METHODS OF ANALYSIS AND BASIC ASPECTS OF INTERNATIONAL TRADE

This section of the Manual will concentrate upon a few important features of international trade in an attempt to convey a clear view of its structure and development. Other more special questions, such as the long-term prospects for the development of export earnings of primary exporting countries (but briefly mentioned at the end of the present statement), the effect of the Treaty of Rome on such prospects, recent changes in the "terms of trade" of primary products in terms of manufactured goods, the impact of agricultural protectionism upon international trade or the methods and results of comparing costs of production for various types of simple manufactures as between different countries, will be dealt with orally during that part of the course for which the Trade Intelligence Division is responsible. What follows, therefore, offers simply the more permanent structural features and tendencies which can be observed in respect of world trade as a whole.

Any serious understanding of such a vast subject calls, not only for hard work and imagination, but also for a well-devised statistical framework. If it is taken into account that there exist close to 200 separate customs territories and something like six million different commodities (including grades of commodities)\(^1\), it is quite obvious that most radical simplifications are necessary if a comprehensive and yet sufficiently articulated view is to be obtained of the movements of commodities across customs frontiers.

Classification of countries into areas

After considerable experimentation, it has appeared both manageable and sufficient to divide the world into a dozen areas\(^2\), formed in the first place according to a somewhat arbitrary fundamental principle, i.e. the essential nature of the export trade, in terms, that is, of primary products or

\(^1\) During the second world war, this was the number of items which entered into the operations of the United States Quartermaster-General's Office.

\(^2\) The number of areas to be distinguished may, as a result of customs unions or free-trade areas, have to be increased as such bodies come into existence.
manufactured goods, of the countries considered. This has led to the adoption of a definition of "the industrial areas" taken as a whole as comprising North America (United States and Canada), Western Europe (including all Member countries of the OEEC) and Japan. "The non-industrial areas" would then include all the other countries combined.

It will be immediately clear that such a classification is, like any other, inevitably arbitrary. For instance, it might very well be questioned whether Canada is really to be considered as a country primarily exporting manufactured commodities. In fact, primary products accounted for 53 per cent of Canada's exports in 1957. On the other hand, Western Europe includes, of course, such definitely "under-developed" or "primary-exporting" countries as Ireland, Greece, Turkey and Portugal. The reason for defining Western Europe as consisting of the Member countries of the OEEC is entirely one of convenience. That Organisation collects consolidated statistics on its Member countries taken as a group, which to collect from national returns would be entirely beyond the reach of the modest resources available in the GATT secretariat. Nevertheless, the OEEC membership comprises all the major exporters of manufactured goods in Western Europe, and the combined export trade of this area with the outside world consists predominantly of manufactures. Finally, it might be questioned whether countries such as Australia, which exports mainly primary products, but has an agricultural working population accounting for only 13 per cent (in 1954) of its total labour force, or India, which exports manufactures in the same proportion to primary products (in 1957, 47 and 53 per cent, respectively) as Canada, but has only a small fraction (9 per cent in 1951) of its total labour force in manufacturing activities, should not also be considered among "the industrial areas".

As regards "the non-industrial areas", they include not only countries which are fairly advanced in their economic development, and moreover produce a relatively high income per inhabitant, e.g. Australia, New Zealand, Brazil, Argentina and (at least as regards the white population) the Union of South Africa, but also the vast area now part of the Soviet Bloc, where production, at least of such basic commodities as coal, steel and, especially in Eastern Europe, machinery and capital goods of all kinds, is very considerable. On the other hand, it should not be forgotten that, except for certain members of the Soviet Bloc and India, as already mentioned, "the non-industrial areas" hardly export any manufactured goods, other than non-ferrous metals.
Thus, even this first criterion by which the world is divided into two parts, one industrial and one non-industrial, is not really satisfactory if strict logic were to be applied.

In addition to the main division of the world's countries into these two groups, it has been found necessary to sub-divide each one of them into several areas. The "industrial" part of the world is divided, in the scheme adopted by the GATT secretariat, into four parts, i.e. North America, the six Common Market countries, the European sterling area (the United Kingdom, Ireland and Iceland), and the rest of the OEEC. Japan, finally, is treated separately, if only on account of remoteness.

The non-industrial areas are distinguished into the dollar countries of Latin America, the non-dollar countries of Latin America, the overseas sterling area, the overseas territories of continental Western Europe, the Soviet bloc (Eastern Europe, the USSR and mainland China), and finally an entirely heterogeneous residual area called "the rest of the world" which, oddly enough, includes the non-OEEC countries of Western Europe (Finland, Spain and Yugoslavia) at the same time as the non-sterling Middle East, the Philippines, Liberia, to give an idea of how heterogeneous its composition is.

While in the preceding discussion of country groups adopted for purposes of simplification, emphasis has been laid on the odd marginal cases, it should nevertheless not be forgotten that the groups distinguished in the non-industrial part of the world are each characterized by more or less close membership in some monetary system, except the non-dollar countries of Latin America and the Soviet bloc, and it is precisely on the kind of classification just described that important conclusions have been based as to the intensity of trade links between certain non-industrial areas and one or other of the industrial ones.

---

1 It may soon be necessary to distinguish in this latter group the seven EFTA countries, a grouping which, by including the United Kingdom, would fall across the "European sterling area" as hitherto distinguished.

2 As the association of the French, Belgian and certain Dutch overseas territories proceeds within the framework of the Treaty of Rome, it may become necessary to distinguish them from the Portuguese overseas territories. Since Spain was not until recently a Member of the OEEC that country, as well as its overseas territories, appeared in "the rest of the world".
The general network of world trade

A first and most important insight into the structure of international trade can be obtained by examining the value of commodities that flow between any one and all of the other areas as defined in the preceding sections. Fortunately, the list of areas adopted by the GATT secretariat has been found sufficiently useful by other larger international organizations such as the United Nations and the OEEC for them to adopt this list in presenting comprehensive trade statistics. For the world as a whole, it is used by the United Nations, and for OEEC Europe plus the United States and Canada by the OEEC. As a result, the secretariat can rely on the compilations undertaken by these other international organizations to construct a "network" of world trade. For this purpose, the organizations mentioned use the national trade returns of the individual customs territories, and all that is necessary for the establishment of such a network where only the total values of exports and imports (without distinction of commodity composition) are recorded, are figures shown in some common currency - and for this purpose the United States' dollar has come into general use - by destination and origin. In order to acquire some impression of the material from which such compilations are built up, it may be useful to consult a regular publication by the United Nations Statistical Office entitled Direction of Trade, which is based on the national trade returns published by individual countries. In establishing such a world trade network, the usual form of presentation, an example of which will be found in Table I at the end of International Trade 1957-58, is in a single table which lists the various areas taken into consideration as headings both of columns and rows. Thus, it will be seen that the area listed as a heading for the first column, as well as the heading of the first row, is North America (which, it will be remembered, includes the United States and Canada). The figure which appears in the corresponding "box" for the year 1958 is 6,447. Since the units used in this table are millions of dollars, this means that the exports of the United States to Canada, plus those of Canada to the United States, added up to $6,447,000,000. In the "box" corresponding to the heading and the row marked "Japan", no figure appears, of course, since only one country constitutes an area in this particular case.

In examining Table I just referred to, it will be noted that the only other box where no figures appear is that labelled "Eastern Europe, USSR and mainland China" both as a column and a row heading. The reason for this is not

---

1 It will be understood that this publication, which gives the value of total exports and imports by individual countries and areas of destination and origin, is itself already a digest.
that there is no trade between the countries constituting the Soviet bloc, but quite simply that these countries have only quite recently begun to publish statistics of their foreign trade. The omission of the foreign trade going on inside the Soviet bloc of course affects the total value of world trade as the GATT secretariat computes it. In fact, that grand total value of world trade which appears in the lower right-hand corner of Table I, by dealing with the Soviet bloc as if it were one single country, understates the value of world trade, defined as the aggregate value of commodities moving across customs frontiers.

Several other points must also be mentioned. Thus, the exports from the United States do not include so-called "special category" exports, i.e., supplies made by the United States to other countries of goods for military consumption for which the United States trade statistics do not indicate destinations.

Finally, and this is a very important aspect of Table I, the figures which appear in it relate to the value of exports only. This means that all values are shown without including costs of transport, insurance and other expenses arising from the transfer of goods as between the frontier of the exporting country and that of the importing country. It also follows from the fact that only export values are used in constructing this table, that the imports of any given area which appear in the column that carries its name as a heading are simply the sum of exports to that area, expressed of course at f.o.b. values (as recorded by the country of origin). They are therefore smaller than the imports as recorded by the importing countries which are usually given at c.i.f. values\(^1\). Moreover, it goes without saying that the exports of any given area to any other do, in fact, include commodities which may be re-exported from the area of first destination to another, since the exports of rubber from, say Malaya, to the United Kingdom, cannot be distinguished into exports for consumption within the United Kingdom and such quantities of rubber as the United Kingdom may later re-export. For this reason, the figures taken

\(^1\) With the important exception of the United States and Canada, which record their imports at f.o.b. values, i.e., excluding transport, etc. charges.
into account when constructing a network in respect of such countries as the Netherlands and the United Kingdom which have a large re-export trade are larger than those shown for "exports of domestic produce" as given in the official trade publications of these countries.

It may be useful to add a general remark about the relation between the import and export data. In principle, the exports from a given country to a given destination should, of course, be identical, apart from transport and similar charges, to those registered by the importing country. However, there are many reasons why such correspondence, in fact, never really occurs. Apart from such obvious reasons as the difference in timing between the exports from one country and the imports of the same shipments to another, there are many other reasons that make for discrepancies between the data on the value of trade when taken from the trade partners' returns. For one thing, there is the well-known tendency for customs officials to be far more interested, at least in general, in imports rather than exports since it is (with certain well-known exceptions) on imports that duties are levied. This tendency may, to some extent, have been counteracted by the interest that exchange control attaches to obtaining accurate reports on the value of exports. But, quite apart from this particular tendency which is inherent in the nature of customs administration, there are differences in valuation. Not in all cases are invoice values adopted by the customs administration without adjustment. Furthermore, the principle by which the destination of shipments is determined may also vary: in some cases it may be the country of final destination, as far as known; in others, it may be the country of sale (or of purchase in the case of imports). There are also instances where the destination is simply unknown at the moment of export: ships may depart, say from Latin America, in the general direction of Europe, but instructions may then be received en route for unloading commodities in this or that harbour. In short, there are many reasons why data on exports and the corresponding imports need not agree. It will be noted that, in choosing to establish a world trade network from export data, this difficulty is simply circumvented rather than

1 It may be worth mentioning some terms which are often used in discussing the questions dealt with in this paragraph. Imports, if recorded without deduction for what is intended for re-export, are called "general", but if they only cover what is intended for domestic consumption (by industries or by final consumers) are called "special". Correspondingly, if exports include commodities that have earlier been imported (without any significant elaboration while in the country) are called "general", but if they cover only "domestic produce", they are called "special". Practices in different countries vary: The United Kingdom, for instance, records "general" imports, but "special" exports, while reporting re-exports separately.
solved. At the same time, there is on the whole a fairly satisfactory correspondence, as long as only total trade values, rather than values concerning particular commodities, are considered. In the latter case, the differences are sometimes disquieting and it may be worth mentioning as an example the serious discrepancies which can be found between the United States export data for coal shipped to France, and the corresponding French import data for coal received from the United States. In this particular case, the explanation is that coal received in France from the United States was immediately re-exported to the Netherlands for the purpose of being turned into coke because the French coke oven capacity was insufficient to satisfy the domestic demand for coke, so that the coal received in France from the United States was finally recorded as imported into France, and appearing in the French import returns, in the form of coke received from the Netherlands. It goes without saying that many similar examples could be quoted.

Finally, it may be useful, or even necessary, to adjust the official trade figures, to allow for disturbing influences of, say, dock strikes. The case occurred particularly in the United Kingdom towards the end of the year 1954 as a result of which shipments from the United Kingdom in the year 1954 were under-stated and those occurring in the year 1955 were over-stated. But it is clear that such adjustments are inevitably arbitrary.

International trade by commodity classes

In the preceding two sections, the type of information discussed concerned the total value of exports or imports. It is quite obvious that information on the commodity composition of trade flows is wanted for a full understanding of their nature and behaviour.

The endeavour to distinguish the commodities that constitute international trade obviously calls for much more detailed statistics than have so far been examined. Immediately, there arises the question of how to simplify the description of this commodity composition by grouping commodities in a way that will be relevant for analytical purposes. One important general distinction will clearly have to be made according to primary commodities and manufactured products.

---

1 See for details International Trade 1955, page 1, footnote 2.
In a general way, one would be inclined to put all food and beverages, unmanufactured tobacco, raw materials for industrial use and fuels into the former category, letting manufactured goods comprise all the rest. However, a number of arbitrary decisions are nevertheless inevitable. Thus, while fresh meat would generally be considered as a foodstuff, frozen or chilled meat, and even more so canned meat, certainly embody a certain amount of manufacturing activity, and the same will apply to all kinds of more or less processed food. Although the food processing industries, such as the canning of meat and vegetables, sugar factories and flour mills are in all countries considered as part of manufacturing, the current convention in respect of manufactured foodstuffs is to include them with the crude unmanufactured primary products. Another similar question arises in respect of feedingstuffs which are not only, in many cases at least, somewhat processed (e.g. oil cakes which are a by-product of seed crushing) but also are an input item for agriculture. Here again, the convention is to consider feedingstuffs together with foodstuffs. As regards beverages, wine for instance is an agricultural product in Europe whereas in the United States and Australia wine-making is definitely a manufacturing process. Beer and similar beverages also involve some degree of manufacturing activity. Finally, as regards raw materials for industrial use, a question arises as to where exactly to draw the line between the primary product and the manufactured product. For instance, there should be little doubt that synthetic rubber is a manufactured good while natural rubber is a primary product, but the classification of crude metallic ores, their concentrates, and partly or wholly refined metals into primary and manufactured products, is clearly a matter for agreement by convention. It might even be suggested, in respect of unwrought non-ferrous metals, that they should be considered as primary products when exported by a primary producing country, but as a manufactured product when exported by an industrialized country. But, obviously, such matters must be decided one way or another, and, in fact, they have been decided in the form of recommendations adopted by the Statistical Commission of the United Nations that countries should, in publishing trade statistics, apply the SITC (Standard International Trade Classification), which is gaining increasing recognition as a statistically useful list of commodities and commodity groups.
The generalized adoption of the SITC for the purpose of publishing trade statistics in a form suitable for economic analysis has hitherto been somewhat hampered by the fact that trade statistics arise as a sort of by-product of customs administration and that, for the latter purpose, commodities should, if possible, be grouped so as to correspond to the customs tariffs. Fortunately, there is an increasing tendency for countries in all parts of the world to adopt a common tariff list, i.e. the Brussels Tariff Nomenclature which singles out commodities which, in general, are subject to different tariff rates. Even more fortunately, it has at last been possible to establish a close correspondence between commodities as listed in the SITC on the one hand, and as listed in the Brussels Nomenclature on the other. As a result, it will be an easy matter for countries using the Brussels list for their tariff, to publish their trade returns according to the SITC – the difference from hereon being only one of the order and grouping in which various individual items appear in the two lists. It may perhaps be mentioned that, on the occasion of establishing this correspondence between the statistical and the tariff nomenclatures mentioned, the SITC itself (as well as the Brussels Nomenclature), has been revised by bringing it somewhat up-to-date so as to keep in closer touch with the relative importance of different commodities as they have emerged in international trade in the course of the last decade or so, e.g. by introducing distinctions between the so-called synthetic fibres, keeping rayon separate from such wholly man-made fibres as nylon.

In the light of these developments in respect of nomenclatures, one may look forward to a rapid development of more comparable statistics of foreign trade, not only in countries which already have well-developed trade returns, but also in countries which are still publishing only fragmentary or otherwise unsatisfactory and non-comparable information on the commodity composition of their foreign trade.

When it comes to manufactures, problems similar to those mentioned in respect of primary products arise. One outstanding example is the matter of wood and wood products. There is no doubt that wood in the round should be

---

1 It may be mentioned as an example of its usefulness that such concepts as "manufactured goods" can be easily obtained from it by adding up the value of trade recorded in SITC Sections 5 to 8 (the whole of the SITC has ten such sections).
considered as a raw material, but it may be questioned whether mechanical wood pulp should be so considered or whether the distinction between the primary and the manufactured stages is to be drawn between wood proper and mechanical wood pulp, or possibly between mechanical and chemical wood pulp, or not even between chemical wood pulp and newsprint, and so forth. Again, there is much room for discussion, especially when it comes to considering a possible distinction between semi-manufactures, such as chemical elements or, say, sulphuric acid, and finished manufactured goods such as machinery, vehicles and textile fabrics. Taking the latter as an example, it is clear that yarns should generally be considered as semi-manufactures, but in respect of fabrics, the matter is not so clear: what of cotton tissues in the grey or otherwise not entirely "finished"? Here again, international agreement only can solve these questions of definition.

In conclusion, the experience of the GATT secretariat has shown that satisfactory insight into the commodity structure of international trade can be obtained by distinguishing eight large commodity classes as follows:

**Primary products**
- Food, beverages and tobacco
- Raw materials of agricultural origin
- Metalliferous ores and concentrates
- Fuels

** Manufactured goods**
- Finished capital goods
- Finished consumer goods (textiles, passenger cars and miscellaneous manufactured consumer goods)
- Base metals
- Other, mainly semi-manufactures

Without going into the exact definitions which have actually been adopted it may be said that, while very rough, these several commodity classes have, on the whole, proved to convey an adequate picture of the general commodity structure of international trade.

---

1 The details are shown, in terms of the SITC, on pages 311 and 312 of *International Trade 1957-58*. 
Construction of networks showing commodity composition of trade flows

In the course of several years, it has been possible to set up tables of the kind shown at the end of International Trade 1957-58 which indicate the commodity composition in terms of the foregoing broad commodity classes as between the various areas which have been described in a preceding section.

It goes without saying, and it applies even more forcefully than in the case of networks showing the total value of trade, that in constructing such relatively complex networks, the GATT secretariat has to rely on work done by other organizations. For several years up to 1959, this work has involved somewhat intricate procedures which relied on a number of different sources. A description of the various devices used will be found in Trade Intelligence Paper No. 5. As from 1959, the United Nations Statistical Office has begun the publication of the same sort of networks as had already been included as a regular feature in the reports on International Trade. Unfortunately, these latter compilations which are based on much fuller documentation than could possibly be collected by the small staff of the GATT secretariat, have not been drawn up in terms of the commodity classes described above, but rely for this aspect of the matter on the so-called "Sections" of the SITC. Thus, the United Nations networks of this kind run in terms of:

- Food, beverages and tobacco
- Crude materials and vegetable oils
- Fuels
- Chemicals
- Machinery and transport equipment
- Other manufactures

It will be seen that only the first and third of these classes correspond to those adopted by the GATT secretariat. There is no distinction between agricultural and mineral raw materials, while manufactures are sub-divided in a substantially different way. Thus, "capital goods", which, in the GATT secretariat's definition, exclude passenger cars, cover the whole of machinery and transport equipment, i.e. including passenger cars, in the United Nations list of commodity classes. The remaining manufactures, the United Nations sub-divide into chemicals, and manufactured goods other than machinery and transport equipment, whereas the GATT secretariat has made at least an attempt to distinguish them into finished consumer goods, e.g. textiles, passenger cars, etc.
and semi-manufactures, i.e. chemicals and other manufactures except base metals which, in turn, are shown as a separate class. In spite of these differences in the commodity classes, the work which the United Nations Statistical Office has taken up in 1959 is of great assistance to the secretariat, especially because it sub-divides into commodity classes the trade, not only among individual industrial areas and that which flows either way between industrial and non-industrial areas, but also the trade among the individual non-industrial areas, the commodity composition of which had, in earlier work done by the GATT, only been shown for the exports from each non-industrial area to all the others combined.

It will, no doubt, be useful to consult Tables II, III and IV of the Appendix to International Trade 1957-58, and also the United Nations Monthly Bulletin of Statistics for February 1959. In observing these networks, a few major features may especially be noted. No doubt, one of them is the fact that North America is a very substantial exporter of primary products. In the first half of 1958, for instance, this area exported nearly the same value of primary products as of manufactured goods to industrial destinations ($2,900 compared with $3,300 million) but, even to non-industrial areas, the exports of primary products are large ($1,200 compared with $2,800 million for primary commodities and manufactures).

Another feature worth noting is the fact that the European Economic Community (or European Common Market) has regularly a very substantial export surplus of manufactured goods vis-à-vis the other countries of Western Europe, while at the same time the Six countries had an import surplus of roughly equal amount in their trade with the overseas sterling area. A little reflection will show that this heavy dependence of the Six on the rest of Europe as a

---

1 An explanation may be necessary to indicate why there remains in practically every "box" of such networks a "residual" item. Such an item is quite unavoidable: partly it includes commodities recorded in the original sources, such as miscellaneous transactions, e.g. returned goods, etc., as well as re-exports the commodity composition and destination of which is not reported as fully as are exports of domestic produce.

2 Table II shows that, in the first half of 1958 for instance, the exports of manufactures from the Six to the rest of Europe ran at about $1,900 million, while their imports from the rest of Europe amounted to only $1,100 million. It will of course be noted that these are figures covering only six months.

3 In the first half of 1958, the imports of primary products of the Six from the overseas sterling area fell not far short of $1,000 million, while their exports of primary products to that area reached only $90 million.
market for their manufactures and on the overseas sterling area as a source for primary products is a powerful argument in favour of extending the liberalization of trade now contemplated by the Six amongst themselves to the rest of Europe. Finally, mention may be made of the very large exports from the dollar countries of Latin America to the overseas territories of continental Western Europe which, in 1957, amounted to $635 million. This considerable figure represents the value of crude petroleum exported from Venezuela to the adjacent island of Aruba, a Dutch territory, for refining. Although, as a result of the development of oil-refining in Venezuela itself, the value of these exports seems to be declining in recent years, it is clear that this particular trade flow between the two "areas" actually involving the transport of crude oil from the gulf of Maracaibo to an island only twenty miles offshore is essentially the result of the somewhat arbitrary and nongeographical nature of the definition of "areas" adopted in this network.

Main features of the structure of international trade

Just as radical simplification is necessary to arrive at networks of total world trade or of its commodity composition to reduce such instruments to manageable proportions, it is necessary to proceed even further in the line of simplification to ascertain certain outstanding structural aspects of international trade. In particular, it is useful to remember the few figures set out in the following table which shows the percentages of world exports, as defined in preceding sections, that are accounted for by trade among and between industrial and non-industrial areas, respectively.

<table>
<thead>
<tr>
<th></th>
<th>Industrial areas</th>
<th>Non-industrial areas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>from:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial areas</td>
<td>40</td>
<td>25</td>
<td>65</td>
</tr>
<tr>
<td>Non-industrial areas</td>
<td>25</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>
Trade among industrial countries represents on the whole 40 per cent of the world total while that which flows among non-industrial areas represents but 10 per cent. Trade between industrial and non-industrial areas thus accounts for nearly half the world total; 25 per cent representing imports of the industrial countries from non-industrial areas and 25 per cent exports in the opposite direction. Looking at the column marked "total", it will be seen that two-thirds of world exports originate in industrial areas as against one third in other parts of the world. Imports shown in the row marked "total" have a similar distribution. Each one of these trade flows has its typical commodity composition. The main aspects of the commodity composition of trade among and between industrial and non-industrial countries are shown in Table 7 of International Trade 1957-58 and, since the total of world exports in that year amounted to roughly $100,000 million it is easy to translate the absolute figures there appearing for that year into percentages of the world total.

In 1957 then, trade among industrial countries represented about $40,000 million of which $24,000 were manufactured goods and no less than $16,000 were primary products. Trade among non-industrial countries represented somewhat more than $10,000 million of which $2,000 were manufactured goods (largely non-ferrous base metals, a large part of which eventually to be re-exported from non-industrial to industrial destinations), while the bulk of trade among primary producing countries was accounted for by primary products, valued at $8,000 million in 1957.

Industrial countries, of course, trade not only amongst themselves, but in 1957 imported roughly $22,000 million worth of commodities from non-industrial areas, obviously comprising overwhelmingly primary products ($19,000 million), while among the $3,000 million worth of manufactures, base metals (non-ferrous) figure prominently. The reverse trade flow from industrial to non-industrial destinations in 1957 somewhat exceeded $26,000 million, of which $21,000 were manufactures, nearly half of which capital goods, while the remaining $5,000 million were primary products.

Several points deserve mention. Thus, of the total imports of primary products into industrial countries (about $35,000 million), more than 40 per cent originate in industrial areas, and those primary products coming from industrial sources show, in respect of the principal commodity classes, nearly the same distribution as those obtained from the non-industrial part of the
world, food and tobacco and raw materials other than ores and fuel being predominant in both cases. Of ores, in particular, the industrial countries import even more from industrial than from non-industrial origins. In other words, supplies from the industrial areas are, if only for certain commodities (oilseeds, tobacco, cotton) clearly competing with those from primary-producing countries in satisfying the import requirements of the industrial part of the world.

On the other hand, it is certainly remarkable that primary products also flow — in 1957 to the extent of $5,000 million — to the non-industrial countries, and the most striking aspect of this trade flow is that 60 per cent of it in 1957 consisted of food and tobacco. Thus, not only were industrial countries important suppliers of primary products to each other, they also exported large amounts of primary goods, especially food, to non-industrial areas. It may perhaps be mentioned that a non-negligible proportion of these latter exports consists of surplus disposal of agricultural commodities by the United States.

It may also be worth noting that, among the total exports of manufactured goods from industrial countries, valued at about $45,000 million, capital goods are by far predominant, representing well over one third of this total, but, whereas the total supplies of all manufactures from industrial to other industrial countries were larger than those they exported to non-industrial countries, their supplies of capital goods to the latter exceeded those they exchanged amongst each other. Next in importance are semi-manufactures (other than base metals, notably steel), followed by finished consumer goods, including textiles and motor-cars, and finally base metals.

So much for the structure which has, on the whole, apart perhaps from a specially rapid growth in the exports of capital goods to developing countries, shown remarkable stability in recent years. It should be pointed out that, in 1957, the figures quoted indicate that the non-industrial areas had, in that year, a trade deficit, even calculated in terms of f.o.b. values, i.e. apart from outlays for transport of imported commodities, that fell but slightly short of $4,000 million. It will, of course, immediately be noticed that this is a deviation from what has, in the foregoing little table, been shown to be a structural feature of world trade. In fact, the trade deficit of the non-industrial areas is a relatively recent phenomenon. True, they
experienced a large import surplus in 1952, as an aftermath of the Korean War boom, during which their export earnings had risen sharply, to be followed, with a delay, by a similar increase in imports, but, by 1953 (partly as a result of sharp import restrictions) the non-industrial areas again achieved an export surplus of about $900 million. In 1954 and 1955, their exports and imports were very nearly in balance, but, in 1956, the import surplus exceeded $1,000 million, to reach nearly $4,000 million in 1957 and again in 1958.

This situation is in sharp contrast to the trade position the non-industrial areas occupied traditionally. Before the war, they regularly achieved substantial export surpluses which covered their outlays on services, such as transport, and also the remittance of dividends and interests, to an extent substantially exceeding such capital imports as they were able to secure. In recent years by contrast, the non-industrial areas taken as a whole seem to have been able to obtain loans, grants and credits, both long and short term, to an extent well exceeding their outlays on current services such as transport, dividends and interests, and also to cover a very important import surplus. That this import surplus is largely due to their economic development is amply borne out by the sharp rise in their imports of capital goods which has already been noted.

While the secretariat has not yet undertaken a separate study of the development of the trade balance for countries mainly exporting commodities falling into one or other of the four classes (other than petroleum) considered in International Trade 1957-58 (see below, page 22), it has proceeded to study the development since 1937-38 of the imports, as well as the exports and the corresponding balance for four categories of countries. The results are shown in Table 7 of Trends in International Trade (the Haberler Report) and Table 3 of International Trade 1957-58; the groups of countries separately distinguished are the so-called "semi-industrialized" countries, the main petroleum exporters, the countries belonging to the Soviet bloc, and the remaining non-industrial countries combined. While the countries of the Soviet bloc taken as a group have, since 1937-38, had imports which were equal on the whole in value to their exports, another outstanding feature is the very considerable export surplus which the countries mainly exporting petroleum have experienced in post-war years. In 1958, that export surplus nearly attained $3,000 million. The remaining two groups, comprising the semi-industrialized and other
non-industrial countries, have in post-war years beginning in 1954, in contrast to their pre-war trade position, especially in 1928\(^1\), shown increasing import surpluses. For the semi-industrialized countries this import surplus was nearly $2,000 million, and for the other non-industrial countries $4,500 million. It is proposed to carry this kind of analysis somewhat further by distinguishing, in addition to the classes of countries just discussed, the groups of countries according to their principal export commodities, somewhat along the lines adopted in *International Trade 1957-58*, pages 13-29.

\(^1\) Figures for that year are only shown in *Trends in International Trade*. 
The changing importance of the trade of non-industrial areas in world trade

The apparent tendency in recent years for the non-industrial areas taken as a whole to develop an increasing import surplus (which, it will be recalled, has been measured at f.o.b. values for both imports and exports), may also be presented from a slightly different angle which is, indeed, the point of view from which a major shift in the trading position of primary producing countries has for the first time been noticed.

The following table shows, not as the one previously presented, the average relative position of trade of non-industrial and industrial areas, but the actual historical development in selected pre-war years, and since 1950.

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports (f.o.b.)</th>
<th>Imports (f.o.b.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1928</td>
<td>28.0</td>
<td>22.7</td>
</tr>
<tr>
<td>1937</td>
<td>30.8</td>
<td>25.0</td>
</tr>
<tr>
<td>1938</td>
<td>28.5</td>
<td>25.5</td>
</tr>
<tr>
<td>1950</td>
<td>28.9</td>
<td>24.1</td>
</tr>
<tr>
<td>1951</td>
<td>27.4</td>
<td>25.9</td>
</tr>
<tr>
<td>1952</td>
<td>26.0</td>
<td>26.7</td>
</tr>
<tr>
<td>1953</td>
<td>26.5</td>
<td>25.3</td>
</tr>
<tr>
<td>1954</td>
<td>25.7</td>
<td>26.1</td>
</tr>
<tr>
<td>1955</td>
<td>24.9</td>
<td>25.3</td>
</tr>
<tr>
<td>1956</td>
<td>24.1</td>
<td>25.3</td>
</tr>
<tr>
<td>1957</td>
<td>22.5</td>
<td>26.4</td>
</tr>
<tr>
<td>1958</td>
<td>22.7</td>
<td>26.7</td>
</tr>
</tbody>
</table>

Whereas both in 1928 and in 1938, the exports from non-industrial areas to industrial destinations represented just over 28 per cent of world exports, these exports exceeded this relative level only in 1950 when they were affected by the exceptionally high prices of the Korean boom. Ever since, there has been a continuous decline in this proportion which, in 1957 and 1958, dropped to roughly 22.6 per cent.
The imports of non-industrial areas from industrial sources, on the other hand, stood substantially higher in 1938 than in 1928—26.5 and 22.7 per cent, respectively—mainly as a result of the shrinkage of trade among industrial countries which occurred during the great depression of the 1930's as a result of restrictive policies practiced by industrial countries in respect of their imports of manufactures.\(^1\) Since 1950, the imports of non-industrial areas have oscillated between 24 per cent in 1950 and nearly 27 per cent in 1958.

In the earlier issues of International Trade—up to 1956—great importance had been attached to the declining share of exports from primary-producing countries to industrial destinations, while at the same time the development of their trade balance was carefully recorded. The Haberler Committee, on the other hand, while not denying that the proportion of exports from non-industrial countries in world trade as a whole had been declining, underscored the fact that the imports of the non-industrial areas had on the whole risen at the same rate as world trade as a whole. Although this is essentially only another way of putting the same facts, there is no doubt virtue in the latter view, especially since the way of looking upon these matters that had been followed in the GATT secretariat's earlier reports had lent itself to misinterpretation. Such writers as Myrdal found in the secretariat's earlier way of putting the facts a basis for accusing international trade of widening "the gap"—meaning the difference in the standards of life—as between industrialized countries and the other parts of the world. Though the difference in presentation by the Haberler Committee and the secretariat is essentially a matter of emphasis, it should be duly acknowledged that the way in which the former presented the circumstances lends itself less easily to misrepresentation.

Whichever way the story is told, so much is certain that the position of primary-producing countries has changed radically and, one would think, permanently, in relation to international trade as a whole.

\(^1\) It is this relative shrinkage of trade among industrial countries following the severe restrictions of the 1930's which also accounts for the relatively high proportion (30.8 per cent) that exports from non-industrial areas to industrial countries represented in 1937, a relatively prosperous year.
Historical development in the price and volume of exports of different classes of primary products

The reason why the secretariat had prominently displayed in its earlier reports the decline in the proportion of the world total that the exports of non-industrial areas to industrial destinations accounted for was that this development stood, to some extent, in contrast to one of its very first findings which had been embodied in International Trade 1952. At that relatively early stage of the post-war development, it had appeared that, in relation to 1938, the prices of primary products taken as a whole had, when expressed in US dollars, roughly trebled, while the prices of manufactured goods had only doubled.\(^1\)

In fact, the diminishing relative importance of the value of exports from primary producing areas to industrial countries, such as it became evident in the years following 1950 when the prices of primary products were on the whole still well maintained (apart from their exceptionally high level during the Korean boom) at a much higher level relative to pre-war than the prices of manufactures, indicated a strong decline in the volume of such exports to which there corresponded, of course, an even sharper increase in the volume of manufactured goods imported by the non-industrial areas from industrial

\(^1\) It will, of course, be understood that these are very sweeping statements applying to general averages, and therefore compatible with very different behaviour in respect of particular commodities, whether primary or manufactured.
sources. Continued investigation of this large structural change in world trade, especially in International Trade 1954 and 1955, was essentially calculated to reconcile the relatively small rise of world production of primary products which, by 1952, was of the order of 30 per cent compared with 1938 and the very much greater increase in the volume of world output in manufactured goods which, in 1952, was nearly twice as large as before the war.

1 The concept of volume, as distinguished from the value, of any trade flow plays an important rôle in trade analysis. The difference is, of course, obvious when only one homogeneous commodity is considered; in that case, the volume is simply the quantity (e.g. in tons) and the value (in dollars) is the product of quantity and price (e.g. in dollars per ton). But as soon as more than one commodity, say two or an indefinite number of commodities are to be examined, the quantity (in tons) no longer can be used as a measure of volume, since it makes no sense to add up tons of steel and of wheat. The device used in this case is simply to choose one year (say 1953) as the basis for comparison and to value the quantities of each commodity in each subsequent year by the price it had in the base year. The figure obtained by adding the results of this operation for each commodity in each year expresses the current quantities traded in constant prices (e.g. in prices of 1953). It shows what the value of trade would have been if prices of 1953 had applied throughout and thus may be looked upon as reflecting variations only in volume, unaffected by price changes. Once such a "volume" series is available, it can be divided into the current value of the trade concerned, and the result would be an index number of the average level of prices, in comparison with the base year, say 1953.

2 The passages relevant to this exercise will be found in International Trade 1954, pp 19 - 31 and International Trade 1955, pp 6 - 15.
While these two studies were mainly devoted to an attempt at explaining the principal factors that were responsible for the fundamental change in the structure of world production that has been referred to in respect of primary products as a whole, or at best distinguishing only foodstuffs from raw materials, work done for the use of, and incorporated in the report by, the Haberler Committee, was primarily devoted to ascertaining the fortunes of exports from primary producing countries, distinguishing various commodity classes. This investigation has been carried further in International Trade 1957-58 where volume and price fluctuations in the exports from non-industrial areas of non-tropical foodstuffs, tropical foodstuffs (coffee, tea and cocoa), agricultural raw materials, and minerals (excluding petroleum) have been examined for the whole period that goes, with interruptions, from 1928 to 1956. It was found that the volume of primary products other than petroleum exported from non-industrial areas was in 1956 only 26 per cent larger than it had been nearly thirty years earlier, whereas the volume of petroleum exports had risen manifold. It was also found that primary products, apart from petroleum, fetched in 1956 a price less than twice as high as in 1928, though nearly three times as high as in 1937.

Perhaps the most striking aspect of the development of the four classes of primary products above enumerated is the fact that the volume of non-tropical foodstuffs exported from non-industrial areas was about 10 per cent smaller in 1956 than it had been in 1928. Agricultural raw materials showed an increase in volume by about one-third while both tropical foods and minerals recorded volume increases by about 50 per cent during the same period.

1 In International Trade 1954, emphasis was laid on the importance of agricultural protectionism in industrial countries in limiting world imports of foodstuffs and the industrialization of primary producing countries in limiting the export availabilities and thereby raising the prices of industrial raw materials. Reference should also be made to International Trade 1956, which contains a detailed discussion of the role of the "semi-industrialized" countries in the decline of trade between industrial and non-industrial areas (pp 10 - 17, 113 - 121, and 263 - 268).

2 This bears out the main finding above-mentioned included in International Trade 1352.
An effort was also made in International Trade 1957-58 to identify the additional effect, additional, that is, to the type of primary commodity mainly exported by individual countries, of the particular position which each of these primary producing territories or countries occupies in relation to some major industrial market. It had, indeed, been discovered in International Trade 1953 that, during the liquidation of the Korean boom, the exports from countries closely associated with some metropolitan area (the overseas territories of continental Western Europe in relation to continental Western Europe, the overseas sterling area in relation to the European sterling area and the dollar countries of Latin America in relation to North America) had suffered much lesser declines, if any, in their export earnings, than the countries which had no "sheltered channels" in which to trade. The investigation undertaken in International Trade 1957-58 served to show that the growth of export earnings of primary producing countries trading in sheltered conditions was not only more stable in the short-run, but also more vigorous over longer periods.2

Long-term prospects

The historical investigations undertaken to show the influence of the commodity composition of exports on the development of export earnings of various primary producing countries indicate fairly systematic differences in the rates of increase in such earnings as between countries exporting non-tropical foodstuffs, tropical foodstuffs, minerals or agricultural raw materials, as well as petroleum.

1 In this connexion, Trade Intelligence Paper No. 6 should also be consulted.

2 Special reference should here be made to graphs V to IX of International Trade 1957-58.
On the other hand, efforts have been made, as above mentioned, to discover the factors which mainly determine the growth in the demand for imports of primary products into industrial countries. As shown especially in *International Trade 1955*, it was found that, in respect of raw material used in industry, there are a number of causes making for reductions in the demand for such imports, i.e. the general tendency for the input of raw materials per unit of manufacturing output to decline, which in turn can be ascribed to (1) changes in the structure of manufacturing production involving a slower growth of high-input industries such as textiles, and a faster growth of low-input industries such as mechanical engineering, (2) increasing use of man-made, rather than natural, raw materials (synthetic rubber, rayon, as well as wholly man-made fibres and aluminium, to quote a few outstanding examples), and (3) the general tendency e.g. in the mechanical engineering, say the automobile, industry, to add more value to any given amount of raw material. Apart from these tendencies making for a lower input of raw materials per unit of manufacturing output and thus for a relative decrease in total requirements, there also has occurred a strong increase in the production within the industrial areas, of quite a series of raw materials, traditionally obtained mainly from primary producing countries in years preceding the last war (such as oil seeds, cotton and tobacco), as well as in the field of non-tropical foodstuffs, a general rise of agricultural production other than of raw materials, often within the consuming country itself, which obviously have had an adverse effect on import requirements, especially from the non-industrial parts of the world.

But these various developments are matters of the past and the present. It has therefore been attempted to explore, it is true on assumptions the continuing validity of which will have to be checked from time to time, what the longer-term prospects are for growth of imports into the industrial countries from primary-producing areas. Naturally enough, account has been taken in these estimates which aim at gauging the possible growth of such imports by the middle 1970's, of trends that have been visible in the past. Nevertheless, while this has been mainly the case in respect of raw materials for industrial use, it was found that at least in one commodity sector, that of non-tropical foodstuffs, such estimates, essentially based on extrapolation
of past tendencies, could not possibly be applied on account of the fact that
the volume and composition, and hence the growth, of agricultural production
in industrial countries is tending increasingly to become the result of
government policy.

The impressive result reached in these investigations, which are shown
in *International Trade 1956*, pp 17 - 35,¹ is that the export earnings of
primary producing countries combined would seem to depend mainly upon the
possible growth in their supplies of non-tropical foodstuffs to the industrial
markets - and thus to depend on the policies that governments will adopt in
countries now fully developed.

It is proposed, in the next annual report now being prepared by the
secretariat, not only to verify to what extent the projections made in the
investigation quoted seem so far to have come true, but also to attempt
 estimates which will be as risky as they are important, of the prospective
 import requirements of developing countries which will obviously be in some
 relation to their economic growth. It will be seen immediately that such
 estimates, in addition to those already made in the past for export earnings
 of developing countries, will, if only on various alternative sets of assump­
tions, at least indicate the general magnitude of the import surplus of non­
industrial areas which, it has been noted, has recently been growing by leaps
and bounds, thus raising problems of financing which, in the light of recent
developments in the United States balance of payments, are becoming a matter
of primary concern to all industrialized countries.

It is submitted that knowledge of at least the main structural features
and recent tendencies of world trade is indispensable for the formulation of
any country's commercial policy.

¹ It is a matter for satisfaction that the attempt undertaken by the
secretariat in *International Trade 1956* to appraise the long-term prospects
for exports of primary products from non-industrial areas to industrial markets
has not only been followed, with only a nine-months' delay, by a similar study
undertaken by the Economic Commission for Europe, but now figures prominently
in the work programme of the Economic Department of the United Nations.