is expected to contribute to a general recovery in the rate of growth. In Australia, where at the beginning of 1960 output in a number of industries —steel, chemicals and paper for example—was reported to be running close to capacity, manufacturing production is expected to remain at a high level, rising with plant potential. India also looks forward to a "general trend of increase", especially in steel, textiles, electrical goods and chemicals. The new protective tariffs—referred to above—are expected to stimulate local manufacturing in several countries, and other measures—including the sponsoring of projects by an Industrial Development Corporation in Nepal and more generous depreciation allowances in the Union of South Africa—are considered likely to encourage output elsewhere.

Much of the increase in industrial production is thus

[6] *Cf.* the address of the President of the International Bank for Reconstruction and Development to the Institute of Bankers in London on 1 December 1959: ". . . the recent large foreign borrowings by [the less developed] countries together with falling export receipts, have increased the average ratio of their foreign debt service payments to their receipts from exports from 4.7% in 1955 to 5.7% in 1958. And included in this average were several countries where the ratio had become so high as virtually to bar them from any further borrowing, whatever their needs may be."

predicated on an increase in investment. In the public sector, however, plans for expansion are by no means universal: low export prices have cut revenues in many countries and some governments have tended to retrench in defence of the balance of payments rather than risk any further stimulation of import demand. Reductions are expected in government investment in Israel, where the cut will be mild, and in Guatemala and Iran where a cut of about a third is contemplated. The reduction in Iran will affect expenditure not only in 1960 but also in the two succeeding years, oil revenues having been partly diverted from the Plan Organization to help reduce the deficit on the ordinary budget. A planned cut in public capital formation in Venezuela is also designed to reduce government borrowing from the banking system. In East Africa cuts in government investment may be less than planned, if external finance is forthcoming for specific projects. In the Union of South Africa tax concessions were made in the 1960 budget in order to stimulate economic activity in the private sector; public investment was reduced somewhat below the previous year's level. Similar emphasis is evident in Australia and New Zealand where cuts in income tax and in certain indirect taxation are likely to result in an appreciable increase in consumer expenditure. In the Federation of Malaya the large increase in revenue flowing from the higher unit value of rubber exports is being used to reduce the budget deficit: 1960 expenditure has been budgeted at only slightly above the 1959 figure.

In contrast to this, the expansion in government investment that recommenced in 1959 in several parts of West Africa is likely to continue in 1960. Ghana looks forward specifically to the use in the public sector of resources released by the expected decline in farmers' incomes. The United Arab Republic is also increasing the rate of public capital formation: in Egypt the 1959/60 development budget is more than double the previous one—with the increment going largely into the industrialization plan—and a sizable advance in government spending is scheduled in Syria, largely in irrigation. Public investment in Iraq is also expected to show a substantial increase: within the four-year development plan now under way the principal gains in 1960 are likely to be in housing and transport and communications. After a marked slackening in 1958/59, investment in the public sector is also likely to rise in the Federation of Rhodesia and Nyasaland.

Apart from the expansionary effects of government finances, consumption levels are likely to be raised in New Zealand by a general 6 per cent increase in wage rates awarded by the Court of Arbitration towards the end of 1959. Higher farm incomes are also expected to accentuate inflationary pressures and in anticipation of rising prices the Government has announced its intention of controlling profit margins. Comparable tax concessions and wage increases are likely to have similar effects in Australia, but here it is hoped to meet the expansion in personal incomes by expansion in the supply of goods, both domestic and imported. By raising the reserve-deposit ratio of the commercial banks, curbing hire-purchase lending and successfully opposing further general wage increases, official policy became more strongly anti-inflationary early in 1960. After a year in which demand pressures continued to mount more rapidly than supplies, anti-inflationary measures have also been adopted in Pakistan, chiefly in the form of restrictions on bank lending.

Increased production is helping to keep the Indian economy in better balance, but the margin—both internally and externally—continues to be narrow. Partly as a result of buoyant revenue and increased indirect taxes, the over-all budgetary deficit is likely to be somewhat smaller in 1960/61 than in the year ending in March 1960. Plan outlay is scheduled to rise by only about 5 per cent, but the capital budget remains heavily dependent on foreign assistance. In combination with expansion in the private sector, public investment is expected to provide employment outside agriculture for an additional 1.5 million persons, but this figure is only about a fourth of the increase in manpower.

Employment problems bulk large in other countries, too. In Venezuela, for example, an agrarian reform programme has as one of its objectives a diminution of "the pressure of the rural population's movement toward urban centres". The need to expand public works expenditure in order to relieve unemployment may affect the intended cut in government investment. Since fiscal changes are likely to give rise to a further redistribution of incomes and an increase in consumption, a sharp rise in capital expenditure would place a strain on the internal economic balance. Similarly in Peru, a programme combining land reform and the construction of housing for low-income groups, planned to relieve urban pressures, is likely to cause some expansion in expenditure in the public sector.

The desire to reduce urban unemployment and stem the townward drift also influences the government investment pattern in the Union of South Africa. Within a somewhat smaller capital outlay in 1960/61, rural investment is to increase slightly: the cut in expenditure is to fall mainly on the transport sector, which has accounted for a high proportion of public capital formation during much of the post-war period.

A newly formed Agricultural Development Corporation will account for part of the increase in public investment due in Chile in 1960. Unemployment, which declined by 4 per cent in 1959 from the relatively high level of the early stabilization period, is expected to decline rather more sharply in 1960. It is unlikely to fall to the low level of 1955 and earlier, however, and absence of pressure on manpower may assist the Government in holding wage gains within the 10 per cent that has been set as a maximum permissible increase.

In general, stabilization programmes in the countries

in which disequilibrium remains serious are not expected to achieve their goals in 1960. Further improvement in the external accounts will assist matters in Indonesia, but the government sector continues to be far out of balance. This is true of Argentina, too, where improvement in the external sector is less likely to come from more favourable terms of trade but is more dependent on the continued development of local supplies —of such items as petroleum, for example—and on the availability of further stand-by aid. Bolivia faces similar problems, except that the sector standing in greatest need of development is domestic agriculture and food production. In Brazil—and to a less extent Colombia—internal disequilibrium continues to be accentuated by the relatively low world price of coffee and the need to finance the large proportion of domestic output withheld from the market.

In most of these countries, the need for substantial, but selective, increases in local production has tended to assume greater importance as efforts to restrain consumption have run into mounting difficulties, whether of a physical, institutional or political nature. To some extent appropriate expansion in production is often obtainable from existing resources, but in many cases new investment is required and its financing poses awkward choices among competing claims not only on domestic means but also on foreign exchange. It is in meeting the latter problem that external assistance plays its major role, but its effectiveness depends in large measure on the earlier decisions regarding production priorities. With external conditions promising to be more stable and external pressures generally less severe, 1960 may provide both a time and a vantage ground from which such production priorities can be realistically reassessed.

Chapter 6

RECENT TRENDS IN CENTRALLY PLANNED ECONOMIES

The economic situation in the centrally planned economies in 1959 was characterized by the continuation of high rates of growth in output and an acceleration of the rate of growth in foreign trade. The pace of expansion in national product increased somewhat in Hungary and very substantially in Bulgaria and Romania, but it slackened in Czechoslovakia, the Soviet Union and, especially, mainland China, which was not able to maintain the extremely high rate of growth achieved in 1958. Changes in the rate of expansion in national product were largely influenced by variations in agricultural production, which, in several countries, was affected by adverse weather. Only in Bulgaria and Romania did agricultural output increase at a much higher rate than in 1958. Industrial production increased at approximately the same rate as in the preceding year, except in Bulgaria where it was considerably accelerated and in mainland China where the rate of expansion was sharply reduced.

Investment activity accelerated in all countries except mainland China and Eastern Germany, and consumption also expanded at a rate exceeding that of 1958. While the balance between supply and demand for consumer goods was generally improved, specific shortages existed in several countries, and in mainland China and Poland the over-all pressure of demand upon supply was accentuated during part of the year. The rise in the real income of the population was, in several countries, associated with shifts in distribution in favour of the lower wage brackets, and in the Soviet Union the reduction in the working week was extended to a greater proportion of the workers.

Industrial production

Industrial production in the centrally planned economies, taken as a group, expanded in 1959 at a slightly lower rate than that achieved in the preceding year. The slight deceleration was almost entirely due to the reduction in the rate of growth of mainland China. In other countries in the group, except Bulgaria, where the rate of increase in industrial production accelerated, the pace of expansion was approximately the same as in 1958 (see table 6-1).

In mainland China, industrial production was reported to have increased by 39 per cent in 1959, the second year of its "forward leap". Although this rate of increase was substantially lower than that in 1958, it was much higher than the rate for any other centrally planned country. It is not possible at this stage, however, to assess adequately the expansion of output in mainland China in 1958 or 1959. The far-reaching institutional changes and the modifications in the structure of industrial output make it difficult even for the authorities of mainland China to ascertain the exact magnitude of the national growth rate. The original estimates of agricultural output and of national product announced at the end of 1958 were later revised drastically. No such revision was announced for the indices of industrial production, but it was stated that the output of several commodities produced by "communal" enterprises in the countryside was not directly comparable with that of large-scale industry owing to great differences in quality.[1]

Next to that of mainland China, the largest annual increase in industrial production—24 per cent—was reported by Bulgaria, which, like mainland China, also launched an ambitious programme of expansion in 1958, providing for high rates of growth in both industry and agriculture.[2] In other centrally planned countries the rate of increase in industrial production ranged from 9 per cent in Poland to 12 per cent in Eastern Germany. Such expansion in industrial output was made possible by further increases in capacity and by the generally greater availability of raw materials through increased imports in countries depending on foreign supplies.

The output of producer goods in 1959 expanded everywhere at higher rates than did that of consumer goods (see table 6-2). In comparison to 1958, the spread between the relative rates of expansion in these two sectors widened in a majority of countries; only in mainland China, Hungary and the Soviet Union did the spread become narrower. Both an acceleration in the expansion of output of producer goods and a decline

[1] This was especially emphasized for pig-iron and steel. Owing to the inferior quality of these commodities produced by local enterprises, their output was listed separately from the production of modern industry.

[2] *See* United Nations, *World Economic Survey, 1958* (sales number: 59.II.C.1), chapter 7.

Table 6-1. Indices of Industrial Production[a]
(Preceding year = 100)

Country	1957	1958	1959
Centrally planned economies, total	109.6	116.9	114.6
China (mainland)	107.1	166.2	139.3
USSR	110.0	110.0	111.0
Other eastern European countries, total	109.9	110.6	111.3
Bulgaria	115.9	113.4	124.9[b]
Czechoslovakia	110.2	111.3	110.9
Eastern Germany	107.7	111.2	112.0
Hungary	111.3	112.3	110.9
Poland	109.5	109.8	109.0
Romania	108.4	110.0	111.1

Source: Reports on fulfilment of plans; national statistical yearbooks and bulletins.

[a] For the Soviet Union, China (mainland), Eastern Germany and Czechoslovakia—total industry; for Bulgaria, Poland and Romania—state and co-operative industry; for Hungary—state industry only. Group indices are weighted averages of country indices. The weights used were the averages of the ratios of output of electric energy and industrial employment in each country in 1956 to the totals of the group. These indices should be considered only as broad approximations of the changes in aggregate output.

[b] According to the report on fulfilment of plans, this figure relates to "planned" industry. It is not certain whether data for 1959 are directly comparable with those for the preceding two years which relate to total industrial production. According to the reply of the Government of Bulgaria to the United Nations questionnaire of October 1959 on economic trends, problems and policies, gross value of industrial production in constant prices amounted in 1959 to 38,986 million levas and that of state industry to 35,613 million levas. Comparing these figures with the corresponding data for 1958 as given in the *Statisticheski Godishnik na Narodna Respublica Bulgaria*, 1959 (Sofia), the increase in output of total industry is 11.5 per cent, and that of state industry, 23.8 per cent. This source does not provide any data on "planned" industry.

Table 6-2. Indices of Output of Producer and Consumer Goods
(Preceding year = 100)

Country and item	1957	1958	1959
Bulgaria			
Producer goods	112.3	116.0	131.0[a]
Consumer goods	119.0	111.3	120.0[a]
China (mainland)[b]			
Producer goods	112.0	203.0	143.3
Consumer goods	102.0	134.0	134.0
Czechoslovakia			
Producer goods	109.9	111.8	112.9
Consumer goods	110.7	110.6	108.2
Eastern Germany[b]			
Producer goods	107.5	112.3	114.0
Consumer goods	107.8	109.6	109.0
Hungary[c]			
Producer goods	109.0	118.0	116.0
Consumer goods	115.0	107.0	107.0
Poland			
Producer goods	107.8	108.8	111.0
Consumer goods	112.2	110.2	106.0
Romania			
Producer goods	109.4	110.1	114.6
Consumer goods	106.7	108.8	107.0[a]
USSR			
Producer goods	111.0	111.0	112.0
Consumer goods	108.0	107.0	110.3

Source: Reports on fulfilment of plans; national statistical yearbooks and bulletins.

[a] Estimated by the United Nations Division of General Economic Research and Policies.

[b] Heavy industry and light and food industries.

[c] Industries under the jurisdiction of central ministries only.

in the rate of growth of production of consumer goods generally contributed to the widening of the gap. These changes in the relative rates of growth were determined, in the main, by two factors. The acceleration in the output of producer goods was stimulated by the investment drive which began in 1958 and gained momentum in 1959. The fall in the rate of expansion in the production of consumer goods, on the other hand, was largely influenced by the poor performance of agriculture. As a result of insufficient increases in the supply of agricultural raw materials, consumer goods industries were not able, in some cases, to fulfil their production plans. In Bulgaria, however, agricultural supplies and production of industrial consumer goods increased at a much higher rate than in 1958, and the widening of the gap between the rates of expansion of consumer and producer goods was due exclusively to the greater acceleration in the latter sector.

Among countries where the difference in the expansion of the two sectors was reduced in 1959, in the Soviet Union the acceleration in production was much greater for consumer goods than for producer goods. In mainland China and Hungary, on the other hand, the rates of increase in consumer goods industries remained unchanged, while the rates of expansion in producer goods were smaller in 1959 than in 1958; in mainland China the rate of expansion in producer goods fell from a reported 103 per cent in 1958 to 43 per cent in 1959.

Within the producer goods sector, the expansion was generally greater in engineering and chemical industries than in fuels and basic materials.[3] The rate of increase in coal output was generally much smaller than in the preceding year (see tables 6-3 and 6-4). In Czechoslovakia, Eastern Germany and Hungary, coal production fell even in absolute terms, although the effect of this fall on coal-consuming industries was offset, at least in part, by increased imports of fuels. It is likely, however, that insufficient fuel supply contributed to the decline in the rate of increase in the output of electric power in eastern Europe. In Hungary, Romania and, especially, Eastern Germany, a sizable discrepancy developed between rates of increase in total industrial output and power. Some shortages of power also emerged in Poland, mainly owing to breakdowns in power stations, and in Bulgaria, which applied some temporary restrictions on supply of electricity for house-

[3] Data on the growth of engineering and chemical industries in mainland China are not available.

Table 6-3. Indices of Output of Fuel, Power and Selected Basic Materials
(Preceding year = 100)

Item	USSR		Other eastern European countries		China (mainland)	
	1958	1959	1958	1959	1958	1959
Coal[a]	107	102	104	102	207	129
Crude oil	115	114	103	101	154	164
Natural gas	151	125	...	115	—	—
Electric power	111	112	111	110	142	151
Pig-iron	107	109	107	111	230	215
Rolled steel	107	109	108	109	149[b]	167[b]
Cement	115	116	111	115	136	132
Mineral fertilizers	105	104	114	116	129	164

Source: Reports on fulfilment of plans; national statistical yearbooks and bulletins.
[a] Hard coal, brown coal and lignite on ton-per-ton basis.
[b] Crude steel. Increase computed by excluding steel produced by small and medium-size converters through "indigenous" methods.

Table 6-4. Indices of Output of Some Major Branches of Producer Goods
(Preceding year = 100)

Country	Engineering industries[a]		Chemicals		Construction materials	
	1958	1959	1958	1959	1958	1959
Bulgaria	123	149	123	135	119	133
Czechoslovakia	116	116	111	116	120	117
Eastern Germany	114	118	110	110	...	...
Hungary	114	117	116	119	115	119
Poland	115	118	120	118	113	114
Romania	113	119[b]	116	120[b]	100	104
USSR	114	115	112	110	125	122

Source: Reports on fulfilment of plans; national statistical yearbooks and bulletins.
[a] Including other metal-processing industries except for Hungary.
[b] First nine months of 1959 compared to the same period in 1958.

hold uses.[4] In contrast to this tendency, output of pig-iron, rolled steel and cement increased in the Soviet Union and in eastern Europe at a higher rate than in 1958. In mainland China the output of rolled steel, electric power, crude oil and mineral fertilizers expanded faster than during the preceding year, in spite of a steep fall in the rate of expansion in total industrial production.

Output of engineering industries increased in 1959 at a higher rate than in 1958, the greatest percentage acceleration having occurred in Bulgaria. In all countries the expansion in both engineering and chemical industries exceeded considerably the over-all rates of increase achieved by the producer goods sector. With the exception of Romania, this was also true for industries producing construction materials.

The pattern of output of engineering industries in 1959 underwent some changes, the most significant of which was the decline of output of tractors in Poland and the Soviet Union and a fall in production of motorcars in the latter country and in Hungary. Data on production of agricultural implements in the Soviet Union reproduced in table 6-5 show that in that country output of most other types of agricultural machinery fell in 1959, and, except for tractors and tractor-drawn ploughs, this was the second consecutive year of decline. According to official sources,[5] the decline in 1958 was due to the re-tooling needed for the introduction of improved and less metal-absorbing models. The further decline in 1959 was probably due, in part, to the same reasons. It is also possible that the output of agricultural machinery during the past two years was affected by changes in demand on account of various reasons. First, the demand for agricultural machinery was influenced by the abolition of state-owned machine and tractor stations and the sale of their equipment to collective farms. Unlike these stations, which received equipment free of charge, the collective farms were required to pay for the machinery acquired and were

[4] Although no apparent shortages of power emerged in the Soviet Union, the need for economizing of power was emphasized by a request made by the Central Committee of the Communist Party (*Pravda*, 26 November 1959, Moscow).

[5] *Narodnoe Khozyaistvo SSSR v 1958 Godu* (Moscow), 1959.

Table 6-5. Union of Soviet Socialist Republics: Output of Selected Agricultural Machinery

Item	1957 (Indices, preceding year=100)	1958 (Indices, preceding year=100)	1959 (Indices, preceding year=100)	1959 (thousands of units)
Tractors	111.0	107.8	97	213.5
Tractor-drawn ploughs	103.5	128.3	94	155.0
Tractor-drawn seeding machines	139.5	78.5	63	136.5
Tractor-drawn cultivators	139.1	85.2	67	121.5
Grain combines	160.8	49.4	...	...
Self-propelled grain combines	...	...	152[a]	53.6[a]
Sugar-beet combines	107.5	84.9	67	4.9
Tractor-drawn mowing machines	170.6	158.4	110	83.8
Winnowers	100.0	121.0	130	15.7

Source: *Pravda*, 22 January 1960; *Narodnoe Khozyaistvo SSSR v 1958 Godu*, page 244.

[a] No data are available on total output of grain combines in 1959 or on self-propelled combines in 1957; in 1958 total output of combines (in thousands of units) amounted to 65.0 and that of self-propelled combines to 35.3.

therefore perhaps unwilling to purchase the machinery and equipment offered by these stations, together with the amounts corresponding to the full capacity of the plants producing agricultural implements. Secondly, the very high requirements of the newly developed agricultural areas in the past few years seem to have declined after the task of bringing virgin and fallow lands under cultivation was completed.

Within the consumer goods sector, the output of durables and semi-durables increased generally in accordance with or in excess of the planned quotas, while the output of specific food products failed to reach the planned targets, mostly because of difficulties in agricultural supplies. Thus, for instance, in Poland production of sugar fell by almost 20 per cent in 1959 and that of meat by 6 per cent. Although the output of durable consumer goods continued to expand rapidly in 1959, the pace of expansion was generally slower than in 1958.

As in the preceding year, the rise in industrial production was achieved mainly through substantial increases in productivity. Only in Bulgaria and Hungary did the rate of increase in employment exceed that in output per man, such increase in the former being very substantial. While adequate data for mainland China are not available, it is probable that the very steep increase in employment was also the main contributing factor of its industrial expansion.[6] The rise in industrial employment in Bulgaria and mainland China was largely accounted for by significant shifts of population from agriculture to industry.

Output per man increased at an accelerated rate in Czechoslovakia, Eastern Germany, Romania and the Soviet Union. In view of the reduction in working time in some of these countries, the rate of increase in output per man-hour was even greater than that indicated in table 6-6. In the Soviet Union, for example, the average working week, for about two-thirds of the industrial workers, was reduced from 47 hours in 1957 to 42 hours in 1959; thus, the increase in output per man-hour, from 1957 to 1959, amounted to some 20 per cent rather than 14 per cent, as shown in the table.

[6] It has been officially stated that employment increased from 24.5 million at the end of 1957 to 45.3 million at the end of 1958, that is, by 85 per cent. It is possible, however, that a part of this increase reflects changes in the coverage of employment statistics. In addition, a large proportion of the newly employed workers consisted of unskilled labour and apprentices; these apprentices, after training, were to be sent to plants put into operation in the following years.

Table 6-6. Indices of Employment and Output per Man in Industry

(Preceding year = 100)

Country	1957		1958		1959	
	Number of wage earners	Output per wage earner	Number of wage earners	Output per wage earner	Number of wage earners	Output per wage earner
Bulgaria[a]	114.7	100.0	106.9	105.6	117.9	105.9
Czechoslovakia	103.9	105.9	103.4	107.4	102.8	107.9
Eastern Germany	103.6	103.9	102.1	108.7	102.1	110.0
Hungary[b]	100.8	110.4	104.1	108.0	106.4	104.2
Poland[a]	103.4	105.9	101.0	108.7	101.5	107.4
Romania[a]	100.2	108.2	104.0	105.8	103.8	107.0
USSR	103.0	106.5	102.6	106.0	103.4	107.4

Source: Reports on fulfilment of plans; national statistical yearbooks and bulletins.

[a] Data for 1957 and 1958 relate to state and co-operative industry only. They are not directly comparable with those for 1959 because of differences in coverage (*see* footnote *b* to table 6-1).

[b] State industry only.

Agricultural production

A severe summer drought and unfavourable harvesting weather, especially for sugar-beets and fodder, adversely affected agricultural output in most centrally planned economies in 1959, resulting either in an absolute decline in gross output of agriculture, as in Czechoslovakia, Eastern Germany and Poland, or in a reduced rate of increase, as in Hungary. In Bulgaria and Romania, however, total production increased considerably (see table 6-7). In countries where the output of crops declined, the effect of the fall on total agricultural production was, in part, offset by a better performance of husbandry, but this was hardly sufficient to raise production to the level attained in 1958 (see tables 6-8 and 6-9).

The 17 per cent increase in production in mainland China was much smaller than the rate of increase reported in 1958, but this increase took place despite natural calamities, which affected about one-third of the cultivated area. Output of grain[7] increased in 1959 by 8 per cent and that of cotton by 23 per cent, as compared to 63 and 19 per cent, reported respectively, for 1958. Cattle population declined in 1959, while the number of pigs increased by more than 12 per cent.

In Bulgaria and Romania, the considerable increases in agricultural production in 1959 were mostly due to improvements in crops whose output had declined in 1958. In Romania, where such decline had been very steep, output of grain and sugar-beets increased by 60 per cent and 97 per cent, respectively, in 1959. In Bulgaria, output of bread grains increased only slightly, by some 4 per cent, but that of coarse grains rose by 55 per cent, and output of sugar-beets by 65 per cent. Although the output of husbandry increased in both countries, the increase was comparatively small; in Bulgaria, meat production rose by only 2 per cent while output of milk increased by 6 per cent. In Hungary, another country showing a rise in total production, the 3 per cent increase in 1959 was exclusively accounted for by improvements in certain crops, ranging from 26 per cent in bread grains to 30 per cent in coarse grains and 36 per cent in sugar-beets. Output of other crops and of animal husbandry seems to have declined substantially.

The poor performance of agriculture in other countries was caused by declines in the production of crops. In the Soviet Union, grain output fell by 12 per cent, below the peak reached in 1958, but it was still 18 per cent above the 1957 level and only 3 per cent below the output of the preceding good year of 1956. Sugar-beet output declined in 1959 by 20 per cent. The effect of these declines on total output of agriculture was partly offset by substantial increases in the output of

[7] Including sweet potatoes.

Table 6-7. Indices of Agricultural Production
(Preceding year = 100)

Country	1956	1957	1958	1959
Bulgaria	93	116	101	123[a]
China (mainland)	105	104	125[b]	117
Czechoslovakia	102	99	103	97
Eastern Germany	101	111	107	...
Hungary	88	113	106	103
Poland	108	104	103	99
Romania	80	121	90	...
USSR	114	102	110	...

Source: Reports on fulfilment of plans; national statistical yearbooks and statistical bulletins.

[a] The 23 per cent increase in gross value of agricultural production was announced by *Rabotnichesko Delo* (Sofia) of 22 December 1959; the report on fulfilment of the plan for 1959 shows only indices of output of specific commodities without giving data on the rise in total output of agriculture. A rough estimate based on the data for individual items seems to indicate a smaller increase in total production than the 23 per cent shown in the table.

[b] Revised data; originally a much higher increase of 64 per cent was announced. According to an official statement, the error in the estimate of the 1958 harvest was due to the lack of experience of the reporting agencies.

Table 6-8. Output of Major Crops
(Millions of tons)

Country	Grain[a]			Sugar-beets			Potatoes		
	Average 1954–1957	1958	1959	Average 1954–1957	1958	1959	Average 1954–1957	1958	1959
Bulgaria	3.7	3.7	4.9	0.9	0.9	1.4	0.3	0.2	0.4
China (mainland)[b]	167.0	250.0	270.0	8.2	14.2	...	...	...	...
Czechoslovakia	5.0	4.8	5.7	5.8	6.9	5.1	8.6	6.6	6.6
Eastern Germany	5.8	6.3	...	5.9	7.0	...	14.0	11.5	...
Hungary	5.9	5.6	7.2	2.0	2.1	2.8	2.3	2.6	...
Poland	12.3	13.5	14.1	7.1	8.4	6.0	34.0	34.8	35.7
Romania	9.0	7.3	11.7	1.7	1.7	3.4	2.7	2.8	...
USSR	113.2	141.2	124.8	35.5[c]	54.4	43.9	83.4[c]	86.5	86.4

Source: Reports on fulfilment of plans; national statistical yearbooks and bulletins.

[a] Wheat, rye, barley, oats and maize.

[b] For grain: bread grain, course grain, sweet potatoes, rice and miscellaneous grains; for sugar-beets: including sugar-cane converted into beet equivalent.

[c] Average for 1954–1958.

Table 6-9. Indices of Livestock Numbers and Production of Animal Husbandry, 1959
(Preceding year = 100)

Country	Number of[a]			Production		
	Cattle	Pigs	Sheep	Meat	Milk	Eggs
Bulgaria	92.7	110.4	101.7	102.1	106.1	107.3
China (mainland)	96.9	112.5	103.4	...	...	...
Czechoslovakia	102.5	107.6	88.6	102.8[b]	99.9[b]	102.7[b]
Eastern Germany	113.9	95.9	99.6	98.1	97.1	...
Hungary	100.0	106.3	105.1	113.0	...	...
Poland	101.7	93.7	97.3	96.2	102.1	...
USSR	104.7	109.4	104.8	111.7	105.6	107.8

Source: Reports on fulfilment of plans; national statistical yearbooks; *Statistisztikai Havi Közlemenyek*, No. 2, 1959 (Budapest); *Statistische Praxis*, No. 2, 1960 (Berlin); *Statisticki Zpravy*, No. 1, 1960 (Prague).

[a] Livestock data based on livestock counts during the following months: China (mainland), presumably the end of the year; Eastern Germany, September; Hungary, October; Poland, June; USSR and Czechoslovakia, January.

[b] Estimated on the basis of output for eleven months.

meat and milk, amounting to 12 per cent and 6 per cent, respectively. Livestock numbers also increased, cattle and sheep by about 5 per cent and pigs by 9 per cent.

In Poland total output of crops fell by about 2 per cent, mainly reflecting a 30 per cent decline in sugar-beets; output of grains and potatoes exceeded only slightly the level reached in 1958. Production of husbandry fell, though less than total production, as a result of a drop in output of pork, while production of beef and eggs increased slightly. The fall in output of pork—and the ensuing failure of total supply of meat to expand—were brought about by various factors, the most important being shortages of fodder and the change in relative prices of potatoes and pigs which made it more advantageous for the peasants to sell potatoes instead of using them as fodder. In consequence, numbers of pigs declined by 6 per cent. The simultaneous decline in livestock and in the production of meat was due to the fact that the time for slaughtering had been considerably advanced and live weight of the stock was accordingly much lower than at the usual slaughtering period.

In Czechoslovakia, the slight fall in total agricultural output was brought about mainly by the 4.5 per cent decline in crops. Although grain output increased by almost 15 per cent in 1959, the drought at the end of summer caused a 30 per cent decline in sugar-beets and also affected the output of potatoes, fruit and vegetables. Milk output remained at the same level as in 1958, while production of meat and eggs increased by about 3 per cent. In Eastern Germany, where the impact of unfavourable weather was even greater, the output of grain, sugar-beets and potatoes declined in 1959. The cattle population increased substantially, but the number of pigs declined. Production of milk and milk products also fell by 2 and 3 per cent, respectively.

The effect of changes in production on government procurement of agricultural commodities varied considerably from country to country.

In the Soviet Union state procurement of grain fell in 1959, proportionally more than the grain crop, but purchases of animal products increased in relation to output[8] (see table 6-10). Total procurement of grain fell by about 20 per cent from the high level of 1958, while procurement of meat rose by 33 per cent, of milk by 14 per cent, and of eggs by 24 per cent. The considerable rise in procurement of meat in relation to output was due in fact to an increase in the share of livestock belonging to state and co-operative farms, which deliver to the State a much larger proportion of products of husbandry than do individual members of collective farms.[9]

In mainland China procurement of cotton increased by 23 per cent and that of grain by 20 per cent, as compared with an increase in output of 15 and 8 per cent, respectively. Among other centrally planned economies, in Hungary procurement of grain declined by about 4 per cent while that of meat increased by 8 per cent. In Poland, however, procurement of grain rose by some 19 per cent, but state purchases of meat fell by 4 per cent. Meat procurement increased very substantially in Bulgaria, by 12 per cent, and rather moderately—by 2 and 3 per cent, respectively—in Eastern Germany and Czechoslovakia.

The institutional structure of agriculture underwent further changes in 1959 in almost all centrally planned economies. In mainland China the system of "communes" established in 1958 was consolidated in a slightly modified form. The basic operating unit of a commune is now the "productive agricultural brigade",

[8] The policy of the Soviet Government seems to aim at increasing procurement of grain in relation to output during years of good harvest and at reducing it when the harvest is bad. Hence, oscillations in procurement are, as a rule, greater than changes in output. This is shown by the following indices (preceding year = 100):

	1957	1958	1959
Grain output	104.7	139.2	88.4
Grain procurement	65.4	161.6	81.5

[9] The share of cattle owned by the state and collective farms rose from 56.9 per cent of the total in 1958 to 64 per cent at the end of 1959, and that of pigs from 64.3 per cent in 1958 to 68.9 per cent in 1959.

Table 6-10. Procurement of Major Agricultural Products
(Thousands of tons)

Country	Grain		Meat		Milk		Eggs[a]	
	1958	1959	1958	1959	1958	1959	1958	1959
Bulgaria	...	1,205	244	274	396	559	492	480
Czechoslovakia	...	...	686	708	...	...	1,000	1,065
Eastern Germany	1,865	...	959	976[b]	4,240	...	1,668	1,756[b]
Hungary	1,128	1,209	455	491	674	714	424	476
Poland	2,243	2,669	1,500	1,415	3,467	3,710	1,818	2,182
USSR	56,900	46,600	5,700	7,600	22,100	25,000	4,500	5,600

Source: Reports on fulfilment of plans; *Statisticheski Izvestia*, No. 4, 1959 (Sofia); *Statistische Praxis*, No. 12, 1959 and No. 2, 1960; *Statistisztikai Havi Közlemenyek*, No. 2, 1960; *Biuletyn Statystyczny*, No. 2, 1960 (Warsaw).

[a] Millions of units.

[b] First nine months.

corresponding to the previous collective farm. The "brigade" pays taxes to the State, transfers to the commune part of its revenue for investment and public welfare funds and, after further deduction for its own funds, distributes its net income among its members according to work, partly in kind and partly in money. The extension of public catering and of other public services, which at one stage were conceived as a step towards replacement of payments according to work by an equalitarian distribution of consumer goods, is now viewed mainly as a means of economizing labour. The "commune" seems to represent a territorial economic organization supervising both industrial and agricultural enterprises in rural areas and organizing large-scale public works exceeding the abilities of individual "brigades".

In the Soviet Union, the tendency towards gradual elimination of differences between state and collective farms was reflected in the introduction of the guaranteed minimum wage in a sizable proportion of collective farms and, in some cases, in the replacement of payment in kind by money wages, supplemented by bonuses determined by the total output and income of the farm. Although wages of workers in state farms are fixed by the State and are no more influenced by the revenue of the enterprise than are wages of industrial workers, there is a tendency to establish a closer link between the net proceeds of state farms and the remuneration of their workers through greater use of bonuses. The extension of the part played by money payment in collective farms on the one hand and, on the other, the establishment of a closer link between output and income payment to the workers of state farms tends to reduce the differences between the two types of agricultural enterprise. The abolition of machine and tractor stations continued throughout the year, and in 1958-1959 the collective farms purchased machinery and equipment to the amount of 32 billion roubles—14 billion for new equipment and 18 billion for equipment formerly belonging to the machine and tractor stations. The equipment sold by machine and tractor stations amounted to 85 per cent of their original stock. During the past two years, collective farms acquired over 660,000 tractors and about 300,000 grain combines from all sources. The extension of investment activities of the collective farms was associated with the extension of the number of various enterprises under the joint management of several collective farms, especially in the field of construction and in the production of building materials.

In Czechoslovakia, Eastern Germany and Hungary, collectivization of agriculture was accelerated, and at the end of the year the share of land belonging to the co-operative sector reached 84 per cent in Czechoslovakia, 66 per cent in Hungary and over 50 per cent in Eastern Germany.[10]

In Bulgaria, where almost all land is owned by collective farms, the system of multiple prices paid by the State for various types of deliveries had already been abolished by 1956, and in 1959, payments in kind to the machine and tractor stations were replaced by money payments. Bulgaria and Czechoslovakia, following the example of the Soviet Union, began, in 1959, to transfer agricultural equipment from the machine and tractor stations to individual collective farms. In Czechoslovakia, the transfer of machinery was completed at the end of 1959.

Poland is the only centrally planned economy which has not returned to the policy of collectivization that had been abandoned, at least temporarily, in 1955. It has instead placed emphasis on the development of "agricultural circles" representing a form of peasants' co-operatives, provided with agricultural machinery and equipment for the use of members as well as non-members, although the fees charged to the latter are to be higher.[11] The capital of co-operatives is to be provided by state subsidies, membership fees and profits. The state subsidies are to be financed out of a special account. Payments into this account are to be equal to

[10] In Eastern Germany, the drive towards collectivization gained momentum during the early part of 1960.

[11] As a rule, they should not exceed the fees charged to the members by more than 20 per cent.

the amount which the State saves by acquiring part of of its procurements of agricultural produce through compulsory deliveries at prices much lower than free market prices. A relatively small part of these amounts is to be used for expansion of output of agricultural machinery, and the remainder is to be allocated to local co-operatives in proportion to the delivery quotas of each locality. In addition to services rendered to individual peasants, the "circles" are to carry out melioration projects and irrigation works.

Allocation of national product and changes in demand and supply

In most of the centrally planned economies, the rate of expansion of national product was lower in 1959 than in 1958. The deceleration was of little significance in Poland, but it amounted to about 3 percentage points in the Soviet Union and Czechoslovakia and, probably, in Eastern Germany. But of much greater magnitude was the slowing down of the rate of expansion in mainland China, where an unusually high rate of growth had been recorded in 1958. While the originally announced figures for 1958 were subsequently revised downward drastically, even the revised data indicated an increase of 34 per cent; but in 1959, national product was reported to have increased by 22 per cent (see table 6-11).

In contrast, Bulgaria, Romania and Hungary were able to accelerate their rates of expansion in 1959. The advance was greatest in Bulgaria where national product was reported to have risen by about 20 per cent in 1959 compared with a 7 per cent increase in 1958. In Romania, the rate of expansion rose from 4 per cent in 1958 to 13 per cent in 1959. The smallest acceleration took place in Hungary where national product increased by 8 per cent in 1959 as against 6 per cent in the previous year.

These changes in rates of growth between 1958 and 1959 reflected mainly fluctuations in agricultural production. In most of the eastern European countries the rates of growth in industrial production during 1959 did not differ significantly from those achieved in the preceding year. Among other components of national product, construction and transport generally increased at a higher rate than in 1958, but in most countries this acceleration was offset either by an absolute decline in agricultural output or by a considerable fall in its rate of increase. Thus, the poor performance of agriculture in 1959 tended to reduce the rate of growth in national product not only in the Soviet Union and Poland, where agriculture accounts for some 25 to 30 per cent of total net product, but even in Czechoslovakia and Eastern Germany, where the share of agriculture does not amount to more than about 12 to 15 per cent. In Romania, on the other hand, the recovery of agricultural production from the low level of 1958 was the main factor accounting for the higher rate of increase in national income in 1959. In Bulgaria, industry as well as agriculture contributed to the substantial acceleration of the over-all growth rate, but the rate of acceleration in agriculture was greater than in industry. In mainland China, however, the fall in the rate of growth in national product was due mainly to a decline in the rate of expansion of industry by 27 percentage points and of agriculture by over 8 percentage points.

The rate of expansion in fixed investment which had already quickened in most of the centrally planned economies during 1958 underwent further acceleration in 1959. The most striking advance occurred in Bul-

Table 6-11. Indices of National Product, Investment and Retail Sales[a]
(Preceding year = 100)

Country	National product			Investment			Retail sales		
	1957	1958	1959	1957	1958	1959	1957	1958	1958
Bulgaria	113.1	106.8	120[b]	94[c]	123[c]	132[c]	109.1	110.7	118.9
China (mainland)	105.1	134.0	122	...	170[d]	125[d]	109.0	116.0	116.4
Czechoslovakia	107.4	107.9	105	110.0	109.1	119	109.1	101.1	107.2
Eastern Germany[e]	106.9	111.3	...	107.0	117	114	106.7	109.6	110.1
Hungary	123.6	106.2	108	90.0	109.0	120	106.8	104.6	112.6
Poland	108.2	105.6	105	106.6	110.7	114	113.8	105.4	109.0
Romania	116.1	104.4	113	92.4	108.7	117	105.3	98.3	105.0
USSR	106.3	111.3	108	112.9	113.6	112	114.1	106.2	108.0

Source: National statistical yearbooks; reports on fulfilment of plans and replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies; *Hsin Hua, Semi-monthly* (Peking).

[a] In constant prices except where otherwise indicated.

[b] Probably in current prices; data for the earlier years are in 1957 prices.

[c] State and state-financed investment partly estimated. This series is of a wider coverage than that given in the *World Economic Survey, 1958* which related to centrally controlled investment only.

[d] Budgetary investment only; data reproduced in the *World Economic Survey, 1958* related presumably to state fixed investment; no such data are available for 1959.

garia where the estimated increase in state and state-financed fixed investment was 32 per cent in 1959 compared with 23 per cent in 1958.[12] The quickening in the pace of expansion was no less pronounced in Czechoslovakia, Hungary and Romania where the percentage increase in investment in 1959 was more than twice the rate achieved in 1958. In Poland the rate of increase in investment rose from about 11 per cent in 1958 to over 14 per cent in 1959. In the remaining countries of the group, however, investment increased at a lower rate in 1959 than in 1958. In the Soviet Union and Eastern Germany this deceleration was of little importance but in mainland China, where a 70 per cent increase in budgetary investment had been reported for 1958, the figure for 1959 did not exceed 25 per cent.

In several countries, the rates of increase in investment scheduled in plans for 1959 were exceeded despite the fact that the plans already provided for a substantial acceleration of investment.

The over-fulfilment of investment targets was particularly notable in Czechoslovakia where investment rose by 18.5 per cent as against a planned increase of 12.6 per cent, and in Poland where the corresponding rates were 14.4 and 11.7 per cent. The rise in investment in excess of planned quotas did not always take place in conformity with the aims of government policy. In fact, it occurred largely through a steep increase in decentralized investment and resulted in some deviation in the pattern of investment distribution from that provided in the plans. The rather unexpected rise in decentralized investment was made possible by the availability of funds in amounts substantially exceeding government estimates and by the fact that the scope for decentralized investment was enlarged before adequate methods and policies had been elaborated by the Government to control or influence such investment.

In Czechoslovakia the rise in expenditure above the anticipated level seems to have been matched by a corresponding increase in the volume of investment.[13] In Poland, however, where investment expenditure in current prices rose by almost 19 per cent instead of the anticipated 11 per cent, capacity in the investment sector proved to be entirely insufficient to meet the whole of the rise in demand, and the volume of investment increased by only 14 per cent. The pressure of demand upon existing capacity of the construction industry resulted in increases in construction costs through the illegal bidding up of prices of materials, and it reduced the efficiency of building enterprises through the over-extension of their activity and the use of inexperienced labour. Moreover, the pressure on the supply of labour resulted in wage increases in building trades which considerably exceeded the rise in output per man. During the second half of the year, the Government introduced several measures designed to restrict the beginning of new construction and to reduce employment in the building trade to a level commensurate with the supply of construction materials. Consequently, investment was brought down during the last quarter of the year to a level less than 2 per cent above that of the corresponding part of 1958.

The acceleration of investment in 1959 was accompanied by an increase in the rate of expansion of retail sales and to a lesser extent of personal consumption. Thus, in Bulgaria, the value of retail sales advanced in 1959 by 19 per cent as compared with 11 per cent in 1958; in Czechoslovakia, it rose by 7 per cent in 1959 as against a one per cent increase during the preceding year; in Hungary, it increased from less than 4 per cent in 1958 to about 13 per cent in 1959, and, in Poland, it rose from 5 to 9 per cent. In Romania, where in 1958 retail sales fell by about 2 per cent, they increased by 5 per cent in 1959. A certain acceleration in the expansion of retail sales also occurred in the Soviet Union and Eastern Germany, but in mainland China the volume of sales rose at about the same rate as in 1958.

Whereas, in 1957 and 1958, the changes in retail sales moved closely in line with personal consumption—at least in those countries for which such data are available—in 1959, consumption increased much less than retail sales. This discrepancy was particularly marked in Hungary where retail sales rose by almost 13 per cent in 1959 while consumption increased by only 7 per cent. In Poland, the respective rates of increase were 9 and 6 per cent and in Czechoslovakia, 7 and 5 per cent.[14] The considerable difference between changes in retail sales and in consumption which developed in these countries in 1959 seems to have reflected a shift in distribution of income in favour of urban populations together with a rise in the share of goods acquired through the network of retail trade in total peasant consumption and, possibly, a rechannelling of trade from peasants' markets to state and co-operative trade. In all these countries, the income of peasants increased less

[12] Centrally controlled investment was reported to have risen by 18 per cent in 1958 and by 49 per cent in 1959. In 1957, the share of centrally controlled investment amounted to about 70 per cent of state and state-financed investment and to about 55 per cent of total investment.

[13] But, as already stated, the steep increase in non-centralized investment resulted in a significant alteration of the planned allocation of investment by sectors and in delays in construction schedules.

[14] As may be seen from the following figures, the difference between changes in retail trade and in personal consumption in 1957 and 1958 did not exceed more than one percentage point (indices, preceding year = 100):

	Czechoslovakia		*Hungary*	
	Retail sales	*Personal consumption*	*Retail sales*	*Personal consumption*
1957	109.1	108.9	106.8	107.4
1958	101.1	101.1	104.6	104.3
1959	107.2	105.0	112.6	107.0

	Poland	
	Retail sales	*Personal consumption*
1957	113.8	112.4
1958	105.4	104.2
1959	109.0	106.0

than that of non-agricultural workers. Since a large part of peasant income is consumed in kind, its decline would tend to increase the share of retail sales in total consumption. Moreover, the poor performance of agriculture in Poland and Czechoslovakia and the rise in the proportion of output sold by the peasants to the State induced the peasants to increase their purchases in state and co-operative trade in relation to their total consumption. In Hungary, the rise in retail sales in relation to total consumption was most likely related to the large-scale collectivization which, apart from reducing the proportion of output directly consumed on the farms, curtailed the share of output sold on the farm market in favour of state and co-operative trade.[15]

In other countries, the lack of data on consumption makes it difficult to ascertain to what extent changes in retail trade were representative of those in personal consumption. It seems that, in general, the factors listed above had a much smaller influence on relative changes in consumption and retail sales in these countries. In the Soviet Union and Bulgaria, however, there was a tendency to replace payments in kind to collective farm labour by money wages and thus to increase the share of consumption channelled through the network of retail trade.[16] In Bulgaria, the shift of population from rural to urban areas acted in the same direction although the steep increase in agricultural output which occurred in 1959 may have had an opposite effect. Similarly, in Romania, the considerable rise in agricultural output in 1959 tended to increase personal consumption at a higher rate than retail sales. Even allowing for possible divergence between changes in consumption and retail sales in countries for which only trade data are available, it appears that in 1959 personal consumption increased in most countries at a higher rate than in 1958.

Only in Bulgaria, Romania and Hungary was the acceleration in the rate of increase in consumption associated with an accelerated growth of national income. In those three countries, the rate of increase in personal consumption fell short of that in national income, thus indicating a shift in the allocation of national product in favour of other components of expenditure on domestic product. This shift was most pronounced in Bulgaria and Romania. In Romania, retail sales increased by 5 per cent and, although personal consumption seems to have increased more, its rate of expansion was certainly substantially below the 13 per cent increase in national product. Gross fixed investment increased by 17 per cent, and the rise in inventories caused by the favourable harvest was probably substantial. In Bulgaria, state and state-financed investment increased by 32 per cent, retail sales by 19 per cent and national income by 20 per cent; for reasons stated above, the rate of increase in personal consumption seems to have been lower than that of retail sales. Despite the lag in personal consumption, the rise of 32 per cent in state and state-financed investment was made possible only by a substantial reduction in social consumption and by the emergence of a considerable import balance. In Hungary, personal consumption rose by 7 per cent, national income by 8 per cent and fixed investment by 20 per cent. The share of personal consumption in national income was virtually unchanged, the shift towards fixed investment occurring largely through a decline in the share of social consumption and through the replacement of net exports by net imports.

In most of the other countries, the accelerated expansion of consumption was accompanied by a slackening in the rate of increase in national income. This indicated a significant difference between 1958 and 1959 in the changes which took place in the allocation of resources. Whereas the share of consumption in national income had declined in all these countries during 1958, in 1959 consumption either increased at a higher or at the same rate as national income in at least three countries, and in two others, the spread between the rates of expansion in consumption and national product was narrowed perceptibly.

In Poland, the only country for which complete data on changes in the allocation of national product are available, personal consumption rose by 6 per cent in 1959, while national product increased by only 5 per cent; this reversed the pattern of 1958 when the rates of change were 3.4 per cent and 5.6 per cent respectively. Apart from personal consumption, social consumption and net fixed investment also increased at rates exceeding that of national product. While the rate of inventory accumulation declined, this was not sufficient to offset the increases in other components of domestic expenditure; these rose more than domestic product, the balance being covered by a substantial rise in net imports.

In Czechoslovakia, personal consumption rose by 5 per cent in 1959, which was the same rate of increase as in national product; this indicated a pattern of allocation entirely different from that in 1958 when national product rose by almost 8 per cent but personal consumption increased by only one per cent. Fixed investment rose by 18.5 per cent, and the resulting increase in the share of fixed investment in national income in 1959 was apparently counterbalanced mainly by opposite changes in the share of stock formation and export surplus.

In the Soviet Union both national product and retail sales increased by 8 per cent. Total personal consumption seems to have increased less than retail sales owing to a much smaller increase, if any, in peasants' consumption of goods directly derived from the farms and

[15] Trade turnover on peasants' markets is not included in the data for retail trade in these countries.

[16] In the Soviet Union an additional factor working in the same direction was a reduction of the relative share of private livestock-breeding, resulting in a rise in the share of consumer goods acquired through the retail trade.

Table 6-12. Poland: Changes in Allocation of National Product, 1958 and 1959

Item	1958 (billions of zlotys)	1958 (indices, preceding year = 100)	1959 (indices, preceding year = 100)
National product	321.3	105.6	105.0
Consumption	255.3	103.9	106.5
Personal	230.6	103.4	106.0
Social	24.7	108.7	111.3
Accumulation	77.4	103.8	107.5
Net fixed investment	53.7	109.8	114.5
Changes in inventories	23.7	92.2	92.0
Net foreign balance	−11.4	71.3	155.3

Source: Report on fulfilment of plan and statistical yearbook for 1959.

to the greater reliance of peasants on the retail trade network; this latter development was caused by the poor harvest and by the rising share of money remuneration in total income of peasants. The decline in the share of consumption in national product was probably not sufficient, however, to account for the 12 per cent increase in fixed investment and the appearance of a substantial export surplus. It is most likely that the rise in investment and net exports was offset by a fall in the rate of increase in inventories due to the poor harvest and, perhaps also, by a reduced rate of increase in social consumption. These developments represented in many respects a reversal of the pattern of changes which occurred in 1958. During that year, national product had risen by 11 per cent whereas the increase in consumption was no more than half this figure; fixed investment had increased by 14 per cent and the rise in the net addition to stocks caused largely by the excellent harvest was probably greater.

Changes in the allocation of national product in mainland China are more difficult to assess from the available data because of the likelihood of a considerable divergence between changes in retail trade and personal consumption and the lack of adequate information on the coverage of the investment index. Nonetheless, it appears that, in mainland China as well, the gap between the rate of increase in personal consumption and national product may have been considerably reduced in 1959. Whereas, in 1958, official reports indicated a rise in national product of 34 per cent, in retail sales of 16 per cent and in budgetary investment[17] of 70 per cent, in 1959 the reported increases amounted to 21.6, 16.4 and 24.5 per cent respectively.

In most countries, changes in money payments to the population in relation to output were broadly in line with the shifts in the allocation of resources. As in 1958, money earnings of industrial workers generally increased less than output (see table 6-13). In countries where the share of national product devoted to personal consumption was reduced, the fall in the ratio of wages to output was sufficient to keep effective demand in line with supply. In countries where no such shift occurred, the effect of a decline of wage cost per unit of output on the balance between supply and demand was offset by an increase in income payments per unit of output in other sectors of the economy or by a greater rise in pensions and family allowances.

In consequence, while money income of the population increased in 1959 at a higher rate than in 1958, the rate of increase in supply of consumer goods also accelerated and, except in Poland and mainland China, the balance between consumer demand and supply improved. The reduction in the pressure of demand upon supply was reflected in a slight reduction in consumer prices in several countries (see table 6-14).

Nevertheless, specific shortages continued to persist in 1959; at the same time, there were increases in inventories of certain goods which, mainly because of the growing exercise of selectivity on the part of consumers as their incomes rise, remained unsold.

In Poland, the over-all balance between supply and demand was upset in the course of 1959 and consumer prices increased. The pressure of demand was generated

[17] Budgetary investment represents only part of total investment but probably includes investment in working capital. State gross fixed investment was reported to have increased by 115 per cent in 1958. No data on gross fixed investment are available for 1959.

Table 6-13. Indices of Output per Man and of Money and Real Wages in Industry
(Preceding year = 100)

Country	1957			1958			1959		
	Output per man	Money wages	Real wages	Output per man	Money wages	Real wages	Output per man	Money wages	Real wages
Bulgaria	100.0	104.8	104.0	105.6	102.6	102.9	105.9	102.6	104.2
Czechoslovakia	105.9	100.5	102.4	107.4	102.1	102.1	107.9	102.2	104.6
Eastern Germany	103.9	103.0	103.6	108.9	103.2	104.9	110.0	107.0[a]	109.2[a]
Hungary	110.4	120.4	117.6	108.0	101.3	101.0	104.2	103.0	104.3
Poland	105.9	119.5	113.2	108.7	105.6	103.5	107.4	107.1	103.7

Source: Reports on fulfilment of plans; replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies; national statistical yearbooks.

[a] Partly estimated.

Table 6-14. Wage Bill, Retail Trade and Prices

Country and year	Wage bill	Value of retail trade (Indices, preceding year = 100)	Volume of retail trade (Indices, preceding year = 100)	Implied price index	Retail trade (billions of national currency units)
Bulgaria					
1957	111.1[a]	110.2	109.1	100.8	16.7
1958	108.5[a]	110.4	110.7	99.7	18.4
1959	113.3[a]	117.0	118.9	98.4	21.6
Czechoslovakia					
1957	105.0	106.8	109.1	98.0	89.2
1958	103.4	101.1	101.1	100.0	90.2
1959	104.5	104.7	107.2	97.7	94.4
Eastern Germany					
1957	106.0	106.7	107.4	99.4	34.8
1958	102.8	109.6	111.4	98.4	38.2
1959	108.0[b]	110.1	112.3	98.0	42.0
Hungary					
1957	116.2[c]	109.4	106.8	102.4	52.8
1958	105.9[c]	104.9	104.6	100.3	55.4
1959	109.3[c]	111.3	112.6	98.8	61.7
Poland					
1957	118.1	121.9	113.8	107.1	180.1
1958	106.8	109.4	105.4	103.8	197.2
1959	110.3	111.2	109.0	102.0	219.3
Romania					
1957	...	113.9	105.3	108.1	34.8
1958	...	99.7	98.3	101.4	34.7
1959	...	...	105.0	...	...
USSR					
1957	...	114.0	114.0	100.0	617.3
1958	...	108.3	106.2	102.0	668.5
1959	...	106.1	108.0	98.2	709.6

Source: Reports on fulfilment of plans; replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies; national statistical yearbooks.

[a] Wage bill data differ from those published in the *World Economic Survey, 1958*, which, in addition to wages, included other payments. Figure for 1959 estimated by the United Nations Division of General Economic Research and Policies.

[b] Total money income of the population; the estimated wage bill increased in about the same proportion.

[c] Total money income of the population. The estimated changes in wage bill (preceding year = 100) were: 1957—112.7, 1958—105.1, 1959—110.3.

by an increase of more than 10 per cent in the wage bill, a rise of 17 per cent in bonuses, an increase of 33 per cent in pensions and a rise of 11 per cent in sickness benefits. Farm receipts from sales to the procurement agencies increased at a lower rate, but despite this, total money income of the population seems to have increased by more than the 9 per cent rise in the volume of retail sales. Retail prices increased in 1959 by 2 per cent while the cost of living of a worker's family went up by 3 per cent. The gap between supply and demand which developed in 1959 was mainly due to the fact that the wage bill substantially exceeded the planned level owing to an 8 per cent increase in average wage rates (see table 6-15) as against the planned increase of less than 5 per cent. The increase in average wages over the planned rates arose, in part, from upgradings of workers and from overtime payments which had originally been extensively made in the building and construction material industries but later spread throughout the economy. While it was planned that the wage bill would increase by 6.5 per cent and retail sales by 10 per cent, the actual increases were 10.3 and 9 per cent respectively. The pressure of demand was particularly concentrated on meat, owing to a very high income elasticity of demand for this product. The situation deteriorated during the third quarter of the year when the supply of meat, which during the first half of the year had been 12 per cent above the corresponding period of 1958, fell as a result of a decline in hog breeding.[18] This deterioration led to an increase of 25 per cent in prices of meat and meat products in state and co-operative trade as well as in peasants' markets. Several steps were taken to arrest the rise in the wage bill through restraints on wages and through reductions in employment. While these measures tended in general to restore the balance between supply and demand at a new price level, specific shortages continued; this was particularly true of meat substitutes, such as fish, milk and other commodities, the

[18] For cause of the decline, see page 231. During the year, meat supplies were 3.3 per cent lower than in 1958.

Table 6-15. Indices of Total Employment and Average Earnings[a]
(Preceding year = 100)

Country	1957	1958	1959
Bulgaria			
A	106.1	105.7	110.4
B	104.8	102.7	102.6
Czechoslovakia			
A	102.9	101.3	102.3
B	102.0	102.1	102.2
Eastern Germany			
A	102.0	98.8	101.0[b]
B	104.0	104.1	107.0[b]
Hungary			
A	96.1	102.9	106.0
B	117.3	102.1	104.1
Poland			
A	101.4	99.4	101.6
B	116.4	107.4	108.1
Romania			
A	96.4	101.0	102.9
USSR			
A	105.2	102.7	103.1

Source: Reports on fulfilment of plans; replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies; national statistical yearbooks.

[a] A = employment; B = average earnings.

[b] Estimated.

demand for which suddenly increased partly under the impact of the steep rise in meat prices. Restrictions imposed upon further growth in employment resulted in an increase in the number of workers seeking employment. At the end of the year, the number of female workers registered in employment agencies exceeded the number of registered vacancies, although the reverse was true for male workers, but unemployment appears to have been of concern only in small towns where local opportunities for employment were limited. In spite of the pressure of demand upon supply and the consequent rise in prices, real wages in 1959 were about 4 per cent above the 1958 level, although by the end of the year they seem to have been substantially reduced.

In mainland China, considerable pressure on the supply of consumer goods developed in 1958 and continued to mount at least until the middle of 1959. This originated mainly from the unusually large increase in employment in 1958 and the ensuing rise in the wage bill;[19] together with increases in other income payments, total money income of the population in 1958 consequently increased at a rate exceeding the rise of 16 per cent in retail sales. The full impact of the expansion in the wage bill was felt in 1959; during the first half of the year, money income of the urban population was 30 per cent greater than in the corresponding period of 1958. Although the difference between the second half of 1958 and of 1959 was much smaller, it seems that for 1959 as a whole the wage bill was still more than 20 per cent greater than in 1958. However, since the rate of increase in money income of the peasant population was certainly smaller, it is not excluded that, for the year as a whole, the rate of increase in total money payments did not greatly exceed the rise of 16 per cent in retail sales. While no precise data on changes in consumer prices are available, there are indications that the level of consumer prices underwent little change. The rise in pressure in the consumer goods market found its expression in wide-spread shortages which, though tending to diminish, appeared to have persisted throughout 1959. During the first half of the year shortages were particularly severe in such commodities as meat, fish products, sugar, edible oils, cotton cloth, leather shoes, paper and kerosene, whose supply rose less than proportionally to total sales or even declined. This was stated to have arisen, in some cases, from reduced production, and, in others, from increased peasants' consumption of their own produce, with a consequent reduction in supplies made available to the urban population.

In Bulgaria, money income of the population rose at a higher rate than in any other country of the group, most of the increase being due to an increase in non-agricultural employment. Average money wages rose by 2.6 per cent while employment advanced by about 10.4 per cent, raising the total wage bill by about 13.3 per cent. The considerable increase in agricultural production in 1959 suggests that money income of the peasants increased at an even higher rate. In addition, the rise of 22 per cent in pension payments also contributed to raise the level of money income over the preceding year. But the increase of almost 19 per cent in retail sales was more than sufficient to meet the expansion in demand and the improvement in the relation between demand and supply resulted in some reductions in the cost of living.[20]

In Hungary, money income of the population increased in 1959 by 9.3 per cent owing to a rise of more than 12 per cent in payments to the urban population.[21] Payments for purchases of agricultural products and advances to the peasants fell by about 3 per cent, however, despite a rise in agricultural output and volume of purchases.[22] Volume of retail sales increased by about

[19] Although, according to official statements, total employment increased by 85 per cent in 1958, the wage bill increased at a much lower rate owing to the fact that wages paid to a large proportion of the newly hired personnel were considerably lower than those paid to workers previously employed (*see* footnote 6).

[20] Prices of the collective farm markets fell during the year and, at the end of October, prices of several items, mostly of textile goods, were reduced in the state and co-operative trade.

[21] Inclusive of pensions, part of which is paid to the rural population. Benefits rose substantially in 1959 as a result of increases in family allowances and old-age pensions introduced at the beginning of the year.

[22] Since data on money payments to the agricultural sector are not broken down by items, it is impossible to ascertain whether the change in the total is due to a decline in advances or in payments for sales of goods. It is possible, therefore, that the decline in total payments was due to the extension of the collective farms system. Since these farms draw on bank credits, the requirements for advance payments from purchasing agencies for future deliveries were reduced.

13 per cent, indicating an improvement in supply in relation to demand.[23]

In Eastern Germany, the rise in money income of the population was due to increases in wage rates rather than in non-agricultural employment. While employment rose by only about one per cent in 1959, average wages rose by about 7 per cent and the wage bill by 8 per cent.[24] This increase in the wage bill was the same as the increase in total money income, thus implying that money payments to the rural population rose approximately to the same extent.[25] The increase of 12 per cent in the supply of consumer goods was greater than that in money income of the population; and this improvement in the supply-demand position was reflected in a slight decline in consumer prices.

In Czechoslovakia, retail sales also increased more than the money income of the population, the respective rates being roughly 7 and 4 per cent. The wage bill increased by 4.5 per cent owing to a 2.2 per cent increase in wage rates and a 2.3 per cent rise in employment. Money income of peasants seems to have risen at a slower rate than the wage bill but non-wage payments rose at a higher rate, mainly because of an increase of almost 15 per cent in family allowances and an increase of 8 per cent in average pensions.[26] The improvement in supply in relation to demand made it possible to reduce prices of a relatively broad variety of goods, including foodstuffs, children's wear and manufactures; and retail prices declined, on the average, by 2.3 per cent. Nonetheless specific shortages of medium-priced and low-priced goods persisted, while more expensive goods were in abundant supply. In addition, some consumer durables were still in short supply despite substantial increases in sales.[27] The fall in consumer prices, together with the increase of 2.2 per cent in money wage rates, resulted in a rise of 4.6 per cent in real wages in 1959.[28]

In the Soviet Union, the volume of retail sales increased by 8 per cent in 1959 while their value rose by only 6 per cent; this indicated a fall of some 2 per cent in retail prices. This fall in prices, which was mostly due to reductions in prices of radios, watches, bicycles and certain other goods in July 1959, as well as the decline of 6 per cent in prices on the collective farm markets, seems to indicate an improvement in the balance of supply and demand for consumer goods. While changes in money income of the population in 1959 cannot be ascertained owing to lack of data, indirect evidence seems to suggest that the rate of increase in money income was smaller than that of retail sales. Peasants' money income probably rose at a higher rate than the wage bill, partly because of the increase in the share of money payments in the total remuneration of members of collective farms.[29]

In contrast to 1958, when the effect of an increase in money wages on real income was to a large extent eliminated by price increases, price movements during 1959 had an opposite effect. As in some other countries, the rise in real wages in the Soviet Union was accompanied by a further shift in the distribution of the wage bill in favour of lower income brackets and by a reduction in the number of hours worked per week in many industries. By the end of the year, 13 million wage and salary earners out of a total of 56.3 million were working forty-two hours weekly or less. Despite the improvement in supply in relation to demand for consumer goods, specific shortages continued in hardware, glassware, electric

[23] The decline of 1.2 per cent in the level of consumer prices was the result of price adjustments introduced in January 1959 aimed primarily at an improvement in the price structure. These adjustments involved price increases as well as price reductions, but the latter were predominant. It is worth mentioning that the decline in the price level of consumer goods took place in the face of increases in prices of investment goods and raw materials for consumer goods; these increases are estimated to have averaged as much as 80 per cent. The aim of these increases was to bring the structure of prices for producer goods more into line with the structure of prices for consumer goods. This was accomplished through a change in turnover taxes which are levied exclusively on consumer goods. Revenue from turnover taxes declined from 29.6 million to 18.4 million forints while profits from enterprises rose from about 5.6 to 24.9 million forints. In some cases, however, a rise in prices of producer goods caused increases in prices of consumer goods; this occurred in instances where the margin of turnover taxes was narrow and its elimination did not suffice to compensate for the increase in producer costs.

[24] The rise in wage rates was partly the outcome of increases introduced in 1958 in connexion with the abolition of food rationing and of measures introduced in 1959 to raise wages in the lowest brackets. The increases amounted in industry alone to 1.1 billion Deutsche marks or to about 8 per cent of the wage bill. Of those receiving wage increases, 65 per cent belonged to the lower wage groups. Particularly significant were the increases in the following branches: mining, chemicals, building and building materials, light industry and food industry, as well as the whole of private industry. Significant wage increases were also reported for employees in health services, education, postal services and trade, and for recipients of lower incomes in state administration.

[25] Pension payments, however, increased at a somewhat higher rate.

[26] An improved scheme of allowances for families with three or more children was reported to have added an average of 800 korunas per year to the income of 300,000 families. The rise of the statutory minimum for sickness and old-age pensions to 400 korunas per month affected 350,000 pensioners, whose income rose on the average by 75 korunas per month. The increase in total money income of the population amounted in 1959 to about 5 billion korunas.

[27] Particularly refrigerators and passenger cars. There were 60,000 applicants for the 22,000 passenger cars sold in 1959.

[28] Simultaneously with this increase, a far-reaching reclassification of jobs and wage scales took place in Czechoslovakia aimed at improving the wage structure and creating a better system of incentives for workers and management. By the end of the year about two-thirds of all workers were reclassified. For about 60 per cent of these workers, hourly earnings were increased; for 20 to 25 per cent, they were lowered, and for the remaining 15 to 20 per cent, they stayed unchanged.

[29] The number of wage and salary earners rose by about 3 per cent in 1959, and average wages probably increased by less than 2 per cent. There was a tendency to keep down increases in weekly earnings in connexion with the reduction in the working week. Some increases were anticipated in connexion with reclassifications favouring the lower wage brackets. The higher rate of increase in peasants' money income is also partly indicated by the fact that money revenue of collective farms increased in 1959 by 7.7 per cent, and retail sales by co-operatives, trading principally in rural areas, rose by 10 per cent.

irons, television sets, washing machines, refrigerators and other durables. At the same time, however, sizable stocks of unsold goods were accumulated, among other things, in clothing, rubber footwear, tobacco products, watches and radios.

Shortages of some commodities coincident with involuntary accumulation of others reflected a maladjustment between the structure of supply and demand, both of which have been undergoing considerable changes during recent years. The changes in consumer preferences with respect to both the types of goods and their quality were not sufficiently taken into account by producing and trade enterprises. Several steps have recently been taken to adapt supply more closely to demand.

Foreign trade

Foreign trade of the European centrally planned economies expanded in 1959 by 19 per cent, exceeding considerably the 5 per cent rise of 1958 and even the 15 per cent advance achieved in 1957 (see table 6-16). While the acceleration of expansion of foreign trade was common to all countries of the group, its extent varied substantially from country to country. The greatest rate of expansion was achieved in Bulgaria, where the rate of advance in 1959 was 42 per cent as compared to a 6 per cent rise in 1958, largely in connexion with its intensive investment drive calling for increased imports of machinery and equipment. The Soviet Union accelerated its expansion from 4 per cent in 1958 to 21 per cent in 1959. Since the Soviet trade accounted for 48 per cent of the total trade of the European centrally planned economies, its steep expansion was the main contributing factor of the high average rate of increase of the region's trade in 1959.

Among the remaining countries, the acceleration was also very significant in Czechoslovakia and Eastern Germany, each of which increased its trade by 16 per cent in 1959, and in Poland, the trade of which rose during the year by 12 per cent. Although the acceleration in Hungary was not as significant as in the countries listed above, it was notable that its trade, which in 1958 had expanded by 12 per cent, by far exceeding the rates achieved during that year by other countries, rose by another 18 per cent in 1959. In Romania the foreign trade increased by only 7 per cent in 1959, as compared to a 5 per cent rise in 1958.

Table 6-16. Foreign Trade Turnover[a]

Country	1957	1958	1959	Value of trade, 1959 (millions of roubles)[b]
	(indices, preceding year = 100)			
Bulgaria	126.9	105.5	141.7	4,201
Czechoslovakia	106.7	104.6	118.0	13,315
Eastern Germany	125.0	104.2	116.0	16,548
Hungary	120.9	112.3	118.4	6,223
Poland	110.9	102.7	112.2	10,259
Romania	107	105	107	3,592
USSR	115.1	104.0	121.4	42,000
Total, countries listed above	115.3	104.5	118.9	96,138
China (mainland)	95.2	114	...	...
TOTAL	112.4	105.7	...	...

Source: United Nations, *Statistical Indicators of Short-term Economic Changes in ECE Countries* (Geneva); national statistical yearbooks; reports on fulfilment of plans; replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies; *Statisztikai Havi Közlemenyek*, March 1960; *Pravda*, 9 March 1960.

[a] Exports plus imports. Indices for 1957 and 1958 differ from those in *World Economic Survey, 1958* because of revision of data.

[b] Converted into roubles at official rates of exchange.

A significant feature of these developments was that, as in 1957, another year of particularly high rates of expansion, imports increased, in most countries, at a higher rate than did exports. As a result, there was a general deterioration in the balance of trade. In Bulgaria a 59 per cent increase in imports compared with a 25 per cent rise in exports wiped out the small export surplus of 1958 and resulted in an import surplus amounting to almost one-fourth as much as exports. In Poland exports rose by 8 per cent, while imports increased by 16 per cent, raising the import surplus by about 60 per cent above 1958, thereby bringing it to the level reached in 1957. In Hungary, also, imports rose by 25 per cent, as against a 12 per cent rise in exports, bringing about a change from a sizable export surplus in 1958 to an import surplus in 1959. And, finally, in Czechoslovakia and Eastern Germany, the higher rates of increase in imports than in exports resulted in a reduction in their export surplus, as compared to 1958. In contrast to these changes, the exports of the Soviet Union increased much more than did imports—26 per cent for the former and 17 per cent for the latter—replacing the relatively small import surplus of 1958 by a substantial export surplus in 1959. The combined trade surpluses of Czechoslovakia, Eastern Germany and the Soviet Union exceeded, in 1959, the combined trade deficits of Bulgaria, Hungary and Poland, indicating for the group as a whole an export surplus of about 954 million roubles (see table 6-17).

The emergence of the large trade surplus in the Soviet Union probably reflects the drawing on credits granted in 1959 and in the earlier years, both to the other centrally planned economies and to some countries outside the area. Credits from the Soviet Union undoubtedly helped to finance the Bulgarian and, to a lesser extent, the Hungarian trade deficit. Bulgaria also supplemented its resources by credits from Czechoslovakia and Eastern Germany. The Polish trade deficit was partly covered by the surplus on current "invisible" transactions, but

Table 6-17. Exports and Imports
(Millions of roubles)[a]

Country and item	1957	1958	1959
Bulgaria			
Exports	1,481	1,499	1,878
Imports	1,329	1,466	2,323
Balance	152	33	−445
Czechoslovakia			
Exports	5,431	6,053	6,906
Imports	5,547	5,429	6,409
Balance	−116	624	497
Eastern Germany			
Exports	7,243	7,559	8,618
Imports	6,462	6,720	7,930
Balance	781	839	688
Hungary			
Exports	1,952	2,734	3,065
Imports	2,730	2,524	3,158
Balance	−778	210	−93
Poland			
Exports	3,900	4,237	4,583
Imports	5,006	4,907	5,676
Balance	−1,106	−670	−1,093
USSR			
Exports	17,526	17,190	21,700
Imports	15,751	17,398	20,300
Balance	1,775	−208	1,400
China (mainland)			
Exports	5,622	...	...
Imports	5,145	...	...
Balance	477	...	...

Source: See source to table 6-16.
[a] *See* footnote [b] to table 6-16.

credits granted by the Soviet Union in the earlier years, as well as the new credits from the United States, were, apparently, not less important in financing its deficit in merchandise trade.

Continued deterioration in the terms of trade (about 3 per cent in 1959) contributed to the increase in the Polish trade deficit.[30] In countries where exports of manufactures to the rest of the world have a relatively greater weight, the advantage gained from the improvement in the terms of trade, if any, was generally smaller than in the preceding year.

Changes in the commodity structure of trade of three eastern European countries and the partial information available on the composition of Soviet trade in 1959 are shown in table 6-18. The significant changes in 1959 were the increases in the share of machinery and equipment and of food and agricultural materials in the imports of all three countries for which data are available, These shifts were particularly pronounced in Hungary and Poland. The steep increase in the share of machinery in Hungary and the considerable rise in the share of food and agricultural raw materials in Poland were largely achieved at the expense of the share of fuels and industrial raw materials in total imports. In Poland this change was the result of an 80 per cent increase in imports of foodstuffs as compared to a rise of only 4 per cent in imports of industrial raw materials.

On the export side the changes were less significant. In all three countries there was some shift towards exports of manufactured consumer goods. In Czechoslovakia and Poland there was also a fall in the share of fuels and industrial raw materials in exports, while the exports of machinery and equipment rose in the former. It is significant that in Czechoslovakia, as well as in the Soviet Union, and probably also in Eastern Germany, the share of machinery and equipment increased in both imports and exports. These increases were particularly notable in the Soviet Union, where the share of machinery and equipment in total exports rose from about 14.8 per cent in 1957 to 21 per cent in 1959, while the share of these items in imports increased during the same period from 23.9 per cent to 26.6 per cent. The expansion in the trade of machinery and equipment is to a large extent attributable to the greater specialization in the output of specific types of machinery recently promoted among the countries of the group.

The very considerable increase in the foreign trade of the centrally planned economies was more a result of an increase in trade within this group of countries than of increase in trade with the rest of the world. For the five countries for which complete data are available, the 18.5 per cent increase in total trade turnover was due to a 21 per cent expansion in trade with other centrally planned economies, but an increase of only 11 per cent in trade with the rest of the world (see table 6-19). This shift towards trade with other centrally planned economies was common to all countries, except Hungary, the trade of which with the rest of the world increased by 25 per cent, as against a 17 per cent increase in the trade with other centrally planned economies. The reorientation of trade towards other centrally planned economies was most pronounced in Poland and perhaps in mainland China, for which no complete data are available, however.

Within the group of centrally planned economies, the most significant change was the shift in the geographical distribution of trade towards the Soviet Union, the share of which increased in the trade of each of the other countries. In contrast, the share of mainland China and other Asian centrally planned economies in the trade of most countries declined, with the notable exception of the Soviet Union, which expanded its trade with these countries by over 30 per cent, as against a 20 per cent rise in its trade with the remaining centrally planned economies.

The more detailed statistical information on east-west trade derived from statistics of private enterprise economies throws further light on the changes in the pattern of geographical distribution of trade of the centrally

[30] This was due mainly to a 5 per cent decline in prices of exported foodstuffs and a 7 per cent decline in the price of coal.

Table 6-18. Commodity Composition of Foreign Trade of Centrally Planned Economies, Selected Countries
(Percentage of total)

Country and item	1957	1958	1959[a]
Czechoslovakia			
Exports:			
Machinery and equipment	40.8	43.4	44.5
Fuels and industrial raw materials	34.8	31.1	29.7
Food and agricultural raw materials	7.0	7.1	5.7
Manufactured consumer goods	17.4	18.4	20.1
Imports:			
Machinery and equipment	18.7	18.7	19.3
Fuels and industrial raw materials	54.0	54.7	54.0
Food and agricultural raw materials	23.4	23.1	24.0
Manufactured consumer goods	3.9	3.5	2.7
Hungary			
Exports:			
Machinery and equipment	38.9	35.8	34.6
Fuels and industrial raw materials	21.2	23.5	23.6
Food and agricultural raw materials	26.2	22.8	22.7
Manufactured consumer goods	13.7	17.9	19.1
Imports:			
Machinery and equipment	12.3	16.8	25.4
Fuels and industrial raw materials	67.8	70.1	60.9
Food and agricultural raw materials	13.5	8.5	9.0
Manufactured consumer goods	6.4	4.6	4.7
Poland			
Exports:			
Machinery and equipment	20.0	26.8	26.3
Fuels and industrial raw materials	61.0	50.8	49.0
Food and agricultural raw materials	12.6	16.9	18.2
Manufactured consumer goods	6.4	5.5	6.5
Imports:			
Machinery and equipment	23.8	26.7	27.5
Fuels and industrial raw materials	53.1	53.9	48.5
Food and agricultural raw materials	17.4	11.0	17.0
Manufactured consumer goods	5.7	8.4	7.0
USSR			
Exports:			
Machinery and equipment	14.8	18.5	21.0
Imports:			
Machinery and equipment	23.9	24.5	26.6

Source: See source to table 6-16.
[a] For Czechoslovakia, nine months only.

planned economies with the rest of the world (see table 6-20).[31] The trade of all centrally planned economies, including mainland China, with the rest of the world increased during the first ten months of 1959 over the corresponding period of 1958, by 6 per cent. This rate was lower than the 9 per cent increase in 1958, which in turn was smaller than the 16 per cent rise in the corresponding period of 1957.

The indicated retardation in the rate of growth of trade between the centrally planned economies and the rest of the world, during the first ten months of 1959, was due exclusively to changes in the trade of mainland China. The total trade turnover of mainland China with the rest of the world rose by 32 per cent in the first ten months of 1958, in comparison with the corresponding period of 1957; but it dropped by 13 per cent during

[31] Despite the differences in coverage and definitions, changes in trade between centrally planned economies and the rest of the world indicated by table 6-19 are quite similar to those indicated by table 6-20. According to the former, aggregate trade turnover of the Soviet Union and the eastern European centrally planned economies, excluding Albania, Bulgaria and Romania, rose by 12.4 per cent in 1959. According to the latter, the increase for the group, including the countries just mentioned, amounted to 11.4 per cent during the first ten months of the year. This increase reflected a 14.6 per cent increase of trade between free enterprise economies and the Soviet Union and a 9.5 per cent increase with the other eastern European centrally planned economies. Table 6-19 shows an identical rate of increase in the Soviet trade and an 8.6 per cent increase in the aggregate trade of Czechoslovakia, Eastern Germany, Hungary and Poland with the rest of the world.

Table 6-19. Geographical Distribution of Trade of Centrally Planned Economies
(Exports plus imports in millions of roubles)

Country and year	Centrally planned economies			Rest of the world	Total
	USSR	Other eastern Europe[a]	China and other Asia		
Bulgaria					
1958	1,579	881	78[b]	427	2,965
1959	...	...	...	...	4,201
Czechoslovakia					
1958	3,795	3,381	912	3,393	11,482
1959	4,640[c]	4,110[c]	890[c]	3,675	13,315
Eastern Germany					
1958	6,160	3,369	1,037	3,711	14,278
1959	———	12,469[d]	———	4,077	16,546
Hungary					
1958	1,412	1,954	402	1,470	5,237
1959	1,831	2,189	372	1,831	6,222
Poland					
1958	2,397	2,463	479	3,806	9,145
1959	3,020[e]	2,920[e]	454[e]	3,866	10,259
USSR					
1958		18,511	7,002	9,076	34,589
1959		22,400[f]	9,200[f]	10,400	42,000
Total, above countries (with the exception of Bulgaria)					
1958	13,765	29,678	9,832	21,455	74,731
1959	———	64,494	———	23,848	88,343
China (mainland)					
1958	6,052	2,465[g]		1,696[h]	12,274

Source: National statistical yearbooks; *Statisztikai Havi Közlemenyek*, No. 3, 1960; *Byulleten Inostrannoy Kommercheskoy Informatsii*, 11 February 1960 and 5 March 1959 (Moscow); *Statisticke Zpravy*, No. 1, 1960 (Prague); *Die Wirtschaft*, 25 February 1960 (Berlin); *Pravda*, 9 March 1960; reports on fulfilment of plans; replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies.

[a] As recent statistics of the centrally planned countries include Yugoslavia within the "socialist countries", and as detailed data are not available for 1959 on country-by-country distribution, this table includes Yugoslavia among "other eastern Europe".

[b] China (mainland) and North Korea only.

[c] Estimated on the basis of data for eleven months.

[d] *Die Wirtschaft*, 25 February 1960, gives an 18 per cent increase over 1958 in trade with the centrally planned economies.

[e] The Polish report on plan fulfilment for 1959 indicates a 20 per cent increase in the total turnover of foreign trade with centrally planned economies and a 26 per cent increase in trade with the Soviet Union. Furthermore, *Byulleten Inostrannoy Kommercheskoy Informatsii*, 11 February 1960, published a country-by-country distribution of foreign trade for the first nine months of 1959. The annual share of other eastern Europe and of China (mainland) and other Asia was derived from these data for nine months and from the data contained in the plan fulfilment report.

[f] *Pravda*, 9 March 1960, indicates that the share of China (mainland) in the foreign trade turnover of the Soviet Union was 6,070 million roubles in 1958 and 8,200 million roubles in 1959. On the basis of data for 1958, an estimated 1,000 million roubles has been added to the Soviet Union-China (mainland) foreign trade turnover on account of North Korea, North Viet-Nam and Mongolia. The share of other eastern European countries in Soviet Union foreign trade was calculated on the basis of this estimate.

[g] Czechoslovakia, Eastern Germany, Hungary and Poland only.

[h] Federal Republic of Germany, France, Italy and United Kingdom only.

the period under review, in comparison with the similar period in 1958. In contrast, Soviet trade with the rest of the world, which showed little change in 1958, rose by 14.6 per cent in 1959. Similarly, there was an acceleration in the rate of expansion in trade of the other eastern European countries with the rest of the world; it increased by 9.5 per cent in the first ten months of the year, as compared with a 6.8 per cent increase in the corresponding period of 1958.

During the period under review, total exports of the

Table 6-20. Trade of Centrally Planned Economies with Rest of World[a]

(Millions of dollars)

Area and period	USSR		Other eastern European countries[b]		China (mainland)		Total	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Canada and United States								
1957	18.2	7.5	44.1	70.5	5.0	1.5	67.3	79.5
1958	17.6	19.9	46.9	101.2	4.0	7.2	68.5	128.3
1959	26.1	16.3	52.6	90.6	3.9	1.5	82.6	108.4
Latin America								
1957	4.4	56.2	53.2	46.1	0.5	0.4	58.1	102.7
1958	14.9	34.5	34.0	49.4	1.0	10.7	49.9	94.6
1959	25.2	36.9	81.4	88.7	1.0	1.2	107.6	128.6
Middle East								
1957	75.6	76.0	88.3	92.4	18.1	42.5	182.0	210.9
1958	98.0	99.3	133.4	111.5	22.1	33.7	253.5	244.5
1959	94.4	109.8	125.1	99.9	25.6	36.6	245.1	246.3
Western Europe[b,c]								
1957	515.5	365.0	797.1	785.1	115.9	197.1	1,428.5	1,347.2
1958	478.6	376.5	860.8	811.5	143.6	341.3	1,483.0	1,529.3
1959	591.0	358.6	912.5	948.8	162.5	295.5	1,666.6	1,602.9
Finland								
1957	128.4	135.5	100.3	58.7	5.1	5.8	233.8	200.0
1958	97.3	116.8	44.5	45.2	3.2	7.3	145.0	169.3
1959	108.9	109.6	43.3	33.0	4.0	16.1	156.2	158.7
Yugoslavia								
1957	53.3	38.6	53.1	39.6	7.7	3.3	114.1	81.5
1958	49.2	27.2	111.4	64.5	1.4	4.5	162.0	96.2
1959	49.8	37.8	83.4	77.3	2.5	1.1	135.7	116.2
Asia and the Far East								
1957	60.5	59.8	55.9	54.6	316.8	143.2	433.2	257.6
1958	80.6	108.0	44.8	55.2	386.6	165.5	512.0	328.7
1959	87.7	196.9	52.1	63.6	311.0	114.9	450.5	375.4
Australia and New Zealand								
1957	0.5	7.0	5.8	46.9	5.7	17.2	12.0	71.1
1958	1.1	1.9	5.8	35.5	7.6	18.3	14.5	55.7
1959	0.9	3.8	5.2	37.0	8.1	25.2	14.2	66.0
Africa								
1957	2.0	35.6	28.8	10.6	6.3	2.9	37.1	49.1
1958	2.8	13.8	31.0	9.4	19.6	3.1	53.5	26.3
1959	5.0	17.8	38.0	8.9	10.5	2.5	53.5	29.2
Total								
1957	858.4	781.2	1,226.6	1,204.5	481.1	413.9	2,566.1	2,399.6
1958	840.1	797.9	1,312.6	1,283.4	589.1	591.6	2,741.9	2,672.9
1959	989.0	887.5	1,393.6	1,447.8	529.1	494.6	2,912.0	2,829.9

Source: United Nations, *Direction of International Trade*, a joint publication of the Statistical Office of the United Nations, the International Monetary Fund and the International Bank for Reconstruction and Development; estimates of the United Nations Division of General Economic Research and Policies; Statistisches Bundesamt, *Wirtschaft und Statistik*, No. 12, 1959 (Mainz); Government Press, *Ceylon Customs Returns* (Colombo), October 1959; *Revista del Banco Nacional de Cuba*, Nos. 7, 8, 9 and 10, 1959 (Havana); *Comercio Internacional*, Nos. 11 and 12, 1959 (Rio de Janeiro).

[a] Exports from and imports into the centrally planned economies, as derived from data of their trading partners. Data relate to first ten months of each year.

[b] Including trade between Eastern Germany and the Federal Republic of Germany.

[c] Metropolitan countries in the Organisation for European Economic Co-operation.

centrally planned economies to the rest of the world increased at virtually the same rate as imports. Soviet exports rose by 18 per cent and imports by only 11 per cent, while exports from mainland China dropped by 10 per cent, as compared to a drop of 16 per cent in imports. However, imports of the other eastern European countries, accounting for about one-half of the trade of the centrally planned economies with the rest of the world, rose by 13 per cent, while exports rose by only 6 per cent. In effect, the total export surplus of the area, although greater in absolute terms than during the first ten months of 1958, remained small in relation to the aggregate turnover.

The most substantial increase in the trade of the centrally planned economies with the rest of the world was with Latin America, exceeding by 64 per cent in the first ten months of 1959 the level of the corresponding period in 1958. This increase reflected a 26 per cent increase in the trade of the Soviet Union and an expansion of over 100 per cent in the trade of the other eastern European countries with this area. Exports of both these regions to Latin America rose at a substantially higher rate than imports, thereby tending to reduce the trade deficit. Trade of mainland China with the Latin American countries declined, however, as a result of a sharp decline in its imports. Although still insignificant in absolute amounts, the trade of the centrally planned economies with Australia and New Zealand increased in the first ten months of 1959 by 14 per cent, mainly as a result of the expansion in imports into mainland China. All three regions of centrally planned economies continued to have a trade deficit with Australia and New Zealand.

Western Europe was another region with which trade rose at a rate higher than the over-all average in 1959. The 8.5 per cent increase was identical to that in the corresponding period of the preceding year, but, in contrast to the changes in that year, there was a considerably higher increase in exports than in imports in the trade of the centrally planned economies with this area. In effect, the net import balance of 1958 was replaced by a net export balance. Soviet exports to this area rose by 24 per cent, while imports declined by 5 per cent. In contrast, exports of other eastern European countries to western Europe rose by 6 per cent, as compared with an increase of 17 per cent in imports. Trade of mainland China with western Europe, which recorded a 55 per cent increase in the first ten months of 1958, declined by 5 per cent in the same period of 1959, reflecting a decline in imports which more than offset the rise in exports.

Apart from Africa, the trade of which with the centrally planned economies rose by 4 per cent, and Finland, where it has remained at its 1958 level, the commercial transactions with each of the remaining areas, as reflected in the data reproduced in table 6-20, seem to have declined in 1959.[32] Although in no case did this decline exceed 3 per cent, it is notable that it occurred in the trade with the areas which in 1958 had shown the highest rates of expansion.

[32] It should be noted, however, that the data indicated in the table, as reported by individual countries, may not always include all commercial transactions with a given area. This qualification seems to be particularly significant for the trade of Asia and the Far East with the centrally planned economies, because of the importance of the trade with India, where substantial amounts of imports on government account have not been included in the published figures.

Trade with Canada and the United States, which rose by 34 per cent in the first ten months of 1958, declined by 3 per cent during the same period of 1959. The decline reflected a 15 per cent reduction in imports, partly offset by a 21 per cent increase in exports. Soviet exports to this region rose by 48 per cent and exports from the other eastern European countries by 12 per cent. Similarly, trade with Yugoslavia, which had increased by 38 per cent in the first ten months of 1957 and by 32 per cent in 1958, recorded a 2 per cent decline in 1959, caused entirely by a decline in exports while imports had risen. Imports of the Soviet Union from Yugoslavia increased by 39 per cent in 1959 and those of other eastern European countries by 20 per cent. The other two areas with which trade declined in 1959 were the Middle East and Asia and the Far East. While during the first ten months of 1958 the trade of the centrally planned economies with the Middle East increased by 27 per cent and with Asia and the Far East by 22 per cent, during the corresponding period of 1959 it declined slightly, by one and 2 per cent, respectively. In both cases the decline reflected reductions in exports from the centrally planned economies, imports from the Middle East having risen by one per cent and from the Far East by 14 per cent. As a result of these changes, the slight export surplus of the centrally planned economies with the Middle East was eliminated. However, the export surplus with the Far East continued to be considerable.

Changes in the commodity composition of trade of the centrally planned economies with the rest of the world during the first half of 1959, as compared with the same period of 1958, were characterized, on the one hand, by an increase in the exports and a decline in the imports of foodstuffs, raw materials, mineral fuels and lubricants, and, on the other, by a decline in the exports and an increase in the imports of machinery, transport equipment and other manufactured goods (see table 6-21). The rise in the exports of foodstuffs was mostly accounted for by the Soviet Union, its exports having risen by as much as 115 per cent. Other eastern European countries contributed only moderately to the rise, while exports from mainland China declined. Much the same changes took place in the geographical allocation of exports of raw materials and mineral fuels, except that exports of raw materials from mainland China rose at a considerably higher rate than did the average for the group. The decline in the exports of machinery and other manufactured goods took place in all regions of the centrally planned economies, with the exception of the exports of "other manufactures" from eastern Europe.

Table 6-21. Composition of Trade of Centrally Planned Economies with Rest of World[a]
(Millions of dollars)

Item and period	USSR		Other eastern European countries		China (mainland)		Total	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Foodstuffs								
1957	67.8	46.8	99.7	110.7	34.4	0.9	201.9	158.4
1958	47.9	50.1	150.6	93.9	32.0	6.5	230.5	150.5
1959	103.3	35.3	162.7	90.8	26.1	0.3	292.1	126.5
Fats and oils								
1957	0.8	5.2	1.7	11.7	5.0	—	7.5	16.9
1958	0.2	4.0	2.0	12.0	5.5	—	7.7	16.0
1959	0.4	3.3	2.9	10.4	3.3	0.1	6.6	13.8
Raw materials								
1957	95.8	34.3	55.2	123.4	41.0	14.6	192.0	172.3
1958	78.6	31.1	50.9	135.2	29.8	47.2	159.3	213.5
1959	102.3	21.7	57.6	113.7	57.6	15.6	217.4	151.0
Mineral fuels and lubricants								
1957	124.6	—	123.5	3.3	—	0.1	248.1	3.4
1958	94.3	—	75.6	1.7	—	—	169.9	1.7
1959	133.5	0.2	79.5	1.2	0.4	0.1	213.4	1.5
Chemicals								
1957	9.5	8.9	33.7	48.2	6.5	27.0	49.7	84.1
1958	12.6	13.0	39.9	42.8	5.5	34.8	58.0	90.6
1959	12.9	11.1	44.5	51.2	4.9	42.5	62.4	104.9
Machinery and transport equipment								
1957	14.0	84.8	60.8	58.0	0.2	24.4	75.0	167.2
1958	18.0	73.9	66.9	76.3	0.3	10.1	85.2	160.3
1959	14.3	98.2	63.9	98.1	—	24.1	78.2	220.3
Other manufactured goods								
1957	63.3	105.5	104.9	127.2	17.3	24.5	185.5	257.2
1958	73.4	105.4	110.2	162.8	24.3	24.4	207.9	292.6
1959	59.7	98.3	115.8	156.1	19.5	97.1	194.9	351.5
Total								
1957	375.8	285.5	479.5	482.5	104.4	91.5	959.7	859.5
1958	325.0	277.5	496.1	524.7	97.4	123.0	918.5	925.2
1959	426.5	268.1	526.8	521.5	111.7	179.8	1,065.1	969.5

Source: United Nations, *Commodity Trade Statistics*, Statistical Papers, Series D, January–June 1957, 1958 and 1959.

[a] Exports from and imports into the centrally planned economies, as recorded by their trading partners, during January–June of each year. Trade between Eastern Germany and the Federal Republic of Germany not included.

Plans for 1960

The plans for economic development in 1960 (see table 6-22) provide for a slowing down in the rate of expansion of industrial production in almost all countries; the sole known exception is Romania, which intends to raise its output by 14 per cent as compared to 11 per cent in 1959.[33] The planned decelerations are most significant in Bulgaria and mainland China, where the rates of expansion are to be reduced by about 10 percentage points; but, even with the reductions, the rates of growth remain considerably greater than in other countries of the group. In Hungary, the planned rate of increase falls short of the rate achieved in 1959 by 4 percentage points and, in Poland and the Soviet Union, by about 3 percentage points. In Czechoslovakia, the rate of increase in industrial production planned for 1960 is only slightly smaller than the actual rate of increase in 1959. It should be pointed out, however, that, in the Soviet Union, actual increases in industrial production in 1958 and 1959 substantially exceeded the planned rates and that, according to official statements, the targets are deliberately set below maximum potential capacity in order to avoid the emergence of bottlenecks. It is apparently considered that the full scope for raising output can be finally revealed only in the actual process of fulfilment of the plan.

[33] No data are available on the 1960 plan of Eastern Germany.

Table 6-22. Planned Targets for 1960
(Indices, 1959 = 100)

Item	*Bulgaria*	*China (mainland)*	*Czechoslovakia*	*Hungary*	*Poland*	*Romania*	*USSR*
National product	121.5	123.0[a]	106.0	109.0	105.7	112.5	109.0
Gross fixed investment	119.5[b]	121.7[c]	110.0	116.0[b]	106.2	134.0	113.5[d]
Retail sales	114.2[e]	114.0	102.7	105.2	105.0[f]	106.0	107.0
Industrial production	115.3	129.0	110.2	108.0	106.1[g]	114.0	108.1
Producer goods	118.0	132.0[h]	113.5	110.0[h]	106.2[g]	114.6	108.8
Consumer goods	113.0	124.0[i]	105.5	106.0[i]	106.1[g]	113.0	106.4
Employment, total	109.0	104.0	102.3	...	101.1	...	...
Industrial employment	108.6	103.2	102.7	104.0[j]	101.3[k]	102.7[k]	102.2
Output per man in industry	106.2	125.0	107.3	103.8	107.0	111.0	105.8
Agricultural production	132.0	112.0	...	104.9	...	...	...
Real wages	...[l]	106.0	100.8	102.1	100.7	...	...[m]
Foreign trade, turnover	116.0	...	109.8	110.0	105.2	...	105.5
Exports	119.0	...	110.4	...	108.4	...	...
Imports	114.0		109.1		102.5	124.0	...

Source: Plans for 1959; replies of Governments to the United Nations questionnaire of October 1959 on economic trends, problems and policies; *Planovoe Khozyaistvo*, No. 11, 1959 (Moscow); *Gospodarka Planowa*, No. 12, 1959 (Warsaw); Report of Ki-Fu-Chen on Economic Plan 1960; Gheorghe Georghiu Dej, *Exposé presenté à la session plénière du Comité central du Parti Ouvrier Roumain, des 3, 4, 5 décembre 1959* (Bucharest, 1960); *Rabotnichesko Delo*, 22, 27 December 1959.

[a] Gross value of output of industry and agriculture.

[b] State and state-financed investment.

[c] Investment outlays granted from budget only.

[d] State investment only. Based on data in absolute terms indicated for 1960 in *Pravda*, 28 October 1959, and for 1959 in the report on fulfilment of the plan. It should be added, however, that *Pravda* of 28 October 1959 indicates that state investment is planned to increase by only 11 per cent in 1960. This difference is presumably due to the fact that actual state investment in 1959 fell short of the expectations taken as a basis for estimating the percentage increase in 1960.

[e] Personal consumption is planned to increase by 12.5 per cent.

[f] Personal consumption is planned to increase by 3.0 per cent.

[g] Indices based on data given in the reply of the Government of Poland to the United Nations questionnaire of October 1959 on economic trends, problems and policies. The planned indices announced earlier in *Gospodarka Planowa*, No. 12, 1959, are higher: for total industrial production—7.6 per cent, for producer goods—7.9 per cent, and for consumer goods—7.2 per cent.

[h] Heavy industry.

[i] Light industry and food industry.

[j] State industry only.

[k] State and co-operative industry only.

[l] No data are available on planned increases in real wages. According to *Rabotnichesko Delo* of 27 December 1959, real income of the population increased in 1959 by 8.2 per cent and is planned to increase in 1960 by 18 per cent. However, according to *Rabotnichesko Delo* of 22 December 1959, the 18 per cent increase is related to the per capita real income of the working population.

[m] Per capita real income of working population is planned to increase by 5 per cent.

Within the industrial sector, output of producer goods is planned to increase at a greater rate than that of consumer goods in all countries. The greatest spread between these rates of increase is being planned in mainland China, Czechoslovakia and Bulgaria, and the smallest in Romania and Poland.

Agricultural production is planned to increase at a considerably accelerated rate only in Bulgaria. The Bulgarian plan provides for an increase of 32 per cent in agricultural output in 1960 compared with a rise of 23 per cent in 1959. This unusually high target is to be achieved mainly by raising the output of coarse grain, cotton, sugar-beets and sunflower seeds at rates between 32 and 40 per cent. The steep increases in output are to be brought about by the extension of acreage under cultivation and a considerable increase in the supply of fertilizers and agricultural equipment. In the Soviet Union, which suffered from a fall in harvest in 1959, the data announced for 1960 do not include any overall targets for agricultural production. Grain output is planned to increase by 22 per cent, bringing the volume slightly above the peak year of 1958. Meat and milk output are planned to increase by 10 and 16 per cent respectively in 1960 as against increases of 12 and 6 per cent in 1959. A certain acceleration of agricultural production is planned for 1960 in Hungary, the rate being raised from the 3 per cent recorded in 1959 to about 5 per cent in 1960. In Poland, the exceptionally long drought in the autumn of 1959 has adversely affected prospects for the 1960 harvest of certain crops, and agricultural output in 1960 is not expected to exceed substantially that in 1959. In mainland China, the plan provides for a further deceleration of growth in agricultural production from about 17 per cent in 1959 to 12 per cent in 1960.

National product is planned to increase at a slightly accelerated rate in almost all the European centrally planned economies; the sole exception is Romania where the rate of 13 per cent planned for 1960 is identical with the actual rate of increase achieved in 1959. In mainland China, however, for which only estimates on total gross output of industry and agriculture are

available, the plan for 1960 provides for a significant decline in the rate of expansion; the rate is to fall from more than 30 per cent in 1959 to 23 per cent in 1960.

While national product is planned to increase in most countries at a somewhat higher rate than in 1959, gross fixed investment is planned to increase at a lower rate. This is true of all countries except Romania, where the rate scheduled for 1960 exceeds that of 1959 by 17 percentage points, and the Soviet Union, where the planned rate of increase in state investment in 1960 is somewhat higher than the rate achieved in 1959. In mainland China, the rate of increase in investment planned for 1960 is only slightly lower than that in 1959. But in Czechoslovakia, Poland, Hungary and Bulgaria, the planned deceleration is much greater. This is especially true of Bulgaria, where the rate of increase in investment is to fall from 32 per cent in 1959 to 19 per cent in 1960. The slowing down in investment planned for 1960 has, in some countries, been partly due to the fact that investment in 1959 increased more than originally planned and resulted in bottlenecks which are to be eliminated in 1960. Despite the acceleration of the growth in national product and a deceleration of planned investment, investment is to increase in 1960 at a higher rate than national product in all countries, except Poland. Personal consumption or retail sales are also to increase at a lower rate than in 1959 and their expansion is planned to be smaller than that of national product in 1960.

All plans for 1960 provide for a substantial rise in output per man; in most instances, these considerably exceed the rates of increase in industrial employment. The most significant change is planned by mainland China where output per man is to increase by 25 per cent while employment is to rise by only 4 per cent. This is in contrast to events over the past two years when employment increased steeply and output per man appears to have declined, for a large proportion of newly employed workers was composed of unskilled labour and trainees whose productivity was much lower than the average. The steep increase in output per man planned for 1960 seems therefore to reflect in part the improvement in skills and the transfer of workers from training to actual production.

Real wages are planned to increase at a smaller rate than output per man in all countries excepting Bulgaria. In Poland and Czechoslovakia, the planned rates of increase in real wages are less than one per cent and, in Hungary, the planned rate is 2 per cent; these are all below the rates achieved in 1959. In mainland China and the Soviet Union, however, the planned increases in real wages appear to exceed those of 1959. In mainland China, the plan provides for an increase of 6 per cent. In the Soviet Union, per capita real income of the working population is to increase by 5 per cent, and it may be supposed that real wages of industrial workers are also scheduled to rise.

Housing construction is to increase in 1960 in all countries excepting Poland where it is planned to remain at its 1959 level. In the Soviet Union 2.4 million apartments are to be built in 1960, which is 20 per cent more than in 1959. In Bulgaria, the plan provides for a 42 per cent rise in the volume of residential housing.[34]

Among countries which have announced their foreign trade targets for 1960 (see table 6-22), the plans provide for a further expansion of trade but at a much lower rate than in 1959. The most pronounced deceleration of foreign trade is planned by the Soviet Union and Bulgaria. The value of trade in 1959 increased by 21 per cent in the Soviet Union and by 42 per cent in Bulgaria, while the plans for 1960 provide for increases of about 6 per cent and 16 per cent respectively. The Czechoslovak and Hungarian plans provide for a rise in foreign trade of about 10 per cent in each country in 1960 as compared with increases of 18 per cent in 1959. In Poland, the value of foreign trade rose by 12 per cent in 1959 while the planned rate of increase in 1960 was set at a little over 5 per cent. The total trade of these countries, which accounted for about 80 per cent of total trade of the European centrally planned economies in 1959,[35] is to increase by only 7 per cent in 1960 as compared with 21 per cent in 1959.

In countries which have announced their plans for both imports and exports, exports are generally to increase at a steeper rate than imports. In Czechoslovakia, these changes are to result in an increase of 27 per cent in net exports, raising their proportion from 7 per cent of exports in 1959 to 8 per cent in 1960. In Poland, the large net imports of 1959 are to be reduced by 22 per cent; net imports are to fall from about 24 per cent of exports in 1959 to 17 per cent in 1960. Bulgaria also plans to reduce its net imports by 7 per cent, bringing net imports down from 24 per cent of exports in 1959 to 18 per cent in 1960.

Economic situation in Yugoslavia

The rate of growth in the national product of Yugoslavia, which in 1958 fell to less than 2 per cent, accelerated steeply in 1959, reaching almost 19 per cent in real terms. This difference was due mainly to fluctuations in agricultural production, the net value of which declined by 15 per cent in 1958 but rose by 35 per cent in 1959. Net industrial production rose by 14 per cent in 1959, as compared to a 10 per cent increase in 1958.

[34] The plan provides for 1,314 thousand cubic metres of residential housing to be built in 1960.

[35] No data for 1959 are available for total trade of the centrally planned economies inclusive of mainland China.

The only sectors indicating a slowing down were construction and trade (see table 6-23).

It is of interest to note that, notwithstanding the wide variations which affected considerably the annual rates of growth in national product, agricultural production has shown a distinctive upward trend since about 1955 when the gross output of agriculture exceeded by 17 per cent the average of 1951-1955. After a temporary setback in 1956, the index of gross output exceeded the 1951-1955 average by 41 per cent in 1957; and even in 1958, a year of exceptionally poor weather, it remained 24 per cent above this average.

Table 6-23. Yougoslavia: Indices of National Product by Industrial Origin
(Preceding year = 100)

Item	*1957*	*1958*	*1959*	*1960 (planned)*
National income, total..	121.4	101.8	118.7	108.1
Industry.....	111.0	110.0	114.0	114.5
Handicrafts.....	118.0	103.0	110.0	110.0
Agriculture.....	140.0	85.0	136.0	96.3
Forestry.....	105.0	92.0	117.0	105.2
Construction.....	110.0	122.0	117.0	112.3
Transport.....	116.0	104.0	112.0	111.7
Trade and catering..	130.0	112.0	108.0	109.5

Source: Reply of the Government of Yugoslavia to the United Nations questionnaire of October 1959 on economic trends, problems and policies.

Government action which sought to improve the technical level of agriculture and to raise incentives for agricultural producers was instrumental, to a large extent, in raising production. Among the policy measures initiated after the abandonment of forced collectivization in 1952, the most important were the abolition of compulsory deliveries, which resulted in a considerable rise in prices received by the peasants, the creation of voluntary co-operatives for the common use of agricultural implements, increases in credits offered to the peasants, extension of direct state investment for land improvement, and improvement in the supply of both consumer and producer goods to rural areas.[36] A notable feature of Yugoslav agriculture, during recent years, was the fact that, despite sharp fluctuations in crops, livestock production expanded relatively smoothly from year to year and in 1959 exceeded by 40 per cent the 1951-1955 average.

Production of investment goods increased at a somewhat higher rate than that of consumer goods in 1959 (see table 6-24). Among raw materials, output of coal accelerated considerably, but that of electric power slackened as a result of the drought in some areas of eastern Europe which caused a decline in the supply of water from rivers for hydroelectric power. Shortages of electricity developed in the latter part of the year which prompted the Government to restrict consumption of power.

As in most of the preceding years, the increase in industrial production in 1959 was achieved largely through a rise in employment and, to a lesser extent, through a rise in output per man. However, the rise in output per man approached more closely the rate of increase in employment than in any other year since 1953, with the exception of 1957.[37]

In contrast to the preceding year, personal consumption rose in 1959 at a lower rate than national product, with the result that its share in national product declined from 58.6 per cent in 1958 to 56.8 per cent in 1959.[38] Gross fixed investment in the socialized sector rose by 29 per cent, as against a 19 per cent rise in national product. Total investment seems to have increased less

[36] The supply of fertilizers per hectare of arable land in 1959 was almost four times as large as the 1955-1956 average.

[37] For 1957-1959, *see* table 6-24. Indices for earlier years are as follows (preceding year = 100):

	1954	*1955*	*1956*
Employment.....	113.7	113.1	106.8
Output per man.....	100.0	102.9	103.3

[38] In 1956 prices.

Table 6-24. Yugoslavia: Selected Indices for Industry
(Preceding year = 100)

Item	*1957*	*1958*	*1959*	*1960 (planned)*
Industrial production, total.....	116.7	110.9	113.3	114.0
Producer goods.....	116.1	113.1	116.9	119.0
Semi-manufactured goods.....	114.5	110.6	111.5	...
Consumer goods.....	121.3	109.7	114.7	110.0
Electric power.....	123.9	117.7	110.2	...
Coal.....	105.3	105.4	111.2	...
Employment in industry.....	107.4	109.8	108.0	106.0
Output per man.....	108.7	101.0	105.0	107.5
Real wages (hourly).....	107.9	102.8	110.4	...

Source: Reply of the Government of the Federal Republic of Yugoslavia to the United Nations questionnaire of October 1959 on economic trends, problems and policies; *Indeks*, No. 2, 1960 (Belgrade); *Statisticki Godisnjak*, 1959 (Belgrade).

than the investment in the socialized sector, but the shift in the allocation of resources towards investment was certainly greater than that indicated by the variation in the ratio of consumption to national income; and since the trade deficit declined, this was made possible only at the expense of the share of resources devoted to social consumption.[39] These shifts in the allocation of resources did not result in a very significant increase in the pressures of demand upon supply. Although the wage bill of industrial workers advanced more than output, total as well as money income of the peasant population rose less than agricultural production. The wage bill appears to have advanced more steeply than the volume of retail sales; other money incomes, however, advanced less. Total effective demand seems to have risen somewhat more than the supply of consumer goods, resulting in a rise of 1.5 per cent in the cost of living, as compared with an increase of 3.3 per cent in 1958 and 2.5 per cent in 1957 (see tables 6-25 and 6-26).

The plan for 1960 provides for a much lower rate of increase in national product, mainly because net agricultural production is expected to decline by about 4 per cent from the record level achieved in 1959. Personal consumption is planned to increase by 6 per cent, as compared with the 8 per cent increase planned for national product. Fixed investment in the public sector is to rise by about 11 per cent, the volume of exports by 23 per cent and the volume of imports by 7 per cent. The considerable decline in the trade deficit is to be secured mainly through a rise in exports and through a fall in imports of agricultural commodities,[40] made possible by the excellent harvest of 1959 and the anticipated high level of output in 1960. In fact, imports of non-agricultural commodities are planned to increase in 1960 at a much higher rate than exports.

A notable feature of the 1960 plan is the expected increase in the cost of living by 5 per cent, largely as a result of a more than doubling in rents and in the price of electric power for home consumption. However, since money earnings are to increase by 13 per cent,[41] real earnings would increase by 8 per cent.

[39] Owing to the unfavourable change in terms of trade, the effect of the fall in net imports was greater than it appears from the value data.

[40] Changes in balance of agricultural products are shown by the following data (billions of dinars in foreign trade prices converted into dinars at the official rate of exchange):

	1957	*1958*	*1959*	*1960 (plan)*
Exports	30.2	38.7	32.1	54.8
Imports	37.3	29.5	36.5	4.5
Balance	−7.1	9.2	5.6	50.3

[41] These data refer to average monthly earnings which in 1959 increased by 15 per cent. Average hourly money wages rose in 1959 by 12 per cent.

Table 6-25. Yugoslavia: Indices of Investment, Personal Consumption, Retail Sales and Prices

(Preceding year = 100)

Item	*1957*	*1958*	*1959*	*1960 (planned)*
Gross fixed investment[a]	...	117.2	129.0	111.0
Personal consumption	114.7	105.4	114.5	106.1
Value of retail sales	123.7	108.9	116.8	...
Volume of retail sales	119.4	105.7	(115.0)[b]	110.0
Implied price index	103.6	103.0	...	...
Cost of living index	102.5	103.3	101.5	105.0

Source: Reply of the Government of the Federal Republic of Yugoslavia to the United Nations questionnaire of October 1959 on economic trends, problems and policies; *Indeks*, No. 2, 1960; *Statisticki Godisnjak'* 1959.

[a] In public sector.

[b] Value of retail sales deflated by the cost of living index.

Table 6-26. Yugoslavia: Balance of Payments

(Billions of dinars)[a]

Item	*1957*	*1958*	*1959*	*1960 (planned)*
Exports of goods	118.5	132.4	142.7	175.2
Imports of goods	198.4	205.5	205.5	220.0
Balance of merchandise trade	−79.9	−73.1	−62.8	−44.8
Balance of other transactions on current account[b]	20.9	26.1	20.8	16.0
Total balance on current account	−59.0	−47.0	−42.0	−28.8

Source: Reply of the Government of the Federal Republic of Yugoslavia to the United Nations questionnaire of October 1959 on economic trends, problems and policies; *Indeks*, No. 2, 1960; *Statisticki Godisnjak*, 1959.

[a] In foreign prices converted into dinars at official exchange rates.

[b] Including transport services, interest, insurance, travel, transfer payments and gold increments.

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