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Repercussions of Changes in Terms of Trade
on the Economies of Countries in
Process of Development

Report by the Secretary-General

53-16583

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EXPLANATION OF SYMBOLS

The following symbols have been used 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, unless otherwise stated.

A full stop (.) is used to indicate decimals.

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

A slash (/) indicates a crop year or fiscal year, e.g., 1950/1951.

Use of a hyphen (-) between dates representing years, e.g., 1934-38, normally signifies an annual average for the calendar years involved, including the beginning and end years. "To" between the years indicates the full period, e.g., 1947 to 1949 means 1947 to 1949, inclusive.

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

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

INTRODUCTION

1. This paper was prepared in response to the resolution 623 (VII) adopted by the General Assembly on 29 December 1952 which inter-alia requests "the Secretary-General to include in the study being prepared in compliance with Economic and Social Council resolution 427 (XIV) an estimate of the financial repercussions which changes in the terms of trade between primary commodities and capital goods and other manufactured articles produce on the national incomes of countries in the process of development, and an analysis of the distribution of those incomes". The study in response to resolution 427 (XIV) of the Council is presented to the sixteenth session of the Council as E/2455, "Relative Prices of Primary Products and Manufactures in International Trade". These two documents should, therefore, be read conjointly. For the purpose of the present report, it was considered that countries in the process of economic development were generally among those exporting primary products.
2. It may be noted, first, that the impact of fluctuations in export prices is quite different from the impact of changes in import prices, both with respect to the sector of the economy immediately affected and to subsequent repercussions. This makes it difficult to analyse the consequences of simultaneous changes in import and export prices and to separate them from the effects of other economic variables, particularly during short periods.
3. In the second place, the effect of changes in foreign trade prices depends not only on the direction, magnitude and duration of such changes but also on the structure and the character of the economy in question. The ultimate effects differ both in nature and in magnitude in accordance with the extent of industrialization in the economy, its degree of diversification, the composition and the relative importance of its foreign trade and its geographical distribution.
4. In view of the fact that changes in the terms of trade taking place during a short period of time cannot easily be isolated from the complex of economic forces which act and interact within and upon any country, the quantitative or statistical relation of changes in the terms of trade to observed movements in

such variables as the national product, employment levels and price levels, frequently does not yield an adequate picture of the nature and strength of the causal influences at work. However, a comparative analysis of trends supplemented by non-statistical information often permits a general qualitative evaluation of the inter-relations between economic variables and of their relative contribution to observed developments.

5. Part I of the present paper contains a summary of the conclusions of the analysis, and is followed in part II by a discussion of certain characteristics of movements in the terms of trade and of their primary and secondary effects on the economies of the countries. Part III is concerned with the analysis of observed economic developments in a number of primary producing countries during the period from 1948 to 1952, in the fields of balance of payments, output of goods and services, course of domestic prices, distribution of income, government revenue and investment. This approach has the advantage of permitting a general appraisal of the effects of the operation of certain economic forces upon countries with quite different economies. The illustrations offered in this appraisal were derived from a number of case studies of primary producing countries which were selected to include examples of different stages in development, types of exports, geographical location and currency affiliation as well as of differences in the degree of diversification and in the relative contribution of foreign trade to national product.^{1/} In addition to these case studies, use was made of a number of recent reports, particularly those from the United Nations regional economic commissions.

^{1/} The countries studied are Argentina, Australia, Brazil, Burma, Ceylon, Chile, Egypt, Malaya, Mexico, the Philippines, Southern Rhodesia and Turkey.

Part I

SUMMARY AND CONCLUSIONS

6. The analysis of trends in the international trade of primary producing countries shows striking disparities between the magnitudes of movements in prices and of movements in volume. Both for the primary producing group as a whole and for the majority of individual countries, fluctuations in the value of foreign trade between 1948 and 1952 were due principally to price changes and only to a very much smaller extent to changes in quantity. These trends departed from the pattern prevalent in the past in which the amplitude of fluctuations in quantity exceeded that of fluctuations in price.

7. The general trend of export prices in under-developed countries was slightly downward in 1949 and the early part of 1950. However, during the second half of 1950 and the first half of 1951 an intense upward movement was recorded; this was followed first by a levelling off and then by a decline which lasted throughout the first six months of 1952. The above pattern was most marked in the case of prices of raw materials, which on the whole showed the highest degree of instability both in the upswing after mid-1950 and in the succeeding decline, although the prices of individual commodities exhibited striking disparities as to both trends and amplitude of movement.^{2/} In general, food prices showed a much greater degree of stability. Among the prices of foodstuffs, those of cereals appear to have benefited least from the expansion of international demand. For a number of them, the trends were downward during the early part of the period, but rose after 1950. The prices of certain tropical foodstuffs, however, showed much greater variability.

8. With respect to imports, average unit value as well as many individual prices moved slightly downward in 1949 and the first six months of 1950. Although there were differences among commodities and commodity groups,^{3/} the general trend was reversed in the second half of 1950. Thereafter import prices rose at a moderate rate throughout 1951 and the first six months of 1952. In a number of primary producing countries which are large importers of cereals and textiles, the trend

^{2/} See also E/2455.

^{3/} See E/2455.

in the prices of these groups contributed to diminish the increase in average unit values of imports.

9. For primary producing countries as a whole, the terms of trade improved at a moderate rate in 1949 and the first six months of 1950. In the succeeding twelve-month period the favourable movement was more rapid, but was followed by a setback which by the first half of 1952 had brought the terms of trade for the group down to the level of the first half of 1950.

10. The terms of trade of individual countries reflect the fluctuation of their export and import prices. As may be expected, countries exporting primary raw materials that were in short supply fared significantly better than the average, whereas some cereal exporting countries were among those which showed unfavourable trends in their terms of trade.

11. As was pointed out above, the fluctuations in export prices and terms of trade from 1948-1952 did not lead to changes in the volume of exports of comparable intensity. For primary producing countries as a whole, the quantum of exports varied in the same direction as average export prices but the rate of change was much smaller. Fluctuations in export proceeds paralleled those in unit values of exports throughout the period, increasing until the middle of 1951, and thereafter declining to a level somewhat above that of the first half of 1950.

12. In many countries the rise in export prices in 1950 and 1951 was accompanied by an increase in the profits earned in the export sector. In some countries where export industries are owned by non-residents, the amounts of investment income remitted abroad also tended to grow.

13. Moreover, in many countries the foreign exchange reserves of governments and central banks rose greatly until 1951, only to fall in 1952. In other cases, the rise in the value of exports was followed by outward short-term capital movements, including repayment of short-term borrowing by the authorities. After 1950, the inflow of long-term capital into under-developed countries as a whole increased moderately, although the additional amounts were smaller than the gains from trade.

14. With respect to output, production for export in many countries grew only moderately, even among the countries which benefited most from favourable trends in export prices. The major exceptions were found in countries where the capacity

of the export industries was being expanded or in countries recovering from war-time damage. The low levels of inventories of export commodities in many exporting countries also contributed to the inelasticity of the volume of exports from 1950 to 1952.

15. In almost all countries, the output of goods and services grew faster in the non-export sectors. The magnitude of increases in production (relative to gains arising from the improvement in the terms of trade) was greater in countries where manufacturing industries were more developed and diversified although the contribution of manufacturing production to the rise in the gross national product was sometimes limited by the inadequacy of resources or the lack of manpower due to the achievement of full employment. The development of manufacturing industries further facilitated the maintenance of employment and production during periods of adverse movements in the terms of trade.

16. Other instances of relatively large increases in production for domestic use were found in countries where both the levels of economic activity and the capacity of major branches - including in certain cases agriculture and transport - were being expanded by public or private investment programmes.

17. In some countries - particularly among those in which the industrial base is narrow and undiversified - the rise in commercial activity was one of the major factors in the growth of the total geographical output of goods and services during periods of rising terms of trade, as well as in the decline during adverse periods.

18. Fluctuations in external prices clearly influenced the course of domestic prices and the distribution of incomes. However, actual trends in each country were also determined by many other variables, and external prices were not always the decisive factor.

19. In most of the countries reviewed domestic prices rose during the period 1948 to 1951. In many instances the trend of wholesale prices was perhaps closer to fluctuations in import prices than to those in export prices, except in some countries in which foreign trade is small compared with the geographic product or in food exporting countries whose local markets for export products are relatively large.

20. In many of the countries importing cereals and textiles, relatively stable trends in the prices of these commodities contributed to diminish inflationary pressures. In other instances, the increases in the production of domestic manufactures or foodstuffs also acted in the same direction.

21. Employment increased after 1948 in the majority of the countries for which information is available. The rise in employment was related to the growth in economic activity resulting from the improvement in the terms of trade and other reasons.

22. In many of the countries, aggregate real wages increased, although at a lower and steadier rate than other incomes. Real wage rates were stable or rising, but less so than employment. In some instances, real wage rates continued stable or rising in 1952, in spite of the reversal of the terms of trade, but in these instances employment tended to level off.

23. Public revenue increased, in real as well as in money terms, throughout the years 1948 to 1952, following the rise in the value of exports and in the gross geographical product. However, the rise in revenue initially lagged behind the increase in the total product, but in 1952 upward trends in tax revenue continued, in spite of the fall in the value of exports and in the gross product.

24. Capital formation increased at a faster rate than geographical product in a number of countries. The inflow of foreign capital was comparatively low, and in some instances it was more than offset by the outward flow of short-term investment and the accumulation of foreign exchange reserves; in extreme cases, these outward movements equalled or exceeded total capital formation.

25. The existence of long-term investment programmes, public or private, in a number of countries permitted them to channel a significant fraction of the additional savings accompanying the growth of incomes into productive investment, thus contributing further to the expansion of the level of production and to the improvement of the standard of living.

Part II

NATURE AND CHARACTERISTICS OF CHANGES IN THE TERMS OF TRADE

26. The sections which follow in part II of this report are concerned with certain theoretical features of changes in the terms of trade. However, the discussion is not intended to present an exhaustive review of the questions involved, but rather to show, in a brief and preliminary manner, the essential characteristics of changes in export and import prices and certain causal relations between the terms of trade and other economic factors, with a view to facilitating the interpretation of observed trends in primary producing countries, discussed in part III of this paper. Owing to the complexity of the causal influences, only the more essential features are discussed here; an analysis such as this must of necessity underplay the role of autonomous factors and other variables not closely related to changes in external prices, although their practical importance may be considerable. More elaborate treatment is beyond the limits of this paper and for this reason was not attempted here.

The Role of Foreign Trade in the Economies of Primary Producing Countries

27. The terms of trade constitute only one aspect of foreign trade relationships.^{1/} The influence of changes in the terms of trade on the economies of primary producing countries can therefore be analysed only if the more general effects of foreign trade on these countries are taken into account.

28. Statistically considered, exports and imports represent a larger share of the gross geographical product of many primary producing countries than of most industrialized countries. Foreign trade tends to be most important among less developed countries, especially if only the exchange sectors of their economies are taken into account, that is, exclusive of subsistence agriculture sector.

^{1/} In this paper, the expression "terms of trade" denotes barter terms of trade and is statistically equivalent to the ratio of the export price index to the import price index, stated as a percentage figure.

29. In a number of countries, uneven development in the past led to the concentration of capital resources and skills on industries which met the demand for foodstuffs and raw materials from the industrialized countries, while other industries not so closely related to world markets remained relatively undeveloped. Thus, wide differences have appeared with respect to amounts of capital employed, organization of production and processing, size of enterprises, productivity and over-all efficiency between the export sector, on the one hand and domestic economic activities, on the other. This trend has enhanced the significance of the export sector in relation to the rest of the economy and has made countries particularly sensitive to vicissitudes in the export trade and to changes in the availability of imports.

30. In a few countries that are in the process of development, the substitution of domestic for imported goods has reduced the statistical ratio of imports to geographical product. In most of these countries, however, the degree of dependence upon imports has remained important and it may even have increased because of the consequent expansion in their demand for the raw materials, fuels and capital goods essential to maintain - or raise - the level of industrial production. Some of these countries, moreover, also depend upon imports for certain of their basic foodstuffs. Hence, in the absence of import controls any substantial contraction in export earnings may be felt in the supply of raw materials or fuels required for the normal operation of manufacturing industries.

31. Another influence of foreign trade on under-developed countries results from its lack of stability, evidenced by the magnitude and frequency of the fluctuations in both the volume of trade and the prices of commodities. Consequently, under-developed countries specializing in raw material exports often exhibit, at least in their commercial export sectors, greater instability than is normally found in more industrialized countries.

32. Moreover, the prices of the exports and imports of under-developed countries - and sometimes the volume of exports as well - are determined in foreign markets by forces almost entirely outside their control. In the case of exporters of raw materials, in general, the demand for their products depends chiefly upon the current level of industrial production and income in more advanced countries and on expectations concerning the future of production and

prices, and, in the case of exporters of foodstuffs, also upon the standard of living of the industrial population. The relatively small individual participation of under-developed primary producing countries in the total volume of world trade in industrial goods tends to minimize the effects of changes in domestic demand upon the price level of their import goods. Although a few primary producing countries may sometimes influence the nature, volume and prices of their exports by appropriate government policies, the results for any individual country attempting such a course of action are apt to be disappointing: in the first place, the possibilities of substituting goods from other areas or other products including competing synthetic products, tend to limit the effect of output restrictions on the world price of the commodities concerned; in the second place, unilateral attempts to expand the volume of exports merely tend to reduce prices and, because of the inelasticity of the demand for raw materials and foodstuffs, to limit the increase in proceeds accruing to the exporting country.^{2/} Furthermore, internal markets for the major exports of under-developed countries are usually too small to permit a significant shift away from foreign markets, though there are some isolated exceptions, including foodstuffs - particularly certain basic foodstuffs, the supply of which is inelastic.^{3/}

33. To sum up, foreign trade influences are multiple and interrelated. Changes in the relative prices of imports and exports are only one of the ways in which they become manifest, but the effects of such changes on economic activity in under-developed countries may be widespread and, in their cumulative results over a period of time, sometimes decisive.

^{2/} See United Nations, Economic Survey of Latin America, 1949, chapter II, (Sales No. 1951.II.G.1).

^{3/} However, market shifts are likely to be more frequent for some of the minor exports of both primary and manufactured goods. In such cases, however, producers may improve their domestic outlets during periods of expansion only to find that increases in the cost of production incident to the general price rise at home have weakened their competitive position in foreign markets. In extreme cases deterioration in cost-price relationship is likely to lead to a reduction in output.

34. Primary producing countries are, however, often capable of increasing the contribution that foreign trade makes to their economic development. First, these countries retain substantial control over the nature and volume of their imports and may take steps to adjust the composition of their imports in accordance with the needs of their domestic economies and the resources at their disposal. Second, governments may institute measures to increase the proportion of the value of exports retained within their economies and to maximize the internal flow of incomes arising out of a given volume of exports, guiding the use of the additional income so as to further the process of economic development.

Character of Changes in the Terms of Trade

35. In the present context four aspects of any movement in the terms of trade may be mentioned: its locus or point of incidence, its direction, its intensity and its duration. Each of these will be examined briefly in this section with a view to indicating the nature of the economic effects it is likely to have.

The locus or point of incidence

36. Since the terms of trade represent a ratio between two price levels, a change may be occasioned by a movement of either of the variables separately or of both simultaneously. The effects of such variation in the terms of trade, however, are likely to differ according to whether the change occurs in export prices or in import prices.

A rise in export prices results in an increase in money income realized in the export sector from a given quantity of exports. At the same time, it tends to induce an increase in the volume of production in export industries. It usually accrues initially to a relatively small fraction of the population, even in cases where export commodities are produced by a large number of small producers.

37. Import prices generally affect costs in the economy as a whole; hence their influence is usually more widespread than that of export prices. Producers are affected to the extent that they use imported equipment, raw materials and

fuels, while consumers are affected to the extent that imported goods enter into consumption. Hence, an improvement in the terms of trade resulting from a fall in import prices initially affects a larger group than when the improvement results from a rise in export prices.

38. The succeeding sequence of events is also likely to be different. A rise in export prices tends to stimulate the output of export commodities directly and also tends to influence the output of domestic industries owing to the increase in demand from the recipients of the incomes initially accruing to the export sector. A fall in import prices tends to lower the general price level or to increase importers' margins, or both, and may be followed by a rise in the volume of imports, or it may facilitate an increase in the production of industries using imported raw materials, fuel and equipment. The process by which these two sets of causal influences affect the economy of a primary producing country as a whole are discussed in more detail in the next section of this report.

Direction of the change

39. There are a number of ways in which changes in the terms of trade may materialize. A rise in the terms of trade may take place when both export prices and import prices rise, the former increasing more than the latter, or it may take place because of rising export prices and falling import prices, or it may occur when both export prices and import prices fall, the latter falling more than the former. This last type occurs least frequently in primary producing countries. Conversely, a fall in the terms of trade results from changes corresponding to those enumerated above.

40. In the past, owing to the fact that forces generated in the more industrialized countries have exercised a preponderant influence over price trends in world markets, the unit values of imports and exports of primary producing countries have tended to vary in the same direction, higher export prices being accompanied by higher import prices and vice versa. Movements of import and export prices in opposite directions are much less frequent, and are sometimes associated with changes in price trends such as those that occur at the turning points of a trade cycle.

41. During periods of rising prices, higher money incomes accruing to the export sector are offset, in whole or in part, by the higher cost of imports and, during a period of falling prices, lower incomes tend to be counterbalanced by falling import costs. Thus, in broad terms, when the prices of imports and exports move in the same direction they tend to cancel each other's effect on the real product of the exporting country. The inflationary and deflationary influences, however, tend to act in the same direction and are therefore likely to aggravate the instability of the economy.

Intensity and duration of the change

42. The effect of trade fluctuations in any country clearly varies with the amplitude of price fluctuations in the particular commodities in which it deals. Experience has shown that producers concentrating on such industrial raw materials as cotton, copra and rubber, and such non-staple foodstuffs as pepper and cocoa, are subject to much greater variations in price - both year-to-year and cyclical - than producers of cereals, such foodstuffs as tea and bananas, and many minerals.^{4/}

^{4/} See United Nations, Instability in Export Markets of Under-developed Countries (Sales No.: 1952.II.A.1), chapter 2.

43. The effects of changes in the terms of trade on the economy are a function of their intensity and duration.^{5/} The effects of a small fluctuation - or even one of greater intensity but short duration - may be dispersed in many corners of the economy and cushioned by such items as financial reserves, commercial inventories or consumer durables. Fluctuations of greater severity or longer duration may lead to cumulative effects and may even produce structural changes (for example, in the importance of the export sector of the economy) or may greatly affect the financial strength of the government.

44. First, the nature and strength of compensatory forces vary greatly, according to the duration of movements in the terms of trade. Short-term changes are particularly susceptible to countervailing influences, and many of their effects on the economy become apparent only after an interval. In any event, a change in the terms of trade in due course influences the level of economic activity. If a reversal then takes place in the direction of the movement, this will force (again after an interval) a revision of expectations and investment decisions. An alternation of favourable and adverse changes in terms of trade of short duration and great intensity, such as that experienced in the post-war period, tends therefore to delay or prevent the emergence of

^{5/} According to the study cited above, average fluctuations in the prices of primary commodities during the period 1901 to 1951 amounted to about 14 per cent from year to year. But primary producers' "vulnerability to price fluctuations was greatly increased by the fact that year-to-year movements tended to be in the same direction for two to three years at a time" (page 5), so that cyclical price declines and rises each averaged about 27 percentage points - and as high as 40 points for individual commodities. Secular changes (as measured by a seven-year moving average) occurred at a slower annual rate, of course, but the cumulative long-trend movements resulted in total changes which "were greater than the normal total cyclical amplitude". Furthermore, according to another United Nations study, Relative Prices of Exports and Imports of Under-developed Countries (Sales No.: 1949.II.B.3), page 23, "average prices of primary commodities relative to manufactured goods have been declining over a period of more than half a century. By 1938, the relative prices of primary goods had deteriorated by about 50 points, or one-third, since the beginning of the period [the eighteen-seventies] and by about 40 points, somewhat less than 30 per cent, since 1913". By 1947, the 1929 position had almost been regained, but most indices remained one sixth or one seventh below the 1913 level.

secondary effects on the economy. At the same time, however, it aggravates the difficulties in the way of economic development, for the heightened uncertainty concerning future trends, and the repercussions of successive disappointments on later decisions to spend or invest, may in many cases slow down the rate of investment in fixed capital.

45. The significance of cyclical fluctuations lies in their cumulative impact on the structure of the economy as well as in the immediate effects of the year-to-year movements.^{6/} A continued improvement in the terms of trade, with price increases lasting more than a very short period - and expected to continue - tends to weaken the effect of the lags and the offsetting influences, so that the economy tends to react to the dynamic impulse of subsequent price rises with increasing momentum. Optimistic expectations first cause an increase in production and then give rise to decisions to invest, while investment programmes are facilitated in turn by a rise in profits and possibly by an inflow of foreign capital. Within the economy, the completion of each investment results in an increased flow of goods.

46. It should be noted, however, that the lag between price increases and new investment is likely to be longer for investments in new industries for which technical background may be lacking, uncertainty surrounding the size of market greater, and competitive prospects less definite. Hence, during periods in which the terms of trade are favourable, private savings are likely to be channelled first into existing industries and activities, particularly export industries, real estate, and trade, and therefore to contribute to the diversification of the economy to only a moderate extent. These obstacles to the diversification of production become easier to overcome the longer the duration of the favourable movement in terms of trade. In the past, however, the trend in the terms of trade has often been reversed before this process could reach significant proportions. In such case, the over-all result of the cycle would be neutral, so far as correcting the imbalance

^{6/} For a study of the consequences of cyclical changes in the terms of trade on the economies of under-developed countries see, for example, United Nations, Economic Survey of Latin America, 1949.

existing in the economic structure of the country was concerned. Furthermore, postponement of investment programmes has more serious consequences during cyclical recessions than during short-term movements, and abandonment of the programmes would lead to a waste of resources.

47. Longer cyclical movements in the terms of trade give broader scope to the play of inflationary effects of rising prices on the economy of primary producing countries while subsequent recessions magnify the deflationary effects of falling prices. In the absence of compensatory or unrelated variables,^{7/} primary producing countries are likely to suffer from both the recessions and the recoveries of industrial countries, without obtaining the full measure of real income gains that attend recovery in industrial economies.

Primary and Secondary Effects^{8/}

48. The basic primary effect of a change in the terms of trade is to alter the volume of goods and services available to a country from abroad without

^{7/} For example, a public investment programme of a compensatory character or large-scale private investment related to the development of natural resources.

^{8/} The following statistical concepts are used throughout this paper:

(a) Gains or losses from changes in the terms of trade (or more briefly gains or losses from trade) are defined as the product of the quantum of exports in any given year (at prices of the base year, 1948) and the changes in the terms of trade since 1948 [$\bar{G} = Q_e (t-1)$].

(b) The capacity to import created by exports at 1948 prices (or more briefly, the capacity to import) is the quantum of imports at 1948 prices which can be purchased by the exports of any given year ($C = \text{value of exports divided by index of price of imports}$). Gains and losses in the terms of trade constitute one measure of the addition to (or the deduction from) the capacity to import due to changes in the terms of trade. It is related statistically to the total capacity to import by the formula, $C = Q_e \div G$.

(c) Gross geographical output (O) is the sum of the output of all goods and services (at 1948 prices) produced in any given year within the geographical boundaries of a given country.

(d) Gross geographical product (P) is the sum of gross geographical output and unilateral transfers of purchasing power between countries arising from changes in the prices of exports and imports. An approximate measure of the gross geographical product is given by the formula, $P = O \div G$. Viewed in this light, gross geographical product is an approximate measure of the sum of real incomes earned within the geographical boundaries of the country.

corresponding alteration in the expenditure of domestic effort and resources. As indicated above, the additional volume of goods and services available to the exporting country, that is, the increase in the gross geographical product, is measured statistically by gains from trade. When export prices fall relative to import prices, the loss from trade and the decrease in the gross geographical product are measured in a corresponding manner. A change in the terms of trade thus gives rise to a change in the country's capacity to import and its gross geographical product.

49. The actual volume of trade is a function not only of the initial changes in the capacity to import but also of a number of other variables, some unrelated, some also affected by the terms of trade. Among the latter are the quantum of exports, the volume of payments for financial and other services, the direction and magnitudes of capital movements and the volume of foreign exchange reserves. Furthermore, the composition of foreign trade, and the manner in which these variables react to it, determine in their turn the subsequent movements and ultimate level of the terms of trade themselves.

50. The influence of fluctuations in the terms of trade, however, goes far beyond its effects on the capacity to import; initial changes in real incomes tend to modify aggregate demand and hence initiate a series of effects on the output of goods and services for home use and on the volume of imports. Furthermore, in the export sector the output normally varies in response to price fluctuations. Output and price jointly determine export proceeds and strongly influence the level of incomes.

51. The volume and composition of imports in turn both reflect and react on the level and structure of production for home use. Furthermore, export and import prices are constituent elements of the general price level and in many under-developed countries are among its major components. Thus, any changes in such prices bring about movements in the general price level, resulting first from the impact of the changes themselves and then from secondary effects of movements induced in the domestic economy.

52. In operation the consequences for the balance of payments, output and price level complement one another. Each reacts on the others and jointly with unrelated variables to bring about a new level of economic activity, employment and income, and to change the distribution of this income among the various

factors of production and hence between consumption and investment. The mechanism through which these interactions take place merits slightly more detailed description.

53. Fluctuations in export prices give rise initially to changes in monetary incomes accruing to firms active in producing, processing and trading export commodities. These income changes are usually followed by fluctuations in demand schedules. The effects on other prices vary according to the circumstances, depending, in particular, on entrepreneurial expectations as to the future course of prices, on the degree of competition among buyers and sellers, and on the elasticity of the supply of commodities and other factors of production.

54. When dealers in any market operate in competition with one another, changes in prices are likely to be passed on promptly to the producers from whom they buy. When comparatively few dealers face a large number of unorganized producers, price increases tend to be retained longer by dealers, and price decreases tend to be passed on more promptly.

55. A similar pattern obtains when the export trade is conducted by the producing enterprises themselves. Where a few firms deal with a large number of unorganized suppliers and workers, price rises in the international market tend to be retained by those firms.

56. In the normal case, a rise in export prices should increase profits in the export sector and thus induce producers in that sector to enlarge their supplies. The response of the producers depends, among other things, on the intensity and duration of the price movement, discussed above, the nature of the commodities involved, the structure of the industries, the capacity of the industries and of ancillary installations, and the tax and foreign exchange policies of the countries. Furthermore, inducements to export industries derive from a rise in unit prices of export products relative to unit costs; hence the trends in import prices and domestic prices also influence the response of those industries. In particular, import prices affect them in a direct manner to the extent that the firms use imported equipment and intermediate goods and indirectly to the extent to which import prices cause the general level of prices and wages to vary. Since the latter factor operates only after a lag, changes in export prices tend to be the predominant influence, at least initially.

57. It is to be expected that initial increases in the output of export commodities will be moderate unless there was originally a substantial amount of idle capacity that could speedily be put into operation. Crop production tends to change only slowly and the same is true, perhaps to a greater degree, of non-annual crops and forest products; in mineral exporting countries production plans of mines may not be easy to adjust. To the extent that production for export rises, it tends to increase still further both the proceeds of exports and the incomes in the export sector. The increase in the demand for goods and services in that sector reinforces the influence of the initial rise in export prices on other industries, but if trends in international markets force a downward revision of expectations before the increase in output has fully materialized, then the effects on domestic prices and wages are likely to be smaller.

58. The influence of a rise in export prices on the output of goods and services in domestic industries differs both in timing and in magnitude from its influence on production for export, and is primarily a function of the distribution of additional incomes earned in the export sector, the portion of those incomes which the original recipients transfer to the flow of domestic payments, the spending habits of the population and the capacity of the economy to adjust itself to changes in demand. Gains accruing to export firms may be partly transferred abroad in the form of remittances of profits and interest or in payment for imports necessary for the production of exports. Part of the gain is required for freight and insurance payments; another part may be retained as foreign exchange assets.

59. Nevertheless, the recipients of additional income probably increase their domestic expenditures and - to the extent that expenditures are directed to the purchase of domestically produced goods and services - thus stimulate output in other industries, after an interval. Because of its cumulative effect, the ultimate increase in output may be several times larger than the primary gains in trade. That part of the additional expenditure which is directed towards the purchase of imported goods and services similarly induces an expansion of production and increases incomes in the countries supplying such imports,^{2/} in this

^{2/} To the extent that these incomes are used to purchase additional exports of the primary producing country, the latter receives a secondary stimulus comparable in nature, but probably not in timing or magnitude, with the stimulus provided by domestic purchases of the beneficiaries of the rise in terms of trade.

case, the effects in the primary producing country are limited to additional activity among importers, merchants and inland transport firms. This tends to be the case when most of the gains from trade accrue to a small number of individuals, either because of concentration of production in the export sector or for such organizational reasons as those mentioned earlier in this section.

60. The increase in the demand for consumer goods is greater when low income groups receive a larger share of the additional income. When a larger proportion of the latter accrues to high income groups, the demand for capital goods and fixed assets increases correspondingly, at least to the extent that export proceeds are not transferred abroad.

61. In general, when domestic agriculture and industry are undeveloped and undiversified, the response of these sectors to additional demand is likely to be slower and smaller, partly because of limited technical possibilities for increasing production rapidly and partly because of the more limited response of producers to economic inducements in the short run. Conversely, a more developed and diversified industrial base permits a larger and more rapid increase in production.

62. On the other hand, increase in the output in sectors producing for domestic use is limited by the capacity of industries and the amount of idle resources that can be put into productive use, and is also dependent on the elasticity of the supply of labour.

63. However, while the processes described above are taking place, prices of imports do not remain stable. In the more frequent case, an upward trend in the export price is accompanied by parallel trends in the prices of imports. A general rise in the import prices tends to increase the domestic price level (or to reinforce an inflationary increase due to other causes). There may be a tendency to substitute domestic for foreign commodities, depending upon the structure of imports and the nature of domestic production, as well as the relative level of domestic prices. Should prices of foodstuffs and finished consumers' goods increase relative to those of raw materials, this type of substitution might have a favourable effect on the output of domestic industries. In any case it is likely that imports of such categories as are not produced in the country (particularly durables, and high-quality or specialized goods) will rise because of the increase in aggregate incomes and in demand. A rise in prices of capital goods, raw materials and fuels may force a reduction on

imports of producers' goods which would adversely affect the output of local manufacturing industries and would ultimately result in an increase in the imports of finished consumer goods.

64. On the other hand, a fall in import prices gives rise to opposite effects to those of a rise in import prices. Lower prices for equipment and raw materials facilitate an increase in the output of domestically produced goods while lower prices of similar imported commodities may induce a trend towards substitution of imported for domestic goods.^{10/}

65. The increase in economic activity following a rise in the price of exports is also reflected in a favourable rise in the demand for labour. Employment increases unless the economy has already substantially approximated a condition of full employment. This is not usually the case in the less developed primary producing countries, in which a relatively large proportion of the population is engaged in low-productivity occupations, including subsistence agriculture. In these conditions, an increase in the demand for labour in urban sectors and in commercial agriculture induces a shift in employment to occupations with higher productivity.

66. For the economy as a whole, these transfers in employment lead to an improvement in the overall productivity of labour, tending to offset the unfavourable effects of a relative increase in the proportion of untrained workers in the more productive branches of activity.^{11/} Further expansion in economic activity is facilitated, inter alia first, by the supply of relatively cheap labour, second, by consumption expenditures of the extra wage earners (including their initial expenditures for semi-durable goods) and third by investment expenditures to meet the increased demand for housing and social services.

^{10/} It may be noted, however, that in both alternatives (that is rising or falling import prices) the government can often take steps to prevent or limit unfavourable effects of changes in import prices on the output of domestic industries, for example, through custom duties or controls over the volume and composition of imports, directed to facilitate the supply of raw materials and equipment, and to discourage excessive competition from imported goods.

^{11/} In Argentina, Australia, Brazil and Southern Rhodesia, migration from abroad played a somewhat similar role to such internal transfers of population, and in some of these countries both types of population movement occurred simultaneously.

67. The course of wage rates in the market economy depends on several factors, many of them unrelated to external prices. On the one hand, the high degree of elasticity in the supply of labour in many of the less developed countries sets a limit to the magnitude of any wage increases, although these usually take place, particularly in industries most favoured by the current prosperity. Pressure for wage increases is greater if prices of basic consumer goods are rising. Finally, the extent of labour organization influences the bargaining position of the wage earning sector and hence, its share of the additional income.

68. Subsequent unfavourable developments in the market economy lead to divergent effects, depending upon the duration of the preceding rise. If the latter was of short duration, a decline in employment in the market economy may in many of the less developed countries result in the return of redundant labour to the subsistence economy and in an increase in disguised unemployment. But if the duration of the rise permitted migrants to become adjusted to relatively higher urban standards of living - and consequently reluctant to resume their former scale - open urban unemployment, which greatly adds to deflationary forces at work, may arise. The former sequence of events seems to have taken place in Northern Rhodesia following the completion of the first phase of mining investment in the early nineteen-thirties, while the second took place to some extent in Bolivia during the depression of 1929 to 1932.

69. The magnitude of inflationary or deflationary influences of changes in external prices - like the influences of these changes on the volume of production - depends on the ratio of exports or imports in the geographical product of the country, the diversification and development of the economy as a whole and the elasticity of the supply of factors of production. If, for example, foreign trade prices rise, the consequences on the general price level tend to be greater when imports and exports are a larger fraction of the geographical product of the country. Conversely, to the extent that additional demand for goods during periods of rising prices can be met by increases in production, such gains in export and import prices become diffused throughout the economy and their influence on the general price level is probably weakened. But as full utilization of productive capacity and labour is approached, a rise in costs and prices probably takes place, together with a diversion of demand to imported commodities; in this case the larger proportion of imported goods in consumption and investment also increases the influence of external prices on the general price level.

70. On the other hand, in many of the less developed countries, where the importance of the exchange economy is small because of the isolation of the export sector and the magnitude of subsistence agriculture, vast sectors of the economy remain little affected by the consequences of price fluctuations. Thus these countries escape serious inflation and deflation at the expense of under employment of their human and natural resources.

71. It may also be noted that the magnitude of the inflationary or deflationary forces is directly related to the amplitude of the change in external prices and to the duration of the movement. Serious inflation following a rise in export prices is compatible with a deterioration in the terms of trade, for import prices may rise faster than export prices. However, to the extent that the terms of trade actually move in favour of a given country, the pace of the inflationary process may be retarded by the additional output on the part of domestic industry and by relatively cheap imports, especially if basic consumer goods form a significant part of such imports. It may also be retarded by the existence of inventories of lower priced goods and by price regulation, rationing and so on, although these influences tend to weaken with the passage of time.

72. If in a later period export prices fall when import prices are still rising, either inflationary or deflationary tendencies may predominate. However, when the export sector is relatively isolated from the rest of the economy, inflationary tendencies may initially prevail. On the other hand, if there is a severe drop in employment and production in the export sector, it may lead to serious deflationary effects in the other economic sectors unless compensatory fiscal and monetary policies are pursued.

73. A fall in both export and import prices is generally likely to be deflationary and to lead to a sequence of events opposite to that flowing from a rise in foreign trade prices. The transition from rising to falling prices, however, may be marked by an aggravation of domestic inflationary pressures.

74. The foregoing sequence is modified when domestic markets for export goods are significant, especially in the case of food exporting countries. Here, a rise in the prices of exportable foodstuffs, may, barring governmental action to control the rise of domestic prices, augment real incomes in the export sector by transfer from domestic as well as from foreign consumers and may therefore generate more severe pressures on real wages and domestic prices in the urban sectors,

If this is followed by a decline in export prices when other prices are rising, inflationary pressures may then abate to the extent that domestic food prices reflect the drop in export prices. But if producers and retailers succeed in maintaining the domestic level, the internal situation tends to remain as above.

75. Because of the increasing importance of governmental action in the economic life of under-developed countries, particularly in regard to economic development, special interest attaches to fiscal policies in relation to trade fluctuations and to the consequences of price fluctuations on government revenue and expenditure.

76. The initial effect of the rise in export prices is felt principally through taxes on the commodities affected. Where export taxes exist, and especially where tax rates are raised during a period of rising export prices, the increased value of exports of course raises government revenues. A fundamental factor is the structure of the tax system. A few of the countries specializing in exports of primary products are still heavily dependent upon export taxes. Others - among them Australia, Chile and Southern Rhodesia - derive part of their revenue from taxes on sales of export products, and incomes of exporters or, in some instances from foreign exchange profits arising out of differential exchange rates. Still others operate export monopolies or directly control export trade in other ways. Almost all the governments depend on revenue from customs, though to a varying degree. In the last analysis, the fiscal significance of export fluctuations extends throughout the entire national economy, in that these fluctuations influence the yield of income taxes, excises and other levies, including duties on imports made possible by exports.^{12/}

77. However, indirect consequences of the rise in export prices on public finances are likely to offset much of the initial improvements in revenue. For example, initial gains in tax revenues and foreign exchange resources may lead to extensive government expenditures on the assumption that the gains are likely to continue. This would increase the cost of government operations and, to the extent that expenditures anticipate or exceed the rise in revenue, budgetary surpluses would be reduced, or deficits increased, thus adding to inflationary pressures. Under these circumstances, it is not unlikely that inflation would add more to government costs than to government revenues.

^{12/} It is estimated that in Venezuela, to take a striking case, exports of petroleum account, directly and indirectly, for about three-quarters of the budget revenue, while in Chile, copper similarly accounts for one-third of the total revenue (United Nations, Measures for the Economic Development of Under Developed Countries (Sales No.: 1951. II. B.2), Page 71.

78. The initial effects of a rise in import prices on custom revenues depend on the character of the duties and the elasticity of demand. If demand is inelastic, there would be a moderate addition to custom revenues if the duties were specific, but the addition to custom revenues would probably be substantial if there were ad valorem taxes.

79. The dangers of domestic inflation arise in the case of increasing import prices as with rising export prices. If inflation materializes, it affects the costs of government operations, as in the case of rising export prices. This problem is particularly serious if the affected goods are important in the cost of living, for the government may then become involved in expensive subsidies. If the rise in import prices affects the cost of imported capital goods, the danger to development programmes is obvious.

80. If the inflationary sequence mentioned above becomes pronounced, and export prices level off or fall following a period of rising trends, the problem of financing government operations becomes more severe, owing to the drop in revenues in the face of rising costs. These developments are of particularly grave import when expenditures include long-term programmes for economic development. Unless the government is able to develop sources of additional revenue or enter upon deficit spending, the completion of the development projects is seriously delayed.

Part III

CHANGES IN THE TERMS OF TRADE OF PRIMARY PRODUCING COUNTRIES FROM 1948 TO 1952, AND THEIR EFFECTS ON ECONOMIC DEVELOPMENT

81. The following sections are concerned with the impact of recent changes in terms of trade on the economies of certain primary producing countries. The analysis follows the effects of this impact on the balance of payments, the output of goods and services, the price system, the distribution of incomes, and public revenues and expenditures.
82. The period selected for analysis, the years 1948 to 1952, has an obvious bearing on the results. With respect to exports of primary products, the period was marked by the recurrence of extensive fluctuations in international demand accompanied by wide price swings affecting many primary products. Import prices exhibited less marked fluctuations as a whole, although variations recorded for smaller homogeneous groups of manufactures were substantial.
83. The present analysis pays more attention to influences which are more conspicuous in the short run. It is believed that this approach is justified by the nature and duration of price and quantum movements in foreign trade during this period. Nevertheless, these short-term relations do not exhaust the influence of terms of trade on the economy, and hence longer term effects discussed in general in part II should also be borne in mind.^{1/}
84. It is clear that changes in terms of trade in a given period are only one of the variables bearing upon the decisions of producers, consumers and public authorities in any country. Foreign trade itself brings different forces to bear, among them the state of world markets for given commodities, geographic shifts in supply and demand, the situation in capital markets and other conditions. Past movements in terms of trade are themselves also a casual influence in so far as their impact is usually transmitted to the economy with lags of varying duration. Many other forces not directly

^{1/} In addition, it may be noted that the statistical magnitudes vary with the base year chosen. In this paper, the year 1948 was adopted as the base year since in many countries - though by no means in all - it marked the end of the period of post-war reconversion and restocking.

related to foreign economic relations are likewise active in influencing economic trends. Hence, this paper does not attempt an exhaustive quantitative analysis of the consequences of changes in the terms of trade, but rather a general evaluation of the joint influence of movements in the terms of trade and of other variables in a number of primary producing countries.

Characteristics of Movements in Terms of Trade during the Period

85. The terms of trade turned steadily in favour of primary producing countries as a whole in 1949 and the first half of 1950, owing to the fact that a moderate decline in the index of unit value of exports was more than offset by a larger drop in the unit value of their imports. As shown in table 1, during the first six months of 1950, the composite index of the terms of trade was 110 (1948=100). From the second half of 1950, the intensity of the changes became greater. The terms of trade index rose in the first half of 1951 to a level of 128, but during the succeeding periods receded to a point practically identical with that of early 1950. The unit value of imports into primary producing countries rose steadily during much of this interval, though the rate of increase slackened appreciably in 1952. The unit value of exports, however, recorded an increase of nearly 35 per cent, between July 1950 and June 1951, only to lose nearly half the gain during the following twelve months.

86. Changes in the terms of trade of individual primary producing countries, reproduced in table 2, show many deviations resulting from differences in the nature and composition of their exports and imports, in the geographical pattern of their foreign trade and in the character of their trade relations, and also from statistical discrepancies in coverage, weighting systems and base periods. Indices of export and import unit values were also affected by changes in the international value of the monetary units.

87. Wide variations in export unit values are recorded among most of the exporters of raw materials thought at one time to be in short supply, such as cotton, fats and oils, hides, certain non-ferrous metals, rubber and wool, and also in the case of coffee exporters. Thus, export unit values of Australia, Brazil, Ceylon, Egypt, Malaya and Southern Rhodesia showed gains of between 61 per cent and 158 per cent between 1948 and 1951. As might have been expected, in many of these countries the subsequent dip in raw material prices was relatively great.

Table 1. Indices of Unit Values of Exports and Imports, and Terms of Trade of Primary Producing Countries as a Group, 1949 to 1952 (1948=100)

Period	Unit Value		Terms of Trade
	Exports	Imports	
1949:			
First half.....	101	95	106
Second half.....	95	88	108
Full year.....	98	92	107
1950:			
First half.....	91	83	110
Second half.....	105	88	119
Full year.....	99	86	115
1951:			
First half.....	125	98	128
Second half.....	123	104	118
Full year.....	124	101	123
1952:			
First half.....	115	105	110

Source: United Nations, Monthly Bulletin of Statistics, World Economic Report, 1950-51 and 1951-52, (Sales No.: 1952.II.C.4 and 1953.II.C.2) and Economic Survey of Europe, 1950, (Sales No.: 1951.II.E.1.).

Based on export and unit value data, expressed in United States dollars, and relating to primary producing countries of Asia (except Japan), Latin America, Africa and Oceania; and Canada, Finland, Spain and Yugoslavia. In view of the composite character of the data, figures are intended to convey only the order of magnitude of the changes.

Table 2. Indices of Unit Values of Exports and Imports, and Terms of Trade of Selected Primary Producing Countries, 1949 to 1952 (1948=100)

Country and items	1949	1950	1951	1952 ^{a/}
Argentina: ^{b/}				
Unit value of exports.....	85.6	74.3	...	...
Unit value of imports.....	96.0	88.5	...	...
Terms of trade.....	89.1	84.0	...	...
Australia: ^{c/}				
Unit value of exports.....	118	135	234	166
Unit value of imports.....	105	114	138	154
Terms of trade.....	112	118	170	107
Brazil:				
Unit value of exports.....	106	159	189	...
Unit value of imports.....	93	80	100	...
Terms of trade.....	114	199	189	...
Burma: ^{d/}				
Unit value of exports.....	102	97	126	151
Unit value of imports.....	109	132	73	83
Terms of trade.....	94	73	173	182
Ceylon:				
Unit value of exports.....	106	144	175	136
Unit value of imports.....	95	98	116	136
Terms of trade.....	112	147	151	100
Chile: ^{b/}				
Unit value of exports.....	96	105	133	...
Unit value of imports.....	96	92	107	...
Terms of trade.....	100	113	124	...
Egypt:				
Unit value of exports.....	89	115	182	...
Unit value of imports.....	100	101	116	...
Terms of trade.....	90	114	158	...
Malaya:				
Unit value of exports.....	93	173	258	187
Unit value of imports.....	101	115	144	129
Terms of trade.....	97	150	179	145
Mexico: ^{e/}				
Terms of trade.....	89	92	107	97

Table 2 - continued

Country and items	1949	1950	1951	1952 ^{a/}
<u>Philippines:</u>				
Unit value of exports.....	69	77	84	64
Unit value of imports.....	104	79	100	94
Terms of trade.....	66	97	84	68
<u>Southern Rhodesia:</u>				
Unit value of exports.....	116	137	161	...
Unit value of imports.....	103	110	130	...
Terms of trade.....	113	124	124	...
<u>Turkey:</u>				
Unit value of exports.....	100	102	121	122
Unit value of imports.....	94	77	91	92
Terms of trade.....	106	132	133	133

Sources: United Nations Statistical Yearbook, 1952, United Nations Monthly Bulletin of Statistics and official trade statistics of the countries.

- a/ Preliminary.
- b/ Dollar terms of trade
- c/ Twelve months ending 30 June of year stated.
- d/ Twelve months ending 30 September of year stated.
- e/ Source: Economic Survey of Latin America, 1951-52.

88. Trends were different in countries exporting chiefly cereals and meat. The unit values of cereal exports of Argentina and Burma showed moderate gains or failed to increase, though in each of these cases prices of other exports rose and average unit values increased. In the case of the Philippines, and in other countries as well, there were conflicting trends in the unit values of major export products.
89. In most countries, import unit values showed a tendency to fall in 1949, to recover in 1950 and to rise thereafter. Although in most of these countries the range of imports is more diverse than the range of exports, certain general trends are seen. For example, countries which import significant quantities of cereals and textiles tended to record stable or declining levels of import unit values, particularly until 1950. However, importers of raw materials were affected by the increases in some commodities during 1950 and 1951. The fall in the import unit values of some countries during 1949 was also due in part to lower prices following the improvement in supplies of raw materials and even in some types of manufactured goods after the end of the post-war boom.
90. The monetary devaluations of 1949 are reflected in the unit values of exports and imports of many countries. Sterling area countries, particularly, tended as a whole to show a steadier upward trend in import prices than other countries. At the same time, export prices showed greater upward movements until 1951 than other countries as a consequence of the more rapid increase in sterling prices as compared with dollar prices.
91. As a consequence of varied trends in export and import prices, terms of trade rose after 1948 and 1949 in most primary producing countries, although in a few instances improved adjustment in world demand to world supply after 1948 brought a deterioration in the terms of trade which persisted during the rest of the period. In most other cases, significant increases were recorded after 1948, particularly among exporters of commodities in short supply, although gains were largely erased by the recession in raw material prices in 1952.

Effects on the Balance of Payments

Elasticity in the supply of exports

92. It was noted earlier that changes in the prices of exports of primary producing countries are often accompanied by movements in volume in the same direction but of wider amplitude. These changes influence the gross value of exports and hence magnify fluctuations in the capacity to import - a pattern which prevailed in the past^{2/} but was often submerged during the period 1948 to 1952. The supply of exports was generally inelastic, as a result of which - for the majority of primary producing countries - changes in price rather than fluctuations in the volume of exports were the major influence on the increase in the capacity to import.

93. Table 3 confirms that the increases in the capacity to import of primary producing countries as a whole were more the result of favourable terms of trade than expansion in the volume of exports. Improvement in the terms of trade is reflected in the gains from trade, which grew steadily until the first half of 1950, and rose higher during the next twelve months. At their peak, during the first six months of 1951, gains from trade contributed an increase of 32 per cent to the capacity to import, compared with 1948. The volume of exports sagged in 1949 under the depressive influence of a decline in international demand, but recovered in 1950 and 1951. The maximum gain in the volume of exports was also reached during the first six months of 1951, when the increase added 14 per cent to the capacity to import. As a joint result of these changes in prices and volume of exports, the capacity of primary producing countries to import rose by 46 per cent over the base year 1948. However, less than one-third of the total increase was due to an expansion in the volume of exports while more than two-thirds resulted from the improvement in the terms of trade.

94. During the second half of 1951 the capacity to import lost about half the gains made since 1948. This was due to declines both in gains from trade and in volume of exports to points below the peaks reached in the earlier half of 1951. During the first half of 1952, the volume of exports recovered somewhat,

2/ See United Nations, Instability in Export Markets of Under-Developed Countries.

but as a result of the deterioration in the terms of trade gains from trade continued to decline. Therefore, the spread between the quantum series and that of gains from trade was reduced.

95. Statistics of particular countries, shown in table 4, generally confirm the foregoing conclusions. The supply of exports was inelastic, first, because output in the export industries is not capable of very rapid increase in the short run and, second, because inventories - which helped to increase elasticity in the past - were generally low in the post-war period. Some outstanding exceptions are found in countries where the capacity of the export industries was being expanded, either as a result of the repair of war damage, as in countries of the Far East, or as a result of a flow of investment into export industries, as in Southern Rhodesia, Turkey and some oil producing countries in the Middle East.

Distribution of export proceeds

96. At any given time, net real purchasing power available to countries exporting primary products differs from their total capacity to import to the extent to which the proceeds from exports are not remitted to the exporting country.

97. In the first place, proceeds from exports are generally computed exclusive of payments for shipping and insurance, but the major part of such charges does not increase the income of the exporting countries. Most of the payments accrue to concerns incorporated in countries important in shipping and finance markets.^{3/} It may be noted also that fluctuations in freight rates in 1950 to 1952 were in the same direction as those in raw material prices and were of comparable intensity.^{4/}

3/ It may be noted that some under-developed countries have established their own insurance or reinsurance organizations and have developed their own shipping services to recapture part of the charges on their exports.

4/ See, for example, United Nations, Economic Survey of Asia and the Far East, 1951 (Sales No.: 1952.II.F.2) pages 131 to 133. In cases of bulky primary commodities where the price per unit of weight is comparatively low (coal, grain) the variation in freight rates was frequently much greater than the variation in prices.

Table 3. Changes in Capacity to Import, Primary Producing Countries as a group, 1949 to 1952 (Percentage change from 1948 average)

Item	1949		1950		1951		1952
	First Half	Second Half	First Half	Second Half	First Half	Second Half	First Half
Increase (decrease -) in quantum of exports....	-4	-4	2	13	14	5	9
Gains from trade ^{a/}	6	8	10	22	32	19	10
<u>Total increase in capacity to import..</u>	2	4	12	35	46	24	19
Proportion of total increase in capacity to import represented by gains from trade.....	b/	b/	80	63	69	81	54

Source: See table 1.

a/ Gains from trade are defined as the product of the quantum of exports in any given year (at prices of the base year, 1948) and changes in the terms of trade since 1948 (see footnote 8 in part II).

b/ Over 100 per cent, indicating that part of the gains from trade were offset by declines in the quantum of exports.

Table 4. Quantum of Merchandise Exports of Selected Primary Producing Countries, 1949 to 1952 (1948 = 100)

Country	1949	1950	1951	1952 ^{a/}
All primary producing countries ^{b/}	96	108	110	109 ^{c/}
Argentina.....	73	104	87	50
Australia ^{d/}	111	110	104	101
Brazil.....	88	72	79	...
Burma ^{e/}	93	52	99	91
Ceylon.....	99	110	112	117
Chile.....	90	85	88	93
Egypt.....	108	107	79	...
Malaya.....	98	127	134	119
Mexico.....	104	117	109	106
Philippines.....	119	133	149	172
Southern Rhodesia.....	103	122	112	...
Turkey.....	128	126	129	150

Source: See table 2.

a/ Preliminary.

b/ See table 1.

c/ First six months.

d/ Twelve months ending 30 June of the year stated.

e/ Twelve months ending 30 September of the year stated.

98. In many primary producing countries, a further offset to increases in the capacity to import originates in the prevalence of foreign ownership among enterprises producing for export. In the short run, current operations of these firms affect the balance of payments of the exporting country principally through the remittance of profits and interest to non-resident stockholders and creditors.^{5/}

99. It is clear that exporters' profits tend to follow changes in export prices, although they are not directly related to the terms of trade themselves. Therefore, the rapid rise in export prices in many countries greatly increased the profits of foreign-owned companies. This was reflected in the increase in remittances of profits from Ceylon, Chile and Southern Rhodesia, among other countries, as shown in table 5.

100. In Chile, exports of large mining companies during the post-war period have represented between 70 to 80 per cent of the total value of exports. Taxation measures and foreign exchange policies pursued in the past by the Government have augmented the proportion of the proceeds of exports retained in the country. During 1948 and 1949 these policies - together with changes in inventories and other capital movements of large mining companies - tended to reduce the fluctuations in the amounts of foreign exchange accruing to the country. Thus, while the f.o.b. value of exports of these companies fell by United States \$76.8 million, their disbursements in Chile decreased by only United States \$10.0 million. However, opposite movements took place the following year, when exports rose by United States \$40.3 million while disbursements in Chile fell slightly, owing partly to reductions in inventories and increases in tax liability.

101. In Malaya, as in other Asian countries where the production and handling of exports are largely in the hands of foreign-owned enterprises, the extraordinary boom in export prices in 1950/51 greatly increased profits in the export sector. The dividend record of tin companies in Malaya was higher than at any time since the mid-nineteen twenties, while profits in

^{5/} Transfers of investment income by foreign-owned export companies were often large in mineral exporting countries. During 1950/51 transfers amounted to 18 per cent of the exports of these companies in Chile, 49 per cent in Iraq (including capital movements, however), and 31 per cent in Venezuela.

Table 5. Components of Balances of Payment of Selected Primary Producing Countries at 1948 Prices, 1948 to 1952
(Percentage of merchandise exports in 1948)

Country and year	Exports f.o.b.	Gains or losses from trade	Total capacity to import	Imports c.i.f.	Trade balance	Invisibles, net			Balance on goods and services	Financing of balance on goods and services			
						Investment income	Other services	Total		Unilateral transfers, net a/	Capital movements, net b/	Total	
Australia: c/ d/													
1947/48	100.0	-	100.0	-83.3	16.7	-10.3	-6.7	-17.0	-0.3	1.0	-0.7	0.3	
1948/49	110.8	13.6	124.6	-97.3	27.3	-9.4	-5.4	-14.8	12.5	-5.9	-6.6	-12.5	
1949/50	110.3	20.2	130.5	-116.2	14.3	-11.1	-9.9	-21.0	-6.7	-4.4	11.1	6.7	
1950/51	103.9	72.4	176.3	-132.5	43.8	-11.6	-13.3	-24.9	18.9	-2.4	-16.5	-18.9	
1951/52	102.0	7.9	108.9	-168.0	-59.1	-9.1	-20.0	-29.1	-88.2	-3.9	92.1	88.2	
Brazil:													
1948	100.0	-	100.0	-94.9	5.1	-9.1	0.5	-8.6	-3.5	...	3.5	3.5	
1949	87.7	12.3	100.0	-100.5	-0.5	-9.1	-0.5	-9.6	-10.1	...	10.1	10.1	
1950	72.1	71.2	143.3	-115.5	27.8	-10.0	-5.0	-15.0	12.8	...	-12.8	-12.8	
1951	79.0	71.2	150.2	-166.7	-16.5	-7.3	-7.3	-14.6	-31.1	...	31.1	31.1	
Ceylon:													
1948	100.0	-	100.0	-95.6	4.4	-4.9	9.0	4.1	8.5	-7.1	-1.4	-8.5	
1949	95.0	13.8	108.8	-107.7	1.1	-2.9	8.7	5.8	6.9	-5.8	-1.1	-6.9	
1950	98.0	53.2	151.2	-119.0	32.2	-2.1	0.6	-1.5	30.7	-5.7	-25.0	-30.7	
1951	106.0	70.6	176.6	-129.8	46.8	-5.8	2.0	-3.8	43.0	-6.9	-36.1	-43.0	
1952	110.0	8.7	118.7	-125.3	-6.6	...	...	...	...	...	...	...
Chile:													
1948	100.0	-	100.0	-81.8	18.2	-22.2	0.1	-22.1	-3.9	...	...	3.9
1949	89.8	1.3	91.1	-95.1	-4.0	-16.0	2.7	-13.3	-17.3	...	...	17.3
1950	84.5	5.4	89.9	-77.9	12.0	-18.7	1.3	-17.4	-5.4	...	...	5.4
1951	88.1	12.7	100.8	-87.5	13.3	-17.2	0.4	-16.8	-3.5	...	...	3.5
Egypt:													
1948	100.0	-	100.0	122.5	-22.5	-5.1	24.8	19.7	-2.8	-	2.8	2.8	
1949	117.1	-12.2	104.9	119.8	-14.9	-10.3	32.9	22.6	7.7	-	-7.7	-7.7	
1950	120.9	17.1	138.0	165.5	-27.5	-11.8	31.5	19.7	-7.8	-	7.8	7.8	
1951	83.8	47.8	131.6	157.6	-26.0	-11.3	27.5	16.2	-9.8	-	9.8	9.8	
Malaya:													
1948	100.0	-	100.0	-101.4	-1.4	...	...	5.7 e/	4.3 e/	...	...	...
1949	99.3	-2.3	97.0	-103.1	-6.1	...	...	5.5 e/	-0.6 e/	...	...	...
1950	131.3	60.0	191.3	-143.8	47.5	...	...	5.8 e/	53.3 e/	...	...	...
1951	133.4	105.4	238.7	-187.0	51.7	...	...	5.7 e/	57.4 e/	...	...	...
1952	115.1	51.8	166.9	-169.0	-2.1	...	...	...	...	...	...	...
Philippines:													
1948	100.0	-	100.0	-203.1	-103.1	-8.3	70.2	61.9	-41.2	56.9	-15.7	-41.2	
1949	115.9	-37.5	78.4	-192.0	-113.6	-13.8	21.8	8.0	-105.6	82.0	23.6	105.6	
1950	133.3	1.7	135.0	-146.2	-11.2	-6.0	10.3	4.3	-6.9	76.0	-69.1	6.9	
1951	148.9	-20.5	128.4	-164.8	-36.4	-7.6	13.6	6.0	-30.4	20.3	10.1	30.4	
1952 f/	167.0	-55.0	112.0	-141.3	-29.3	...	...	...	...	...	...	...
Southern Rhodesia: c/ d/													
1948	100.0	-	100.0	-148.1	-48.1	-6.3	-18.5	-24.8	-72.9	17.8	55.1	72.9	
1949	102.8	12.9	115.7	-184.7	-69.0	-8.4	-26.5	-34.9	-103.9	11.2	92.7	103.9	
1950	122.0	30.0	152.0	-188.4	-34.4	-10.5	-24.4	-34.9	-69.3	7.3	62.0	69.3	
1951	112.2	26.8	139.0	-230.0	-91.0	-12.2	-34.8	-47.0	-138.0	7.3	130.7	138.0	
Turkey: c/ d/													
1948	100.0	-	100.0	-163.3	-63.3	-3.6	-11.8	-15.4	-78.7	40.1	38.6	78.7	
1949	128.0	8.2	136.2	-169.5	-33.3	-7.1	-18.9	-26.0	-59.3	37.2	222.1	59.3	
1950	126.0	40.8	166.8	-186.0	-19.2	-8.7	-23.2	-31.9	-51.1	28.7	22.4	51.1	
1951	129.0	42.5	171.5	-190.7	...	...	...	...	...	...	...	...

Source: Computed by the United Nations Department of Economic Affairs on the basis of official statistics.

Exports and imports were deflated by their respective unit values; invisibles and financing items were deflated by import unit values. Gains or losses from trade were computed by the procedure explained in footnote 8 in part II. Figures for the last year shown are generally preliminary estimates.

a/ Including private remittances, immigration funds, donations, United States aid, grants by the Economic Cooperation Administration and other grants.

b/ Balancing figure: including short-term and long-term capital movements, changes in exchange reserves, errors and omissions and discrepancies due to statistical approximations.

c/ Imports, f.o.b.

d/ Net invisibles, other services: including freight and insurance on imports.

e/ Rough estimates, excluding investment income transferred abroad.

f/ Annual rate, January to November 1952.

rubber were among the highest recorded. This led to a heavy outflow of remittance on the score of investment income of foreign companies, which in 1950/51 were almost four times the amount in 1948/49. At the same time, yields of export duties on rubber and tin increased correspondingly.

102. Similar changes occurred in other Asian countries. In Ceylon, for example, the proceeds of export duties more than doubled between 1948 and 1951, while the value of exports rose somewhat less. In Indonesia, government receipts from export duties and exchange profits rose to an estimated 40 per cent of total revenues of the Government in 1951, rising parallel to the value of exports.

Short-term capital movements

103. The initial impact of a change in terms of trade on the foreign exchange resources available to an exporting country may be mitigated by capital movements. During the period 1948 to 1952, these capital movements - principally short-term - cushioned the economy of many exporting countries against the dislocating effects of excessive fluctuations in foreign demand. Table 5 indicates the trends in capital movements after 1948.

104. Short-term private capital movements, being responsive to speculative influences, might be expected to react to movements in terms of trade in so far as the latter give rise to expectations concerning the course of prices, financial developments or foreign exchange rates. On the other hand, monetary and fiscal agencies within an exporting country are in a position to apply compensatory policies by formulating their borrowing and investment programmes so as to relate the domestic aspects to the international accounts of the country. Thus it is to be expected that foreign public borrowing (either short-term or long-term) will be used to compensate for short-term fluctuations in the balance of payments.

105. After 1948 there were numerous instances of outward short-term capital movements from primary producing countries, coinciding in many cases with the rise in export prices. The magnitudes of these movements were greater with respect to the value of exports of some countries in the Far East and the Middle East, and of some of the less-developed countries in Latin America.

106. Many of these capital movements arose in the course of normal international trade transactions, such as increases in credits, customarily extended by local exporters to their customers abroad. In other instances, capital movements may have been purely speculative, owing, for example, to expectations regarding the course of exchange rates. However, in some cases they were probably related to the lack of suitable investment outlets in the primary producing country (or to considerations of risk) which tend to give rise to delays in transferring part of the value of exports to the exporting country. In these cases, an increase in the value of exports tends to be accompanied by an accumulation of idle foreign exchange balances in the hands of exporters or by short-term investment abroad, thus transferring to other countries a part of the income-generating effects accruing from the initial increase in the value of exports.

107. It may be noted, however, that the scope of such movements tends to be smaller in countries which have established comprehensive exchange controls, and in fact, supervision of the use of export proceeds has sometimes motivated the establishment of exchange controls. Furthermore, regulations governing exchange rates and the amounts of foreign exchange that exporters are required to surrender to the monetary authorities have been changed either to offset fluctuations in foreign exchange returns arising from price fluctuations, or as a stimulus to the expansion of exports. On the other hand, even in these cases an improvement in the balance of payments often leads to a relaxation of controls over capital movements, followed by an outward flow of capital, or an increase in the flow.

108. Akin to these capital movements and of still greater importance, was the accumulation of gold and foreign exchange assets by governments and central banks. The foreign exchange assets of primary producing countries as a whole increased by the equivalent of United States \$3,200 million between July 1950 and June 1951 but thereafter fell by United States \$1,900 million to the end of the first half of 1952, as the imports of primary producing countries continued to rise in spite of the decline in the value of their exports. This occasioned a reversal in 1951 and 1952 of the previous surplus in the balance on merchandise and service accounts in the majority of the countries.^{6/}

^{6/} See World Economic Report, 1951-52 and the surveys of regional economic commissions.

109. The accumulation of foreign exchange assets reached large proportions in some raw material exporting countries. In Burma, for example, the increase in value of exports in 1951, amounting to 236 million rupees, was accompanied by a net increase in gold and foreign assets of 154 million rupees. The increases in the value of the exports of Ceylon, Indonesia and Malaya in 1950 also led initially to a large expansion in the foreign exchange reserves of the countries, followed by similar movements, though of somewhat smaller magnitude, in the succeeding year. The immediate cause was the compensatory policy followed by monetary authorities. In addition, however, monetary authorities in Malaya (as well as in Ceylon until 1950) operate under an exchange standard which leads to purchases of foreign securities simultaneously with increases in currency in circulation.

110. Another type of compensatory capital movement is short-term borrowing, public and private, undertaken in unfavourable years, and followed by debt repayment during recovery. These are characteristic of a relatively high level of economic activity rather than a deficiency of aggregate demand, and occur more frequently in countries where the economy has reached a certain degree of diversification. For example, after the war and before 1950, Brazil had experienced a severe deterioration in the balance of current transactions, arising from the need for capital goods and raw materials, together with pent-up demand for many types of consumer goods. This led to substantial short-term borrowing and to an accumulation of deferred import payments which helped maintain the volume of imports. After an improvement in the terms of trade in 1950, the monetary authorities took steps to reduce short-term indebtedness, with the result that gains in trade during 1950, amounting to 16,000 cruzeiros (at 1948 import prices), were accompanied by outward capital movements, largely short-term, to the extent of nearly 5,000 million cruzeiros, and it was only towards the end of the year that the volume of imports began to increase substantially. In Chile, though for different reasons, short-term capital movements of foreign-owned mining companies also tended to offset the initial impact of changes in foreign trade gains, as indicated above.

Long-term capital movements

111. Although capital movements in the past have tended to aggravate the cyclical instability of the economies of under-developed countries, long-term capital movements have on occasion exerted a compensatory influence with respect to changes in the terms of trade. During 1948 to 1952, their role in this connexion was not conspicuous, particularly for private investment, which - except for investments in petroleum - was of relatively moderate magnitude during the post-war period. On the other hand, public borrowing for economic development may be adjusted, within an integrated development policy, to changes in the balance of payments. Thus, in Chile, the authorities increased their foreign borrowing in 1949/50 with a view to counteracting the fluctuations in foreign exchange resources brought about by the recession of copper prices in 1949. This succeeded in retarding the fall in imports until 1950 and foreign borrowing decreased again during 1951.^V

^V On the other hand, the improvement in the terms of trade the war facilitated the implementation of policies of redemption of long-term public debt or repatriation of foreign investments. This was the case in programmes carried out by the government of Brazil, among other countries, and also in the repatriation of foreign investment by private domestic investors, as in Ceylon.

Effects on the Output of Goods and Services

112. The gross geographical output of goods and services increased during 1948 to 1952 in almost all of the countries reviewed, as shown in table 6. The trends, however, varied from country to country. The rate of increase was greatest for Brazil, Ceylon, Malaya (until 1951), Mexico and the Philippines. In most other countries the rates of increase were smaller, while in Argentina and Burma the total output of goods and services actually decreased.

113. In analysing the trends, it is convenient to discuss production for export and the output of domestic industries separately.

Production for export

114. Although the prices of exports (particularly in 1950 and 1951) increased in the majority of the countries, the volume of production in the export sector in many cases rose only moderately or actually fell.

115. Reasons have been given earlier for expecting that the initial response of the export industries to an increase in export prices would often be of moderate magnitude, particularly in view of the technical difficulties in expanding production rapidly.^{8/} These factors were generally operative after 1948 and contributed to limit the increase in the output of exports. Furthermore, expectations of entrepreneurs regarding the temporary character of the additional demand - in so far as it was due to stockpiling, pipeline filling and speculative movements in industrial countries - probably helped to reduce producers' response. Similarly, price decreases in 1951 and 1952 were not followed initially by serious declines in the output of exports. Furthermore, the magnitude of price movements differed among commodities; hence the inducements to producers were not the same in all cases.

116. The relative importance of the factors mentioned above varied from country to country, as did the nature and magnitude of forces other than changes in external prices. The examples below indicate some of the variables influencing the output of exports in certain of the countries reviewed.

^{8/} See part II.

Table 6. Composition of Gross Geographical Product in Selected Primary Producing Countries, at 1948 Prices, 1948 to 1952 (Percentage of gross geographical output in 1948)

Country and year	Gross geographical output of goods and services			Gains, or losses (-), from trade	Total gross geographical product
	Exports ^{a/}	Other goods and services	Total		
<u>Argentina:</u> ^{b/}					
1948	12.2	87.8	100.0	5.8 c/	105.8
1949	7.3	92.9	100.2	3.2 c/	103.4
1950	10.2	78.4	88.6	2.4 c/	91.0
1951	11.0	79.8	90.8	0.8 c/	91.6
1952	6.3	77.1	83.4	0.3 c/	83.7
<u>Australia:</u>					
1947/48	21.7	78.3	100.0	-	100.0
1948/49	24.1	74.2	98.3	2.9	101.2
1949/50	23.9	82.3	106.2	4.2	110.4
1950/51	22.2	88.2	110.4	14.9	125.3
1951/52	22.0	81.9	103.9	1.6	105.5
<u>Burma:</u>					
1947/48 .....	...	...	100.0	-	100.0
1948/49 .....	...	...	91.4	-1.3	90.2
1949/50 .....	...	...	86.5	-5.6	80.9
1950/51 .....	...	...	98.9	16.6	115.5
<u>Brazil:</u>					
1948	12.2	87.8	100.0	-	100
1949	10.7	106.5	117.2	1.5	118.7
1950	8.8	108.3	117.1	8.7	125.8
1951	9.6	117.8	127.4	8.6	136.0
1952 ...					
<u>Ceylon:</u>					
1948	32.3	67.7	100.0	-	100.0
1949	31.7	68.5	100.2	4.9	105.1
1950	33.3	85.4	118.7	19.0	137.7
1951	34.6	91.1	125.7	25.1	150.8
1952	33.4	96.3	129.7	2.9	132.6
<u>Chile:</u>					
1948	12.4	87.6	100.0	-	100.0
1949	11.1	92.3	103.4	0.2	103.6
1950	10.5	92.0	102.5	0.6	103.1
1951	10.9	97.9	108.8	1.6	110.4

Table 6. Composition of Gross Geographical Product in Selected Primary Producing Countries, at 1948 Prices, 1948 to 1952 (Percentage of gross geographical output in 1948)
(continued)

Country and year	Gross geographical output of goods and services			Gains, or losses (-), from trade	Total gross geographical product
	Exports ^{a/}	Other goods and services	Total		
<u>Malaya:</u> ^{d/}					
1948	29.0	71.0	100.0	-	100.0
1949	29.9	76.1	106.0	-1.1	104.9
1950	31.4	86.6	118.0	29.5	147.5
1951	29.5	99.5	129.0	51.9	180.9
1952	26.8	82.2	109.0	25.5	134.5
<u>Mexico:</u> ^{b/}					
1948	15.1	84.9	100.0	0.8 <u>c/</u>	100.8
1949	15.4	90.5	105.9	-0.3 <u>c/</u>	105.6
1950	18.6	98.4	117.0	- <u>c/</u>	117.0
1951	18.1	103.5	121.6	2.2 <u>c/</u>	123.8
1952	19.7	107.9	127.6	0.8 <u>c/</u>	128.4
<u>Southern Rhodesia:</u> ^{e/}					
1948	51.9	48.1	100.0	-	100.0
1949	52.5	49.6	102.1	5.2	107.3
1950	60.5	50.4	110.9	12.1	123.0
1951	54.9	60.5	115.4	10.8	126.2
<u>Turkey:</u>					
1948	6.2	93.8	100.0	-	100.0
1949	7.9	75.7	83.6	0.5	84.1
1950	7.8	96.1	103.9	2.5	106.4
1951	8.0	109.6	117.6	2.6	120.2
<u>Philippines:</u>					
1948	18.5	81.5	100.0	-	100.0
1949	16.0	91.1	107.1	-3.8	103.3
1950	16.9	97.4	114.3	0.2	114.5
1951	18.0	111.9	129.9	-2.1	127.8
1952	20.2	113.7	133.9	-5.5	128.4

Sources: Argentina and Mexico: From United Nations, Economic Survey of Latin America, 1951-1952; other countries: computed by United Nations Department of Economic Affairs, on the basis of official statistics.

- a/ Quantum of exports, except Ceylon and Malaya, production for export.
b/ At 1950 prices.
c/ With respect to 1945.
d/ Based on data for national product.
e/ Net geographical output.

117. The production of copper in Chile fell between 1948 and 1949, and there was little increase in the three succeeding years. Technical problems relating to the nature and treatment of the ore were the principal factors which have tended to prevent a rapid expansion of output. In the case of nitrates, some of the plants were working at capacity in 1950 and 1951, and the uncertainty arising from the expansion of synthetic nitrogen probably tended to limit the growth in capacity and output during this period. The increase in the capacity of metal working industries in Chile permitted a sharp increase in the volume of exports of copper and iron semi-manufactures in 1951, a factor which contributed to the improvement of Chile's terms of trade in that year.

118. The rise in the prices of raw materials like rubber and copra stimulated some increase in output for export in Far Eastern countries in 1950 and 1951.^{9/} In Ceylon the index for rubber output reached 129 in 1951 (1948 = 100) but fell below the base year in 1952. Fluctuations in tea production were more moderate; and the age composition of the coconut trees was partly responsible for the fall in the output of coconut products before 1951.

119. In Malaya the output of rubber fell in 1949, recovered moderately in 1950 but declined sharply in 1951 and 1952. Tin production was expanded in 1949, as a result of the rehabilitation of the industry, but thereafter remained comparatively stable. On the other hand, the output of other agricultural export products rose steadily. Owing to these divergent trends, the composite index of the output of export products increased by only 8 per cent between 1948 and 1950, and the gains were lost in the next two years.

120. The output of export crops in the Philippines was stimulated by repair of war-time destruction. The rise in domestic demand due to internal inflation, however, served to retard recovery in output for export by comparison with domestically-consumed products in the post-war period, until 1948 or 1949. In the following years, the services furnished to foreign governments declined and partly offset the expansion of merchandise exports.

121. In Brazil, production of coffee is limited by the age composition of the coffee bushes, a result of inadequate planting during years of low coffee prices. The high prices reached after 1949 may have helped to raise productivity through the increased use of fertilizers, the spread of irrigation and other technical

^{9/} It should be noted, however, that at its peak the over-all level of production barely exceeded the pre-war levels.

improvements, but these failed to bring about an increase in output until 1952.^{10/} The second largest export product, cotton, showed a rising trend in production during most of the period 1948 to 1952, but exports have lagged partly because of changes in quality and over-valuation of the cruzeiro^{11/} and also, probably, because of a relative shift to the domestic market in some years.

122. In Egypt, the fact that suitable land resources were already fully utilized prevented more rapid expansion of cotton production after 1949. On the other hand, in Southern Rhodesia output of the major export crop, tobacco, rose sharply between 1948 and 1950 owing to large investments in the industry (though drought caused a fall in yields in 1951, and exports declined). This illustrates the lag in the effects of price increases, for it was the rise in prices in 1946 and 1947 that stimulated the increase in output; price changes after 1948 were comparatively small.

123. In numerous instances, the rise in export prices was accompanied by appreciable increases in output. This happened in the case of cotton in Mexico and Turkey, coffee (aside from Brazilian) and cacao. In some of the countries exporting agricultural raw materials, the expansion in export production was achieved in part at the expense of food crops. Such was the case in the Far East,^{12/} as well as in Mexico and, probably, in Egypt. In these cases the incentive to increase the output of raw materials arose in part from the fact that their prices increased; the fairly stable trend of cereal prices during the period under review probably tended - among other factors varying from country to country - to discourage an increase in cereal production among exporting countries. Both cultivated area and production of wheat and corn tended to remain stationary or to decline in Argentina and Australia. Rice production in the Far East likewise failed to record significant gains between 1949 and 1950,^{13/} while prices remained comparatively steady, and from 1950 onward rose only slightly.

^{10/} See United Nations, Economic Survey of Latin America, 1951-1952.

^{11/} Ibid.

^{12/} See United Nations, Economic Survey of Asia and the Far East, 1951, page 12.

^{13/} Ibid., pages 8 to 13. The report discusses other factors which contributed to reduce the volume of food production in that region.

124. Among wool exporting countries, the course of prices in 1950 and 1951 induced a moderate expansion of output in Argentina, Australia and Uruguay, limited by the size of flocks.

Output of domestic industries

125. In contrast with the trends in production for export, significant increases were recorded in the output of other sectors among most of the countries reviewed. As a consequence, the ratio of the output of domestic industries to exports generally increased throughout most of the period.

126. The trends in output of domestic industries, again, were not similar in all countries, but depended on the relative strength of the factors mentioned in part II (for example, the amount of gains from trade and the proportion retained within the country, the spending habits of the population, the diversification and capacity of domestic industries). In addition, the trends recorded after 1948 showed the influence of many other variables, the nature and strength of which differed from country to country.

127. One temporary characteristic of the post-war period in many countries was the existence of a substantial unsatisfied demand. This resulted primarily from restrictions on international trade during the war, which led to a reduction in imports into primary producing countries of consumer goods as well as capital goods. In many of these countries the expansion of secondary industry during the war had increased the demand for equipment both for replacement and for new investment, while in other countries, the repair of war-time damage also led to an increase in the post-war demand for capital goods. In all these cases, the propensity to consume and to invest were high.

128. At the same time, the recovery in imports during the post-war period had permitted expansion in the capacity of industries producing capital goods as well as consumer goods. Hence, in some countries, such as Argentina, Brazil and the Philippines, relatively large increases in output were recorded in 1948 or 1949, although gains from trade contributed but little to the product of these countries in these years.

129. The increase in the output of domestic industries was sometimes facilitated by the fall in import prices. This factor was apparent in a few cases in 1949, when it strengthened the influences of the existing high propensity to consume and to invest, mentioned above.

130. Another factor working in the same direction was the existence of large-scale public or private investment programmes. The importance of these to under-developed countries obviously transcends short-term considerations and in many cases such programmes are not closely related to current economic conditions. In the present context, however, they are significant principally because if the nature and timing of investments permit a prompt rise in output, the additional demand arising out of gains from trade is likely to be more easily met by additional supplies. Several instances of this relationship were observed after 1948, for example, in Brazil, Turkey and Southern Rhodesia, among others.

131. Manufacturing. In certain countries secondary increases in output in response to gains from trade were facilitated by the development and diversification of domestic manufacturing industries. This is due partly to higher productivity of industry in general, partly to relatively high income-elasticity of demand for manufactured products, partly to greater flexibility in adjusting industrial production plans and partly to the greater readiness of industrial entrepreneurs to respond to economic inducements. The incentive to increase output and thus to spread the gains in foreign trade may be expected to be higher in countries where manufacturing industry furnishes an important contribution to the national product, at least up to the point when a state of full employment has been reached.

132. The dynamic role of secondary industry is apparent in Australia, where manufacturing development and diversification have reached substantial proportions. Australian gains from trade until 1951 were accompanied by significant increases in the output of goods and services, in spite of high propensity to import, foreign competition and the achievement of nearly full employment of labour and capacity in many branches of industry.

133. In Brazil, where industry contributes one-third of the gross geographical product, the response of the economic system was similar, although the magnitudes were different. Between 1948 and 1951, gains in foreign trade amounted on the average to 7 per cent of the geographical product, and were associated with larger increases in non-export production. Here the rise in the terms of trade took place largely during the late part of 1949 and the early months of 1950, but compensatory monetary policy eased the impact of the improvement in the terms of trade and permitted a more orderly response of the economic system.

134. In Chile, the magnitude and timing of the changes were different, although the sequence of events was essentially similar. Chile has succeeded to a substantial extent in replacing imported non-durable consumer goods by domestic products although it is still dependent upon imports of most capital goods and a number of raw materials and petroleum. Thus, although exports represent less than 10 per cent of the geographical product, the significance of foreign trade to the economy is still very great. During the period 1948 to 1951 gains in foreign trade, averaging about one per cent of the geographical product, were accompanied by larger increases in the output of goods and services for the domestic market. The strategic role of foreign trade was apparent in 1950: a decrease in imports occurred as a consequence of the contraction in the capacity to import which followed the fall in copper prices in 1949. Although the volume of imports of raw materials and the output of manufacturing industries were maintained (partly by the utilization of inventories and partly at the expense of imports of consumer goods), total output of goods and services levelled off and investment suffered a significant decline. The recovery in copper prices during the latter part of 1950 coupled with other favourable factors created conditions leading to a renewal of the upward trend in total output during the following two years.

135. In the above three instances the output of industries producing for internal markets rose faster than total output while the output of most export goods became less (or actually fell), resulting in a relative decline in the ratio of exports to total output. It should be noted also that economic activity was maintained in these countries not only by favourable trends in foreign trade prices but also by a high level of domestic investment, both public and private.

136. Among countries where the industrial base is narrower, the stimulus from gains in foreign trade elicited only a limited response in the short-run. The favourable movement in the terms of trade between 1948 and 1951 led to substantial expansion of imports of consumer goods, raw materials (and in certain cases foodstuffs as well) and sometimes to higher land rents.

137. Nevertheless, considerable expansion in the output of manufacturing took place in a number of countries. In Malaya, industrial output starting from a low level rose nearly 75 per cent between 1948 and 1951. A similar trend,

though much less marked was observable in Ceylon, Egypt and the Philippines. In these cases, inadequate capacity in manufacturing industries probably limited the volume of production and the magnitude of industrial expansion.

138. In many countries expansion in manufacturing output was facilitated by increased investment in industry. This was the case in Australia, Brazil and Chile, as well as in other countries. In Southern Rhodesia, for example, manufacturing output rose by one-third between 1948 and 1950 and further large gains appear to have occurred in the following year. In this case, employment in construction indicated that activity in this industry expanded even more than in manufacturing. In Mexico, manufacturing production rose by 45 per cent between 1948 and 1952 but here the gains from trade probably did not play a decisive role in bringing about the expansion of the economy because of the limited magnitude and erratic direction of changes in terms of trade.

139. When the terms of trade move against primary producing countries, the unfavourable impact on the over-all level of economic activity can be offset, partly or wholly, by the expansion of output in industries producing for the home market with the support of appropriate government policies. This was the case in Argentina, where the terms of trade reached a peak in 1948 and then deteriorated sharply. While the output of agriculture fell, owing partly to climatic conditions, industrial output, including construction and public utilities, though lower in 1949, thereafter remained fairly constant until 1951, at a level somewhat below the 1948 maximum but above the volume of earlier years. In contrast, the level of activity in the remaining sectors increased rapidly until 1949, dropped back in 1950 to the 1947 level and again fell in 1952.

140. Similar evidence of sustained manufacturing production appeared in 1952 in other countries affected by the recession in raw material prices, including Malaya, the Philippines and, probably, Ceylon.

141. The case of Argentina also exemplifies the cumulative effects of an adverse movement in terms of trade.^{14/} The output of manufactures had a stabilizing

^{14/} In this country, as in others, the effects were the result not only of changes in the terms of trade but also of other factors (see United Nations Economic Survey of Latin America, 1951-1952, chapter II).

influence in 1949 to 1951. As the terms of trade steadily worsened after 1948, however, it became increasingly difficult to maintain the supply of certain raw materials and fuels, while domestic markets began to shrink. The turning point was reached in 1952 when the terms of trade had fallen to about 50 per cent below the 1948 peak; a further decline in the agricultural production and in exports, as a result of drought, forced a drastic cut in imports and this, together with smaller public investment following the completion of the five-year plan, reduced aggregate demand and was followed by a reduction in the output of industry for the first time since 1949.

142. Manufacturing industries in the majority of primary producing countries are largely dependent upon imported equipment and very often upon imported raw materials. Hence, gains from trade in 1950/51 resulted in increased imports in both categories. Output and the ability to absorb raw materials, however, are limited in the short run by the productive capacity of the industries in question. When a condition of full employment is reached, the rise in domestic prices stimulates the importation of both equipment and finished consumer goods. This was apparent in 1950 and 1951 in Australia as well as in certain other countries. In these cases, an adverse movement in the capacity to import may later lead to a reduction in imports of finished consumer goods and capital goods before imports of raw materials, fuels and, in certain cases, essential consumer goods are affected. In Australia, for example, the reversal in terms of trade in 1951/52 at a time of quickly rising imports was followed by a drop in the level of industrial production which led to the introduction of severe restrictions on imports in 1952.

143. In Argentina, imports of raw materials and fuels constituted more than one-fourth of total imports during the period 1947 to 1949, and imports of capital goods close to 45 per cent of the total in the same period. After 1949, the volume of imports of raw materials remained steady and fuel imports increased moderately. Imports of consumer goods, however, fell by 63 per cent between the period 1947 to 1949 and 1952, while those of capital goods dropped nearly 40 per cent, although in both cases the decline was offset in part by an expansion in domestic output. In Chile, the short-lived contraction of imports in 1950 affected consumer goods and fuels. Imports of capital goods levelled off but did not actually fall.^{15/}

^{15/} Economic Survey of Latin America, 1951-1952.

144. Agriculture. The pattern of land tenure, technical conditions of production, the availability of unused land and the nature and size of markets, together with climatic conditions, are among the factors which determine both the level of agricultural and pastoral output and its response to favourable prices; some of these variables may tend to diminish or obscure the immediate impact of price changes. In certain instances the development of agricultural production was held down by the movement of population to the cities, encouraged by industrial development. The output of agricultural and livestock production between 1948 and 1951 showed, on the whole, little initial response to short-run price changes, not only in the case of export products but also in the case of products for internal consumption.

145. With respect to the latter, however, some outstanding exceptions are to be found in countries where recent advances in production reflect the play of temporary factors, such as the rehabilitation of installations damaged during the war or shifts in international demand. Thus, Indonesia, Malaya, the Philippines and Thailand substantially increased their agricultural output after 1948.

146. In other cases in which significant progress was achieved in the output of agricultural produce for the domestic market, increases in production were facilitated by governmental programmes for agricultural development. This was the case in Colombia and Uruguay, among other Latin American countries, as well as in Ceylon and Turkey. In Ceylon, the land development programme was accompanied by an increase in production for the domestic market of over 30 per cent between 1948 and 1951. In Turkey, the extension of mechanization facilitated the increase in output of cereals, leading to an exportable surplus of wheat in 1952.

147. Other sectors. Activity in services and public utilities generally increased in most of the countries reviewed. The rates of increase were not equal for all countries or among different sectors; in transport and power industries especially, the rise was limited in some countries by inadequate capacity, which could not easily be expanded in the short run. In some countries where industries producing for domestic markets do not contribute significantly to the national income, commerce and personal services were among the sectors which expanded at a greater rate in response to gains from trade.

148. In many instances internal commercial activity rose almost simultaneously with external prices, for example, in Brazil during 1949 and 1950 and in Ceylon during 1950 and 1951. In Malaya, the expansion in entrepôt trade during the same years contributed significantly to the rise in the geographical output of the country.

149. On the other hand, price declines in 1952 were accompanied in some of the countries by substantial contraction in commercial activity, which was among the major causes of the decline in the geographical output of goods and services recorded.

Effects on the Course of Domestic Prices and the Distribution of Incomes

The course of domestic prices

150. In many under-developed countries inflationary tendencies appeared with the rise in foreign trade prices after 1948. However, the magnitude of price increases varied greatly among countries, as shown in table 7, as did the relative importance of inflationary forces of external or domestic origin and the strength of anti-inflationary policies.

151. In each country, therefore, changes in foreign trade prices were only one of the forces at work, and their contribution to the movement in domestic prices was not always decisive. The influences of different variables mentioned above cannot always be clearly separated, however, in some cases it is possible to indicate the strength of the influence of foreign trade prices on the course of other prices. The following analysis attempts to abstract from general inflationary and deflationary tendencies those that were immediately connected with foreign trade prices.

152. The composition of imports clearly influenced the course of domestic prices. First, the relative stability of prices of cereals and, to a lesser degree of textiles and other consumer goods, contributed to keep the cost of living down, especially in countries where consumption is relatively less diversified, while in some instances declines in the prices of certain imported capital goods probably contributed to reduce production costs in industry. In countries where raw materials constitute a significant proportion of imports, however,

movements in import prices and domestic prices corresponded less closely. Furthermore, in countries experiencing an expansion of investment in export or manufacturing industries, or in other fields, the trends in both import and domestic prices, including cost of living items, tended to rise more sharply than in other countries.

153. On the other hand, in many of the countries, producers in export industries did not expand their demand for goods and services from other sectors to the same extent as proceeds from exports increased. Not only production remained fairly stable in the export sector, but in some of these countries new investment in export industries actually declined; in these cases taxation of exports and other fiscal measures were among the most significant means of stimulating economic activity in other sectors of the economy by increasing the aggregate demand for goods and services.

154. In many of the countries reviewed the course of domestic prices was perhaps less closely related to export than to import prices. The relation between these price series was less close, however, in some countries in which foreign trade is small in relation to the gross geographical product (for example, Brazil) or where, as in Australia, the export sector is closely integrated with the rest of the economy, and the achievement of substantially full employment in many industries limited the magnitude of secondary increases of output in other sectors. The following paragraphs indicate briefly some of the major forces active in individual countries,

155. In Southern Rhodesia, which imports many foodstuffs and consumer goods, the cost of living and import prices tended to show parallel trends until 1951. The expansion of manufacturing output, however, probably contributed in this case to moderate the increase in the cost of living, counteracting the rise in prices of imported goods. Egypt, which is also a food importing country, lowered or abolished import duties on cereals and this contributed to the stability of retail prices and also permitted an increase in food supplies in spite of a moderate shift in production from cereals to cotton. Simultaneously, duties on finished consumer goods were raised, and those on raw materials and capital goods were lowered, to stimulate investment and production in manufacturing. This in turn led to a significant increase in money wages in the towns,

Table 7. Indices of Prices and Wages in Selected Primary Producing Countries, 1949 to 1952
(1948 = 100)

Country and item	1949	1950	1951	1952 ^{a/}
<u>Australia:</u>				
Export prices:				
All items	118	135	234	166
Wool	127	165	348	197
Metals	128	113	185	218
Import prices:				
All items	105	114	138	154
Wholesale prices:				
All items	112	132	163	184
Imported goods	104	121	138	149
Cost of living:				
All items	109	120	146	170
Food	111	125	162	201
Money wages	112	122	147	179
<u>Brazil:</u>				
Export prices	106	159	189	...
Import prices	93	80	100	...
Wholesale prices	110	127	154	172
Cost of living:				
All items	98	104	113	133
Food	96	103	108	131
Money wages in manufacturing	114	124	132	150
<u>Ceylon:</u>				
Export prices	106	144	175	136
Import prices:				
All items	95	98	116	136
Grains and flour	96	94	101	129
Textiles	82	85	101	82
Capital goods	99	102	140	128
Cost of living (Colombo):				
All items	99	105	109	108
Food	104	112	112	110
Money wages on plantations	102	119	145	146

Table 7. Indices of Prices and Wages in Selected Primary Producing Countries, 1949 to 1952 (continued)
(1948 = 100)

Country and item	1949	1950	1951	1952 ^{a/}
<u>Chile:</u>				
Wholesale prices:				
All items	114	134	175	217
Domestic goods	114	130	164	210
Food	109	116	137	...
Textiles	119	138	172	...
Imported goods	115	143	200	234
Food	130	189	232	...
Raw materials	110	134	175	...
Cost of living:				
All items	119	137	167	204
Food	115	134	169	216
Money wages in manufacturing	120	141	156	...
<u>Egypt:</u>				
Export prices	89	115	182	...
Cotton	82	145	174	106
Import prices	100	101	116	...
Metals	95	124	140	119
Fertilizers	107	107	107	107
Wholesale prices	94	104	116	113
Cost of living:				
All items	99	104	114	113
Food	102	111	120	117
Money wages in industry	107	135	...	...
<u>Malaya:</u>				
Export prices:				
All items	98	173	258	187
Rubber	92	263	388	237
Tin	110	128	196	177
Import prices	101	115	144	129
Cost of living (January 1949 = 100):				
All items .....	...	108	136	138
Food .....	...	97	104	110

Table 7. Indices of Prices and Wages in Selected Primary Producing Countries, 1949 to 1952 (continued)
(1948 = 100)

Country and item	1949	1950	1951	1952 ^{a/}
<u>Mexico:</u>				
Wholesale prices:				
All items	110	120	148	154
Raw materials	113	126	166	168
Cost of living:				
All items	105	112	126	144
Food	104	108	124	144
<u>Philippines:</u>				
Export prices:				
All items	69	77	84	63
Copra	64	74	76	48
Sugar	114	116	118	111
Import prices	104	79	100	94
Wholesale prices (1949 = 100):				
All items	100	97	109	100
Domestic goods	100	93	101	93
Imported goods	100	122	153	136
Cost of living:				
All items	94	93	99	95
Food	93	86	94	90
Wearing apparel	95	130	175	...
Money wages:				
Agriculture	104	102	103	105
Unskilled labour, Manila	104	91	99	105
<u>Southern Rhodesia:</u>				
Export prices:				
All items	116	137	161	
Import prices:				
All items	103	110	130	
Cost of living:				
All items	106	114	121	
Food	107	121	131	
Clothing	108	115	127	

Table 7. Indices of Prices and Wages in Selected Primary Producing Countries, 1949 to 1952 (continued)
(1948 = 100)

Country and item	1949	1950	1951	1952 ^{a/}
<u>Turkey:</u>				
Export prices:				
All items	100	102	121	122
Cotton	116	112	186	
Tobacco	90	93	91	81
Import prices:				
All items	94	77	91	92
Wholesale prices:				
All items ^{b/}	108	97	103	104
Raw materials	104	94	114	108
Cost of living:				
All items	110	104	103	109
Food	112	106	102	110

Source: United Nations, Statistical Yearbook, 1952, Monthly Bulletin of Statistics and official national statistics.

^{a/} Preliminary.

^{b/} Domestically consumed goods.

particularly after 1949. On the other hand, there are indications that wages in agriculture rose less rapidly and that profits of tenant farmers probably increased somewhat but less than land rents.

156. In Turkey, which had become more self-sufficient in respect of food supplies, crop failures in 1949 and 1950 curtailed the availability of foodstuffs and raised food prices, but in 1951 the output of cereals and legumes (and of agricultural raw materials) greatly increased again. Imports of cereals at relatively low prices helped to maintain domestic supplies of food, and in 1952, the recovery of cereal production was complete leading to the emergence of an export surplus. Furthermore, unit values of imported goods generally fell after 1948, thus aiding the maintenance of domestic price stability. On the other hand, wages - and manufacturing output and construction - rose sharply in the cities, although in 1950 they had not recovered to pre-war levels.

157. The stability of import prices of textiles and food before 1951 helped to maintain relatively stable price levels in Ceylon, which is greatly dependent on many essential imports. Money wages rose considerably on rubber, tea and coconut plantations but in urban occupations wages and costs appeared to have risen less during the export boom in 1950 and 1951. At the same time, the development of agricultural production for internal markets added to the effectiveness of anti-inflationary policies and rising real incomes among agricultural producers.

158. In other countries, some of the factors mentioned above were also operative but inflationary trends - arising in part from general scarcities due to war-time destruction and from rehabilitation expenditures - brought about a general rise in domestic prices of the same intensity as the increases in money wages. However, in some of these countries wages in export industries tended to rise above the average. In the Philippines, rehabilitation in agriculture was accompanied by substantial increases in production. On the other hand, the capacity to import generally moved downwards, first because of the drop in export prices in 1949 and 1951 and, second, because of gradual reduction in governmental grants. This led to a contraction of imports after 1950, reflected in increased prices of manufactured goods, which prevented the cost of living from falling to the same extent as

food prices. Money wages in the cities declined slightly between 1949 and 1950, but recovered thereafter.

159. In Malaya the expansion of activity in urban industries only partially moderated the inflationary consequences of a rise in import prices, because of the lack of development of domestic industries. Accordingly, the cost of living index in Singapore followed the direction and magnitude of the index of import prices.

Distribution of incomes and changes in employment

160. Fluctuations in the terms of trade have a direct effect on the distribution of incomes accruing from exports and an indirect effect through the secondary impact of the changes in incomes on employment, production and prices.

Therefore, the ultimate consequences of a change in terms of trade are not easily distinguishable from those of other variables. In the majority of the primary producing countries reviewed for which information is available, aggregate real incomes grew during 1948 to 1951, but aggregate labour incomes rose at a lesser and steadier rate than other incomes. However, in many cases in which export prices and terms of trade fell in 1952, real labour income continued to increase, while other incomes fell. These changes occurred within the export sector, which was the sector most directly affected by variations in export prices, but similar changes probably occurred in non-export industries in general.

161. The analysis in the preceding chapters points to some of the causes underlying the trends noted above: first, the export boom was primarily a phenomenon of price rather than of quantity; second, its short duration limited the effect of inflationary increases in domestic demand arising from gains in foreign trade; third, the high elasticity of the supply of labour, especially in countries where the subsistence agriculture sector is important, rapidly translated increases in the demand for labour into an expansion of employment and retarded the rise in real wage rates in the market economies.

162. Employment showed rising trends until 1951 in the countries for which information is available, but in 1951 and 1952 it tended to level off in some of them although few instances of actually falling employment were noted.

By and large, after 1948, real wage rates were more stable than either employment or aggregate real wages. Thus, in the short run it appears that the largest gains in the standard of living among wage earners, especially among the less developed countries, were achieved by those formerly employed in the low-productivity sectors and were brought about as a result of their shift to employment having higher productivity and wages.

Government revenue

163. During the period of rising prices before 1951, revenue increased in the majority of primary producing countries reviewed, both in money terms and in real terms.^{16/} The increase in revenue extended to export taxes - in countries where these were in effect - and also to other taxes, as a result of the rise in the value of exports and in the gross national product. In 1949, devaluation of currencies led in many Asian and Latin American countries to the establishment or revision of export taxes, designed to channel to the treasury a proportion of the increased value of exports. A similar process accompanied widespread price increases in 1950 and 1951. Some countries raised additional revenue from profits of fiscal agencies active in foreign trade or from profits arising from exchange controls.

164. In most Asian countries, proceeds from export duties rose rapidly. Thus, in Malaya the yields of ad valorem duties on rubber and sliding-scale duties on tin rose fivefold between 1948 and 1951. Revenue from export taxes, which constituted one-fourth of the total revenue of the Federation of Malaya in 1948, accounted for almost one-half in 1951. In Ceylon, proceeds from export duties more than doubled between 1948 and 1951, and their share in total government revenues increased from 20 per cent in 1948 to 36 per cent in 1951.

165. In most countries, however, public revenues initially lagged behind the rise in the value of exports and of gross product. This was due in some cases to delays involved in the enactment or revision of taxes and, in others, to delays inherent in the collection of certain categories of revenue, such as

^{16/} A brief discussion of the relation of fluctuations in prices and changes in government revenue is included in part II.

income taxes. As a consequence, in 1950 - and even in 1951 - the ratio of public revenue to gross national product declined in many countries, but recovered in 1952 as the yield of taxes continued to grow while the gross geographical product tended to level off or actually decrease.

166. In 1952, export taxes were lowered in some countries, and differential exchange rates adjusted with a view towards mitigating the loss of income in the export sector. In these cases, it is probable that revenue may fall after 1952.

167. In 1950 to 1952, however, public expenditure increased earlier and more steadily than revenue, not only because of inflationary price increases but also because of expanded governmental action, including the use of food subsidies in some countries, as well as widespread increases in development expenditures. Hence, delay in the increase of tax receipts led to the reduction of surplus or to actual deficits which, to the extent that they were financed from banking sources, tended to exert inflationary pressure. On the other hand, public expenditures remained high or were actually increased in 1952 in many countries. Although in that year revenue was exceptionally high in a number of countries, it declined in others; in the future, the decline in tax receipts may likely jeopardize development plans, unless new sources of revenue or credit can be developed.

The course of investment and development planning

168. Increases in profits accompanying rising prices and higher real national incomes generally induce optimistic expectations among entrepreneurs and hence lead to an increase in the volume of capital formation. This was generally the case in most under-developed countries during the period after 1948.

169. Table 8 shows trends in consumption and investment. Gross domestic capital formation rose steeply between 1948 and 1951 in the majority of the countries. In some of the Far Eastern countries, however, the gradual levelling off in expenditures for rehabilitation of war-time damage, together with unsettled political conditions in certain instances, contributed to hinder the rise in capital formation.

170. In the majority of the countries reviewed, gross capital formation grew at a greater rate than the gross geographical product, notably in Brazil, Ceylon, Mexico and Southern Rhodesia. In Australia, the rate of increase in capital formation was smaller than in gross product, but the initial amounts in 1947 to 1949 were large not only in absolute figures but also in relation to gross geographical product. During the period 1948 to 1952, gross capital formation averaged 24 per cent of gross product. In Southern Rhodesia the ratio was even larger, averaging 44 per cent. In most other countries, however, the ratio of investment to gross product was much smaller, averaging 13 per cent for Brazil, 9 per cent for Ceylon, 12 per cent for Chile and 15 per cent for Mexico.

171. The contribution of foreign investment to the volume of capital formation varied widely among the countries reviewed. Table 8 shows that a few countries were able to attract relatively large amounts of foreign capital. In Southern Rhodesia the inflow of foreign capital (together with immigrants' funds) represented nearly three-fourths of total capital formation. In other countries the participation of foreign capital was smaller.^{17/} On the whole, there was little evidence that foreign investment - particularly long-term capital - was directly related to current changes in the terms of trade to a substantial extent. In many instances, the flow of foreign capital appeared to be related to availability of resources, comparative costs, security of investment, level of demand for particular products and similar considerations. In some instances, outward capital movements (including increases in foreign assets) more than offset the inflow of foreign long-term capital. On occasion, net outward capital movement was larger than total domestic capital formation.

172. The results described above are to some extent a consequence of the investment process. Clearly, the amount of investment in fixed capital need not vary directly with short-term influences, such as a rise in prices, regardless of the magnitude of such changes, when these are not expected to last. This is because entrepreneurs plan production with a view to maximizing the net returns expected during the normally long lifetime of capital assets. Furthermore,

^{17/} In some countries, including the Philippines (particularly until 1950) and Turkey, foreign grants supplemented the inflow of foreign capital.

Table 8. Gross Available Domestic Means, at 1948 Prices,
and Their Allocation, 1948 to 1952
(Percentage of gross geographical output in 1948)

Country and Year	Gross geographical product	Net imports or exports (-) of goods and services a/	Net investment income trans- ferred abroad	Gross domestic means available for consumption and investment	Allocation			
					Private consumption	Government consumption of goods and services	Gross domestic Public	Capital formation Private
Argentina:								
1948	105.8	-0.5	-0.2	105.1	82.5		22.6	
1949	103.4	1.6	-0.2	104.8	85.2		19.6	
1950	91.0	-1.2	-	89.8	73.3		16.5	
1951	91.6	2.7	-	94.3	75.7		18.6	
1952	83.7	3.9	-	87.6	74.9		12.7	
Australia:								
1947/48	100.0	-	-2.2	97.7	66.4	7.2	5.0	19.1
1948/49	101.2	-2.6	-0.5	98.1	70.4	8.5	6.4	12.8
1949/50	110.4	1.4	-1.2	110.6	75.1	9.2	8.6	17.7
1950/51	125.3	-3.9	-1.4	120.0	81.2	10.3	10.3	18.2
1951/52	105.5	19.1	-2.0	122.6	79.2	11.7	10.2	21.5
Burma:								
1947/48	100.0	6.7	-	106.7	82.0		24.7	
1948/49	90.2	-4.2	-	85.9	69.1		16.8	
1949/50	80.9	-1.4	-	79.5	66.0		13.5	
1950/51	115.5	-8.3	-	107.2	71.2		36.0	
Brazil:								
1948	100.0	0.4	-1.1	99.3	87.3		2.9	9.0
1949	118.7	1.1	-1.1	118.7	103.7		3.9	11.1
1950	128.6	-1.4	-1.2	123.0	107.5		2.9	12.6
1951	135.4	3.9	-0.9	138.4	117.7		3.9	18.8
Ceylon:								
1948	100.0	-3.1	-1.7	95.2	89.0 b/		6.2 g/	
1949	105.1	-2.4	-1.0	101.7	94.0 b/		7.7 g/	
1950	137.7	-10.9	-0.7	126.1	114.5 b/		11.6 g/	
1951	150.8	-14.9	-2.1	133.8	118.3 b/		15.5 g/	
1952	132.6	3.9	-1.0	135.5	...		...
Chile:								
1948	100.0	0.5	-2.8	97.7	85.1 b/		12.6 g/	
1949	103.6	2.1	-2.0	103.7	89.9 b/		13.8 g/	
1950	103.1	0.7	-2.3	101.5	87.8 b/		13.7 g/	
1951	110.4	0.4	-2.1	108.7	94.5 b/		14.2 g/	
Malaya:								
1948	100.0 d/	-2.1		97.9	88.7 b/		9.2 g/	
1949	104.9 d/	0.3		105.2	97.3 b/		7.8 g/	
1950	147.5 d/	-26.2		121.3	111.6 b/		9.7 g/	
1951	180.9 d/	-28.2		152.7	138.9 b/		13.8 g/	
1952	134.5 d/	
Mexico:								
1948	100.8	2.1	-1.9	101.1	87.0		5.1		9.0
1949	105.6	0.5	-2.0	104.1	88.9		5.9		9.3
1950	117.0	-0.8	-1.6	111.6	98.6		7.0		9.0
1951	123.8	3.0	-1.7	125.1	106.5		8.1		10.5
1952	128.4	0.8	-1.6	127.6	106.5		9.2		11.9
Philippines:								
1948	100.0	4.2	-0.8	103.4	85.8	6.3	1.7	9.6
1949	103.3	10.5	-1.4	112.4	95.4	7.6	1.9	7.5
1950	114.5	0.7	-0.6	114.6	94.6	9.5	2.2	8.3
1951	127.8	2.6	-0.8	129.6	112.8	5.9	1.8	7.9
1952	128.4	...	...	...	...	...	...	...
Southern Rhodesia:								
1948	100.0 g/	29.3	-2.5	126.8	76.1	10.2	40.5	
1949	107.3 g/	41.9	-3.4	145.8	84.3	11.1	50.1	
1950	123.0 g/	28.0	-4.2	146.8	90.2	12.8	43.8	
1951	126.2 g/	55.6	-4.9	176.9	97.0	14.6	65.3	
Turkey:								
1948	100.0	4.9	-0.2	104.7	...	...	...	...
1949	84.1	3.7	-0.4	87.4	...	...	...	...
1950	106.4	3.2	-0.5	109.1	...	...	...	...
1951	120.2	3.2	-0.5	122.9	...	...	...	...

Sources: Argentina and Mexico: United Nations, Economic Survey of Latin America, 1951-52; other countries: computed by United Nations Department of Economic Affairs, on the basis of official statistics.

- a/ This series represents the combined capital inflow (outflow -), unilateral transactions and errors and omissions in the balance of payments.
 b/ Including changes in inventories.
 c/ Excluding changes in inventories.
 d/ Gross national product.
 e/ Net geographical product.

when - as was frequently the case in 1949 and 1950 - enterprises were working below capacity, a rise in sales prices over unit costs need not be followed immediately by new investment, except for expenditures to put idle installations back into production and perhaps to modernize production processes.

173. In addition, even when the above considerations do not apply, some time normally elapses between a change in incomes and profits and a corresponding change in the volume of investment. The delays involved generally differ among categories of investment and may be expected to be longer for investments in fixed capital.^{18/} If in the meantime conditions lead to a reversal of entrepreneurial expectations, investment programmes may be postponed or abandoned.^{19/} In view of the amplitude and duration of changes in prices and profits, the delays inherent in the investment process assumed great significance for the less developed primary producing countries in 1948 to 1952.

174. The above considerations are especially pertinent with respect to large-scale undertakings, whether these produce for export or for the domestic market. In particular, the greater the capital intensity of the productive process, the longer the expected life of the capital assets and the more extensive the period of preliminary exploration, market analysis and determination of the productive process and types of equipment, the more will investment decisions be divorced from short-run inducements and become sensitive to long-run considerations. These considerations - which generally apply to mineral industries, transportation, public utilities and, to a lesser extent, agricultural enterprises - also tend to reduce the response of the volume of investment to changes in current prices and profits. Investment decisions among enterprises in the export sector are dependent on certain additional factors which may reduce the influence of current developments in an exporting country still more.

^{18/} The full consequences of new investment on the output of goods and services is further retarded by the time elapsing between the preparatory stages of the project and the completion of installations.

^{19/} The consequences may be even more serious if expectations, with respect to changes in real income, are more elastic in a downward than in an upward direction, which would probably occur in the case of entrepreneurs in under-developed countries embarking on new or unfamiliar fields.

Investment decisions are also dictated by consideration of long-run trends in prospective sales prices and unit costs. But among export industries, sales prices are determined by conditions in world markets, while local costs and taxes in the producing country are significant to the extent that they are an important part of total unit costs (which is not always the case) and that trends in local costs and taxes are expected to diverge from other costs or from costs and taxes in other countries producing the same commodities. Furthermore, enterprises having access to adequate sources of finance in the capital markets of more developed countries are in a position to plan their investments with less reliance upon the current volume of profits. Therefore, large-scale investment programmes are often conducted during periods of stable or falling demand and prices; for example, mining investments in Northern Rhodesia were planned at a time of high copper prices, though executed largely in the depression of the nineteen-thirties. The same is generally true of investments in petroleum in the Middle East during this period.

175. In practice, fixed investments by large-scale enterprises tend to increase during prosperous times to the extent that long-term investment projects have already been formulated.^{20/} However, this is not always so. It often happens that favourable market conditions fail to evoke any great flow of new investment, as in the case of tin companies in Bolivia during a large part of the nineteen-forties and export industries in a number of countries in the post-war period such as investments in Malaya and in other countries of the Far East.

176. Hence, there are reasons for expecting that a sudden and unforeseen rise in profits may not always be accompanied by a corresponding increase in the volume of investment in large-scale enterprises.^{21/} On the other hand, the volume of investment is more closely related to the current level of incomes and profits,

^{20/} Total investment would also increase owing, *inter alia*, to greater requirements for working capital when the enterprises expand their output.

^{21/} The long-term significance of this process transcends its immediate effects. Control over the timing of investment allows large-scale enterprises to adjust their purchases and borrowings in order to lower their fixed costs, and thus contributes to reduce expenditure of real resources, and hence real unit costs, during the lifetime of fixed assets. To this extent, the process benefits the producing countries in the long run.

whether arising from favourable terms of trade or other reasons, in industries where the average size of firms is smaller, the capital intensity is lower and the lifetime of capital assets is shorter. In under-developed countries this pattern obtains more frequently in industries producing for the domestic market and among smaller firms producing for export, principally those owned by residents of the exporting country. Here the limiting factors are the low level of savings, the narrowness of the markets for the products of industry and the scarcity of certain factors of production, including managerial personnel, industrial technicians and skilled workers. All these factors increase the risks of productive investment and simultaneously make more attractive the traditional pattern of investment in commercial inventories, real estate, residential construction or purchase of foreign securities.

177. The effects of these factors are diminished in countries where the economy is more diversified. This was clearly apparent in some countries in the process of development (Argentina, Brazil, Mexico and Turkey, among others) where, during the post-war period, there was considerable public and private investment of a productive character, including a number of large-scale industrial projects.

178. In view of the technical and institutional characteristics mentioned in the preceding paragraphs, it is to be expected that in primary producing countries - especially among the less developed - the course of domestic capital formation should fail in the short run to ensure the full and adequate utilization of savings, particularly if these arise from wide fluctuations in foreign trade prices. In these cases (by no means uncommon during the period 1948 to 1952) the increase in profits and savings is accompanied by an outward flow of exporters' profits or an accumulation of idle foreign balances, and these movements check the potential secondary effects on employment and incomes of the initial increase in the gross geographic product accompanying the rise in the terms of trade.

179. In view of the extent and intensity of fluctuations in profits and incomes arising from foreign trade influences, there are clear advantages in investment policies by entrepreneurs of an "anti-cyclical" character, which would help to compensate for fluctuations in employment and incomes from current production. To the extent that private investment follows a different course, public investment, tax and borrowing programmes may be so conducted as to ensure the full and adequate utilization of savings in the short run. In particular,

programmes may be planned to offset the expansion of non-productive investment during years of favourable terms of trade and to compensate for the fall in private investment during adverse periods. The following paragraphs summarize the experience of several countries in this respect.

180. Since 1948, the Burmese economy has been seriously affected by the dislocation and destruction of the war, unsettled political conditions in the post-war period and other unfavourable factors. As a result, per capita gross geographic product in 1950/51 fell 40 per cent below the levels of 1938/39.^{22/} These developments were accompanied by a serious decline in the levels of employment, consumption and savings. At the same time, the Government extended the scope of its activities, including wider participation in the fields of industry and commerce, and as a consequence the development programme of Burma began to gather momentum. There was a considerable diversion of private savings from domestic capital formation, particularly in the immediate post-war period. This, however, was partly offset by the expansion of capital disbursements by public authorities, financed entirely from current revenues.

181. After falling slightly between 1947/48 and 1948/49, consolidated government revenue grew sharply, from 466 million kyats in 1948/49 to 621 million in 1949/50 and an estimated 645 million in 1950/51, an increase of 38 per cent. The major sources of the additional revenue were higher yields from import duties, excises, sales taxes and income taxes. The improvement in export prices increased the profits of government boards engaged in export activity, and hence contributed significantly to the rise in public revenue. Consolidated current expenditures rose by 19 per cent between 1948/49 and 1950/51. Capital expenditures, on the other hand, increased at an accelerated rate, having more than doubled during the same period.

182. As a result of these trends, the consolidated government surplus grew from 53 million kyats in 1948/49 to 184 million kyats in the following year, only to decrease to 87 million in 1950/51. The accumulated budgetary surplus was reflected in the rise in the government's cash balance, which at the end of 1951 reached 422.4 million kyats.

183. According to revised estimates for 1951/52, the increase in revenue of over 20 per cent compared with the previous year was accompanied by moderately larger current expenditures and sharply increased capital expenditures, the latter being estimated at 283 million kyats, or 36 per cent of total expenditure. The rise in expenditure over revenue cancelled the over-all surplus in 1951/52.

184. Thus, monetary and fiscal policy in Burma offset part of the decline in private saving. The accumulation of cash reserves in the government sector neutralized the inflationary consequences of the expansion of bank loans to the public in the face of a reduced supply of goods, and facilitated the financing of the expansion of public investment necessary to restore capital equipment destroyed during the war and raise the standard of living above pre-war levels.

185. The rate of public investment is to be further increased in 1952/53, to an estimated 480 million kyats, or slightly over 40 per cent of total public expenditure. A substantial part of this sum is allocated to the development of industry and mining, as well as agriculture and transport. A deficit of 29 million kyats is expected to be covered largely from borrowing and drawing upon government cash balances.

186. The utilization of resources now under-employed will provide an initial cushion against the inflationary effect of increases in investment activity. The Government is aware of the need for stimulating private savings and developing the capital market to prevent the appearance of inflationary forces as recovery proceeds. However, it is recognized that the demands on private savings for investment purposes are likely to be large, hence the authorities propose to rely for financing investment programmes on revenue derived in large part from higher yields from existing taxes following the increase in output of goods and services. At the same time the Union Bank of Burma has been granted additional power over commercial banks.

187. In Brazil some of the major obstacles to economic development originate in the low levels of real income per head and the inability to import enough to meet growing needs for capital goods. These and other factors,^{23/} including

^{23/} See Economic Commission for Latin America, Recent Facts and Trends in the Economy of Brazil (E/CN.12/217/Add.2).

the need to expand imports of raw materials as well as of capital goods, emphasize the importance of the increase in the country's capacity to import following the improvement of its terms of trade after 1949.

188. Gross capital formation nearly doubled between 1948 and 1951, private and public investment growing at approximately the same rates. Road building and investments in petroleum were two significant items in public investment. As to private investment, fixed capital investments in industry, public utilities and agriculture absorbed larger funds than either construction or increases in inventories.^{24/} A considerable volume of investment in Brazil has been directed to the development of basic industry, particularly metallurgical, engineering and heavy chemical industries. The increase in commercial inventories was fairly moderate until 1951.

189. The increase in the capacity to import, and the even steeper rise in production of capital goods, facilitated the financing of these investment programmes without impairing the levels of consumption. The annual average volume of imports for 1951-52 increased by 69 per cent over the average for 1947-49. Capital goods participated in the general movement, but lagged behind raw materials and consumer goods. Annual imports of capital goods rose only 53 per cent in 1951-52 compared with 1947-49, but in 1952 they increased as a proportion of total imports.

190. In Ceylon, the improvement in government receipts which followed the rise in export prices was also accompanied by increased expenditure on current and capital account. The latter is largely due to development expenditure including, among other plans and projects, a programme for land development to improve the production of food for domestic markets, as well as industrial projects, transport and fuel development.

191. As the rise in revenue after 1948 improved the budgetary surplus on current account from 31.5 million rupees in 1948 to 153.2 million in 1951, expenditures on capital account also rose from 104.0 million rupees in 1948 to 222.0 million in 1951. This led to substantial over-all deficits, financed by drawing on cash reserves and by borrowing. In 1951, however, revenue again rose, by almost

^{24/} However, according to preliminary data, gross investment in coffee plantations absorbed less than 2 per cent of total capital formation in 1951.

50 per cent, following an improvement in the price and the value of exports, which reduced the over-all deficit. The Government, however, continued its borrowing operations by substantially more than the actual deficit. The result has been to increase its cash balances. In 1952, the situation was reversed; according to preliminary estimates, revenue from export duties fell, reducing total revenues. Expenditure, however, continued to rise - particularly capital expenditure which almost doubled the figure of the previous year and was expected to reach a total of 433.2 million rupees, financed by further drawing on accumulated cash balances and by greatly increased borrowing.

192. The Government sought to keep down the expansion in the money supply by increasing its borrowing from non-banking sources. Actually, loans from the public (including institutional savers) were among the major sources of funds in 1951, but in 1952 the rise in the deficit was accompanied by more extensive resort to banking funds. This partly offset the consequences of the fall in foreign assets and loans to the public upon the money supply, which therefore remained relatively stable during 1951/52.^{25/}

193. The above examples illustrate the role of private capital in the investment process as well as the use of fiscal and monetary policy by governments to channel an increasing proportion of the savings of the community into productive investment when the national product expands in response to improvement in the terms of trade. At the same time, the maintenance of the volume of public investment during years of deteriorating terms of trade contributes to offset the decline in private capital formation.

194. The capacity of productive facilities and the degree of diversification and industrialization achieved by the economy determine the effectiveness of fiscal measures to promote economic development during extended periods of deteriorating terms of trade, just as the same factors contribute to set limits to the adequate utilization of gains from trade during periods of improving terms of trade. It is clear, however, that the response of the private sector to

^{25/} The impact of the financial operations on the cost of living was further lessened by increasing food subsidies and by Central Bank regulation of the reserve requirements of commercial banks, which limited the extent of credit expansion.

favourable trends in foreign trade prices is not always conducive - either in timing or in direction - to investments which promote economic developments. Some of the examples in the preceding pages demonstrate that during recent years, the fuller utilization of gains from trade for the purpose of achieving a lasting improvement in the use of resources rests in part upon the adequacy of government programmes designed to increase the degree of diversification and industrialization of the economy.
