Growth and Fluctuation in the World Economy, 1870-1960

World trade grew faster than ever before in the decade of the 1950s. The annual increase in volume from 1950-60 was 6.4 per cent as compared with 3.4 per cent from 1870 to 1913, and about 1 per cent in 1913-38. This study attempts to put this postwar acceleration of growth in historical perspective and to relate it to movements in income. In particular, we have tried to analyse the interaction between the industrialised countries of Europe and America in the process of generating growth and fluctuations in the world economy. We present new estimates of the value and volume of world trade, as well as giving figures for major countries and regions which have not hitherto been readily available in a comparable form (1). We also present estimates of the long term growth of income in all the main industrial countries. It is hoped that these estimates will be useful in other studies of the world economy.

I. The Structure of the World Economy

The world economy can nowadays be usefully divided roughly into four groups: industrialised Western Europe (2); North America;

(1) The problems of reconciling the hitherto available series are stated in detail in *Forty Years of Foreign Trade* by PAUL LAMARTINE YATES, 1959, pp. 201-208. We have adjusted the value data to exclude re-exports and monetary movements of gold and silver. Imports of all countries are put on a c.i.f. basis. Trade of the Sino-Soviet bloc is included throughout. Our index of world unit value and volume also differs from previous estimates. The estimates are described in detail in the statistical annex. I am indebted to Professor M. C. Urquhart and Dr. K. H. Raabe for providing me with statistical material on Canada and Germany respectively.

(2) Austria, Belgium, Luxembourg, Denmark, France, Western Germany, Ireland, Italy, Netherlands, Norway, Sweden, Switzerland and the United Kingdom. Ireland is included as it was part of the United Kingdom for half the period considered. For convenience, this group is usually described as "Europe".

the Sino-Soviet bloc; and the rest of the world. These groups are fairly meaningful ones in terms of the distribution of economic and political power, even though the fourth one is quite heterogeneous. The "rest of the world" owes its unity largely to the fact that most of the countries are poor, underdeveloped, or primary producers, and their economic prospects are dominated by policy and developments in the first two. The only really industrial country in this group is Japan, and there are some, such as Australia, New Zealand, Venezuela and Israel which are not poor. The Sino-Soviet group is treated as part of the rest of the world for most of our period, as it has gained economic and political coherence only since the war.

TABLE I

WORLD OUTPUT, POPULATION AND *PER CAPITA* INCOME IN 1960

	Real GNP ($ billion)	GNP as per cent of World total	Population (million)	Population as per cent of World total	Average *per capita* Income ($)
Industrial Europe . . .	439	25.1	252.6	8.6	1738
U.S.	505	28.9	180.7	6.2	2796
Canada	37	2.1	17.9	0.6	2067
Sino-Soviet Group . . .	388	22.2	1013.9	34.6	383
Rest of World	378	21.6	1464.9	50.0	258
World . . .	1747	100.0	2930.0	100.0	596

Source: The figures for Europe and U.S. are extrapolations of the estimates of Milton Gilbert & Associates, *Comparative National Products and Price Levels*, OEEC, 1958, and refer to GNP at U.S. 1960 relative prices. The figures for other countries are estimates derived from various sources. The population figures for Europe and North America are from OECD *General Statistics*, and for other countries from United Nations publications.

In terms of total output the four areas are fairly well balanced, although this balance is, of course, the net result of wide divergences in population and per capita income. The four blocs are of roughly equal importance in terms of real GNP, but Europe and North America combined account for only one-sixth of world population. The European countries are five times as wealthy as the rest, the American seven times.

About 10 per cent of world money income arises through international trade. The relative weight of the four groups in

trade differs from that in respect of income. The European countries have 25 per cent of world income but they do about 39 per cent of world trade; North America with 31 per cent of world income provides 21 per cent of world exports and takes 16 per cent of world imports; the Sino-Soviet bloc represents 22 per cent of world income and does only 12 per cent of world trade; the rest of the world with 22 per cent of world income provides 29 per cent of world exports and takes 33 per cent of world imports. Europe is therefore the most open part of world economy and the Sino-Soviet bloc is the most closed.

Well over a third of world trade takes place inside each of the four blocs. The Sino-Soviet bloc is again the most closed and two-thirds of its total trade is internal. In Europe half of trade is internal. In North America and the rest of the world about a third of trade is within the group. Europe gains about 5 per cent of its money income by extra-area trade, North America 3 per cent, the Sino-Soviet bloc about 0.5 per cent and the rest of the world about 7 per cent.

The influence of different areas has not always been the same in the past. In 1960 the U.S. GNP was about 15 per cent bigger than that of Europe. In 1913 European GNP was bigger than North American — about $213 billion as compared with $135 billion (in terms of 1960 United States relative prices). In 1870 the real product of France, Germany, the United Kingdom and United States were very similar and total European income at $85.5 billion was more than four times as high as the $19 billion of North America. We have not been able to measure the long-term growth of income in the rest of the world, but it has probably grown considerably faster than in Europe (3). In terms of population, third countries (including the Sino-Soviet bloc) have certainly grown faster; they increased their share of the world total from less than 80 per cent in 1870 to 85 per cent in 1960.

In spite of its declining role, Europe has always been the biggest group in world trade. The share of North America has

(3) There is an index of physical output (agriculture, raw materials and manufactures) in the world excluding the United States and the Sino-Soviet group in Sir DONALD MAC DOUGALL, *The World Dollar Problem*, p. 490. This shows an increase of 133.5 per cent between 1913 and 1955, whereas our figure for European GNP for this period shows an increase of only half as much.

grown more slowly than its share of income. Its exports rose from 9 per cent of the total in 1870 to 20 per cent in 1960; its imports have risen more slowly. Europe's share of exports has declined

TABLE 2

STRUCTURE OF WORLD TRADE

Exports as percentage of world total

Exports from \ to	Europe	North America	Third Countries	World
		1880		
Europe	33.5	6.3	14.8	54.7
North America	11.4	1.0	2.0	14.4
Third Countries	17.7	4.1	9.2	31.0
World	62.6	11.4	26,0	100.0
		1913		
Europe	27.5	4.1	18.5	50.1
North America	8.6	3.1	3.5	15.2
Third Countries	21.5	5.0	8.2	34.7
World	57.6	13.2	30.2	100.0
		1960		
Europe	19.8	3.8	14.8	38.4
North America	6.2	5.7	8.7	20.6
Third Countries	13.0	6.6	21.5	41.0
of which:				
Sino-Soviet	2.0	0.1	9.9(1)	12.0
Other	11.0	6.5	11.6(2)	29.0
World	39.0	16.0	45.0	100.0

(1) of which intra-Sino-Soviet is 8.6.
(2) of which exports to Sino Soviet bloc are 1.1.

Sources: The figures refer to exports f.o.b.. 1880 and 1913 derived from C. P. KINDLEBERGER, *The Terms of Trade: A European Case Study*, and from national sources. 1960 from U.N. statistical bulletins and yearbooks. Special category exports of the U.S. have been allocated to the different areas in the same proportion as normal U.S. exports. It was assumed that none went to the Sino-Soviet bloc. For third countries and Europe there is a small fraction of trade which cannot be allocated by area, and which was not included in this table. This is why there is a slight discrepancy for 1960 between this table and table 10.

from 55 to 40 per cent, and its share of imports has fallen faster. Third countries have increased their share of exports and their imports have risen even more rapidly from 30 to 45 per cent.

There have been significant changes in the area pattern of trade. In 1880 Europe dominated the trade relations of the other areas, and intra-European trade played a bigger role than in 1960. There has been a significant increase in the autonomy of North America and third countries as their intra-trade has grown to be bigger than trade with Europe. The change in third countries is partly, but not entirely, due to the growth of the Sino-Soviet bloc.

II. Nature of Trade Relationships between and within Areas

It is easy to see the degree of interdependence of different areas by looking at a matrix of world trade. This does not tell us in which direction the dependence lies. In this section we shall try to show the nature of the relationships between and within the different areas before going on to analyse the transmission of growth and stability.

North America - Europe

We shall consider the relations between the four blocs before turning to relations within the blocs. The North American-European relation is now symbiotic, and neither side can be said to be the dependent partner in the economic sense. European imports from the United States have been more dynamic and volatile than United States imports from Europe, in spite of much milder European output fluctuations. Europe sends about 10 per cent of its exports to North America, i.e. about 2 per cent of European GNP. The United Kingdom has the highest export ratio with 15 per cent of total exports or 2.1 per cent of GNP. Belgium and Switzerland have a lower export ratio but a higher GNP ratio of 3.2 and 2.6 per cent respectively. Europe takes 28 per cent of Northern American exports, representing about 1.1 per cent of United States GNP and 4.1 per cent of Canadian GNP. The popular notion that an American sneeze will give the world pneumonia is a fallacy. The United States tends to suffer more from European fluctuations than vice versa.

Capital flows have played a significant part in the relations between the two centres. They not only have a direct effect on growth and stability via the balance of payments and their contri-

bution to investment, but they reinforce the already fairly strong psychological links in business decisions between the areas, as well as being a major element in the constant two-way flow of technological knowledge. The direction of the capital flows has varied considerably. The overall creditor-debtor position, taking both short and long-term capital into account, is in favour of Europe. Before 1913 there were large European capital flows to both the United States and Canada. During the first world war, European assets in the United States were reduced and the United States lent a great deal to Europe. In the 1920s there was a large United States flow to Europe. In the 1930s this was reversed. In the second war, the pattern of the first was repeated. From 1946 to 1958 there was a massive flow of United States aid and government loans to Europe which amounted net to $25 billion. During this period, there were small flows of private capital in both directions, with a net recorded flow from the United States of $200 million. Since then, the situation has changed. The U.S. has become a net recipient on government capital due to European repayment and prepayment of debt. United States private capital has been drawn to Europe partly by the creation of the Common Market, but also because the disappearance of differential war risks brought about by Sputnik, the convertibility of European currencies, and the strength of European reserves has made U.S. capital responsive to the higher interest rates and growth of equity values in Europe. This has recreated an international capital market in a way unknown for forty years. There is now, in fact, an entirely new situation for short-term capital, which has shown itself capable of disturbing both the United States and Europe. Hence, on capital account as well as current account there is no evidence that the European relationship is one of dependence on the United States.

There has also been little long-term relation between European and U.S. growth rates or in the timing, frequency and amplitude of fluctuations. Since 1950 the United States has had three business recessions, none of which has had any serious impact on European payments and only a very minor impact on the European conjuncture. The biggest of these was in 1958 and coincided with an extremely mild recession in Europe but the United States recession contributed to rather than caused it. The main impact on Europe of slower United States growth in the 1950s has not been any direct deflationary influence but the transmission of depressing price influences to primary products, which has improved Europe's terms of trade with third countries and, if anything, fostered European growth.

Industrial Countries - Rest of World

The relation of Europe and America to the "rest of the world" is generally one of dominance by the industrial countries. This does not, of course, apply to European-American relations with the Sino-Soviet group, although it did in prewar years. American trade with third countries is only half as big as that of Europe, and United States imports from third countries have been steadier than those of Europe in spite of the greater volatility of the United States economy. Nevertheless, the influence of the U.S. is probably as great as that of Europe. This happens because the United States is a major producer of many raw materials and foods and hence has a major influence on world markets through purely internal developments. The U.S. also exports as much capital to the rest of the world as the European countries combined.

Third countries do not usually generate large autonomous demand fluctuations because the great bulk of their economy is at a subsistence level; the volatile components like investment, military spending and consumer durables are much smaller than in Europe or America. They are much less industrialised with a much smaller group of entrepreneurs. This is, of course, not true of Japan, Australia and some of the wealthier countries in Latin America. However, they are too small, individually, to have much of a world impact on their own, and any of their fluctuations having purely domestic origins are not too likely to be synchronised in time, as their trade, capital and psychological interrelations are much smaller than those they have with industrial countries. All of this does not imply that they are a stabilising force in the world economy. In fact, their imports are quite volatile. This is, of course, largely a reflection of the volatility of their export earnings and capital receipts, but their imports tend to react more quickly to variations in export receipts than is the case in Europe or America. This is, in some cases, due to lack of liquidity or the operation of closer balance of payments constraints, but the main reason is probably that foreign trade is heavily concentrated on particular sectors of their economy. In less developed countries the bulk of imports

is bought by the people who are exporting, and their sensitivity is therefore greater than in advanced countries where foreign trade is more widely diffused throughout the economy. Nowadays, of course, many of their trade reactions are determined by government policy.

Less developed countries tend to have volatile export prices because their supply situation is not as flexible as that of developed countries. This is partly because of the nature of agricultural output and also because many countries are still heavily dependent on exports of only one or two items. As a group, however, the volume of their exports has been much more stable than that of Europe and America since 1913.

One of the criteria of dependency is the direction of capital flows. In 1960 the net outflow of capital from Europe and America to the rest of the world excluding the Sino-Soviet bloc was about $8.5 billion (4). The transfer of resources represents about 1 per cent of the income of advanced countries in money terms and about 3-4 per cent of that of the rest of the world. This flow, therefore, adds considerably to the resources available for growth in third countries and it is probably about 20 per cent of their capital formation. It is also the main vehicle by which they import new technology. The technological dependence is largely on the West, although Japan and Russia have an increasing role. Apart from its impact on growth, foreign capital also leads to cyclical problems. This is true particularly of private investment, the flow of which is influenced by the levels of activity and entrepreneurial psychology in the developed countries. The presence of a large bloc of foreign-owned industries will also influence these economies in sympathy with the conjuncture outside. However, more than half their capital receipts are now governmental and not subject to such influences.

It is, of course, possible to overstate the dependence of third countries. Most of them have now achieved political independence, and their former bilateral dependence on one particular industrial country is diminishing. Their degree of dependence on industrial

(4) *The Flow of Financial Resources to Countries in Course of Economic Development in 1960*, OECD, February 1962, describes the flow to underdeveloped countries to which we have added an estimate for Japan, Australia, New Zealand and South Africa. These figures include reinvested earnings, and funds flowing through the I.B.R.D.

countries has also declined somewhat as their trade with each other has increased. Their reserve position is weaker than that of North America and Europe, but in 1960 their exchange reserves (excluding the Sino-Soviet bloc) amounted to $15 billion or almost a third of imports. The flow of government aid they receive is pretty steady and may even compensate fluctuations in the private flow. These flows are increasingly geared to development plans which will give these countries an independent momentum of their own. There are also some automatic stabilisers in their payments — in times of world recession when their prices and commodity export earnings fall, they usually pay less for shipping services and remit fewer dividends. They also have a wide armoury of exchange controls and trade restrictions which they use to protect their position. This is, of course, evidence of the weakness of their payments position, but on the other hand, it is a more powerful defence weapon than they have had before. They can now count on exercising these without fear of the retaliation which it would have invoked in earlier years, as these weapons have now been abandoned in Europe.

Sino-Soviet bloc - Rest of World

The relations between Sino-Soviet group and third countries are largely confined to trade, with small capital movements and few services. A good deal of trade is conducted on a barter basis. Although the bloc is a much bigger raw material producer than Europe, it exercises less indirect price influence on third countries than the United States does, because it is cut off from the world market. The relations of North America with the Soviet group are negligible, and those of Europe are generally marginal. The Sino-Soviet bloc has remained withdrawn from the world economy largely as a matter of choice but partly because of Western trade restrictions. However, its outside trade ties have increased appreciably in the past few years, and a capital flow to less developed countries has been inaugurated, which in 1960 was about 2 per cent of the size of the flow from Western countries.

Intra-Bloc Relations

United States - Canada. The relations within blocs vary a good deal. Within North America, the United States is the

dominant partner, taking well over half of Canadian exports and providing about 70 per cent of imports. She dominates the Canadian invisible and capital account, and provided a $5.4 billion net private capital flow (excluding reinvested earnings) from 1946 to 1959 which was equal to about 10 per cent of Canadian capital formation in this period. The Canadian role in the United States economy is negligible by comparison, although she is the United States' biggest customer and supplier. This interdependence has grown enormously in the period considered, and the change has been largely fostered by the two major wars. Canadian growth and fluctuations are heavily influenced by this, by widespread U.S. ownership of Canadian industry, and by close technological links. In spite of this, fluctuations in the Canadian trade balance have tended to be milder than those in the United States because the biggest brunt of recession has fallen on her imports of American capital goods.

Europe. The relations between European countries are much more equal, and the four big countries do not have nearly the influence over their trading partners which one might expect. As a group, the four large countries are dominant, but Germany and the United Kingdom are the only two countries with any significant degree of bilateral dominance. The only really heavily dependent country is Ireland, about three-quarters of whose trade is with the United Kingdom. Austria and the Netherlands send a quarter of their exports to Germany. Denmark and Norway send about the same proportion to the United Kingdom. The main impression one gets from Table 3 is that the European trade pattern is surprisingly dispersed. The fate of European countries is therefore closely interlinked and there is no evidence of any greater fluctuation in the smaller countries. It is true that the smaller countries are more dependent on trade than the larger ones, and insofar as trade is more volatile than income, one might expect them to have a more volatile income than the larger countries. There is, in fact, no evidence of this in the record of fluctuations. To some extent it may be due to better economic policy, but it is partly due to their heavier import dependence on goods which are amongst the more volatile components of demand — capital goods and consumer durables. The ones which suffer most — like Sweden and Belgium — export raw materials. They might also be expected to

benefit (or suffer) more, secularly, if trade is rising (falling) relative to GNP in the larger countries, but there is no evidence for this either.

In the 1870-1913 period there were substantial intra-European capital flows, but these were greatly reduced in the interwar period in favour of European-American flows. Now that the United

TABLE 3

STRUCTURE OF EXPORT MARKETS IN 1960

Percentage of Each Country's Total Exports

From \ to	France	Germany	Italy	U.K.	Other Industrial Europe	U.S.	Canada	Sino-Soviet	Other Third Countries	World
Austria	1.7	26.8	16.6	2.8	14.5	4.4	0.6	14.8	17.6	100.0
Belgium	10.4	15.8	3.1	5.6	31.0	9.5	1.1	3.7	19.9	100.0
Denmark	1.5	18.7	4.6	26.4	18.4	9.1	0.7	3.9	16.6	100.0
France	—	13.7	5.8	5.1	19.0	5.8	0.8	4.0	45.8	100.0
Germany	8.8	—	5.9	4.5	37.7	7.9	1.1	4.7	29.4	100.0
Ireland	0.9	3.1	1.0	74.0	2.6	7.3	0.8	0.1	10.2	100.0
Italy	7.6	16.5	—	6.9	19.0	10.6	1.1	5.8	32.6	100.0
Netherlands	5.9	22.6	3.2	11.0	27.0	4.9	0.7	1.7	23.1	100.0
Norway	2.6	13.7	3.5	22.6	26.4	6.9	0.4	4.8	19.1	100.0
Sweden	3.9	15.2	3.3	16.0	27.5	6.4	0.8	4.8	22.1	100.0
Switzerland	6.7	18.4	8.2	5.8	16.8	10.0	1.7	3.7	28.7	100.0
United Kingdom	2.6	4.9	2.5	—	18.5	9.3	6.0	3.5	52.7	100.0
United States	2.8	5.2	3.2	6.9	9.8	—	18.0	0.9	53.2	100.0
Canada	1.4	3.1	1.2	17.2	5.0	56.6	—	0.8	14.7	100.0

States is no longer a uniquely secure haven for investment, there has been a revival of intra-European flows. The private capital flow within Europe is probably as vigorous as that inside North America and is likely to grow much farther as the process of European integration proceeds. Here again, it is noteworthy that the small countries — Switzerland and Holland — have played a leading role.

Third Countries. Within third countries the dependency relation is not very close. There is, however, a rapidly growing intra-trade particularly in oil and manufactures. There are several countries whose relations to Japan must be similar to that of third

TABLE 4

RATIO OF MERCHANDISE TRADE TO GNP AT CURRENT MARKET PRICES

	1870	1913	1929	1938	1950	1960
				Imports c.i.f.		
Austria				24.2 (a)	20.6	25.0
Belgium-Luxembourg				28.0	25.9	31.2
Denmark	28.7(1)	35.5	29.9	21.5(2)	27.6	30.3
France				10.5	10 4 (b)	10.8
Germany	18.5(3)	18.1	14.9	5.9	11.6 (c)	14.8 (d)
Ireland				22.9	41.4	35.5
Italy	11.0(4)	16.5	14.5	13.1	10.6	14.7
Netherlands				23.7	41.2	40.4
Norway		32.4	26.8	20.7	32.3	33.0
Sweden	16.3	22.9	20.0	16.2	21.2	23.6
Switzerland				17.3	22.8	26.7
United Kingdom	24.4	24,9	22.7	18.7	18.9	17.5
United States	6.6(5)	5.1	4.5	2.5	3.4	3.1
Canada				10.2	19.6	16.8
				Exports f.o.b.		
Austria				24.3 (a)	14.1	19.8
Belgium-Luxembourg				26.5	22.1	29.8
Denmark	21.2(1)	29.1	28.1	20.1 (2)	21.5	24.9
France				6.9	10.4 (b)	11.8
Germany	13.1(3)	17.0	15.0	5.4	8.6 (c)	16.6 (d)
Ireland				13.4	18.9	23.9
Italy	10.8(4)	11.3	10.1	6.3	8.6	11.4
Netherlands				17.4	28.3	35.9
Norway		23.0	18.7	14.5	18.6	19.9
Sweden	17.7	22.1	20.3	16.4	19.8	21.0
Switzerland				14.2	19.7	22.4
United Kingdom	18.8	19.8	14.9	8.2	16.3	14.1
United States	6.3(5)	6.1	4.9	3.6	3.5	4.0
Canada				15.7	17.5	14.7

(a) Includes trade with Germany.
(b) Including Saar.
(c) Federal Republic (excluding Saar) and W. Berlin.
(d) Federal Republic (including Saar) and W. Berlin.
(1) 1874.
(2) 1937.
(3) 1875.
(4) 1872.
(5) 1889.

countries to Europe. The capital and invisible flows within the region are negligible in comparison with those they have with the outside.

Sino-Soviet. Within the Sino-Soviet bloc, the dominant country is the USSR on both current and capital account. However, there is no free currency convertibility within the bloc, barter is widely practised, and there is very little capital movement. The countries are therefore more autarkic than those in Europe.

III. The Transmission of Growth via Trade and Impact of Trade on Growth

Generally speaking, we can consider a country's import movements as the impulses which it transmits to the rest of the world and its export movements as the stimuli which it receives. Import changes are not, of course, induced by domestic factors alone. There are constraints on import behaviour which arise through balance of payments difficulties caused by changes in exports or capital flows. To the extent that countries so affected reduce their imports as a result of the resulting income change or directly via policy measures, they are not transmitting autonomous influences but merely reflecting back into the world economy influences which they receive from outside. Imports are also affected by changes in the ratio of foreign to home prices. Exports are affected by pressures of domestic as well as foreign demand, and they are, of course, influenced by changes in competitiveness. All of these relationships will be affected by the degree of freedom a country enjoys because of its reserve position. There is also an asymmetry in the balance of payments constraint, depending upon whether the country needs to reduce a deficit or a surplus.

It is therefore difficult to prove anything conclusive about the causes and mode of transmission of growth and stability influences. However, a close inspection of long period movements, particularly of growth rates, and of the frequency, timing and amplitude of fluctuations will provide clues and at least enable us to rule out certain hypotheses. It would, of course, be desirable to have regional data on intra-bloc and inter-bloc trade relations. Any refinement in cyclical analysis would require monthly or quarterly data in order

to assess the timing of fluctuations. For the postwar period, the availability of OECD seasonally adjusted trade values makes it possible to begin such a detailed analysis. However, the general lack of volume figures on regional trading patterns, even for recent periods, is a major obstacle to more refined study. Further *desiderata* would be a more analytic classification of the type of goods traded than is usually available and a greater knowledge of the share of foreign trade in the various components of GNP. None of this refinement was possible for the period we are considering and we have therefore concentrated on certain crude relationships. Generally, we have studied transmission of influences by looking at the volume of a country's imports relative to its GNP in real terms. We have analysed price movements separately. For the stimuli received we have related each country's exports to the movement of world trade. This is more relevant than world income even if we had it, for it allows for changing import patterns, and an individual exporter cannot be held responsible for changes in these. It would have been a greater refinement to exclude from world trade the trade of the country in question, particularly when, as in the case of the United Kingdom and United States, its share was large. But in practice this would not change the picture much.

The most consistently dynamic area in world trade has been third countries. America has moved faster than the world average, and Europe over the long run has pulled down the world average. However, the long-term lead of North America is entirely due to wars, and that of third countries was largely helped by wars. It is clear that world trade has tended to move in sympathy with production in the industrial countries, but the relationship has changed over time. From 1870 to 1913, world trade moved a little faster than the aggregate income of industrial countries. In 1921-38 trade moved more slowly than income and in 1950-60 much faster.

From 1870 to 1913 economic growth in Europe averaged about 2.1 per cent a year, and growth in North America about 4.5 per cent a year, or about 2.8 per cent a year for the group. World trade grew somewhat faster, at 3.4 per cent. There was some decline in the import ratio in the United States and some rise in the smaller European countries and Germany, and a fall in France and the United Kingdom. The movement of trade in third countries was in line with that of Europe and America. The steady growth

of world trade in the 1870-1913 period can perhaps be taken to be a normal condition of healthy growth in which trade may not actively foster growth but does not constitute a hindrance. Trade grew in line with income, except in Germany. Countries were receiving roughly the same stimulus as they transmitted.

TABLE 5

RATE OF GROWTH OF GNP

territory of the epoch (a)

annual compound rates

	1870-1890	1890-1913	1913-1925	1925-1938	1938-1950	1950-1960
Belgium	2.4 (1)	3.1 (2)	− 0.9 (3)	2.3 (4)	1.8	2.9
Denmark	2.8	3.5	1.8	2.4	2.5	3.3
France	1.8	1.4	1.4	− 0.2	1.6	4.1
Germany	2.9 (5)	2.9	− 1.7	4.1	− 3.8	7.7
Italy	0.7	2.1	2.0	1.8	0.3	5.9
Netherlands		2.2 (6)	3.1	1.3	2.0	4.9
Norway	1.6 (7)	2.6 (8)	2.3	3.4	2.3	3.5
Sweden	2.8	3.6	1.6	3.1	3.3	3.2
Switzerland		2.4	2.1	1.9	2.0	4.6
United Kingdom	3.0	1.7	0.2	2.5	1.1	2.6
Europe	2.2	2.1	− 0.3	2.2	0.1	4.7
Canada	3.2	4.3	1.0	1.8	5.7	3.9
United States	5.7	3.9	3.0	1.0	5.0	3.2

(1) 1870-1895.
(2) 1895-1913.
(3) 1913-1924.
(4) 1924-1938.
(5) 1871-1890.
(6) 1900-1913.
(7) 1871-1887.
(8) 1887-1913.
(a) Cf. Statistical Annex.

The first world war greatly affected the growth of Europe and its trade. There were changes in the boundaries of all the larger European countries, and there was a net loss of territory in our group of countries which amounted to about 8 per cent of 1913 income. Total European income did not regain 1913 levels till 1927. In every country, except the United Kingdom and possibly Sweden, the movement of trade was affected more adversely than GNP. The war hardly slowed the rate of United States' GNP growth, and by 1927 it was more than 50 per cent up on 1913. American imports

TABLE 6

RATE OF CHANGE OF THE VOLUME OF IMPORTS

annual compound rates

	1870-1890	1890-1913	1913-1925	1925-1938	1938-1950	1950-1960
Belgium	4.3	4.2	- 3.5	3.1	1.1	6.7
France	3.4	2.4	0.5	0.1	0.3	6.8
Germany	..	3.9	- 1.5	0.4	- 4.8	14.8
Italy	..	..	1.2	- 2.6	2.8	12.1
Netherlands	5.2	5.2	- 0.9	0.7	1.8	7.1
Norway	..	3.6	0.6	4.1	1.6	6.0
Sweden	..	4.8 (1)	1.9	4.9	1.1	7.0
Switzerland	..	..	- 1.3	- 0.2	3.7	5.8 (2)
United Kingdom	3.2	2.1	1.1	0.8	- 0.8	4.7
Europe	..	3.2	- 0.2	0.8	- 0.3	7.9
Canada	3.1	7.4	0.1	1.3	6.0	5.1
United States	..	3.3	3.6	- 0.8	5.0	3.8
Third Countries	..	3.2	2.6	1.6	2.9	6.5
World	3.4	3.5	1.2	0.8	1.8	6.4

TABLE 7

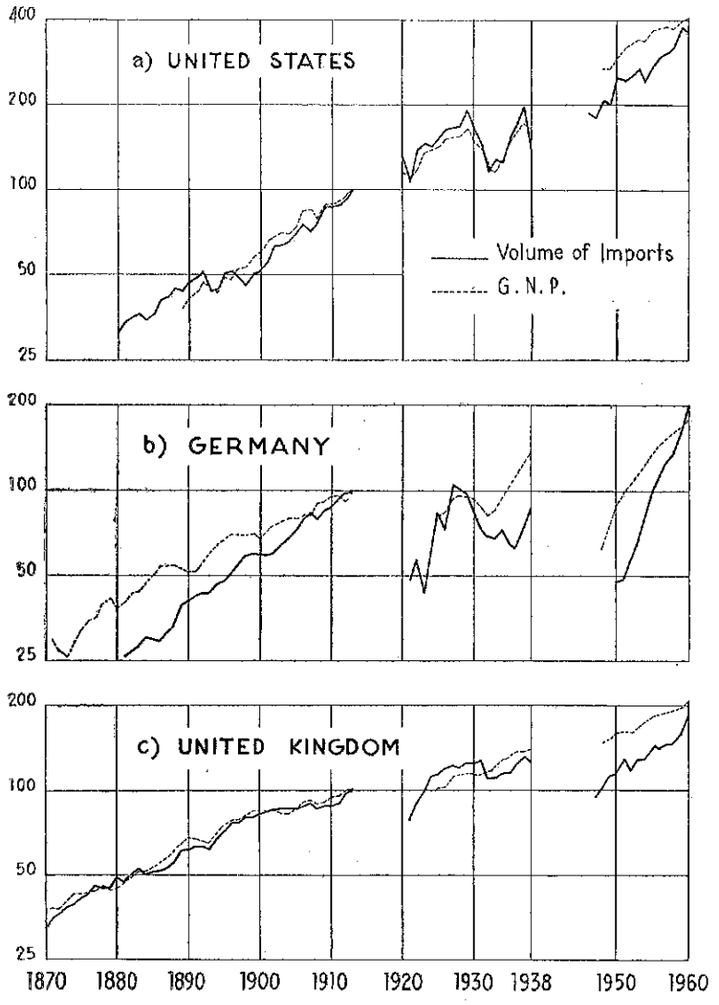
RATE OF CHANGE OF THE VOLUME OF EXPORTS

	1870-1890	1890-1913	1913-1925	1925-1938	1938-1950	1950-1960
Belgium	5.0	3.5	- 2.6	2.7	0.3	7.7
France	2.7	2.8	1.8	- 2.3	4.3	7.2
Germany	..	5.1	- 3.5	- 0.3	- 3.7	15.8
Italy	..	..	2.6	1.0	0.8	11.8
Netherlands	5.4	4.6	1.2	0.2	2.2	10.0
Sweden	..	3.8 (1)	0.0	3.5	2.3	5.5
Switzerland	..	..	- 0.9	- 1.0	3.0	7.8 (2)
United Kingdom	2.6	2.1	- 1.9	- 2.1	4.7	1.9
Europe	..	3.2	- 1.1	- 0.4	1.7	7.0
Canada	1.4	6.5	5.7	0.3	4.1	3.8
United States	..	3.8	2.3	- 0.2	5.1	5.0
Third Countries	..	3.5	3.4	1.7	0.4	6.4
World	3.4	3.5	1.2	0.8	1.8	6.4

(1) 1893-1913
(2) 1950-1959.

GRAPH I

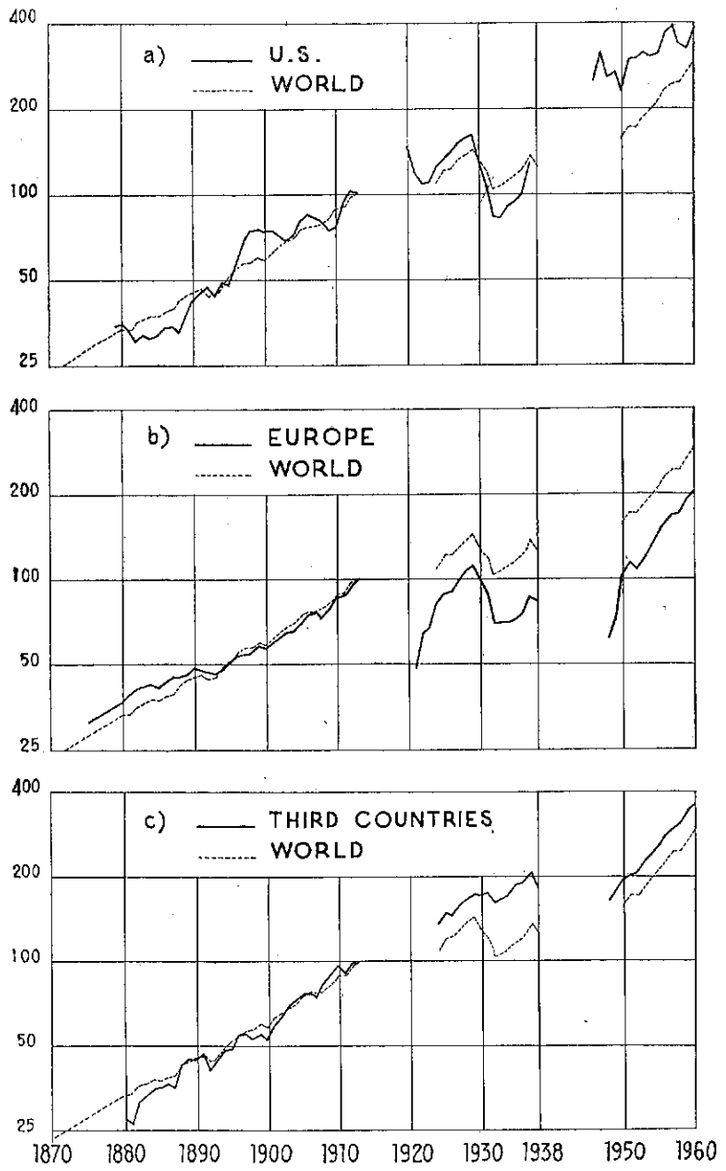
INDICES OF G.N.P. AND IMPORT VOLUME - 1913=100



semi-logarithmic scale

GRAPH II

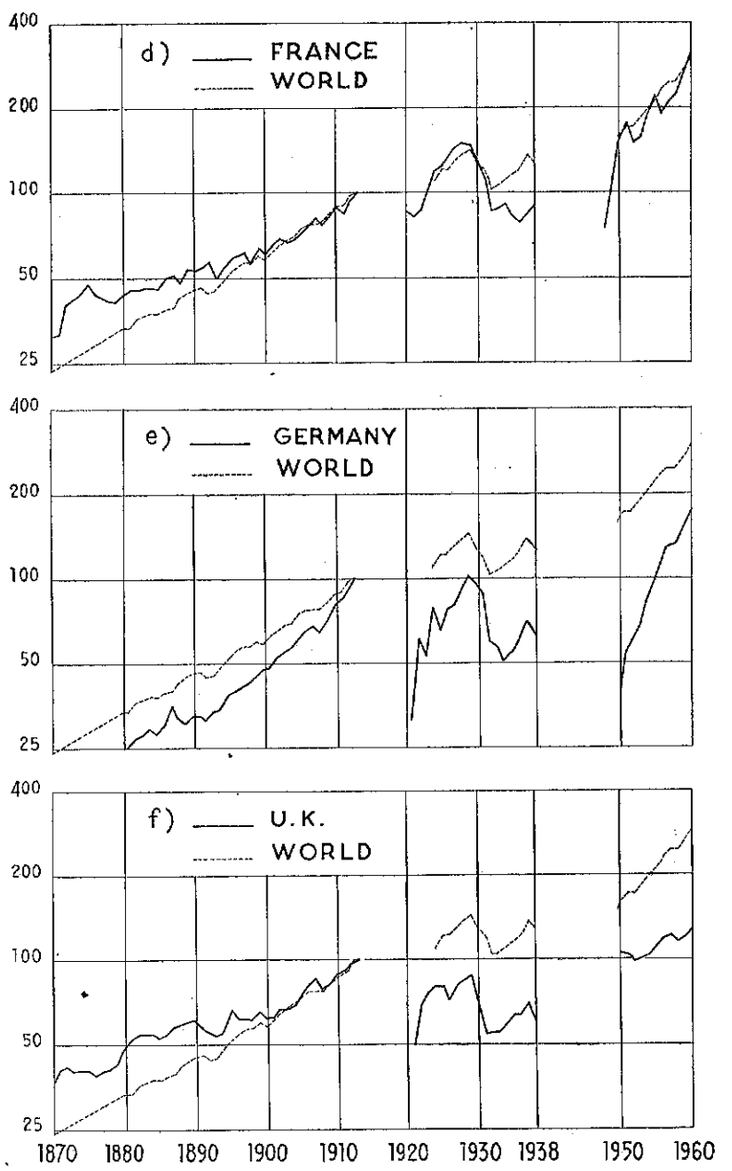
INDICES OF EXPORT VOLUME - 1913=100



semi-logarithmic scale

GRAPH II

INDICES OF EXPORT VOLUME - 1913=100



semi-logarithmic scale

rose somewhat more in volume terms than did GNP, though the smaller rise in import prices than in domestic prices led to a fall in the import ratio in value terms. It is not possible to measure the impact of the war on the income of third countries. Some suffered badly, such as Russia, the Balkans and Turkey, but, as a whole, their experience was probably closer to that of the United States than to that of Europe (5). Third countries greatly increased their export earnings from 1913 to 1921, sustained their imports well, and increased the proportion of intra-trade. Some degree of spurious dynamism is imparted to third country trade in this period by boundary changes. If 1913 boundaries had been the same as postwar boundaries, the value of third country exports would probably have been about 15 per cent higher in 1913. This was largely due to the breakup of the Austrian Empire. Other changes in Russia and Turkey were much less important. These gains were partly at the expense of Europe, but were bigger than European losses because the trade of the new states was, of course, bigger than that of the old Austrian Empire. On balance, Europe was compensated for the loss of Austrian trade by the split of Ireland from the U.K. in 1923, which created as much new foreign trade as had been lost. The net effect of boundary changes on world trade was probably a value increase of about 5 per cent.

There was a fairly rapid rise in trade in the 1920s. In Europe trade rose faster than income, but the 1929 peak in European trade did not go more than a quarter higher than its 1913 level. The state of demand and activity in the late 1920s in Europe was not as high as in the United States. There was considerable slack capacity, particularly in the United Kingdom. The slow growth of Europe in the 1920s appeared to be due to the predominance of structural problems but this was the case only because the general context was one of slow growth. In fact, slow growth was largely due to bad national policies and lack of co-operation. Although there were large United States government loans to Europe after the war, amounting to $7 billion in 1919 and 1920, the emphasis in

(5) "Such statistics as are available indicate that in India, Brazil, South Africa, New Zealand and Finland, for example, as well as in Japan, industrial production increased from 1913 to the later 'twenties by 100 per cent or more — a rate of advance which among the more developed countries was not attained even by the United States". *International Currency Experience*, p. 195.

international policy was on war debts and reparations and less on action to rebuild a prosperous world economy.

The 1929 crash brought a 27 per cent fall in the volume of world trade, a 29 per cent fall in United States income and a 7 per cent fall in European income. The volume of European exports fell 37 per cent, and American exports fell by 49 per cent — about twice the world average. Third country exports were hit only mildly, by about 10 per cent — no worse than in the milder recession of 1937-38. There was also a major fall in prices, about 40 per cent in dollar terms for the United States and Europe and about 60 per cent for third countries. The fall in the volume of European and United States imports was lower than in exports — 19 per cent and 40 per cent respectively. Third countries transmitted a much bigger deflationary impact in volume terms than they received — imports fell by 36 per cent. In spite of the fact that the United States was the major sufferer in this depression, there is little doubt that she played a major role in transmitting it to the rest of the world (6). The international payments system of the 1920s was very precarious and the state of European demand and investment was weak except in France. The United States was a major reserve centre but did not act as a stabilising force on the capital side of the account. There was a large repatriation of United States capital when the recession started. The German current account and reparations payments had been heavily dependent on large American capital flows. There was serious exchange rate disequilibrium between major currencies, particularly sterling and the franc which were respectively overvalued and undervalued when they were stabilised in 1925 and 1926 (7). The effects were seen in the high French reserves and short-term claims on London, but were also reflected in severe deflation and unemployment in the United Kingdom and boom conditions in France. In this situation, the major recession in United States imports and the sudden reflux of United States capital from Europe caused both external and internal financial collapse in central

(6) This is the view expressed by Hal B. Lary & Associates in *The United States in the World Economy* which analyses the impact in terms of supply of and demand for dollars — emphasising very strongly the destabilising role of capital and fixed war debt obligations. It makes it clear that the liquidity constraints which forced other countries into deflation were absent in the United States.

(7) Cf. *International Currency Experience*, League of Nations, 1944, for a detailed description of this period.

Europe, and set off a withdrawal of French funds from London. There were government attempts to provide some modicum of international liquidity to palliate the problem but these were miserably inadequate. On the private level there was a breakdown of the international mercantile credit mechanism in 1931, and the United Kingdom also closed the London capital market to foreign borrowers in 1931 and 1932. The attempt of the United Kingdom to achieve better equilibrium by abandoning a fixed gold parity and devaluing in 1931 was followed by a round of competitive devaluations inaugurated by the United States in 1933. The French were fairly immune to the United Kingdom devaluation but they suffered in consequence of their delay in following the United States. After this, the international payments system collapsed. Trade was further restricted by commercial policy. The U.S. increased its tariffs in 1930 and was followed by the U.K. in 1932. World trade, income and liquidity were rebuilt gradually on a protectionist and discriminatory basis, mainly by the efforts of the European countries. The system of reparations and government debt payments was abandoned with enforced United States consent. The most successful of these discriminatory alignments, if we judge in terms of the movement of income and trade, was the sterling area and the system of imperial preference. France also managed to concentrate more of her trade on the franc area, and Japan, Germany and Italy built up new autarkic, colonial and semi-colonial blocs (8).

In the 1930s the volume of European and United States trade never regained the 1929 peaks, and it was only in third countries that there was any net advance. Nevertheless, economic growth in Europe generally was as fast as it had been before the first world war, except in France. By 1938 European GNP was 15 per cent above the 1929 peak. There was no recovery in import ratios and the only European countries to regain their 1929 volume of imports in the inter-war period were the United Kingdom, Scandinavia and Belgium. There was a general revival of trade in 1937, but an extremely sharp reaction in 1938 as the whole system was quick to react to the deflationary shock of another U.S. recession. This recession was big in respect to almost all others, except 1929, but did not affect European income much. In the thirties third country

(8) The impact of these discriminatory alignments on trading patterns of individual countries is analysed in the League of Nations, *Review of World Trade 1938*, Geneva, 1939.

trade did better than that of both Europe and America and rose well above the 1929 level. The evidence on income growth is not available in comparable form, but they may well have done as well as Europe (9).

The impact of the second world war on European output was worse than the first, the territorial loss was bigger — about 15 per cent of the 1938 income — but recovery was quicker. Prewar output was surpassed in 1950. Total European imports declined a little in volume, but there was a notable export increase in the U.K., and possibly in France (10). Third countries suffered more directly than in the first world war and their exports were only moderately higher in volume in 1950 than in 1938. The volume of U.S. exports increased much faster than it had in the first world war. This was partly due to large U.S. aid shipments made possible by an 80 per cent GNP increase from 1938 to 1950. The war brought big changes in the terms of trade, with the U.S., Germany and the U.K. as the main losers and third countries as the main gainers.

In the decade of the 1950s, European growth has gone ahead at a quite unprecedented pace except in the United Kingdom. The average rate of GNP growth has been about 4.7 per cent and the ratio of imports to GNP has risen everywhere except Ireland, the United Kingdom and the Netherlands. As a result, the volume of European imports has risen much faster at about 7.9 per cent. There is little doubt that the opening up of the economies has been a stimulus to growth both on the demand and the supply side. Except in Belgium, there has been a close relation between fast GNP growth and export growth. In continental countries the growth of exports has generally been faster than imports, particularly in Germany, the Netherlands and Switzerland. In the United Kingdom exports have been stagnant. Thus exports failed to stimulate British growth and the attempt to rectify the balance of payments consequences has further impeded growth. The continental countries have received even bigger stimuli than they have transmitted, but this kind of

(9) "In a large number of formerly backward countries, industrialisation proceeded with a vigour that was only temporarily checked, if at all, by the great depression". *International Currency Experience*, p. 196. The figures quoted suggest that their industrial growth was about three times the world average from 1929 to 1938. It is suggested that they financed this rapid growth by raising internal savings and increasing the share of capital goods in their imports.

(10) The volume movement for France should be treated with caution as the unit value deflator may well be defective for this period.

progress cannot be entirely derivative and all countries have contributed something to the general ambiance of growth. A good deal of success is due to the general policy emphasis on expansion, full employment and mutual aid. Nobody has tried beggar-your-neighbour remedies and exerted deflationary pressures on others.

This dynamism was not shared by North America, where the rate of economic growth has been slower than Europe. At 3.2 per cent, U.S. growth has been slower than its long-run average. The increase in American imports, although a quite respectable 3.8 per cent, has been below that in the slowest-growing European country, i.e. the United Kingdom. United States exports in the 1950s rose faster than imports, but some of this growth was due to an increase in tied aid.

The trade and income performance of the U.K. and U.S. in the 1950s contributed less expansion to the world economy than that of most continental European countries. But these two countries cannot be judged on trade alone. A good deal of the buoyancy of European imports was financed by Marshall aid and the United States tolerated European discrimination in trade and payments without retaliation in the period when Europe was recovering its competitiveness. The United States ran down its reserves greatly and hence helped the continent to restore a viable payments system. The United Kingdom also contributed to the expansion of world trade. The high level of postwar third country imports was made possible to a substantial extent by use of sterling balances created by British war finance and amounting to $10 billion. The U.S. and the U.K. were jointly responsible for the switch to sensible policies for maintaining full employment, and their wartime reappraisals changed the tone of the postwar world and contributed to the prosperity of Europe and third countries.

The postwar acceleration in world trade is obviously centred on Europe. It springs partly from faster economic growth and partly from changes in commercial policy. Some of the factors making for faster growth have been temporary, particularly in countries like Germany, France and Italy, and a more moderate pace must now be expected, although growth should be higher than previous long-run trends (11). The reduction of trade barriers cannot be continued permanently, but still has some way to go. In the latter respect, we have probably reached the same stage as in the late 1920s, having dismantled non-agricultural Q.Rs more or less completely, and reduced tariffs from the high levels imposed in the 1930s. Import ratios are still generally somewhat below peak except in Scandinavia and Switzerland (in the latter, 1929 was probably higher). The reduction of tariff barriers within the Common Market is something new and will probably raise import ratios higher than ever before. Certainly, they have risen fast in the past two or three years. A good deal of the resulting expansion will affect intra-European trade, but the process of tariff reduction and quota liberalisation is likely to apply to some extent to non-European countries, particularly as the very strong payments position of Europe makes such a liberalisation both possible and desirable.

(11) For a discussion of the factors likely to affect growth trends, cf. my article in this *Review*, March 1959.

Although the proportion of trade within Europe increased in the 1950s, the rest of the world also felt the benefit. Third countries were able to expand their total imports by 6.5 per cent a year in volume, partly because their exports to Europe were increasing rapidly. They, were, however, increasing their intra-trade even faster, even if we exclude the Sino-Soviet bloc. The volume of third country exports increased in the 1950s about as fast as their imports, but their terms of trade declined by about 11 per cent. A good deal of the buoyancy of third countries in the 1950s was due to the steady increase in capital flows from both Europe and America which almost compensated for the decline in terms of trade since 1950. These flows averaged $3.5 billion from 1950-55, and $7 billion from 1956-60. Here, America played a major sustaining part. The United Kingdom and France have also had large capital exports to third countries. For the 1950s it is possible from various sources to make a rough estimate of GNP growth in third countries. In the Sino-Soviet bloc GNP probably grew in the 1950s at about 6.5 per cent, and in other third countries about 4.5 to 5 per cent. This compares with 4.7 per cent in Europe and 3.2 per cent in the U.S.

IV. Fluctuations in Trade and the Transmission of Cycles.

In the period since 1948, fluctuations in European output have been remarkably limited. Growth has not always been at an even pace but in some countries GNP has never declined, and where

declines have occurred, they have been brief and small. In most cases GNP fell only once. This is in sharp contrast to the interwar years when output was below peak for about half the period in many countries. It also contrasts favourably with the pre-1913 period which was generally more prosperous than the inter-war years but when the record of the United Kingdom and Italy was worse than in the 1930s. In the United States the postwar record has not been so good, output having been below peak for about a quarter of the period.

If we measure fluctuations by their amplitude, the record is similar. The maximum decline from peak to trough in GNP in most of Europe since 1948 has been two per cent, as compared with falls ranging from five to 19 per cent in all countries except the United Kingdom in the 1930s and two to five per cent prior to 1913. Generally then, post-1948 recessions have lain below the mildest pre-1913 experience. The inter-war experience was generally worse than the worst of pre-1913. The general picture of the three periods is the same in North America as in Europe, but the magnitude of fluctuations in the United States and Canada has been greater in all periods.

Our measures of fluctuation are rather crude, i.e. the proportion of years below peak and maximum amplitude of downward fluctuation (12). There are, of course, alternative measures, e.g. fluctuations round some fitted trend, which would tend to show somewhat more postwar fluctuation, particularly in countries like Germany where the postwar trend has been very high. It is unlikely however, that other methods would invalidate our general conclusion, and it is not worth while fitting trends to data of this type with such erratic inter-war developments.

The movement of trade has been more volatile than production in all periods and most countries. The ratio of fluctuations in import volume to those in output since 1948 has been very much greater than it used to be and import fluctuations have been as big as those before 1913 in several European countries. The countries which have had particularly unstable imports relative to their production movement have been France, the Netherlands, Sweden, Switzerland, and the United Kingdom. In the case of the United Kingdom, this

(12) Cf. my article in this *Review*, June 1960, for a more refined analysis of postwar cyclical expansions and contractions.

postwar behaviour contrasts with that before 1913 when imports reflected movements in activity in a dampened way.

As far as exports are concerned, there has been a reduction in both the frequency and amplitude of the downturns experienced

TABLE 8

EXPERIENCE OF RECESSION

	G.N.P. of epoch			Export Volume			Import Volume		
	1890-1913	1921-1938	1948-1960	1890-1913	1921-1938	1948-1960	1890-1913	1921-1938	1948-1960
Maximum Cyclical Fall from Peak to Trough									
Belgium	..	5.9	1.8	13.1	31.8	6.9	(9.1)	18.7	6.6
France	..	19.3	0	11.5	47.3	15.1	11.0	28.0	7.6
Germany	4.0	(16.1)	0	4.7	49.7	0	5.4	40.5	0
Italy	5.2	5.4	0	..	31.9	10.5	..	53.2	0.2
Netherlands	(2.1)	12.1	0	2.2	30.7	0	10.6	24.8	13.3
Norway	(1.8)	8 0	0.2	..	..	..	8.5	21.8	3.3
Sweden	3.3	13.3	0.4	12.4	27.0	10.4	(8.5)	23.5	12.6
Switzerland	(2.4)	(8.0)	2.2	..	50.2	4.3	..	21.7	19.0
United Kingdom	4.1	(0.5)	0.5	8.9	37.3	7.4	3.2	13.0	9.0
Western Europe	..	(7.1)	0	5.5	36.7	5.3	2.4	18.7	2.6
United States	8.3	28.9	1.6	10.7	48.5	15.6	14.1	39.6	8.9
Canada	13.2	29.3	3.6	5.7	40.6	6.4	8.1	55.5	11.7
Third Countries	..	..	..	12.4	(10.2)	0	10.0	(35.9)	0.7
World	..	..	..	2.7	(26.8)	0.2	2.7	(26.8)	0.2
Percentage of Years Below Peak									
Belgium	..	..	17	44	(53)	17	(22)	(69)	25
France	..	59	0	35	59	33	30	41	33
Germany	17	(46)	0	9	71	0	17	59	0
Italy	44	41	0	..	65	17	..	53	8
Netherlands	8	41	0	22	53	0	22	35	25
Norway	22	24	8	..	..	..	39	53	17
Sweden	17	24	8	45	53	25	(35)	35	25
Switzerland	..	(50)	8	..	65	(27)	..	41	(36)
United Kingdom	44	(14)	8	57	65	42	30	47	33
Western Europe	..	(39)	0	26	53	8	17	53	8
United States	22	47	25	52	65	50	44	53	25
Canada	26	59	8	17	59	42	17	59	42
Third Countries	..	..	..	35	(43)	(0)	30	(57)	(8)
World	..	..	..	13	(64)	(8)	13	(64)	(8)

Figures in brackets refer to part of the period.

by Europe since 1948 as compared with pre-1913. Two countries, Germany and the Netherlands, have had no fall in export volume at all. Postwar export fluctuations have been somewhat smaller than import fluctuations except in Belgium, France and Italy. Most countries have been transmitting more instability than they received. This is in sharp contrast to the great depression of the 1930s when exports fell more than imports in all countries except Italy. Before 1913 the situation was mixed, Belgium, France, Sweden and the United Kingdom had bigger fluctuations in exports than imports and in Germany and the Netherlands they were smaller.

TABLE 9

EXPERIENCE OF RECESSION

Maximum Cyclical Fall from Peak to Trough

	Value of Exports			Value of Imports		
	1890-1913	1921-1938	1948-1960	1890-1913	1921-1938	1948-1960
Austria	8.2	68.2	6.2	4.3	64.5	19.7
Belgium	14.0	53.5	14.7	14.4	54.5	11.9
Denmark	5.2	52.9	0.7	8.3	55.0	4.9
France	18.0	64.1	7.6	22.0	48.7	16.8
Germany	11.2	57.4	0	12.4	67.1	1.7
Ireland	..	64.0	6.5	..	50.2	18.7
Italy	11.2	56.5	15.8	14.9	63.2	12.5
Netherlands	2.6	57.4	0	10.7	52.6	12.9
Norway	10.9	49.2	17.9	10.4	56.8	11.9
Sweden	10.1	64.2	16.9	12.6	55.4	19.9
Switzerland	11.8	62.0	0	13.6	33.7	24.2
United Kingdom	18.2	64.0	8.6	15.4	57.9	14.5
Canada	5.3	67.9	6.5	12.5	71.4	5.6
United States	12.3	69.4	19.1	18.7	70.1	6.2
Western Europe	11.1	59.7	0.6	7.5	56.8	6.8
Third Countries	15.6	60.6	8.2	15.7	61.9	5.7
World	8.8	61.7	3.4	8.0	60.9	5.2

Historically, the United States economy has been more volatile than the European and until the second world war its import fluctuations were bigger than in Europe. However, it has transmitted fluctuations to a smaller degree than Europe relative to its GNP fluctuations. Since 1948 American imports have fluctuated less than in pre-war years and less than those of Europe.

The post-1948 situation for United States' exports has been the reverse of that in Europe. The volatility of American exports has been much higher relative to both GNP and import fluctuations than it was prior to the war (13). The United States has always had very volatile exports but it is now even more of a target for cycles transmitted by other countries than it used to be. In Canada export fluctuations have always been milder than those in imports and this is true of the postwar period too. However, the volume of Canadian trade has been more volatile since 1948 than before 1913.

Our figures for third countries refer to a large aggregate and will therefore tend to be more stable than the movements, often offsetting, experienced by the individual countries in this group. Nevertheless, it seems clear that since 1948 the volume fluctuations they have experienced must have been mild by previous standards. Our aggregate index shows no falls in their volume and only a very mild dip in their imports. In general, one would expect demand for the products of this group to be more stable than for those of industrial countries, insofar as their exports consist of food. The ratio of food exports is now about a third and was higher in earlier years. On the other hand, their imports have been increasingly switched from consumption goods to capital goods. With this commodity structure their import demand has been more volatile in volume terms than their export demand. This greater instability is, of course, induced by balance of payments constraints which have arisen from the greater instability in their export prices, and in the 1930s, by the destabilising nature of their capital flows.

If one looks at fluctuations in the value of exports as distinct from their volume, the same general picture emerges. The biggest fluctuation by far was in the interwar period. The post-1948 fluctuation in European exports has been large relative to the movement of GNP, but has declined somewhat as compared with the pre-1913 situation. European imports have tended to be more volatile than exports since 1948, and have been just as volatile as they were prior to 1913. European trade has therefore become a relatively more destabilising force in the world economy. In the U.S. the contrary has happened. U.S. exports are as unstable as before, but import

(13) This change in the U.S. is also noted by ILSE MINTZ, *American Exports during Business Cycles 1879-1958*, N.B.E.R., 1961, p. 11 and 21.

fluctuations have dampened. In third countries the value picture is much more volatile than that for volume movements. The value movement in third country imports is fairly similar to that for exports, and, indeed, since 1948 their exports have fluctuated a little more than imports. There is no evidence that small countries have bigger fluctuations than large ones; it does seem clear, however, that the more slowly-growing countries tend to have the biggest fluctuations, whether they are small or large.

The greater relative postwar sensitivity of imports in Europe is probably due partly to the operation of the economies closer to capacity, which has given entrepreneurs a greater incentive to vary stocks. This pressure has been largely absent in the United States and the United States has become much more of a marginal producer than it was. Raw material fluctuations hit United States producers more than United States imports. Increased European sensitivity may also have had something to do with expectations concerning import controls which did not exist prior to 1913. This is true of the 1952 fluctuations which in every European country were the most severe of the postwar period. It is also true that the 1952 recession arose from the special circumstances of the Korean War. However, our main point is that fluctuations in trade have been much larger than in income, and governments avoided major fluctuations in real income in 1952. Postwar import movements have been strongly influenced by deliberate policy measures to correct balance of payments disequilibria. This was necessary in several cases because of the unprecedented level of demand and limited reserves. In 1952 the two major European importers, France and the United Kingdom, imposed quantitative restrictions, and France used this weapon again in 1957. The most noteworthy feature of the postwar situation is that payments difficulties have been due to the pressure of the domestic conjuncture on imports rather than falling exports. When falling or stagnant exports have occurred, they have usually been due to rising prices and declining competitiveness and not to deficient external demand. Governments have now abandoned the use of import controls as an anti-cyclical device and demand pressures are much less than in earlier years, so that import fluctuations are probably tending to become milder.

The coincidence in timing of fluctuations in trade and income, and the large size of fluctuations in trade relative to the movement

of income indicate clearly that these fluctuations in trade have been a major contributor to instability. The timing of trade and income fluctuations is closely related in nearly all periods and countries. It is rather rare to find fluctuations in counterphase to the movement in world trade. The fall in French exports in 1955 was an example of this and was due to special internal factors. Certainly, the 1952 recession which was widely felt in Europe, and more severe than that of 1958, was transmitted via trade. The transmission was fairly obviously from the United Kingdom and France as the timing was independent of that in the United States. Germany and Italy have had no hand in initiating postwar recessions. In general, the smaller European countries have retransmitted the cycles they have received and there is no evidence that they have suffered more than the larger countries. The transmission of cycles within Europe has dampened as the relative importance of Germany and Italy has grown, and the increasing liquidity of nearly all countries has reduced their balance of payments constraints.

Apart from the 1923-33 crisis when the whole world cycle was synchronised and the major country responsible for transmitting the influence was the United States, there is no clear originator of world cycles. The cycle in European countries is usually fairly closely in phase, both in timing and intensity, but no single European country is the lynchpin. There is, in fact, a distinctly European conjuncture in both trade and income. United States output cycles are different. The United States has always tended to receive worse than it gave in the world cycle and this has been particularly true since the war. Fortunately the great liquidity of the United States removed the balance of payments constraint suffered by most other countries and this has greatly helped it in its postwar pursuit of policies to stabilise the world economy. This freedom from constraint is now disappearing. Third countries as a group seem to have become increasingly immune to cycles in the industrial countries because of the growth of their intra-trade, the structure of their exports, and the steadiness of their capital receipts. Third countries do, of course, have problems individually which arise from being underdeveloped, inadequately diversified, and lacking sufficient liquidity or policy weapons to control their economies. As a group they can hardly claim that their export outlets have shown lack of growth and stability in the 1950s.

V. Movements in Relative Prices

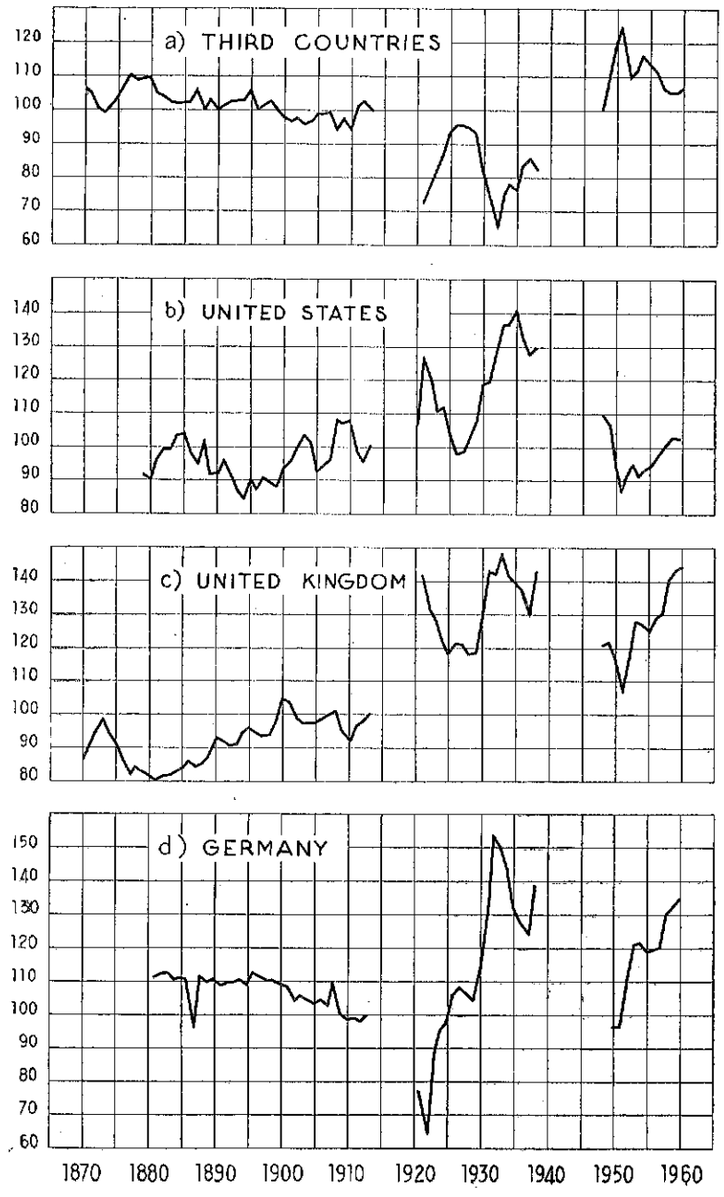
A good deal of the literature on world trade has been concerned with the terms of trade between primary goods and manufactures. Hilgerdt, who did the pioneering work in this field, suggested that the terms of trade of primary producers tend to fall steadily. Hilgerdt was writing with the experience of the 1930s immediately behind him and relying heavily on British data which were somewhat exceptional. Some later writers have extended the theory and suggested that there has been a long-term tendency to weakness in the terms of trade of underdeveloped countries as a group. Very little of the literature is, in fact, concerned with long-term trends for countries as distinct from commodities, so that these theories have not been very rigorously tested. Our own investigation shows some big swings in the terms of trade but no clear trends. In the period 1913-38 the terms of trade swung against third countries because of the inelasticity of supply of primary products in face of falling demand. This position was reversed between 1938 and 1950. Between 1950 and 1960 their terms of trade have deteriorated. Since 1913 the United Kingdom, Sweden and Germany have improved their position but most other countries are where they were then. This is true for third countries as a group, and for the United States.

The terms of trade are, of course, important but they are not particularly illuminating in themselves for they tell us little about the economy concerned. A deterioration in the terms of trade may be due to a decrease in export prices due to a fall in foreign demand or it may reflect improved competitiveness induced by falling costs. The change may be on the side of import prices or various combinations of exports and imports. In practice, changes in terms of trade are usually affected more by a country's export prices than by its import prices. The greater parallelism in import prices is due to the fact that most countries have a heterogeneous range of imports but many, and particularly third countries, have a narrower range of exports.

There is tendency for countries with a changing share of world trade to show an inverse movement in competitiveness as reflected in their relative export price. Before 1913 Germany increased her share of world trade and that of the United Kingdom and France fell.

GRAPH III

TERM OF TRADE - 1913=100



In the 1950s the share of both the United Kingdom and the United States fell as relative export prices rose, and that of Germany and Italy rose. There have been exceptions to this process, particularly in the 1930s, when discriminatory relations outweighed the impact of prices. Over the long run the countries which have increased their export volume most relative to world exports have had low price rises, and vice versa. This is true of the United States and third countries which have lowered their relative prices, and the United Kingdom which has raised its prices. This tendency is not true universally. Sweden has raised it prices and its share of world trade and the reverse is true in France. We must be careful about the interpretation of competitiveness because not all countries are exporting the same products and the criterion of performance relative to the world index is pretty crude.

Changes in a country's share of world trade are linked to a country's relative rate of growth, as well as to its competitiveness. The most notable long-term changes in trade shares are the fall for France and the United Kingdom, and the rise for the United States and third countries. It is natural to expect that if a country is growing faster than the rest of the world it will tend to increase its share of world trade and vice versa if it is growing more slowly. A country with faster than average growth will tend to increase its share of world imports. In order to balance its payments it will have to increase its share of world exports. To do this it will have to increase its competitiveness. Even if it simply reduces the share of imports in GNP it will have to increase its competitiveness in order to provoke import substitution. This of course assumes that the relation between growth and competitiveness is not upset by changes in commercial policy, capital movements, or changes in technology which may effect the range of comparative advantage. Such changes have, of course, taken place, notably in commercial policy which was protectionist in the 'thirties and liberal in the 'fifties. If a country grows relatively slowly, its import needs will also rise slowly and its relative capacity to supply will tend to fall unless the period is one of generally slack capacity use. It could be argued that the lack of competitiveness is itself the cause of slower growth. There is undoubtedly a two-way link here, and there is obviously some truth in this as regards the United Kingdom position in the inter-war years.

TABLE 10

PERCENTAGE SHARE IN VALUE OF WORLD EXPORTS f.o.b.

	1885	1913	1929	1938	1950	1960
Austria	4.4	3.0	0.9	1.7	0.5	0.9
Belgium-Luxembourg	3.7	3.9	2.7	3.2	2.7	3.0
Denmark	0.6	0.9	1.3	1.5	1.1	1.2
France	9.6	7.2	6.0	3.9	4.9	5.4
Germany	11.0	13.1	9.8	10.0	3.4	9.1
Ireland	—	—	0.7	0.5	0.3	0.3
Italy	3.0	2.6	2.4	2.5	2.0	2.9
Netherlands	1.9	2.2	2.4	2.5	2.3	3.1
Norway	0.4	0.6	0.6	0.8	0.6	0.7
Sweden	1.1	1.2	1.5	2.1	1.8	2.0
Switzerland	2.1	1.4	1.2	1.3	1.5	1.5
United Kingdom	16.7	13,9	10.8	10.2	9.9	7.8
Western Europe	54.4	50.0	40.5	40.4	31.0	37.7
United States	11.2	12.9	15.8	13.6	16.5	15.9
Canada	1.3	2.3	3.5	3.7	4.7	4.2
North America	12.5	15.2	19.2	17.3	21.2	20.1
Third Countries	33.1	34.7	40.3	42.3	47.8	41.7

TABLE 11

PERCENTAGE SHARE IN VALUE OF WORLD IMPORTS c.i.f.

	1885	1913	1929	1938	1950	1960
Austria	3.1	3.4	1.3	1.6	0.7	1.1
Belgium-Luxembourg	3.6	4.8	2.7	3.1	3.0	2.9
Denmark	0.8	1.0	1.3	1.4	1.3	1.3
France	10.9	8.0	6.3	5.3	4.7	4.7
Germany	9.6	12.6	8.8	9.7	4.3	7.7
Ireland	—	—	0.8	0.8	0.7	0.5
Italy	3.9	3.5	3.1	2.4	2.3	3.5
Netherlands	2.8	3.7	3.0	3.1	3.2	3.4
Norway	0.5	0.7	0.8	1.2	1.1	1.1
Sweden	1.2	1.1	1.3	2.1	1.8	2.1
Switzerland	1.9	1.8	1.4	1.5	1.6	1.7
United Kingdom	21.0	15.8	14.9	16.8	10.9	9.2
Western Europe	59.5	56.4	45.7	48.8	35.7	39.1
United States	9.0	9.8	13.1	8.5	14.9	11.8
Canada	1.5	3.4	3.9	2.9	5.0	4.6
North America	10,5	13.2	17.0	11.4	19.9	16.4
Third Countries	30.0	30.4	37.3	39.8	44.5	44.5

TABLE 12

TRADE BALANCES AS A PERCENTAGE OF WORLD TRADE

	Europe	North America	Third Countries	World
1880				
Europe	0	− 5.1	− 2.9	− 8.0
North America	+ 5.1	0	− 2.1	+ 3.0
Third Countries	+ 2.9	+ 2.1	0	+ 5.0
World	+ 8.0	− 3.0	− 5.0	0
1913				
Europe	0	− 4.5	− 3.0	− 7.5
North America	+ 4.5	0	− 1.5	+ 3.0
Third Countries	+ 3.0	+ 1.5	0	+ 4.5
World	+ 7.5	− 3.0	− 4.5	0
1960				
Europe	0	− 2.4	+ 1.8	− 0.6
North America	+ 2.4	0	+ 2.2	+ 4.6
Third Countries	− 1.8	− 2.2	0	− 4.0
World	+ 0.6	− 4.6	+ 4.0	0

Source: Derived from table 2.

VI. The Structure of World Payments

Table 12 shows the balance of world trade for major regions in 1880, 1913 and 1960 (14). The 1880 and 1913 patterns were very similar — a large European deficit with the world, the larger part of it with North America, but a substantial amount with third countries. An American surplus with the world was more than accounted for by the surplus with Europe and was partially offset by a deficit

(14) We have not dealt with the payments relations in the inter-war period as these were disturbed by abnormal developments. The interwar payments structure is analysed in detail in *Europe's Trade*, League of Nations, Geneva, 1941. The 1928 structure was a transitional phase. The biggest difference from 1913 was that the U.S. had changed its relation with Europe. It had not yet become a major capital exporter to third countries.

with third countries. Third countries had a surplus with both Europe and the United States.

These balances are on a uniform f.o.b. basis as they are derived from export figures. The trade balances with the world reflect the direction of other items in the balance of payments, i.e. a trade deficit is covered either by a surplus on invisible payments, receipts on capital account or losses in reserves. Regional variations in pattern, e.g. of North America, simply reflect a triangular pattern of settlement. In both 1880 and 1913 Europe was a net exporter of capital to both America and third countries. Its trade and capital deficit was financed by high earnings from shipping services and from interest and dividend payments. The United Kingdom was the biggest recipient with a net invisibles income of $1.7 billion in 1913, i.e. about two-thirds the size of United Kingdom exports (15). The world surplus of North America largely reflected the flow of payments for services as there was a net import of capital by both Canada and the United States in 1913 (small in the United States and large in Canada), and by Canada in 1880. The United States was in deficit on services account in 1913 to the extent of about 17 per cent of its export earnings. America also needed its surplus with Europe to finance its trade deficit with third areas. Third areas needed a trade surplus to service their capital imports from Europe and to pay for shipping. In those days, the role of reserves as a balancing item was fairly negligible. The total of world reserves in 1913 was only about $4.5 billion or about 22 per cent of world imports.

The 1960 payments structure was quite different. The European trade deficit had practically disappeared and there was a surplus with third countries. This reflects the need to offset a large fall in European invisible earnings, particularly dividends and shipping, and the need to finance higher military expenditure abroad. The European capital outflow was probably somewhat lower proportionately than in 1913. In the case of North America the trade surplus has increased since 1913. There has been some improvement in the invisibles account which, together with fairly steady reserve losses in the 1950s, has helped to finance a much larger capital flow and big military payments. There has also been a change in the triangular pattern. The American surplus with Europe has fallen and there

(15) Cf. A. K. CAIRNCROSS, *Home and Foreign Investment 1870-1913*, 1953, p. 180.

has been a swing from deficit to surplus with third countries. North America still has an invisibles deficit with Europe but this is now mainly on military account. The capital flow is now from North America to Europe. The net flow of long-term capital has been rather small in the past three years by comparison with the massive, exceptional, two-way flows of capital in the intervening fifty years. The change in the United States position since 1913 is partly concealed by the greatly increased United States surplus with Canada (16). Thus Europe and America have moved closer to trade balance with each other, and both have gone from deficit to surplus with third countries.

The change for third countries is massive. The movement from a large trade surplus in 1913 to a large deficit in 1960 largely reflects an improvement in their invisible earnings, as their capital receipts from Europe and America combined are now about the same proportionately as their 1913 capital receipts from Europe. The net capital flow from industrial Europe and North America to third countries from 1870 to 1913 amounted to about $20 billion or about 15.5 per cent of the export earnings of third areas. Nearly all of this was private capital. As a result of the first world war, many of these assets were lost — nearly all of those of France — and a good deal were sold — largely by the United Kingdom. The postwar flow was much smaller because of the insecurity caused by these losses and contemporary uncertainties greater than pre-1913. From 1924 to 1938 there were conflicting tendencies. Between 1924 and 1929 there was a net outflow from the industrial countries of somewhat under $6 billion, and from 1930 to 1938 a slightly bigger reflux of $6.3 billion, making a small net inflow of $385 million for the whole period (17). During this period the bulk of investment in third countries was still done by European countries. The second world war led to much smaller capital losses than the first, but it changed European debtor-creditor relations with third countries to a greater degree because of sales of British assets and the build-up of third country assets in the United Kingdom. From 1950 to 1960 the outflow was about $60 billion, i.e. 13 per cent of the export

(16) Long-term estimates of the United States balance of payments are contained in *Historical Statistics of the United States*, 1960, pp. 557 to 566. For Canada there are historical figures in *The Canadian Balance of International Payments, 1957*.

(17) Cf. *International Capital Movements during the Inter-war Period*, U.N., 1949.

earnings of third countries (or 17 per cent excluding the Sino-Soviet bloc). The proportion has been rising, and in 1960 at $8.5 billion was 15.8 per cent of export earnings of third countries (21.8 per cent excluding the Sino-Soviet bloc). This compares with a figure of somewhat over $1 billion in 1913 which was about 16 per cent of their export earnings. Thus capital flows have played about the same role in relative terms in the payments of third countries in the 1950s as they did before 1913. A considerable portion of these flows now consists of government capital — about 58 per cent in 1950-60, and a good part of these are grants. As a result of this, and of wartime changes in their international investment position, the net flow of dividends and interest payments from third countries is relatively smaller than it used to be. The fact that third countries have had a relatively high rate of interest on their monetary reserves held in sterling has also helped. In 1960 their net payments on account of dividends and interest averaged about $2.5 billion or about five per cent of export earnings. In 1913 they were probably about $1.3 billion or about 20 per cent of export earnings. In 1960 their shipping payments were probably proportionately smaller than in 1913, as the c.i.f. content of world trade (as measured by the ratio of world imports to world exports) fell in this period from about 10.5 per cent to 5.5 per cent, which indicates a drop in freights. There may also have been some rise in the proportion of shipping services they provided for themselves. Here we have another improvement which may have amounted to 3 to 4 per cent of their export earnings. Their invisible earnings from military expenditures were also more important in 1960. On the other hand, the relative size of their earnings from gold production fell from about five per cent of 1913 exports to about 2.5 per cent of 1960 exports. In 1960 there was no appreciable change in their reserves. A better invisibles balance, therefore, explains how they could finance imports marginally higher than exports in 1960 (on an f.o.b./f.o.b. basis) as compared with imports only 87 per cent of exports in 1913 (18).

It is, of course, a rather arbitrary procedure to pick on particular years and treat them as if they were typical of different epochs. The payments positions of different countries are, of course, subject to

(18) These estimates were derived from the sources quoted above as well as *The Flow of Financial Resources to Countries in Course of Economic Development in 1960*, O.E.C.D. 1962 and the *IMF Balance of Payments Yearbook*.

very large cyclical fluctuations which we have no space to analyse here. There were several obvious disequilibria in the situation of 1960 within Europe, and there was a large United States loss of reserves and a European gain largely due to speculative capital movements. Nevertheless, the above analysis does reveal some basic structural changes in relations between broad groups which can be expected to endure. This is true at least of the relation between third countries and the industrial countries as a whole.

Paris ANGUS MADDISON

STATISTICAL ANNEX

VALUE OF TRADE

The figures are adjusted wherever possible to show special trade on a calendar year basis in dollars at current exchange rates. Exports are f.o.b. and imports c.i.f. Trade in gold and silver bullion and specie is excluded as far as possible. The figures refer to the customs territory of the year concerned and are not adjusted for territorial changes except for Austrian and German intra-trade in 1938.

EXPORTS

Western Europe

1870-1913. Denmark, *Studier over Danmarks Nationalprodukt 1870-1950*, K. Bjerke and N. Ussing; France, *Annuaire Statistique de la France 1961;* Germany, from 1880 from *Statistisches Jahrbuch für das Deutsche Reich 1930*; Norway, *Statistiske Oversikter 1948*; Switzerland, from 1886 from *Statistisches Jahrbuch der Schweiz 1959/60*, p. 194; U. K., Werner Schlote, *British Overseas Trade from 1700 to the 1930s*, p. 125-126, exports of "home products". Other countries or years were derived from the international sections of *Statistisches Jahrbuch für das Deutsche Reich, 1910 to 1915, Annuaire Statistique de la France 1954*, and from F. X. von Neumann-Spallart, *Ubersichten der Weltwirtschaft*, Stuttgart, 1887. The 1872 figures for Italy, Sweden and Belgium are from Charles P. Kindleberger *The Terms of Trade, A European Case Study*, 1956, pp. 62-63.

1920-1938. For all European countries figures are taken from Svennilson *Growth and Stagnation in the European Economy*, pp. 312-313, except for Germany and Austria in 1938 where the figures are from the *U. N. Yearbook of International Trade Statistics 1959*, and include trade between Austria and

Germany. For the U. K. 1921-23 the figures are from Schlote *Op. cit.* (Svennilson adjusted U. K. trade for these years to include trade with Ireland).
1946-60. The figures for European countries for 1946-47 and for 1949 are from OEEC *Foreign Trade by Areas 1928, 1937-53*, and for 1948 and 1950-60 from *U. N. Monthly Bulletin of Statistics*, Table 43, January 1961 and June 1961. The figures for Germany refer to the trade of the Federal Republic and West Berlin with the outside world including Eastern Germany.

North America

Figures for the U.S. are derived from *Historical Statistics of the U.S., Colonial Times to 1957*, U.S. Dept. of Commerce, pp. 537-538, and for recent years from *World Trade Information Service*, Part 3, No. 61-25, U.S. Dept. of Commerce. They refer to "exports of U.S. merchandise" adjusted to a calendar year basis throughout; Canada from *Trade of Canada 1958*, pp. 19-20, D.B.S., 1960, exports of "Canadian produce" adjusted to a calendar year basis throughout.

World

In all cases where we made an adjustment to the figures for an individual country the world figure was adjusted to provide consistency.
1870-1913. The series for world trade were derived from W. A. Lewis, "World Production, Prices and Trade", *The Manchester School*, May, 1952, who presents estimates prepared by Folke Hilgerdt which involve minor amendments to the figures in Hilgerdt's earlier League of Nations publication *Industrialization and Foreign Trade*. They are not given in straightforward form but have to be unscrambled from Lewis' Table I (19). These figures are given by Lewis

(19) In order to convert Lewis' figures for manufactured and primary product trade into figures for the value of world trade, the following adjustments must be made:

(a) Multiply the 1913 absolute figure for primary product trade, i.e. $15,140 million (given in Lewis' appendix, the original Hilgerdt figure was $15,170 million) by the index in column 5 to give absolute value of primary trade in each year;

(b) Use Hilgerdt to get the ratio of primary imports to total primary trade (available for quinquennia). Applying these ratios to (a) above will give primary imports and exports;

(c) Take Lewis' ratio in column 4 of manufactured imports relative to total imports, and divide it by its reciprocal to give the ratio of manufactured to primary imports;

(d) Apply the derived ratio (c) to the figure derived in (b) for primary imports. This gives manufactured imports;

(e) In order to get manufactured exports multiply (d) above by the ratio (for quinquennia) derived from Hilgerdt of manufactured exports to manufactured imports.

This should give a fair approximation to the original series as the ratios primary imports/total primary trade and manufactured exports/manufactured imports are relatively stable and the variable ratio manufactured imports/primary imports is available on an annual basis from Lewis.

for individual years from 1881 onwards. No explanation is given of the nature of the revision in Hilgerdt's earlier estimates which were originally presented for quinquennia from 1876-80 onwards. The revisions are all upward for the years before 1910. We have adjusted the Hilgerdt-Lewis world trade figures to allow for the fact that Hilgerdt had included the general trade of the Netherlands. It has been assumed throughout that Dutch re-exports were two-thirds of its general trade. This is in line with the adjustment made by Svennilson for 1913. The figures were also adjusted to allow for the fact Hilgerdt recorded U.S. trade on a fiscal and not a calendar year basis.

TABLE 13.

WORLD TRADE ESTIMATES OF HILGERDT & LEWIS

million dollars of 1929 gold content

	Exports			Imports		
	Hilgerdt	Lewis	Difference	Hilgerdt	Lewis	Difference
1876–80	6,010	n. a.		7,060	n. a.	
1881–85	6,760	6,818	+ 58	7,700	7,755	+ 55
1886–90	6,960	7,111	+ 151	7,890	8,060	+ 170
1891–95	7,370	7,459	+ 89	8,390	8,486	+ 96
1896–1900	8,690	8,852	+ 162	9,810	9,975	+ 165
1901–1905	10,910	11,058	+ 148	11,940	12,114	+ 174
1906–1910	14,320	14,335	+ 15	15,650	15,655	+ 5
1911–13	18,320	18,089	− 231	19,920	19,625	− 295
1913	19,450	19,276	− 174	21,050	20,844	− 206
1921–25	25,660	25,577	− 83	27,780	27,714	− 66
1926–29	31,610	31,605	− 5	34,230	34,229	− 1
1930	27,000	26,938	− 62	29,080	29,043	− 37
1931–35	13,060	13,062	+ 2	14,290	14,286	− 4
1936–38	13,350	13,351	+ 1	14,570	14,553	− 17

There are two fairly complete sources on world trade before 1913 from which Hilgerdt's figures were probably very largely drawn. Neumann-Spallart in *Uebersichten der Weltwirtschaft* (20) gives figures for 87 individual countries or territories for the period from 1880-94, and has estimates of world trade from 1867-68 to 1894. *The Statistisches Jahrbuch für das Deutsche Reich*,

(20) Neumann-Spallart published several editions of this work which was a pioneer world economic survey. The last edition (Jahrgang 1885-1889) was published posthumously in an enlarged form by Franz von Juraschek (Langenscheidt, Berlin, 1896).

1910-1915, has figures for 51 individual countries, territories or groups of territories for the period from 1890. The coverage of the *Jahrbuch* figures is somewhat smaller than that of Neumann-Spallart whose import figures for 1885 for the countries not included in the *Jahrbuch* amounted to 3.23 per cent of the countries he lists.

In fact, the sum of the exports of the countries listed by Neumann-Spallart is virtually identical with the Hilgerdt-Lewis series if the former is brought into line by removing U.K. re-exports, and the gold exports of gold producers except the U.S. The correspondence of the figures for imports is not quite so close but it is virtually all explained by the same two adjustments. It is also significant that Hilgerdt's figures start in 1876, the first individual year for which Neumann-Spallart gives figures.

Hilgerdt probably made these two adjustments to the Neumann-Spallart figures and adjusted the *Jahrbuch* figures upwards for the countries included in Neumann-Spallart. In 1900 the Jahrbuch figure for special imports of the countries listed is 95.3 per cent of the Hilgerdt-Lewis figure, and in 1905 it was 94.6 per cent.

We have therefore used Neumann-Spallart's figures on world trade for earlier years in order to estimate world trade in 1870 and 1880. This involved making the two adjustments we have assumed Hilgerdt to make, and an estimate for Swiss trade in 1870. This estimate was then adjusted to bring Dutch trade to a "special" basis and U.S. trade to a calendar year basis in the same way as we have adjusted the Hilgerdt-Lewis series. (Imports were further adjusted to a c.i.f. basis).

1924-1938. For this period there are two sets of figures on world trade — the Hilgerdt-Lewis series and the League of Nations *Reviews of World Trade* which are available up to 1938. The first source has the advantage of continuity but the latter is much more fully documented and has been preferred because it contains annual figures for 135 individual countries or areas, detailed notes which permit a reconciliation with postwar figures and a detailed calculation of the volume of trade. The *Review* figures have been adjusted to exclude the gold exports of gold producers (except Australia already excluded by the *Review*). For 1938 they have been adjusted to include trade between Germany and Austria. Hilgerdt-Lewis and the *Review* agree well for the overlap year 1913, but they diverge mysteriously for the 1924-1938 period. For 1924-32 the Hilgerdt-Lewis figures are considerably bigger than the *Review*, particularly in 1929-31. For 1934-35 Hilgerdt-Lewis was actually lower than the *Review*, and in 1936-38 the figures were quite close. For 1930 when there was a large discrepancy, it is possible to check Hilgerdt's individual country figures against those in the *Review*, but these agree very well and do not help to explain the mystery. The explanation must lie in countries not shown by Hilgerdt individually.

TABLE 14

RECONCILIATION OF LEAGUE AND HILGERDT-LEWIS FIGURES ON EXPORTS FOR 1913-38

current $ million

	Review of World Trade Unadjusted	*Review* adjusted to exclude gold exports of gold producers	Lewis	Anglo-Irish Trade	Lewis adjusted to include Anglo-Irish Trade	Difference Lewis adjusted and *Review* adjusted
1913	19564	18372 (1)	19276		18401 (1)	
1921			21682			
1922			23185			
1923			24519	414	24933	
1924	27850	27595	27357	424	27781	+ 186
1925	31551	31261	31143	400	31543	+ 282
1926	29920	29653	29720	361	30081	+ 428
1927	31516	31245	31254	381	31635	+ 390
1928	32728	32452	32394	386	32780	+ 328
1929	33024	32746	33052	390	33442	+ 696
1930	26477	26188	26938	370	27308	+ 1120
1931	18906	18580	19013	291	19304	+ 724
1932	12885	12557	12792	174	12966	+ 409
1933	15076	14757	14671	161	14832	+ 75
1934	18994	18629	18299	179	18478	— 151
1935	19569	19188	18941	204	19145	— 43
1936	21300	20675	20563	203	20766	+ 91
1937	26118	25480	25361	238	25599	+ 119
1938	22715	22490 (2)	21887	237	22508 (2)	+ 18

(1) Adjusted to exclude Dutch reexports and to put U.S. exports on a calendar year basis.

(2) Adjusted to include Austrian-German intra trade.

1946-60. World trade figures are published regularly in the U.N. *Monthly Bulletin of Statistics*, Table 43. These figures exclude the trade of the Sino-Soviet group of countries as well as trade between East and West Germany, but figures for these countries were derived from the June 1960 issue, Special Table A, for 1938-57, and the June 1961 Bulletin Special Table E for 1958-60. These special tables show a matrix of world exports. (There are also some slightly different figures on world trade in *International Financial Statistics*, I.M.F., but these include re-exports). The U.N. figures for world trade include estimates for uncovered countries, are adjusted where necessary to approximate to the special trade concept, and are on a calendar year basis. The figures exclude trade in gold bullion, ores and concentrates and specie, and silver coinage, but include silver bullion. In the case of the U.S. the figures we have used throughout exclude silver bullion and we have therefore excluded this from the U.N. world trade figures. The U.N. makes an attempt to adjust for changes in customs area, and in this respect differs from our figures for 1870-1938, which are not so adjusted.

It is possible to reconcile the League and U.N. figures in some detail for the overlap year 1938, for which we have used the League figures. A good deal of the difference for 1938 is due to the fact that the U.N. has attempted to produce an estimate comparable in geographic scope of customs areas with that for the post-war years. The U.N. figures therefore exclude the 1938 intra-trade of Libya, Northern and Southern Rhodesia, South West Africa with the Union of South Africa, and China with Manchuria. This trade is, of course, included in the League figure for 1938. The U.N. includes 1938 trade between Singapore and Malaya, the trade of Japan with Korea and Formosa, which were excluded by the League. There are other differences for the U.S. and Canada, and for these we have adjusted the U.N. figures. The remaining discrepancies are fairly small, though some of them are offsetting. It appears that the *Review* did not include the trade of Hong Kong, and it probably understated world trade by at most about 2 per cent.

IMPORTS

Western Europe

The sources were the same as for exports. The figures for the Netherlands were adjusted to a special trade basis by deducting re-exports calculated as described above. The figure for Belgium differs from that of Hilgerdt probably because it includes trade in gold. The figures for the U.K. refer to general imports minus re-exports.

North America

Source as for exports. The Canadian figure refers to "imports for consumption", the U.S. figure to general imports minus re-exports. In both cases the figures were adjusted to a calendar year basis and raised by 10 per cent to bring them from an f.o.b. to a c.i.f. basis.

World Trade

1870-1913. The Hilgerdt-Lewis figures were used as for exports. Their total was adjusted to take account of our adjustment for Netherlands and U.S. re-exports and for the U.S. calendar adjustment. They were not adjusted for the small Belgian discrepancy. Hilgerdt made no adjustment for countries reporting their imports on an f.o.b. basis, i.e. U.S., Canada, Australia, South Africa, Cuba, Venezuela, Philippines, Rhodesia, Dominican Republic, Ecuador, Honduras, Panama, Paraguay, Bermuda, Dutch Antilles, Papua, New Guinea. We therefore added 10 per cent to the trade of these countries to put them on a

c.i.f. basis. In fact, we had figures only for the U.S. and Canada. We assumed other f.o.b. reporters to be 12.5 per cent of third country trade.

TABLE 15

RECONCILIATION OF LEAGUE AND HILGERDT-LEWIS FIGURES ON IMPORTS FOR 1913-38

Current $ million

	Review of World Trade unadjusted	Lewis	Anglo-Irish Trade	Lewis adjusted to include Anglo-Irish Trade	Difference Lewis adjusted and *Review*
1913	21,034	20,844			
1921		23,456			
1922		25,090			
1923		26,557	407		
1924	28,978	29,660	423	30,083	+ 1,105
1925	33,150	33,808	399	34,207	+ 1,057
1926	32,117	32,206	371	32,577	+ 460
1927	33,764	33,869	391	34,260	+ 496
1928	34,652	35,065	397	35,462	+ 810
1929	35,595	35,774	411	36,185	+ 590
1930	29,075	29,043	389	29,432	+ 357
1931	20,795	20,773	296	21,069	+ 274
1932	13,968	14,002	180	14,182	+ 214
1933	15,959	15,973	165	16,138	+ 179
1934	20,080	20,015	190	20,205	+ 125
1935	20,727	20,726	220	20,946	+ 219
1936	22,249	22,436	177	22,613	+ 364
1937	27,667	27,667	(213)	27,880	+ 213
1938	24,240	23,812	(214)	24,026	− 214

1924-1938. For this period the figures of the *Review of World Trade* were preferred for the same reasons as described for exports. The *Review* figures have been adjusted in 1938 to include trade between Austria and Germany. The *Review* made no adjustment for the c.i.f. content of countries reporting trade f.o.b. We have therefore made a 10 per cent upward adjustment to the imports of those countries. As with exports there is a divergence between the Hilgerdt-Lewis and the *Review* figures. The *Review* figures are about $200 million or 1 per cent above Lewis for 1913 (the original Hilgerdt figure was, however, virtually the same as the *Review*). The Hilgerdt-Lewis figures are generally higher than those of the *Review*, and again the difference is not traceable to the data for any of the individual countries recorded in the two sources. It is therefore probable that Hilgerdt had a higher estimate for third country trade (or was he perhaps allowing for smuggled liquor during the period of U.S. prohibition?).

TABLE 16

RECONCILIATION OF OUR ESTIMATE OF WORLD TRADE WITH U.N. 1948-1960

$ million

	U.N. figure for World (excluding Sino-Soviet and Intra-German Trade)	Sino-Soviet Trade (1)	Intra-German Trade (1)	Adjustment for c.i.f. content of Sino-Soviet and Intra-German imports	Adjustment to U.N. figures for North America	Our figure for world trade
			Imports c.i.f.			
1948	59,700	3,590	n.a.	359	− 342	63,307
1949						
1950	59,000	4,760	172	493	+ 152	64,577
1951	80,900	5,990	77	607	+ 339	87,913
1952	79,600	6,490	72	656	+ 160	86,978
1953	75,900	7,430	130	756	+ 368	84,584
1954	79,200	8,330	205	854	+ 220	88,809
1955	88,600	8,810	260	907	+ 277	98,854
1956	97,400	9,450	320	977	+ 564	108,711
1957	107,200	10,910	406	1,132	+ 70	119,718
1958	100,000	11,701	402	1,210	+ 214	113,527
1959	105,300	13,907	487	1,439	+ 327	121,460
1960	117,700	14,992	497	1,549	+ 50	134,788
			Exports f.o.b.			
1948	53,600	3,690	n.a.		− 47	57,243
1949					− 28	
1950	56,300	4,930	172		− 30	61,372
1951	76,100	6,320	77		− 41	82,456
1952	73,000	7,020	72		− 43	80,049
1953	74,100	7,910	130		− 43	82,097
1954	76,900	8,600	205		− 51	85,654
1955	83,700	9,370	260		− 53	93,277
1956	92,900	10,140	320		− 51	103,309
1957	99,800	11,300	406		− 57	111,449
1958	95,200	12,073	402		− 58	107,617
1959	100,700	14,201	487		− 82	115,306
1960	112,500	15,090	497		− 158	127,929

(1) Imports measured f.o.b.

1946-60. The same U.N. sources were used as described for exports. The U.N. make an upward adjustment to put all countries on a c.i.f. basis. For the U.S. and Canada the U.N. adjustment differs somewhat from ours, and the U.N. total has been adjusted accordingly. The U.N. figure includes U.S. silver trade and has been adjusted accordingly. The figures for Sino-Soviet imports were derived from world exports to that area raised by 10 per cent to a c.i.f. basis. Similarly, intra-German trade was raised 10 per cent to yield a figure for c.i.f. imports. A reconciliation of the U.N. and League figures for imports yields similar results to those for exports, i.e. it suggests that the League underestimated world trade by somewhat less than 2 per cent (about half of the understatement was due to the exclusion of Hong Kong). However, the 1938 League figures were provisional and may well have understated trade more than in earlier years.

EXCHANGE RATES

For the years 1913 to 1938 we have used the exchange rates given in *Growth and Stagnation in the European Economy*, pp. 318-319, for European countries. The 1913 rates were applied to the years back to 1870 except for Austria. For 1938 to 1960 we have used the figures in the *U.N. Yearbook of Foreign Trade Statistics*. The exchange rates used by Hilgerdt are not stated but he appeared to use the same as we did with only minor variations. Neumann-Spallart and the *Statistisches Jahrbuch* also used the same rates. The Svennilson figures are the same as those in the *Reviews of World Trade* and it was from here that we took the conversion factors for new dollars (both the *Review* and Hilgerdt give figures in old U.S. dollars). The rate of old dollars for new was 78.08 cents in 1933, 59.65 cents in 1934 and 59.06 cents in 1935. For Canada the rates used for 1920 to 1938 are from J. Stovel, *Canada in the World Economy*, p. 251, Harvard, 1959.

VOLUME OF TRADE

The figures on the volume of trade are derived by dividing the value figures by the unit value series.

UNIT VALUES

Unless otherwise specified, the unit value indices are of the Paasche (current weighted) type.

Individual Countries

For the period 1870-1938 the unit values for Belgium, Germany, Italy, Switzerland, Sweden and the United Kingdom were derived from Kindleberger

Op. cit., pp. 22-25, who describes them in his Appendix A. For Belgium for 1870-1913 they are a price index (Laspeyres); Germany 1881-1913 is partly a chain index, partly Laspeyres; Sweden 1892-1913 is a chain index, Switzerland 1929-35 is a chain index. Kindleberger was used for France for 1870-1913, (1870-80 chain, 1880-1913 Laspeyres). The 1913-38 French figures were derived from the volume series published in the *Annuaire Statistique de la France 1961*, p. 205. These move in a similar way to the figures quoted by Kindleberger up to 1927, but diverge thereafter. For the Netherlands the 1913-38 figures are from Kindleberger. Before 1913 the value of Dutch trade was recorded at conventional official prices, some of which date back to 1845. The value figures are therefore different from the other countries as they are in effect a constant price series. For Norway the figures for imports for 1880-1938 are derived from the volume series published in *Statistical Survey 1948*, Norwegian Central Bureau of Statistics, p. 185. For the U.S. the figures are taken from *Historical Statistics of the U.S.*, 1960, pp. 540-541. They are a Fisher ideal index. For Canada the figures for 1870-1913 are from K. W. Taylor, *Statistical Contributions to Canadian Economic History*, Toronto, MacMillan, 1931, Volume II, page 6, adjusted to a calendar year basis. For 1913-1926 the figures are from *Prices and Price Indexes* 1913-33, D.B.S. Ottawa, 1934, page 191. From 1926 to 1960 the figures are from the *Canadian Statistical Review*.

For 1938-60 the figures for all countries except Canada and the U.K. are derived from the *U.N. Yearbook of International Trade Statistics 1959*, Vol. I and the *U.N. Monthly Bulletin of Statistics*. The U.K. is derived from the U.K. *Annual Abstract of Statistics*. For Canada the index is of the Laspeyres type, and for Ireland, the Netherlands, Sweden and the U.S. they are Fisher indexes. The Belgian figures for 1938-48 are also Fisher. The unit values shown by the U.N. for Italy (1938-53), Switzerland and the U.K. are not Paasche, but the present Paasche index was derived from the Laspeyres volume index.

Europe

The figures for Europe are a Paasche index derived by dividing the total value of trade at constant (1913) prices for the countries for which we have figures into the total current value of the trade of the same countries. This was done for the period 1913-60. For 1870-1913, Kindleberger's estimate for industrial Europe was used as his unit value indices are the same as ours for this period, except that we had a figure for Norwegian imports.

Third Countries

1870-1929. For this period the figures for third country unit values were derived indirectly from the unit value series of the four major industrial countries — France, Germany, the U.K. and the U.S. These countries accounted for about half of world trade and were major trading partners of third countries. We made a weighted average of the unit value of the trade of the four

countries combined. It was assumed that the export unit value of third countries would be approximately represented by the import unit value of the four major industrial countries (after adjustment for the fact that 35 per cent of industrial countries' imports were from each other). Import prices of third countries were derived on the assumption that 70 per cent of the movement was explained by the export prices of the industrial countries, and 30 per cent by the export prices of third countries themselves.

1929-38. For this period we used the series given in the *Review of World Trade 1938* for the "rest of the world".

1938-1960. For this period the figures are taken from the *U.N. Monthly Bulletin of Statistics*. The U.N. do not publish figures for the Sino-Soviet group of countries, but we have assumed that the movement for other third countries is also valid for this group.

World

Our figures for world unit values were derived by dividing estimates of the value of trade at constant prices for our three main areas combined — Europe, North America and third countries — into the figures for the value of world trade. In fact the volume movement shown for exports of the three regions combined was somewhat different from that shown by imports particularly for 1938-1960, so that we averaged the two series to get a single volume movement.

GROSS NATIONAL PRODUCT

Our figures refer wherever possible to gross national product at market prices. We have attempted to select figures which are as comparable as possible, and in some cases have made a number of adjustments to bring them closer to the OEEC standardised system. The figures for 1938-1960 for all countries except Switzerland are from various issues of OECD and OEEC *General Statistics*. Several of the series are taken from my earlier article "Economic Growth in Western Europe 1870-1957" published in this *Review*, March 1959. The figures for prewar years for Belgium, France and Switzerland are of more dubious value than the others and are used largely in order to make up our European total.

Two sets of figures are given for the years 1913-60. The first shows growth adjusted as far as possible to eliminate the effect of territorial changes. This is the way in which long-term series are generally presented. For our purpose, however, we wanted to compare growth in the customs territory of the epoch to get consistency with the trade figures. For the period since 1913 in which frontiers have changed considerably, we have therefore given a second series referring as far as possible to the customs area of the epoch. We have, for example, included West Berlin in the figures for 1948-60 for Germany, as it was part of the customs area of the Federal Republic. There were some changes

in customs area before 1913, e.g. the incorporation of Hawaii and Porto Rico in the U.S. in 1900, but we have ignored these.

Belgium: 1870-1938 from Colin Clark, *Conditions of Economic Progress* They refer to national income. 1870 is an interpolation of Colin Clark's figures for 1846 and 1895.

Denmark: 1870-1938 from *Studier over Danmarks Nationalprodukt*, 1870-1950, K. Bjerke and N. Ussing. They refer to GDP at factor cost at 1929 prices.

France: 1870-1913 from Colin Clark, *Op. cit.* 1913-38 from Svennilson, *Op. cit.* They refer to national income.

Germany: 1870-1913. The figures of current national income from W. G. Hoffman and J. H. Muller, *Das Deutsche Volkseinkommen 1851-1957*, pp. 39-40, were divided by the price index of A. Jacobs and H. Richter "Die Grosshandelspreise in Deutschland von 1792 bis 1934", *Sonderheft des Instituts für Konjunkturforschung*, No. 37, Berlin 1935. The figures for 1925-38 refer to GNP and are taken from the *Statistisches Jahrbuch 1960*. The link 1913-25 is derived from Deborah Paige, F. T. Blackaby and S. Freund, "Economic Growth: The Last Hundred Years", *National Institute Economic Review*, July 1961.

Italy: 1870-1938 - cf. my article, *Op. cit.*, figures refer to GNP at 1938 prices, adjusted to OEEC concepts.

Norway: 1871-99 from J. Bjerke, "Some Aspects of Long-Term Economic Growth in Norway since 1865", paper presented to the International Association for Research in Income and Wealth, August 1959. The figures refer to GDP at 1938 market prices including repair and maintenance. 1900-1938 from my article, *Op. cit.* The figures refer to GNP at market prices, adjusted to the OEEC standardised system.

Netherlands: 1900-1938 from my article *Op. cit.* The figures refer to net national product at factor cost.

Sweden: 1870-1938 - Osten Johansson "Economic Growth and Structure in Sweden", paper presented to the International Association for Research in Income and Wealth, August 1959. Refers to GNP at 1913 market prices.

Switzerland: 1890-1938. Colin Clark, *Op. cit.*, pp. 188-189. Figures refer to national income. 1938-1953 from *Statistisches Jahrbuch*, 1961.

United Kingdom: 1870-1938. Cf. my article, *Op. cit.* Figures refer to GNP.

Canada: 1870-1938 - O. J. Firestone, *Canada's Economic Development 1867-1953*, London, 1958, pp. 276. Figures refer to GNP in 1935-39 prices.

United States: 1889-1938. J. Kendrick, *Productivity Trends in the United States*, N.B.E.R., 1962. Figures refer to GNP. (Dept. of Commerce concept) at 1929 prices.

Europe: The index for Europe is derived from the individual country series, weighted by real product in 1955 U.S. relative prices taken from Milton Gilbert & Associates, *Op. cit.*, OEEC, 1958, together with some estimates. The 1913 weights (territory of epoch) were as follows: Belgium $7 billion, France $32.9 billion, Germany $50.7 billion, Italy $17.5 billion, Netherlands $4.6 billion, Austria $18.1 billion, Denmark $2.2 billion, Norway $1.5 billion, Sweden $3.2 billion, Switzerland $2.5 billion, U.K. $41.1 billion. The European total includes interpolations for certain years and figures for Austria and Ireland which were derived from Colin Clark, *Op. cit.* Comparable figures for 1913 for the U.S. are $105.9 billion and Canada $7.7 billion.

Changes in Customs Area: The main changes are summarised in the following table, which does not, however, exhaust the adjustments we have made.

TABLE 17

IMPACT OF BOUNDARY CHANGES (1) ON POPULATION AND INCOME 1870-1960

Ratio of Old to New Area

	1913-1923 (2)		1938-1950 (3)		1950-1960 (4)	
	Population	GNP	Population	GNP	Population	GNP
Austria	431.5	431.5	100.0	100.0	100.0	100.0
Belgium-Luxembourg	95.9	95.9	100.0	100.0	100.0	100.0
Denmark	94.4	94.4	100.0	100.0	100.0	100.0
France	93.9	93.9	97.8	98.1	102.3	101.8
Germany	112.7	110.0	164.7	163.1	98.1	98.5
Italy	96.2	96.2	101.5	101.5	100.0	100.0
United Kingdom	107.3	107.3	100.0	100.0	100.0	100.0
Canada	100.0	100.0	97.4	98.7	100.0	100.0

(1) The changes noted are those which affected the customs area. They do not coincide in all cases with the change in national territory in the political sense. There was, for instance, a political change in the U.S. when Hawaii and Alaska became states, but this did not change the U.S. customs area.

(2) All the ratios are for 1913. For Austria, Germany, France and Italy, the changes are those resulting from the war. The German figure allows for the departure of Luxembourg from the Zollverein. The French ratio includes the Saar, and the German one excludes it. In 1935 the Saar reverted to Germany. The figure for Belgium includes the acquisition of Eupen and Malmedy as well as the customs union with Luxembourg which started in 1922. The Danish change is due to the South Schleswig plebiscite in 1920. The U.K. change is due to the independence of Ireland.

(3) The change in France is due to the Saar, and the ratio is that of 1950. For Germany the ratio is that of the prewar Reich (including Saar but excluding Austria and Sudetenland) to the area of the Federal Republic excluding the Saar but including West Berlin (which is included in German trade statistics). The ratio refers to 1939 for population and 1936 for income. The ratio for Italy refers to 1938, the ratio for Canada to 1949 (acquisition of Newfoundland).

(4) The changes in France and Germany are due to the transfer of the Saar in 1959.

VALUE OF EXPORTS f.o.b.

$ million

TABLE 18

	Austria	Belgium	Denmark	France	Germany	Ireland	Italy	Netherlands	Norway	Sweden	Switzerland	U.K.	Canada	U.S.
1870	160	133		541			208	51	21.7	40.7		971	58	403
1871				555					21.6			1085	62	428
1872				726			222		28.1	54.0		1247	71	467
1873				731					32.4			1242	77	537
1874			42.1	714					32.5			1166	73	534
1875	223	213	41.0	748	594		197	72	27.7	54.7		1087	71	513
1876			42.9	690					31.7			976	70	558
1877			38.6	663					29.2			968	68	636
1878			36.7	614					24.5			938	65	690
1879			37.8	624					23.9			932	68	761
1880	270	235	47.4	669	696		219	84	29.1	63.4	145	1085	78	854
1881	297	251	43.4	687	722		230	93	32.4	59.6	137	1139	89	809
1882	318	256	43.1	690	768		223	101	33.0	68.1	149	1175	91	769
1883	305	259	44.8	666	776		228	92	31.1	68.6	153	1167	84	765
1884	281	258	40.2	624	760		206	113	30.1	63.8	134	1134	79	726
1885	272	232	35.6	596	680		184	119	27.3	65.9	129	1037	78	697
1886			37.3	627	708				27.6		129	1034	79	685
1887			41.3	627	747				28.6		130	1077	81	694
1888			42.1	627	764				32.8		130	1141	81	707
1889			46.4	715	754				35.6		134	1211	83	788
1890	312	277	52.3	724	793		173	146	35.1	81.5	136	1285	87	859
1891	319	293	56.0	689	757		169	153	34.8	86.6	130	1202	94	944
1892	293	264	55.7	668	704		185	152	33.8	87.9	127	1105	102	924
1893	327	262	53.1	625	737		186	150	36.4	87.9	125	1061	105	850
1894	323	252	59.5	594	705		198	149	35.4	79.9	120	1051	104	831
1895	301	267	58.2	651	790		200	158	36.7	83.3	128	1100	107	828
1896	314	283	58.7	656	840		203	179	39.7	91.1	133	1168	117	948
1897	311	314	65.4	694	866		211	198	45.0	95.9	134	1136	135	1121
1898	327	345	63.8	678	895		232	203	42.6	92.5	140	1134	141	1207
1899	377	376	72.4	802	1002		276	212	42.6	95.9	154	1285	153	1288
1900	393	371	75.6	793	1098		258	227	46.4	104.8	161	1416	173	1418
1901	382	353	78.0	775	1056		265	232	44.2	94.9	162	1363	187	1408
1902	388	372	85.2	821	1114		276	245	48.5	105.1	169	1377	205	1374
1903	432	407	94.3	821	1195		293	261	51.7	118.2	172	1416	206	1414
1904	423	421	96.2	859	1244		308	266	51.7	111.2	172	1465	195	1464
1905	455	451	104.8	939	1365		334	267	58.4	120.6	187	1606	214	1605
1906	482	539	105.3	1016	1515		368	279	65.9	135.1	207	1830	239	1786
1907	457	550	111.8	1080	1631		376	296	61.4	141.0	223	2073	246	1845
1908	457	484	117.7	975	1524		334	292	58.7	129.2	200	1835	244	1737
1909	470	542	119.0	1104	1571		360	329	65.1	126.8	212	1839	270	1674

VALUE OF EXPORTS f.o.b.

$ million

TABLE 19

	Austria	Belgium	Denmark	France	Germany	Ireland	Italy	Nether-lands	Norway	Sweden	Switzer-land	U.K.	Canada	U.S.
1910	490	658	130.0	1203	1781		401	353	75.8	158.9	231	2092	275	1862
1911	487	691	143.9	1173	1931		425	366	79.9	178.0	243	2209	286	2092
1912	561	763	160.3	1296	2134		463	417	90.0	203.9	262	2370	340	2300
1913	561	717	170.7	1328	2405		485	413	105.3	219.0	266	2555	421	2380
1920													1132	8080
1921	183	541	251	1475	607		356	461	91	248	306	2707	714	4379
1922	224	477	246	1751	945		442	470	134	302	322	3185	863	3765
1923	227	505	282	1874	1457		510	510	136	303	310	3509	982	4091
1924	278	644	331	2169	2432	221	627	636	145	338	364	3539	1020	4498
1925	266	689	378	2222	2092	209	729	726	184	364	393	3735	1240	4819
1926	240	652	369	1925	2478	200	726	701	178	380	352	3173	1261	4712
1927	287	740	387	2153	2567	215	805	762	176	433	386	3447	1211	4759
1928	311	858	414	2042	2924	222	766	798	180	422	408	3522	1339	5030
1929	308	884	433	1965	3212	225	783	800	199	486	404	3550	1141	5157
1930	260	725	408	1679	2867	217	638	691	181	416	342	2778	864	3781
1931	182	643	316	1193	2286	163	532	527	110	281	262	1764	565	2378
1932	98	411	204	774	1367	88	350	341	101	174	155	1278	430	1576
1933	110	501	222	930	1489	81	401	375	118	238	187	1563	485	1647
1934	158	630	265	1174	1664	89	447	479	144	338	273	1995	656	2100
1935	169	577	268	1029	1722	97	434	459	147	330	267	2102	718	2243
1936	179	660	295	931	1923	110	383	476	169	389	266	2191	938	2419
1937	229	854	340	960	2381	110	550	632	201	510	295	2579	997	3299
1938	390	727	335	875	2257	117	553	571	150	464	301	2302	830	3057
1946	22	681	336	850	161	155	176	296	241	645	622	3682	2312	9500
1947	84	1407	481	1871	315	155	435	701	364	900	760	4587	2775	14252
1948	198	1690	569	2011	700	200	1077	1024	415	1107	799	6297	3075	12532
1949	286	1770	670	2717	699	215	1121	1292	395	1075	803	6620	2920	11936
1950	326	1653	665	3037	2069	204	1209	1413	390	1103	903	6048	2874	10142
1951	454	2649	839	4084	3505	229	1647	1950	620	1782	1081	7179	3718	14879
1952	507	2445	850	3827	4041	286	1387	2109	565	1571	1100	7178	4396	15049
1953	538	2260	895	3782	4449	320	1507	2153	509	1480	1204	7153	4186	15652
1954	610	2300	964	4181	5348	324	1638	2414	583	1583	1228	7419	3988	14981
1955	699	2776	1057	4912	6259	310	1857	2687	633	1726	1307	8054	4342	15421
1956	849	3162	1111	4541	7524	303	2145	2862	772	1945	1442	8800	4872	18940
1957	979	3186	1174	5065	8776	368	2552	3097	821	2137	1560	9226	5048	20671
1958	918	3046	1288	5117	8998	368	2577	3218	744	2088	1539	8893	4974	17745
1959	968	3295	1398	5607	10062	366	2913	3607	810	2206	1683	9324	5238	17438
1960	1120	3775	1485	6864	11642	427	3650	4028	880	2567	1880	9955	5430	20300

VALUE OF EXPORTS f.o.b.

$ million

TABLE 20

	North America	Western Europe	Third Countries	World		North America	Western Europe	Third Countries	World
1870	461			5132	1910	2137	7573	5483	15193
1871	490				1911	2378	7927	5614	15919
1872	538				1912	2640	8719	6355	17714
1873	614				1913	2801	9224	6376	18401
1874	607								
1875	584	(3397)			1920	9212			
1876	628				1921	5093	7226		
1877	704				1922	4628	8498		
1878	755				1923	5073	9623		
1879	829				1924	5518	11724	10353	27595
1880	932	3542	2007	6481	1925	6059	11987	13215	31261
1881	898	3691	1846	6435	1926	5973	11374	12306	29653
1882	860	3824	2162	6846	1927	5970	12358	12917	31245
1883	849	3791	2187	6827	1928	6369	12867	13216	32452
1884	805	3644	2186	6635	1929	6298	13249	13199	32746
1885	775	3376	2056	6207	1930	4645	11202	10341	26188
1886	764	(3400)	(2047)	(6211)	1931	2943	8259	7378	18580
1887	775	(3520)	(2044)	(6339)	1932	2006	5341	5210	12557
1888	788	(3630)	(2439)	(6857)	1933	2132	6215	6410	14757
1889	871	(3840)	(2669)	(7380)	1934	2756	7656	8217	18629
1890	946	4014	2607	7567	1935	2961	7601	8626	19188
1891	1038	3889	2684	7611	1936	3357	7972	9346	20675
1892	1026	3675	2264	6965	1937	4296	9641	11543	25480
1893	955	3648	2463	7066	1938	3887	9082	9521	22490
1894	935	3567	2438	6940					
1895	935	3774	2477	7186	1946	11812	7867		
1896	1065	3966	2775	7806	1947	17027	12060		
1897	1256	4072	2769	8097	1948	15607	16087	25549	57243
1898	1348	4153	2690	8191	1949	14856	17663		
1899	1441	4694	2857	8992	1950	13016	19020	29336	61372
1900	1591	4945	2901	9437	1951	18597	26019	37840	82456
1901	1595	4804	3068	9467	1952	19445	25866	34738	80049
1902	1579	5000	3295	9874	1953	19838	26250	36009	82097
1903	1620	5260	3656	10536	1954	18969	28592	38093	85654
1904	1659	5418	3901	10978	1955	19763	32277	41237	93277
1905	1819	5888	4311	12018	1956	23812	35456	44041	103309
1906	2025	6542	4445	13012	1957	25719	38941	46789	111449
1907	2091	7000	4525	13616	1958	22719	38794	46104	107617
1908	1981	6406	4625	13012	1959	22676	42239	50391	115306
1909	1944	6738	5209	13891	1960	25730	48273	53926	127929

VALUE OF IMPORTS c.i.f.

$ million

TABLE 21

	Austria	Belgium	Denmark	France	Germany	Ireland	Italy	Nether-lands	Norway	Sweden	Switzer-land	U.K.	Canada	U.S.
1870	177	178		553			186	85	27.6	37.5		1259	83	509
1871				688					27.3			1321	104	615
1872		243		689			225		36.6	57.0		1443	126	680
1873				686					44.8			1535	136	647
1874			57.1	677					49.8			1518	132	587
1875	223	252	56.8	683	840		233	133	47.4	69.9		1537	116	530
1876			56.5	770					44.9			1553	103	486
1877			55.7	710					50.9			1659	102	473
1878			47.4	806					37.6			1539	93	472
1879			49.6	887					35.4			1488	82	600
1880	249	324	56.3	971	668		237	165	40.5	73.6	159	1692	88	705
1881	260	315	60.8	939	706		257	185	44.2	75.7	162	1625	111	733
1882	266	310	61.6	931	738		260	198	43.0	79.1	163	1692	128	776
1883	254	300	69.9	927	767		248	248	43.2	88.4	168	1758	125	746
1884	249	275	67.0	838	771		255	229	42.6	86.5	144	1592	113	668
1885	227	260	60.8	789	697		282	200	39.1	90.3	139	1521	108	651
1886			51.5	812	684				36.2		154	1429	111	715
1887			60.6	777	741				35.8		162	1474	113	765
1888			66.7	793	775				42.5		160	1575	115	795
1889			73.2	833	950				51.4		175	1756	121	829
1890	248	323	73.4	856	988		255	231	56.0	100.8	184	1732	123	884
1891	248	347	80.7	920	989		217	233	59.8	98.7	180	1817	125	904
1892	252	297	76.9	808	957		227	208	53.6	96.6	168	1748	127	914
1893	272	304	77.5	744	944		230	260	54.8	89.2	160	1682	123	815
1894	284	304	76.1	743	938		211	286	55.2	94.1	159	1706	115	743
1895	293	324	87.4	718	982		229	265	59.8	91.9	177	1537	113	813
1896	286	343	91.4	733	1026		228	299	64.3	95.7	192	1878	117	829
1897	306	352	87.4	764	1115		230	289	70.8	106.9	198	1903	128	738
1898	332	395	98.4	863	1210		273	316	75.0	119.5	206	1995	152	699
1899	326	436	107.2	872	1306		291	346	83.1	134.8	224	2044	177	825
1900	344	428	111.5	907	1374		328	337	83.3	141.0	214	2238	193	892
1901	335	429	106.4	843	1291		332	358	76.9	123.3	203	2209	206	920
1902	348	460	116.3	848	1341		343	383	77.7	134.5	218	2248	232	1032
1903	380	513	119.0	927	1430		359	393	78.5	142.0	231	2302	258	1079
1904	415	537	124.9	869	1514		369	441	78.3	153.3	239	2341	273	1131
1905	435	592	129.4	922	1698		399	504	83.6	153.8	266	2370	295	1261
1906	474	667	149.8	1086	1911		485	456	92.2	171.0	284	2545	340	1434
1907	507	728	161.1	1201	2084		556	481	97.0	180.6	326	2696	383	1416
1908	486	642	147.7	1089	1826		562	551	95.1	160.3	287	2496	335	1350
1909	556	715	152.0	1206	2031		601	603	98.1	164.6	309	2598	385	1546

VALUE OF IMPORTS c.i.f.

$ million

TABLE 22

	Austria	Belgium	Denmark	France	Germany	Ireland	Italy	Nether-lands	Norway	Sweden	Switzer-land	U.K.	Canada	U.S.
1910	578	823	154.6	1384	2128		627	607	107.7	179.3	337	2793	475	1657
1911	647	870	167.0	1557	2312		654	608	125.7	184.9	348	2808	556	1711
1912	721	957	198.1	1589	2547		715	618	141.0	209.8	382	3080	697	1867
1913	690	975	208.2	1625	2565		704	749	147.9	227.0	370	3207	695	2000
1920													1313	5643
1921	344	760	276	1698	1346		728	754	214	284	390	3764	784	2643
1922	356	707	305	1988	1477		749	780	226	292	359	3980	822	3351
1923	389	687	350	1995	1465		791	786	221	344	402	4470	974	4087
1924	486	815	371	2088	2162	301	845	905	211	382	452	5026	880	3869
1925	396	846	409	2125	2939	299	1043	986	243	388	481	5634	979	4550
1926	389	754	401	1938	2380	294	1007	979	241	399	456	5421	1109	4767
1927	435	808	422	2080	3381	292	1049	1022	252	425	482	5325	1196	4486
1928	456	889	441	2103	3335	288	1153	1079	271	458	512	5233	1344	4392
1929	459	988	460	2282	3203	293	1121	1106	285	478	516	5407	1415	4747
1930	380	861	444	2058	2476	271	913	972	283	446	497	4659	1109	3299
1931	304	660	352	1655	1602	225	607	761	213	357	437	3602	664	2250
1932	177	450	207	1171	1112	146	424	524	123	213	342	2278	437	1417
1933	163	529	234	1432	1285	150	497	624	141	242	396	2659	405	1564
1934	213	639	293	1517	1177	196	658	699	184	338	464	3426	570	1784
1935	227	621	283	1393	1678	183	649	637	203	375	417	3459	600	2208
1936	235	720	321	1527	1702	196	432	650	229	419	382	3913	699	2625
1937	273	932	364	1699	2199	215	735	853	318	542	415	4712	890	3337
1938	389	766	355	1327	2430	201	594	779	290	524	367	4195	537	2115
1946	25	1305	592	2218	643	288	249	809	442	857	796	5035	2120	5174
1947	119	1952	645	3328	851	525	885	1603	765	1450	1121	6691	2831	6137
1948	390	2046	713	3442	1570	550	1539	1871	750	1377	1163	8070	2901	7703
1949	594	1803	805	3294	2237	475	1545	1832	771	1103	881	8230	2963	7158
1950	477	1942	853	3030	2797	447	1488	2056	679	1182	1047	7035	3218	9591
1951	653	2535	1012	4457	3535	573	2168	2553	878	1776	1364	10540	4269	11895
1952	652	2444	962	4326	3844	483	2366	2223	874	1730	1202	9296	4531	11622
1953	546	2413	1001	3942	3839	511	2420	2375	912	1579	1179	9025	4902	11826
1954	653	2535	1170	4221	4673	504	2439	2858	1019	1776	1304	9129	4627	11095
1955	887	2830	1178	4739	5932	582	2711	3208	1090	1997	1489	10483	5256	12381
1956	974	3273	1311	5558	6773	512	3175	3725	1212	2209	1766	10413	6382	13712
1957	1128	3432	1358	6110	7694	516	3674	4105	1275	2428	1964	10960	6453	14083
1958	1074	3129	1366	5609	7565	557	3216	3625	1310	2366	1706	10096	5886	13925
1959	1145	3442	1602	5086	8689	595	3369	3939	1323	2405	1923	10806	6321	16526
1960	1416	3957	1802	6281	10371	634	4721	4531	1461	2876	2243	12433	6229	15899

VALUE OF IMPORTS c.i.f.

$ million

TABLE 23

	North America	Western Europe	Third Countries	World		North America	Western Europe	Third Countries	World
1870	593			5704	1910	2133	9719	4854	16706
1871	719				1911	2266	10281	5032	17579
1872	806				1912	2565	11157	5810	19532
1873	783				1913	2695	11468	6181	20344
1874	719								
1875	647	(4220)			1920	6956			
1876	589				1921	3427	10558		
1877	574				1922	4173	11219		
1878	565				1923	5061	11900		
1879	681				1924	4749	14044	10758	29551
1880	793	4636	2065	7494	1925	5529	15789	12496	33814
1881	844	4630	2090	7564	1926	5876	14659	12277	32812
1882	904	4742	2217	7863	1927	5682	15973	12789	34444
1883	871	4871	2155	7897	1928	5737	16218	13377	35332
1884	781	4550	2280	7611	1929	6161	16598	13561	36320
1885	759	4303	2167	7229	1930	4408	14260	10938	29606
1886	826	(4185)	2155	7166	1931	2914	10775	7445	21134
1887	878	(4273)	2180	7331	1932	1854	7167	5170	14191
1888	911	(4470)	2496	7877	1933	1969	8352	5881	16202
1889	950	(5005)	2510	8465	1934	2354	10404	7627	20385
1890	1008	5046	2695	8749	1935	2807	10125	8157	21089
1891	1029	5192	2504	8725	1936	3323	10726	8623	22672
1892	1041	4892	2272	8205	1937	4227	13257	10706	28190
1893	938	4817	2290	8045	1938	2852	12217	9955	25024
1894	858	4857	2390	8105					
1895	926	4964	2405	8295	1946	7294	13259		
1896	946	5236	2636	8818	1947	8968	19932		
1897	867	5431	2787	9085	1948	10604	23481	29222	63307
1898	850	5883	2697	9430	1949	10121	23570		
1899	1002	6170	3102	10274	1950	12808	23033	28736	64577
1900	1085	6505	3160	10750	1951	16165	32044	39704	87913
1901	1126	6306	3203	10635	1952	16152	30402	40424	86978
1902	1264	6518	3254	11036	1953	16728	29742	38114	84584
1903	1339	6874	3483	11696	1954	15721	32281	40807	88809
1904	1404	7081	3771	12256	1955	17636	37126	44092	98854
1905	1555	7553	4194	13302	1956	20094	40901	47716	108711
1906	1774	8321	4421	14516	1957	20536	44644	54538	119718
1907	1800	9018	4184	15002	1958	19811	41619	52097	113527
1908	1686	8342	4554	14582	1959	22847	44324	54289	121460
1909	1931	9034	4546	15511	1960	22128	52726	59934	134788

INDICES OF THE VOLUME OF EXPORTS f.o.b.

1913 = 100

TABLE 24

	Belgium	France	Germany	Italy	Nether-lands	Sweden	Switzer-land	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1870	16.9	31.1			12.4			36.6		17.9			23.8
1871		31.6						40.9		18.4			
1872	23.3	40.5		27.6		25.4		41.7		20.5			
1873		42.3						40.2		21.6			
1874		43.4						40.4		19.8			
1875	25.8	47.3			17.4			40.2	31.5	18.6			
1876		43.7						39.0		19.0			
1877		42.3						40.7		19.2			
1878		41.6						41.3		19.0			
1879		41.2						42.9		20.6	34.6		
1880	31.2	43.5			20.3			48.3	37.3	22.9	35.4	27.8	
1881		45.0	25.4					52.4	39.6	24.4	32.7	26.7	34.5
1882		45.6	26.8					54.1	41.0	23.6	30.2	31.8	36.5
1883		46.5	27.6					54.4	41.9	22.0	31.7	33.5	37.8
1884		46.1	29.0					54.8	42.5	21.8	31.3	35.3	38.5
1885	35.1	45.8	28.0		28.9			52.7	41.6	22.4	32.2	35.5	38.8
1886		49.7	29.8					54.7	43.4	23.1	33.6	36.4	39.9
1887		50.7	35.3					57.8	45.4	23.0	34.1	35.5	40.8
1888		48.2	31.8					59.6	45.2	22.4	33.1	43.4	43.3
1889		53.8	30.4					60.8	46.3	22.8	38.5	45.2	45.3
1890	45.0	53.0	32.0		35.3			61.3	48.4	23.6	42.5	45.0	46.7
1891	48.1	54.6	32.1		37.0			57.4	47.4	25.5	45.1	46.8	47.2
1892	44.4	56.5	31.5		36.8			55.4	46.9	28.1	47.4	41.0	45.9
1893	44.5	50.0	33.3		36.2	47.2		53.9	46.5	29.2	44.5	45.0	46.0
1894	41.8	53.9	34.1		36.2	48.6		55.6	48.3	29.6	49.5	48.0	49.4
1895	43.3	58.4	38.2		38.2	51.4		67.6	51.8	31.7	48.4	49.4	51.7
1896	44.9	59.6	39.7		43.4	56.2		62.6	53.8	35.7	56.1	55.7	54.9
1897	48.6	61.5	40.9		48.0	56.1		61.9	54.5	40.3	68.2	55.8	57.1
1898	51.7	56.7	42.3		49.2	53.5		61.6	54.9	41.2	74.2	53.7	58.0
1899	54.7	63.5	44.8		51.3	54.7		65.3	58.5	44.0	74.8	55.3	60.5
1900	53.9	61.6	47.1	61.2	55.0	55.7	63.3	62.3	57.0	48.0	73.6	53.2	59.1
1901	51.8	65.5	48.2		56.3	52.8		62.7	59.2	50.8	74.5	59.7	62.0
1902	54.6	68.7	52.1		59.3	58.5		66.5	62.3	54.3	70.9	64.0	64.6
1903	59.2	66.5	55.2		63.3	65.0		67.6	64.8	53.5	68.6	69.8	67.2
1904	60.0	68.1	56.8		64.4	62.7		69.1	66.0	51.2	70.8	73.2	69.3
1905	62.8	72.2	60.4		64.7	67.2		74.8	70.1	55.0	80.6	77.4	73.8
1906	73.7	75.0	64.9		67.6	70.9		80.5	74.7	58.0	83.5	76.9	76.7
1907	74.4	80.5	68.5		71.8	67.8		86.3	77.4	56.3	81.4	74.7	76.7

INDICES OF THE VOLUME OF EXPORTS f.o.b.

1913 = 100

TABLE 25

	Belgium	France	Germany	Italy	Netherlands	Sweden	Switzerland	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1908	66.8	77.3	65.3		70.8	62.1		78.9	73.1	55.4	81.0	84.1	78.5
1909	76.4	82.3	71.0		79.6	64.3		81.8	78.5	61.0	74.6	91.0	82.6
1910	92.6	88.0	79.6		85.4	78.0		89.0	86.4	62.3	76.6	96.6	87.1
1911	97.3	84.9	84.5		88.6	87.4		92.0	88.6	66.2	94.0	90.8	89.5
1912	106.4	93.8	90.5		101.0	95.0		96.6	95.5	78.3	101.2	99.1	97.1
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920		86.0								131.4	146.0		
1921		83.0	31.2	74.2	72.9	52.4	62.6	49.7	47.9	115.3	116.8		
1922		86.0	61.4	82.9	81.3	82.6	70.1	68.5	63.8	151.7	109.0		
1923		103.0	53.1	88.4	87.0	80.9	74.4	76.3	66.4	173.9	110.2		
1924		119.0	79.0	117.6	107.7	94.7	87.3	80.1	82.2	175.3	123.6	134.9	107.4
1925	72.8	124.0	65.4	135.5	115.6	99.5	89.7	79.9	87.5	194.2	131.1	149.1	115.8
1926	76.4	134.0	77.5	124.8	121.2	100.9	86.6	71.8	90.0	203.8	139.3	147.1	119.4
1927	96.5	146.0	79.7	130.8	135.6	124.3	98.2	81.8	99.2	203.1	150.6	159.3	129.2
1928	107.8	148.0	90.7	132.8	143.1	122.7	101.1	85.1	105.4	232.3	155.5	165.6	134.9
1929	107.2	147.0	101.2	146.8	145.6	144.1	100.7	87.4	110.3	202.9	161.2	172.8	141.5
1930	92.8	132.0	96.1	143.0	138.2	132.8	90.1	72.0	100.2	181.4	131.9	171.3	132.0
1931	94.4	112.0	88.0	144.4	128.9	107.8	77.1	54.8	88.0	148.8	107.9	174.0	121.6
1932	73.5	86.0	59.8	118.4	105.8	96.9	50.3	55.0	70.1	138.0	84.2	162.4	103.6
1933	76.0	88.0	56.3	121.6	100.9	116.8	52.6	55.6	69.8	150.2	83.0	167.8	106.4
1934	78.5	91.0	50.9	112.4	103.5	137.8	62.7	59.2	70.5	172.9	90.7	173.4	110.4
1935	87.5	82.0	54.2	111.9	101.9	139.5	62.4	63.3	72.3	189.5	93.9	187.9	116.4
1936	97.9	78.0	59.7	100.0	105.7	157.2	63.4	63.5	74.6	232.3	99.7	189.9	121.6
1937	111.3	84.0	69.2	157.6	130.8	184.8	76.1	69.6	86.7	211.8	128.2	207.4	137.1
1938	102.4	91.0	62.5	154.1	119.1	154.7	79.3	61.3	83.2	202.0	127.9	186.2	128.2
1946							80.9			328.2	248.1		
1947	72.2					127.6	92.6			343.7	311.4		
1948	89.5	75.6		121.3	77.8	140.5	100.1	83.6	61.6	348.8	257.1	165.2	132.0
1949	98.5	110.3		134.1	113.4	165.1	100.0	93.2	72.5	328.7	263.7		
1950	106.6	151.6	40.0	169.2	155.3	204.1	113.2	106.1	102.4	326.6	231.7	194.3	159.0
1951	126.7	174.5	53.9	193.1	178.9	211.4	138.4	104.5	114.6	360.9	296.1	200.4	175.9
1952	117.9	148.2	59.1	172.9	193.5	189.6	132.5	98.2	108.4	400.5	299.5	206.7	176.7
1953	129.7	156.7	67.0	183.9	215.4	205.4	147.2	100.3	116.3	394.9	314.7	226.1	186.9
1954	140.4	184.3	82.2	206.1	246.4	224.2	154.6	104.6	130.8	382.6	304.2	237.3	198.0
1955	164.3	214.2	96.2	241.1	268.8	234.8	169.2	112.0	147.1	412.7	310.0	258.9	217.2
1956	176.2	190.0	112.2	284.5	280.7	262.1	188.5	118.2	155.6	447.7	366.1	279.0	235.3
1957	172.5	208.6	128.4	327.8	295.0	287.9	201.5	121.3	168.0	452.5	388.4	295.8	250.7
1958	176.6	219.5	131.6	345.6	318.7	286.9	198.6	116.1	171.5	452.3	336.6	306.6	250.0
1959	199.0	260.2	151.6	428.3	357.3	309.3	222.2	121.4	194.6	464.1	327.7	342.7	273.5
1960	223.6	303.7	173.6	518.4	403.1	349.3		127.5	201.4	474.1	377.9	360.5	296.6

INDICES OF THE VOLUME OF IMPORTS c.i.f.

1913 = 100

TABLE 26

	Belgium	France	Germany	Italy	Netherlands	Norway	Sweden	Switzerland	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1870	16.9	29.6			11.3				32.7		10.5			23.8
1871		35.0							35.8		11.9			
1872		33.6					18.1		36.6		14.3			
1873		34.0							38.9		16.1			
1874		35.9							39.4	32.0	15.9			
1875	22.9	37.5			17.8				41.3		13.9			
1876		41.9							42.9		13.1			
1877		39.7							45.8		14.1			
1878		48.1							45.3		13.8			
1879		53.0							45.5		12.3			
1880	31.1	55.9			22.1	26.0			49.3	37.8	12.8	31.2		
1881		55.5	25.9			29.0			47.8	37.7	15.5	34.0	32.8	34.5
1882		56.7	27.1			30.0			50.3	39.4	17.6	35.8	34.8	36.5
1883		60.1	28.7			31.0			53.2	41.6	17.4	36.6	35.0	37.8
1884		56.7	30.4			32.0			50.7	40.9	16.5	35.0	38.9	38.5
1885	29.0	55.2	29.8		26.7	31.0			51.6	41.7	16.7	37.1	39.3	38.8
1886		57.4	29.6			30.0			51.8	41.9	17.9	40.9	40.4	39.9
1887		56.2	31.7			30.0			53.5	42.8	18.9	42.1	41.5	40.8
1888		57.4	33.6			35.0			55.8	44.3	18.8	44.8	46.2	43.3
1889		57.0	39.4			41.0			61.5	48.5	19.1	44.1	45.2	45.3
1890	38.9	57.9	41.4		30.9	44.0			61.4	48.9	19.2	47.4	48.2	46.7
1891		64.3	42.8		31.1	46.0			63.7	50.9	19.9	49.1	45.4	47.2
1892		59.9	43.9		27.8	43.0			63.4	50.2	21.1	51.6	43.4	45.9
1893		57.2	43.8		34.7	45.0	39.0		61.7	50.0	20.9	44.3	43.9	46.0
1894		59.4	46.9		38.2	50.0	45.1		68.2	54.3	20.8	44.5	49.7	49.4
1895	41.1	58.1	48.4		35.4	55.0	44.5		72.2	56.2	21.1	51.1	51.8	51.7
1896	42.9	58.6	51.3		39.9	60.0	46.8		76.1	58.5	21.9	51.4	55.0	54.9
1897	44.7	61.0	55.0		38.7	66.0	52.9		77.1	60.7	24.0	48.6	58.7	57.1
1898	48.2	67.2	59.0		42.2	67.0	57.8		80.8	64.9	27.4	46.2	56.5	58.0
1899	52.7	64.6	60.6		46.3	71.0	63.2		80.7	65.6	30.1	50.6	61.7	60.5
1900	51.6	62.7	60.2	49.6	45.0	67.0	61.5	62.9	82.1	65.2	30.9	51.4	58.0	59.1
1901	52.4	64.8	59.9		47.8	65.0	57.8		84.0	66.3	33.4	55.7	61.8	62.0
1902	53.8	66.0	61.5		51.2	66.0	63.0		85.5	68.5	37.7	63.9	63.2	64.6
1903	60.4	69.5	65.6		52.5	67.0	65.9		85.4	70.5	40.9	64.2	65.8	67.2
1904	61.2	65.2	67.8		58.8	66.0	71.1		85.9	71.8	42.8	65.9	70.4	69.3
1905	64.6	68.4	72.7		67.4	68.0	70.6		85.9	74.8	45.2	69.6	77.0	73.8
1906	69.8	75.1	80.1		60.9	73.0	76.9		88.2	78.9	49.5	75.7	77.4	76.7
1907	74.0	78.6	84.6		64.3	72.0	79.6		89.4	82.8	53.1	71.4	70.4	76.7

INDICES OF THE VOLUME OF IMPORTS c.i.f.

1913 = 100

TABLE 27

	Belgium	France	Germany	Italy	Netherlands	Norway	Sweden	Switzerland	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1908	67.2	78.8	80.0		73.6	74.0	74.3		86.5	80.8	48.8	76.6	81.1	78.5
1909	77.2	82.4	86.1		80.6	76.0	75.6		88.1	85.6	56.9	87.8	80.0	82.6
1910	88.0	89.7	88.2		81.1	82.0	80.6		88.0	88.3	69.6	87.6	83.3	87.1
1911	92.0	98.7	93.9		81.2	93.0	82.3		90.3	92.4	82.9	89.0	84.8	89.5
1912	100.2	97.7	99.3		82.6	96.0	92.4		98.0	98.3	103.0	92.4	95.4	97.1
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920		114.0				142.0					96.0	128.8		
1921		82.0	50.0	75.0	72.4	88.0	75.8	64.2	77.7	67.4	78.6	105.6		
1922		108.0	58.7	86.5	80.1	103.0	91.9	69.2	89.9	79.2	89.1	140.2		
1923		109.0	44.6	91.4	78.3	109.0	117.5	78.6	99.6	79.8	96.8	145.0		
1924		115.0	62.9	100.1	88.2	106.0	133.6	84.7	111.2	93.2	90.2	141.6	122.7	107.4
1925	65.7	106.0	83.6	114.9	90.2	107.0	124.8	86.0	114.1	97.6	101.1	152.3	135.5	115.8
1926	62.9	111.0	74.2	118.3	97.6	106.0	134.2	86.1	119.1	98.7	121.6	164.3	144.8	119.4
1927	72.7	109.0	106.3	115.6	103.4	117.0	149.8	88.5	122.1	108.6	137.5	165.9	155.3	129.2
1928	79.3	116.0	103.2	135.4	109.2	125.0	162.7	94.7	119.1	111.0	157.0	167.8	164.0	134.9
1929	93.0	133.0	99.1	135.0	115.4	136.0	169.8	97.4	125.8	116.7	171.3	191.7	170.2	141.5
1930	91.1	143.0	88.5	127.2	111.9	147.0	175.4	104.0	124.2	115.2	152.0	163.3	154.3	132.0
1931	91.5	141.0	75.2	107.8	112.9	135.0	163.8	106.3	127.6	111.9	111.9	143.7	132.5	121.6
1932	74.5	118.0	69.9	97.2	95.9	115.0	134.1	98.2	111.0	96.4	82.7	115.8	109.1	103.6
1933	74.4	123.0	68.6	95.4	104.2	117.0	134.9	98.1	112.1	96.7	76.3	127.8	117.6	106.4
1934	74.5	106.0	73.7	103.9	99.3	130.0	160.1	88.2	114.9	97.0	91.8	125.5	129.8	110.4
1935	77.7	103.0	65.4	101.4	86.8	146.0	179.6	87.3	116.0	94.9	100.7	155.3	140.7	116.4
1936	83.9	113.0	63.2	63.3	88.6	158.0	202.8	83.2	124.5	97.3	114.0	170.9	152.3	121.6
1937	111.2	120.0	74.5	95.8	99.9	195.0	238.8	91.8	132.4	109.8	132.4	195.4	170.5	137.1
1938	98.2	107.0	87.7	81.2	98.2	180.0	233.2	84.0	127.0	108.0	119.1	137.7	165.9	128.2
1946						139.6		87.6			209.2	186.7		
1947	114.1					207.2	274.1	122.3	95.7		242.9	181.1		
1948	106.9	104.3		86.3	83.8	177.7	245.8	122.4	103.0	86.4	219.1	206.0	191.5	132.0
1949	99.8	96.4		101.8	90.5	204.7	214.8	99.2	112.6	91.9	223.6	200.8		
1950	111.7	111.5	48.8	112.6	121.5	217.8	266.7	130.0	115.4	103.6	239.1	247.7	233.7	159.0
1951	116.4	125.2	49.1	126.5	119.9	234.6	316.1	143.1	130.5	112.5	268.9	243.6	269.0	175.9
1952	115.4	123.6	58.2	143.7	105.3	226.9	293.8	124.9	118.7	109.6	303.2	251.6	271.6	176.7
1953	120.8	126.2	65.6	154.2	124.9	248.6	292.2	128.9	129.1	117.8	332.8	268.8	273.7	186.9
1954	132.2	136.5	81.5	161.9	153.4	283.5	332.1	148.3	130.6	129.7	310.6	244.8	304.0	198.0
1955	147.5	154.8	101.4	178.1	170.4	297.2	373.4	168.8	145.6	147.1	354.3	275.9	326.8	217.2
1956	165.4	174.5	113.5	202.3	192.0	317.7	397.0	194.4	143.5	158.3	419.3	299.7	346.2	235.3
1957	168.4	185.0	127.7	220.8	201.7	316.0	423.9	207.2	149.2	168.0	401.4	304.8	380.7	250.7
1958	164.8	184.2	136.1	220.3	188.8	333.7	433.6	189.3	148.1	169.0	370.3	316.5	378.0	250.0
1959	185.2	180.9	163.2	246.8	211.4	350.2	449.7	216.5	160.5	186.2	398.8	379.4	400.7	273.5
1960	212.9	214.8	194.8	353.8	240.6	390.5	527.0		182.8	221.8	393.1	361.3	439.6	296.6

INDICES OF EXPORT UNIT VALUES IN CURRENT DOLLARS

1913 = 100

TABLE 28

	Belgium	France	Germany	Italy	Sweden	Switzerland	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1870	110	131					104	119	77		122	117
1871	114	132					104	120	80		120	
1872	118	135	189	166	97		117	130	82		125	
1873	121	130					121	131	85		123	
1874	118	124					113	124	87		120	
1875	115	119					106	117	91		117	
1876	113	119					98	110	88		117	
1877	111	118					93	108	84		118	
1878	109	111					89	103	81		110	
1879	107	114					85	101	78	93	107	
1880	105	116					88	103	81	102	113	
1881	104	115	118				85	101	87	104	108	101
1882	102	114	119				85	101	92	107	107	102
1883	100	108	117				84	98	91	101	102	98
1884	95	102	109				81	93	86	98	97	94
1885	92	98	101				77	88	83	91	91	87
1886	85	95	99				74	85	81	86	88	85
1887	86	93	88				73	84	84	86	90	84
1888	86	98	100				75	87	86	90	88	86
1889	87	100	103				78	90	87	86	93	89
1890	86	103	103				82	90	88	85	91	88
1891	85	95	98				82	89	88	88	90	88
1892	83	89	93				78	85	86	82	87	83
1893	82	94	92		85		77	85	85	80	86	84
1894	84	83	86		75		74	80	84	71	80	76
1895	86	84	86		74		72	79	80	72	79	76
1896	88	83	88		74		73	80	78	71	78	77
1897	90	85	88		78		72	81	80	69	78	77
1898	93	90	88		79		72	82	81	68	79	77
1899	96	95	93		80		77	87	83	72	81	81
1900	96	97	97	87	86	96	89	94	86	81	86	87
1901	95	89	91		82		85	88	87	79	81	83
1902	95	90	89		82		81	87	90	81	81	83
1903	96	93	90		83		82	88	92	87	82	85
1904	98	95	91		81		83	89	90	87	84	86
1905	100	98	94		82		84	91	93	84	87	89
1906	102	102	97		87		89	95	98	90	91	92
1907	103	101	99		95		94	98	104	95	95	97

INDICES OF EXPORT UNIT VALUES IN CURRENT DOLLARS

1913 = 100

TABLE 29

	Belgium	France	Germany	Italy	Nether-lands	Sweden	Switzer-land	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1908	101	95	97			95		91	95	105	90	86	90
1909	99	101	92			90		88	93	105	94	90	91
1910	99	103	93			93		92	95	105	102	89	95
1911	99	104	95			93		94	97	103	94	97	97
1912	100	104	98			98		96	99	103	96	101	99
1913	100	100	100	100	100	100	100	100	100	100	100	100	100
1920				139		277	235	270		205	233		
1921		134	81	99	153	216	184	213	164	147	158	101	
1922		153	64	110	140	167	173	182	144	135	145	98	
1923		137	114	119	142	171	157	180	157	134	156	118	
1924		140	128	110	143	163	157	173	155	138	153	124	140
1925	132	133	133	111	152	167	165	183	149	152	154	139	147
1926	119	109	133	120	140	172	153	173	137	147	142	131	135
1927	107	111	134	127	136	159	148	165	135	142	133	127	131
1928	111	103	134	119	135	157	152	162	132	137	136	125	131
1929	115	101	132	110	133	154	151	159	130	134	134	120	126
1930	109	96	124	92	121	143	143	151	121	113	120	95	108
1931	95	80	108	76	99	119	128	126	102	90	93	67	83
1932	78	68	95	61	78	82	116	91	83	74	79	50	66
1933	92	80	110	68	90	93	134	110	97	77	83	60	75
1934	112	97	136	82	112	112	164	132	118	90	97	74	92
1935	92	94	132	80	109	108	161	130	114	90	100	72	90
1936	94	91	134	79	109	113	158	135	116	96	102	77	92
1937	107	87	143	72	117	126	146	145	121	112	108	87	101
1938	99	73	150	74	116	137	143	147	118	98	100	80	95
1948	263	200		183	319	360	301	295	283	209	205	247	236
1949	251	186		172	276	297	303	278	264	211	190		
1950	216	151	215	147	220	247	300	223	201	209	184	237	210
1951	292	176	271	176	264	385	294	269	246	245	211	296	255
1952	289	195	284	166	264	378	313	286	259	261	211	264	246
1953	243	182	276	169	242	329	308	279	245	252	209	250	239
1954	228	171	271	164	237	322	299	278	237	248	207	252	235
1955	236	173	271	159	242	336	291	282	238	250	209	250	233
1956	250	180	279	156	247	339	288	291	247	259	217	248	239
1957	258	183	284	161	254	339	291	298	251	265	224	248	242
1958	241	176	284	154	244	332	292	300	245	261	222	236	234
1959	231	162	276	140	244	326	285	301	235	268	224	231	229
1960	236	170	279	145	242	336		306	260	272	226	235	234

INDICES OF IMPORT UNIT VALUES IN CURRENT DOLLARS

1913 = 100

TABLE 30

	Belgium	France	Germany	Italy	Nether-lands	Norway	Sweden	Switzer-land	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1870	108	115							120	119	114		115	118
1871	110	121							115	116	126		114	
1872	112	126	125	142			139		123	123	127		124	
1873	114	124							123	123	122		124	
1874	114	116							120	119	120		118	
1875	113	112							116	115	120		113	
1876	113	113							113	115	112		109	
1877	112	110							113	112	104		107	
1878	112	103							106	106	97		101	
1879	110	103							102	103	95	102	98	
1880	107	107				105			107	107	99	113	103	
1881	105	104	106			103			106	107	103	108	103	108
1882	103	101	106			97			105	105	105	108	103	106
1883	100	95	104			94			103	102	104	102	100	103
1884	96	91	99			90			98	97	99	95	95	97
1885	92	88	91			85			92	90	93	88	89	92
1886	88	87	90			82			86	87	89	88	86	88
1887	88	85	91			81			86	87	86	91	85	88
1888	87	85	90			82			88	88	88	89	88	89
1889	87	90	94			85			89	90	91	94	90	92
1890	85	91	93			86			88	90	92	93	91	92
1891	83	88	90			88			89	89	90	92	89	91
1892	81	83	85			84			86	85	87	89	85	88
1893	79	80	84			82	101		85	84	85	92	84	86
1894	80	77	78			75	92		78	78	80	84	78	81
1895	81	76	79			74	91		75	77	77	80	75	79
1896	82	77	78			73	90		77	78	77	81	78	79
1897	83	77	79			73	89		77	78	77	76	77	78
1898	84	79	80			76	91		77	79	80	76	77	80
1899	85	83	84			79	94		79	82	85	82	81	84
1900	85	89	89	94		84	101	92	85	87	90	87	88	89
1901	84	80	84			80	94		82	83	89	83	84	84
1902	84	79	85			80	94		82	83	89	81	83	84
1903	87	82	85			79	95		84	85	91	84	86	86
1904	90	82	87			80	95		85	86	92	86	87	87
1905	94	83	91			83	96		86	88	94	91	88	89
1906	98	89	93			85	98		90	92	99	95	92	93
1907	101	94	96			91	100		94	95	104	99	96	96

INDICES OF IMPORT UNIT VALUES IN CURRENT DOLLARS

1913 = 100

TABLE 31

	Belgium	France	Germany	Italy	Nether-lands	Norway	Sweden	Switzer-land	U.K.	Western Europe	Canada	U.S.	Third Countries	World
1908	98	85	89			87	95		90	90	99	88	91	91
1909	95	90	92			87	96		92	92	97	88	92	92
1910	96	95	94			89	98		99	96	98	95	94	94
1911	97	97	96			91	99		97	97	96	96	96	97
1912	98	100	100			99	100		98	99	97	101	99	99
1913	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1920				201			245	239	214		197	219		
1921		127	105	138	139	164	165	164	151	137	143	125	139	
1922		113	98	123	130	148	140	140	138	124	133	120	126	
1923		113	128	123	134	137	129	138	140	130	145	141	141	
1924		112	134	120	137	135	126	144	141	131	140	137	142	135
1925	132	122	137	129	146	154	137	151	154	141	139	149	149	144
1926	123	107	125	121	134	154	131	143	142	130	131	145	137	135
1927	114	117	124	129	132	146	125	147	136	128	125	135	133	131
1928	115	111	126	121	132	147	124	146	137	127	123	131	132	129
1929	109	106	126	118	128	142	124	143	134	124	119	124	129	126
1930	97	89	109	102	116	130	112	129	117	108	105	101	115	110
1931	74	72	83	80	90	107	96	111	88	84	85	78	91	85
1932	62	61	62	62	73	72	70	94	64	65	76	61	77	67
1933	73	72	73	74	80	82	79	109	74	75	76	61	81	75
1934	88	88	94	90	94	96	93	142	93	94	89	71	95	91
1935	82	83	100	91	98	94	92	129	93	93	86	71	94	89
1936	88	85	105	97	98	98	91	124	98	96	88	77	92	92
1937	86	88	115	109	114	110	100	122	111	105	97	85	102	101
1938	80	76	108	104	106	109	99	118	103	99	89	77	97	96
1948	196	203		253	298	285	247	257	244	237	190	187	247	236
1949	185	210		216	271	255	226	240	228	224	191	178		
1950	178	167	223	188	226	211	195	217	190	194	194	194	199	200
1951	224	219	280	244	285	253	248	257	252	248	228	244	237	246
1952	217	215	258	234	282	260	259	260	244	242	215	231	241	242
1953	205	192	228	223	254	248	238	247	218	220	212	220	225	223
1954	197	190	223	214	249	243	236	237	218	217	214	227	217	221
1955	197	188	228	216	252	248	236	238	225	220	213	224	218	224
1956	203	196	233	223	259	258	245	245	226	225	219	229	223	227
1957	209	203	235	236	272	273	252	256	229	232	231	231	232	235
1958	195	187	217	207	257	265	240	243	213	215	229	220	223	223
1959	191	173	208	194	249	255	236	240	210	208	228	218	219	218
1960	191	180	208	190	252	253	240		212	207	228	220	221	223

G.N.P. AT CONSTANT PRICES

Constant Territory. 1913 = 100

TABLE 32

	Belgium	Denmark	France	Germany	Italy	Netherlands	Norway	Sweden	Switzerland	U.K.	Western Europe	Canada	U.S.
1870	31.8	25.8	51.1		54.8			25.3		37.4	40.5	20.2	
1871		26.7		30.0	53.2		40.3	28.9		38.6	41.1	20.7	
1872		28.5		27.1	53.0			31.0		38.1	39.4	17.4	
1873		28.4		26.0	54.5			33.0		40.4	40.0	19.2	
1874		29.1		29.0	54.8			34.9		43.2	42.5	23.1	
1875		28.7		32.7	57.0			32.6		42.9	44.4	22.3	
1876		29.8		34.8	57.4			35.6		43.6	45.8	22.5	
1877		28.7		36.2	57.4		49.9	35.0		43.9	46.4	23.1	
1878		30.2		40.4	57.5			34.1		45.5	48.9	22.7	
1879		31.0		41.9	56.5			35.5		44.5	49.0	26.6	
1880		33.4	57.5	38.7	60.2			35.9		44.9	48.1	29.6	
1881		34.2		40.7	57.7			37.3		47.8	49.8	33.6	
1882		35.8		43.0	58.7			36.4		50.1	51.8	33.4	
1883		37.3		44.3	58.8			38.0		51.3	52.9	32.8	
1884		37.7		46.9	58.1			39.5		51.7	54.2	36.1	
1885		37.8		49.7	58.6			40.5		53.7	56.3	40.0	
1886		38.4		54.0	60.9			40.0		55.9	59.4	36.1	
1887		39.3		54.2	60.1		51.7	40.5		57.9	60.0	36.1	
1888		40.2		54.6	59.9			41.9		61.8	61.6	38.0	
1889		42.3		52.8	57.6			43.7		65.3	61 7	37.1	38.4
1890		45.1	72.2	51.3	62.6			44.1	58.0	68.0	62.7	38.0	41.3
1891		46.8		52.1	65.4			45.7		67.4	63.4	44.3	43.1
1892		47.1		55.9	62.5			45.3		65.9	64.0	43.3	47.3
1893		47.6		60.6	63.4			46.6		65.2	66.0	42.1	45.0
1894		48.6		64.3	65.3			50.9		70.6	70.2	41.9	43.7
1895	57.7	52.2		67.4	63.6			49.5	71.2	75.6	73.2	44.1	49.0
1896		54.4		70.1	63.7			56.1		77.0	75.1	48.4	48.0
1897		56.2		70.3	62.1			57.3		78.1	75.3	42.0	52.5
1898		59.6		69.8	65.7			57.5		79.9	76.3	49.8	53.7
1899		61.7		70.8	69.8		72.9	59.0	69.5	84.6	79.1	47.7	58.6
1900		62.7	87.9	68.4	70.4	75.0	71.6	62.3		83.3	77.7	49.9	60.2
1901		64.5		73.0	76.8	73.4	73.5	63.6		83.2	80.6	54.8	67.1
1902		65.1		76.1	73.6	78.1	74.5	61.5		84.4	81.6	58.8	67.8
1903		70.1		78.9	80.0	79.7	74.1	68.5		82.5	83.1	60.5	71.1
1904		72.1		81.1	79.1	79.7	73.8	69.2		83.0	83.9	61.6	70.2
1905		74.7		80.3	83.3	81.3	74.6	69.9		86.4	85.2	66.3	75.4
1906		76.1		81.8	83.5	84.4	76.7	78.4		90.3	87.3	70.1	84.2
1907		79.8		82.0	88.6	85.9	79.6	78.5		92.0	88.6	70.4	85.5

G.N.P. AT CONSTANT PRICES

Constant Territory. 1913 = 100

TABLE 33

	Belgium	Denmark	France	Germany	Italy	Netherlands	Norway	Sweden	Switzerland	U.K.	Canada	U.S.
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	54.2		77.6		106.6	117.2	123.2	113.5			103.7	115.5
1921		97.1	71.8		108.9	123.4	110.5	100.0			94.3	112.8
1922		103.9	88.2		113.4	128.1	123.2	101.2			101.9	119.4
1923		117.7	95.3		116.6	132.8	126.8	113.6			108.3	135.2
1924	86.0	120.4	110.6		117.2	137.5	126.2	117.5	119.2	106.6	108.1	139.2
1925		117.2	110.6	90.3	122.1	143.8	131.7	121.0	127.8	108.5	112.8	142.6
1926		120.9	116.5	92.9	122.9	151.6	133.1	126.1	134.2	109.5	122.7	151.9
1927	83.5	125.1	111.8	102.1	122.1	156.3	138.6	131.9	141.5	118.8	132.8	153.3
1928		130.1	118.8	106.7	130.4	164.1	135.8	132.3	149.3	120.8	143.7	155.2
1929		134.1	130.6	106.2	132.9	168.8	155.1	143.4	154.5	122.8	143.9	164.5
1930	105.4	140.0	129.4	104.9	125.7	168.8	166.9	148.3	153.6	122.2	138.3	149.9
1931		142.3	123.5	96.7	127.4	157.8	153.5	134.0	147.2	122.5	120.7	140.9
1932	99.2	139.5	115.3	89.5	132.7	153.1	162.9	128.5	142.2	123.4	110.5	120.4
1933		141.5	115.3	94.9	132.0	150.0	166.9	134.5	149.2	130.8	101.7	116.9
1934	106.2	146.9	112.9	103.4	131.0	148.4	171.3	146.8	149.5	135.4	113.5	127.3
1935	107.4	150.4	108.2	112.8	144.1	151.6	180.5	153.9	148.9	140.7	122.2	144.0
1936	117.3	154.9	107.1	122.5	145.3	159.4	190.6	163.2	149.4	146.0	127.8	159.0
1937	118.1	160.1	110.6	136.4	154.2	171.9	197.8	174.0	156.5	146.5	140.3	171.9
1938	115.9	160.5	109.4	149.9	153.8	170.3	202.7	180.5	162.6	149.5	141.5	162.6
1948	133.5	189.7	107.7	110.9	143.4	194.0	248.1	239.4	202.6	158.7	246.7	268.3
1949	137.5	198.7	120.9	128.9	151.0	209.2	252.3	254.2	198.0	163.2	253.9	268.1
1950	144.3	216.1	130.3	157.3	161.8	216.8	265.7	267.8	212.4	170.4	271.7	291.2
1951	152.6	215.8	138.2	173.8	174.1	222.9	274.5	266.7	221.3	173.6	288.0	313.3
1952	151.3	218.6	141.7	188.3	179.1	227.5	285.1	274.1	227.8	172.7	315.1	324.7
1953	157.3	232.3	146.0	202.4	192.7	247.5	296.5	283.8	240.0	180.6	326.3	337.8
1954	164.6	230.2	153.1	217.5	202.5	264.9	309.7	302.4	254.4	189.5	314.6	332.3
1955	169.7	230.6	162.0	242.5	216.1	285.6	316.9	312.7	270.2	195.6	340.3	358.9
1956	175.9	245.2	170.0	259.2	225.1	296.9	332.4	322.6	285.0	199.0	373.1	365.7
1957	180.3	258.9	180.2	273.2	239.3	304.3	339.3	334.4	295.8	202.5	376.3	371.8
1958	177.1	265.5	183.4	282.1	249.8	305.8	338.6	338.1	301.7	204.9	380.0	367.4
1959	183.7	280.3	187.5	301.0	268.9	324.2	351.8	354.9	316.5	210.8	389.3	391.6
1960	191.4	298.7	199.1	325.1	287.4	350.6	373.3	368.4	332.3	220.3	397.5	400.3

G.N.P. AT CONSTANT PRICES

Customs Territory of Epoch (1). 1913 = 100

TABLE 34

	Belgium	Denmark	France	Germany	Italy	Nether-lands	Norway	Sweden	Switzer-land	U.K.	Western Europe	Canada	U.S.
1908		79.5		89.9	89.7	85.9	82.0	79.1		89.3	91.0	73.4	78.4
1909		80.3		91.6	92.3	89.1	83.9	80.6		90.6	92.3	81.7	88.1
1910		84.0		95.1	87.5	89.1	88.5	85.8		93.4	94.0	83.3	89.0
1911		89.3		96.0	96.7	92.2	90.3	89.1		95.4	96.4	90.5	91.9
1912		95.5		92.2	96.2	98.4	94.4	87.3		97.9	95.2	92.2	96.2
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920			82.6		110.8	117.2	123.2	113.5				103.7	115.5
1921		102.7	76.5		113.2	123.4	110.5	100.0				94.3	112.8
1922		109.9	93.9		117.9	128.1	123.2	101.2				101.9	119.4
1923		124.4	101.5		121.2	132.8	126.8	113.6				108.3	135.2
1924	89.8	127.4	117.8		121.8	137.5	126.2	117.5	119.2	99.4		108.1	139.2
1925		124.0	117.8	82.1	126.9	143.8	131.7	121.0	127.8	101.2	96.6	112.8	142.6
1926		127.9	124.1	84.5	127.8	151.6	133.1	126.1	134.2	102.2	99.1	122.7	151.9
1927	87.2	132.4	119.1	92.8	126.9	156.3	138.6	131.9	141.5	110.9	102.8	132.8	153.3
1928		137.8	126.5	97.0	135.6	164.1	135.8	132.3	149.3	112.6	107.3	143.7	155.2
1929		142.1	139.1	96.5	138.1	168.8	155.1	143.4	154.5	114.5	110.9	143.9	164.5
1930	110.0	148.5	137.8	95.4	130.7	168.8	166.9	148.3	153.6	113.9	110.3	138.3	149.9
1931		150.8	131.5	87.9	132.4	157.8	153.5	134.0	147.2	114.2	106.6	120.7	140.9
1932	103.5	147.7	122.8	81.4	137.9	153.1	162.9	128.5	142.2	115.0	103.0	110.5	120.4
1933		149.9	122.8	86.3	137.2	150.0	166.9	134.5	149.2	122.0	105.9	101.7	116.9
1934	110.8	155.7	120.2	94.0	136.2	148.4	171.3	146.8	149.5	126.2	109.1	113.5	127.3
1935	112.1	159.6	113.4	103.9	149.8	151.6	180.5	153.9	148.9	131.0	113.3	122.2	144.0
1936	122.4	164.1	112.2	112.9	151.0	159.4	190.6	163.2	149.4	136.1	118.0	127.8	159.0
1937	123.3	169.8	115.9	125.7	160.3	171.9	197.8	174.0	156.5	136.7	124.2	140.3	171.9
1938	121.0	170.2	114.7	138.1	159.9	170.3	202.7	180.5	162.6	139.2	128.2	141.5	162.6
1948	139.4	201.1	115.0	62.7	146.9	194.0	248.1	239.4	202.6	147.7	111.2	246.7	268.3
1949	143.5	210.7	129.1	72.8	154.6	209.4	252.3	254.2	198.0	152.0	119.7	257.2	268.1
1950	150.6	229.2	139.2	88.9	165.7	216.8	265.7	267.8	212.4	158.7	130.2	275.3	291.2
1951	159.3	228.8	147.6	98.2	178.3	222.9	274.5	266.7	221.3	161.6	137.2	291.8	313.3
1952	157.9	231.8	151.3	106.4	183.4	227.5	285.1	274.1	227.8	160.8	140.9	319.2	324.7
1953	164.2	246.3	155.9	114.4	197.3	247.3	296.5	283.8	240.0	168.2	148.5	330.6	337.8
1954	171.8	253.7	163.5	122.9	207.4	264.9	309.7	302.4	254.4	176.5	157.0	318.7	332.3
1955	177.2	254.0	173.0	137.0	221.3	285.6	316.9	312.7	270.2	182.1	166.9	344.8	358.9
1956	183.6	260.0	181.6	146.4	230.5	296.9	332.4	322.6	285.0	185.3	174.0	378.0	365.7
1957	188.2	274.6	192.5	154.4	245.1	304.3	339.3	334.4	295.8	188.6	181.6	381.3	371.8
1958	184.8	281.6	195.0	159.4	255.8	305.8	338.6	338.1	301.7	190.8	185.4	385.0	367.4
1959	191.8	297.3	196.7	172.8	275.4	324.2	351.8	354.9	316.5	196.3	194.1	394.4	391.6
1960	199.7	316.8	208.9	186.6	294.3	350.6	373.3	368.4	332.3	205.1	206.3	402.7	400.3

(1) Figures for 1908 to 1913 are for constant territory.