

CHAPTER 6

INTERNATIONAL TRANSACTIONS

6.0 TRANSACTIONS WITH THE REST OF THE WORLD

SCOPE OF THE SECTOR¹

This is the last of our five sectors and covers the transactions between residents of the United Kingdom and non-residents. The latter are formally regarded as a 'sector' of the United Kingdom economy in respect of their transactions with residents.

The division between residents and non-residents as presently defined by the C.S.O. follows that used for balance of payments purposes, and residents comprise persons living in the United Kingdom; the Central Government and local authorities; and all business enterprises and non-profit-making bodies located in the United Kingdom, including branches and subsidiaries of overseas companies but excluding overseas branches and subsidiaries of United Kingdom companies. Agencies of the government operating abroad, such as embassies or military units are regarded as residents of the United Kingdom and, conversely, the agencies of foreign governments in the United Kingdom are regarded as non-residents [73, p. 436].

As noted, overseas branches and subsidiaries of United Kingdom companies are treated as non-residents and so do not contribute to the domestic product (e.g. the wages they pay are not part of domestic factor incomes) but the property income earned by such branches and subsidiaries does contribute to the gross *national* product and forms part of the item 'Property income received from abroad', whether or not it is remitted to this country. As presently defined [73, p. 445] this component comprises branch earnings, interest payments in respect of loans granted by the parent, and the dividends remitted by subsidiaries to the parent, together with the parent companies' share of the unremitted profits. As with the other components of property income from abroad (see Chapter 6.3) it is measured *before* deduction of taxes on income due to foreign governments. The corresponding definition applies to property income accruing to non-residents from foreign-owned branches and subsidiaries operating in the United Kingdom; and this income, measured before deduction of United Kingdom taxes on income, will contribute to the domestic product but not to the national product.

The definition of international transactions is thus not necessarily related to geographical boundaries. A transaction can take place wholly inside the United Kingdom (e.g. purchases of goods and services by foreign tourists) and still be regarded as an international transaction; and conversely a domestic transaction between two United Kingdom residents can take place outside the country (e.g. salaries paid to British troops stationed abroad). Furthermore, enterprises engaged in operating British ships and aircraft are treated in a rather special sense as operating 'in the United Kingdom'. Their purchases of stores and fuel abroad are included in United Kingdom purchases of services (though what is bought is a commodity which may never physically enter the country); their income from the sale of tickets to foreigners is included in exports of services; and both the wages earned by their crews and the gross trading profits of the companies form part of domestic factor incomes.

The above definitions became effective in 1961² and retrospective adjustments were made to the Blue Book estimates for 1938 and all years from 1946. The current definitions apply also to the pre-1946 estimates of total property income received from, and paid, abroad. This is precisely true for 1920-45 when the revised 1938 Blue Book estimates are used as benchmarks and so define the series; and is broadly true for the pre-1920 series which cannot be quite so sharply delimited. It is, however, important to note certain qualifications regarding the estimates of corporate trading profits presented in Chapters 3 and 7. One series is given (for 1889-1945) for the gross profits of all companies operating in the United Kingdom and another (in Chapter 3.3, for 1920-38 only) for the profits of British companies operating abroad. This latter series is of course a component of property income received from abroad and should be, but for 1920-38 is not, fully consistent with the definition of the total. Furthermore, there are certain minor in-

¹ Based on C.S.O. [73], pp. 15 and 436-8.

² See *Economic Trends* [267], March 1961, and also C.S.O. [75, 1967], pp. 56-7.

consistencies in the demarcation between domestic trading profits of companies operating in the United Kingdom and property income from abroad.

The estimates of domestic and overseas corporate trading profits are based on income tax assessments and the boundaries are therefore drawn in accordance with the criteria used for income tax purposes. In what is quantitatively by far the most important case, where an enterprise operated largely or wholly abroad, but was regarded as resident for tax purposes because its central management and control was exercised in the United Kingdom (this applied, e.g. to most British-owned companies engaged in mining, railway and plantation operations outside the United Kingdom), there is no difference between the pre-war and the present treatment. The whole of the profits earned abroad were liable for tax irrespective of whether or not they were remitted to the United Kingdom. They are, therefore, included in the present estimates for trading profits earned abroad, and form part of the national, but not the domestic, product.¹ Furthermore, the administrative expenses of the head office (e.g. wages and salaries) would be regarded in both periods as part of the domestic product.

The difficulty arises in the case of an enterprise operating principally in the United Kingdom and regarded as resident for tax purposes, but having one or more *branches* operating abroad. The Inland Revenue does not distinguish the profits which may have been earned by the operations of such branches (as opposed to subsidiary companies) abroad,² and these branches would be treated as United Kingdom residents. The present estimates for gross trading profits of enterprises operating in the United Kingdom will thus include – and trading profits of British companies operating abroad will exclude – the income earned by overseas branches of such enterprises. On the post-1946 definition these branches would be treated as residents of the country in which they were located and their income would be treated as profits earned abroad. And since this definition is applied to the inter-war estimates of property income from abroad there will be an element of duplication in the estimate of gross national product. This difference is, however, partly offset by another, since any profits earned inside the United Kingdom by branches of United Kingdom enterprises allocated to the 'O.U.K.' category would be included in Chapter 3 in trading profits earned abroad, and omitted from the profits of companies operating in the United Kingdom; and it would also be omitted from the estimate in Chapter 6.3 of property income received from abroad.

In the alternative case, where a foreign enterprise had either a subsidiary or a branch (or agent) operating in the United Kingdom (e.g. a distributing office for

a foreign manufacturer), there is no difference as compared with the post-1946 treatment. The whole of the profit earned in the United Kingdom would have been liable for tax and so would be included in the present estimates of gross trading profits,³ and would thus be included in the *domestic* product; any profits remitted to the foreign parents, however, and also the parents' share of undistributed profits would be subtracted in arriving at the *national* product. Similarly, wages and salaries paid, and rents received, by such concerns would also be part of domestic factor income since the census and other statistics from which these estimates are drawn would not distinguish the nationality of the employer or landlord.

For 1920–65 the estimates refer to the United Kingdom of Great Britain and Northern Ireland; for earlier

¹ If the profits were earned abroad by a company which was *not* treated as resident for tax purposes (even though most or all of its shareholders may have been British residents) then only the income remitted to the United Kingdom would be liable to United Kingdom tax. However, the 'alternative estimate' for non-trading income received by companies from abroad (given with reservations in Chapter 3.3 and included in Table 11) is basically defined by the Blue Book estimate for 1938 taken as the benchmark, and so is *not* affected by the tax treatment. The United Kingdom share (based on the degree of ownership) of the unremitted profits is, therefore, in principle included.

² The difference between branches and subsidiaries arises in the following way: once it was established that an enterprise was resident for tax purposes, the *whole* of its profits, including the profits of all branches whether located at home or overseas, but not those of overseas subsidiaries – which constitute a separate legal entity – would be liable for United Kingdom taxes on income. The Inland Revenue would as a rule, therefore, have no reason as tax collectors to distinguish between profits earned in the United Kingdom and those earned by branches abroad. However, as part of the partial classification of profits undertaken by the Inland Revenue (see Chapter 7.1) they did classify enterprises in a number of broad categories one of which was 'concerns operating outside the United Kingdom' (O.U.K.). For this purpose, companies were assigned to one of the domestic categories or to the 'O.U.K.' category on the basis of a judgement of the source of the principal activity, and for this classification each subsidiary company was considered individually. It is this 'O.U.K.' series which forms the basis for the present estimate of trading profits earned abroad.

³ For further clarification – by a principal of the Board of Inland Revenue – of the issues arising in such cases, e.g. the determination of branch profits where separate accounts are not available or where prices used in inter-group transactions are thought to give inappropriate results, see E. W. Verity, 'Tax Systems and Allocation Methods in the United Kingdom' in *Taxation of Foreign and National Enterprises*, vol. 1, League of Nations, Geneva, 1932 [103], pp. 167–97.

years Southern Ireland is included. Estimates are given on both bases for 1920 and the break is made at that point for convenience, although the actual separation of the Irish Free State did not occur until December 1922.

The information relating to the transactions of United Kingdom residents with the rest of the world is described in the following sections:

- 6.1 Exports and imports of goods at current and constant prices, 1870–1965
- 6.2 Exports and imports of services at current and constant prices, 1870–1965
- 6.3 Property income received from, and paid to, non-residents at current and constant prices, 1855–1965
- 6.4 Grants and transfers received from, and paid to, non-residents, 1870–1965

The estimates for 1870–1965 are set out in Table 15 in a form which shows separately the three categories of transactions distinguished elsewhere in the national accounts: transactions in goods and services, property income receipts and payments, and transfers. The estimates for goods and services and property income also appear in Tables 2 and 3, and the same series are shown at constant prices in Table 5. An additional Table 37 summarises all the information regarding international transactions in 1900–65 in a form corresponding to that presently adopted for the balance of payments rather than the national accounts; and details of the invisible items on this basis are given for 1920–38 in Table 38.¹ The two main differences between the balance of payments and the national accounts presentation are that the former does not emphasise the distinction between purchase or sale of services and unrequited transfers; and that property income is measured in the balance of payments after, but in the national accounts before, deduction of taxes, (see Chapter 6.3). The current weighted (Paasche) aggregate price indices for exports and imports of goods and services are given in Table 61 (columns (4) and (6)), and Table 64 gives the separate indices for exports, re-exports and imports of goods, together with an index of the terms of trade. Finally, Table 6.6 brings together all government debits and credits on current account for the period 1920–38.

SOURCES AND METHODS OF ESTIMATION

The following notes for 1939–65 cover all the separate items in Chapters 6.1–6.4 and no further details are given in those chapters. Earlier years are discussed more fully in the separate chapters.

For 1946–64 the Blue Book estimates are simply a rearrangement of the balance of payments data and are fully described in the annual C.S.O. publication *United Kingdom Balance of Payments* [79]. For imports and exports of

merchandise the basic source is the monthly *Accounts relating to the Trade and Navigation of the United Kingdom* [7]; for transactions with overseas residents by the Central Government the information is derived mainly from returns provided by the Government; and for most other items, eg. transport, travel and property income, special enquiries are made by government departments or by bodies such as the Chamber of Shipping of the United Kingdom.

For 1940–5 estimates were made by Professor Sayers.² Their margin of error is indicated by the fact that they are given correct to the nearest £ hundred million. The major corrections to the raw data were made by Sayers, including the addition of an estimate for the munitions omitted from the overseas trade statistics for 1942–5. Unfortunately, however, his results are not given in quite the detail needed for Table 15, and a number of hazardous adjustments and reshuffles were required to complete the table.

First, Sayers' estimates were specifically drawn up to include free deliveries under lend-lease and reciprocal aid and not simply those paid for in cash (cf. p. 113, below). It was therefore necessary to exclude from credits the amount supplied by the United Kingdom under reciprocal aid and to exclude from debits the amount obtained under lend-lease. The latter had also to be divided between goods and services.³ In allocating the cash credit between goods and services I relied partly on the trade statistics for exports and re-exports and for some years rashly included figures to the nearest £ ten million. Secondly, separate and very rough series were made for property income received from, and paid, abroad. These rest largely on interpolation between the 1938 and 1946 estimates on the basis of the *Statistical Digest of the War* [77, p. 200] series for net property income from abroad and Treasury data on the realisation of external capital assets [241, p. 503]. Thirdly, certain series were rearranged so as to obtain separate estimates for credits and debits on those services for which only a net credit was shown by Sayers. Finally, the Central Government estimates for current grants paid abroad (see Chapter 4.5) were used for a rounded estimate of transfers abroad. It was further necessary to add estimates for 1939.

¹ The information available for 1900–19 and 1939–45 is not sufficiently reliable to warrant detailed presentation. For 1946 onwards see C.S.O. [75, 1967].

² R. S. Sayers, *Financial Policy, 1939–1945*, 1956 [241], p. 499.

³ The data for this is given in an article by R. G. D. Allen, 'Mutual Aid between the U.S. and the British Empire, 1941–1945', *J. R. Statist. Soc.* CIX, 1946, reprinted by Sayers [241] as Appendix III, pp. 518–556. See especially Tables 4, 5 and 11.

The individual items should not be taken too seriously, but the totals of credits and debits are probably broadly acceptable; and the current account balance (deficit) is made to equal (to the nearest £ ten million) the official estimates of the net external disinvestment by the United Kingdom.¹

As noted already, the present estimates for 1941-5 relate solely to cash transactions. Imports of goods and services thus exclude all items received under the lend-lease agreement with the U.S.A. and grants from Canada, and exports exclude all goods and services supplied by Britain under reciprocal aid agreements. The amounts involved are estimated by Sayers [241, p. 499] to be as follows (valued in £ million):

	1941	1942	1943	1944	1945
Grants received	300	1,200	2,100	2,600	1,300
Reciprocal aid	—	100	700	800	500

The same treatment applies to the estimates of Central Government current expenditure in Chapter 4.4: goods and services purchased for cash are included even though given away and lend-lease goods and services used but not paid for in cash are omitted.

For 1914-38 I have made new estimates, but relied extensively on the work done in the inter-war period by the Board of Trade.² The main object of the new estimates was to obtain separate series, appropriately defined, for all the main credit and debit items. In many cases this meant that new estimates had to be constructed, but that the *net* credit or debit was not significantly altered. This is even more true of the estimates for 1870-1913, where essentially all that was required was a rearrangement of the series prepared by Imlah [181], although some minor adjustments were made to his estimates for 1900-13 where it was clearly possible to improve the reliability of the estimates. A detailed description of the estimates for 1870-1938 is given in Chapters 6.1 to 6.4.

COMPARISON WITH OTHER ESTIMATES³

In Table 6.1 the estimates of the current balance for 1924-38 are compared with those made by the Board of Trade. The two estimates agree reasonably well despite certain differences in definition. The present estimates include two debits omitted by the Board of Trade: import of diamonds and personal expenditure abroad by British troops; but they exclude the payments and receipts in respect of the principal of certain inter-government loans, which the Board included in its current account estimate of government transactions. The present estimates for these capital transactions are given in Table 34, and a reasonably accurate estimate

can be made of the amounts likely to have been included in the Board of Trade series. The estimate is given in column (7) of Table 6.6 and reproduced in column (2) of Table 6.1. It shows a debit averaging some £4-£5 m. in the period 1925-32, and no regular pattern for the remaining years. Allowance for this item would reduce the two largest discrepancies between columns (1) and (2) of Table 6.1 (in 1927 and 1934) but, as column (4) shows, would still leave an average discrepancy (ignoring sign) of £7 m. This would be accounted for by a variety of small differences in estimation, mainly relating to government debits and credits (other than interest), tourist expenditure, and personal remittances for which the Board gave little indication of its estimates.

The two estimates of government overseas expenditure and receipts are compared in Table 6.6, p. 126, and after adjustment to a comparable basis agree reasonably well.

TABLE 6.1 COMPARISON WITH THE BOARD OF TRADE ESTIMATES OF THE BALANCE ON CURRENT ACCOUNT, 1924-38 (£M.)

	Board of Trade (1)	Payments less receipts on capital account (2)	Present estimate (3)	Difference 3 - (1 + 2) (4)
1924	72	—	78	6
1925	46	5	52	1
1926	-15	4	-18	-7
1927	82	6	98	10
1928	123	3	124	-2
1929	103	5	96	-12
1930	28	2	36	6
1931	-104	1	-103	—
1932	-51	7	-51	-7
1933	—	1	-8	-9
1934	-7	-5	-22	-10
1935	32	-2	23	-7
1936	-18	—	-27	-9
1937	-56	4	-47	5
1938	-55	—	-55	—

SOURCE: (1) *Statistical Abstract* [35], No. 83, p. 434.
(2) See Table 6.6, column (7) and text, p. 113.
(3) Table 15.

¹ See C.S.O. [77], p. 198. The series is also given in Sayers [241], p. 491, and differs marginally from earlier figures given by the Treasury and quoted by Sayers [241], p. 503.

² An article was published annually in the *Board of Trade Journal* [67]. See, e.g., the issue for 23 February 1939, pp. 284-9.

³ See also the comparison with the Blue Book estimates for 1938 on p. 114, below.

CONSISTENCY AND RELIABILITY

The estimates for 1920-38 are fully consistent in all major respects with those for the post-war period. The 1938 figures can be compared with those in the Blue Book as shown in Table 6.2.

TABLE 6.2 COMPARISON WITH THE BLUE BOOK ESTIMATES OF INTERNATIONAL TRANSACTIONS IN 1938
(£M.)

	Blue Book (1)	Present estimate (2)
Credits:		
Exports and re-exports of goods	533	564
Exports of services	190	193
Property income and taxes from abroad	253	253
Transfers from abroad:		
to personal sector	— ^a	14
to Central Government	—	—
Total	976	1,024
Debits:		
Imports of goods	835	849
Imports of services	142	152
Property income and taxes paid abroad	61	61
Transfers abroad:		
from personal sector	— ^a	9
from Central Government	8	8
Total	1,046	1,079
Net investment abroad	-70	-55

^a Net transfers abroad are assumed to be nil [75, 1967, p. 10].

SOURCE: (1) 1967 Blue Book [75], p. 10. (2) Table 15.

The differences on merchandise trade are basically due to the fact that the Blue Book figures for 1938 attempted to measure exports and imports at the time when payment was made, and not when the shipments were declared for customs purposes by importers and exporters. This follows an older definition, which is not the one currently adopted for the post-1946 estimates.¹ For this item, as for transfers to and by the personal sector, the present estimates for 1938 (and earlier years) are, therefore, more consistent with those for 1946 onwards than the Blue Book figures. The agreement on property income has no significance, since the present estimates are based on those in the Blue Book, but the estimates for services and government transfers are independently derived (though they

probably have a common source) and agree reasonably well.

There are some minor breaks in continuity in 1920 (affecting the treatment of taxes on property income) and again in 1900 (affecting 'other services' and current transfers), but neither seriously impairs the long-run

TABLE 6.3 COMPARISON OF THE ACCUMULATED DEFICIT ON CURRENT ACCOUNT WITH ESTIMATED NET DISINVESTMENT, 1914-19
(£M.)

Capital account	
1. Government borrowing from abroad	1,340
2. Government and private sale of foreign assets	550
3. Net reduction of short-term credits, or increase in liabilities (say)	300
4. Total disinvestment	2,190
5. Less government and private lending	2,085
6. Less net import of gold	45
Net disinvestment	60
Current account	
7. Accumulated balance, 1914-19: net deficit	100

SOURCE: The capital account estimates are all based on Morgan [214], pp. 317-43. Item 3 is particularly tentative, see [214], pp. 331-4 and 342-3. For the current account see Table 15.

picture presented in Table 15. The estimates for the two war-time periods are of a lower order of reliability and although there are no known changes in definition the coverage may be somewhat less comprehensive on either side of the account.

For all the main items (merchandise, shipping, government, property income) there is a reasonably firm basis for the estimates in all peace-time periods from 1870. Even if one allows for the possibility of error in the basic sources, such as the statistics of overseas trade, it seems unlikely that the margin of error in the present estimates would exceed $\pm 10\%$ for the merchandise and about $\pm 15\%$ for the other main items.² The quality of

¹ Cf. C.S.O. [74], p. 342, and [73], p. 441. The estimates prepared on the old definition, but still used in the current Blue Book for 1938, appeared in the 1947 *National Income White Paper* [65, Cmd. 7099], see pp. 7 and 57.

² It should be noted, though, that the present estimate for property income from abroad for 1920-38 has as its main determinant the old Board of Trade series which was rounded to the nearest £ ten million.

the remaining series – notably private transfers – is a good deal lower, but these items are generally too small to affect the main aggregates in the national accounts tables.

For both 1914–19 and 1939–45 the individual series are very unreliable and even the trade statistics require substantial adjustment for unrecorded imports of munitions etc. However, in both cases the current balance is subject to a check from capital account data on net disinvestment. For 1939–45 the official data on sale of assets are taken as the basis for the current account balance (see p. 113, above). For 1914–19 it is possible to make the comparison set out in Table 6.3.

We conclude from this that despite the defects in the component series, the overall results are of roughly the right order of magnitude.

In terms of the reliability grades described in Chapter 1.4, the estimates for the main components can thus be assigned to the following categories:

	Exports and imports of goods, and total goods and services	Exports and imports of services	Net property income from abroad
1870–1913	B	C	C
1914–21	C	D	D
1922–38	B	C	B
1939–45	C	D	D
1946–65 ^a	A	B	C

^a See C.S.O. [73], pp. 468–72.

For the current balance (net investment abroad) it is perhaps better to think in terms of errors of 10 % or £10 m., whichever is the higher.

6.1 EXPORTS AND IMPORTS OF GOODS AT CURRENT AND CONSTANT PRICES, 1870–1965

DEFINITION OF THE SERIES

The two series covered in this section measure the f.o.b. value (i.e. excluding the costs of freight, insurance, commissions and other charges) of goods respectively leaving and entering the United Kingdom. Goods imported and re-exported are included both in imports and in total exports. No adjustment is made for timing differences between the declaration of trade by exporters and importers (which forms the basis for the estimates) and the time of change in ownership, which generally occurs somewhat earlier in the case of imports and may be earlier or later for exports, and is strictly what is required for consistency with other items in the national accounts. Certain items, which are omitted from the *Annual Statement of the Trade of the United Kingdom* [16] in some or all of the years covered are specifically included in the estimates, notably second-hand ships and aircraft, new ships delivered abroad, atomic energy materials, silver,¹ diamonds and munitions.

The estimates are shown in Table 15 at current prices; and they are given, combined with exports or imports of services, at current prices in Table 3 and at constant prices in Table 5. The implicit current weight (Paasche) unit value indices are given for exports and imports of goods and services in columns (4) and (6) of Table 61, and for exports, re-exports and imports of goods in Table 64. Column (4) of Table 64 also gives an index of the terms of trade.

SOURCES AND METHODS OF ESTIMATION

(i) At current prices

1939–1965

See pp. 112–13, above.

1920–1938

The trade statistics for exports and re-exports in these years are adjusted by the addition of exports of silver and net sales of second-hand ships. The former item is shown in the *Statistical Abstract* [35, e.g. No. 83, p. 426]. For the latter, a series for the tonnage sold and purchased abroad each year is available in the *Annual Statement of the Navigation and Shipping of the United Kingdom* [15, e.g. 1921, p. xii]. The tonnage series for net sales was valued on the basis of figures quoted for this item for a few years in the 1930s in the *Board of Trade Journal* [67, e.g. 18 February 1932, p. 219] extrapolated on the basis of *Fairplay's* estimate [270] of the price of a standard 7,500 deadweight cargo vessel ready for immediate delivery. This is a very approximate procedure, since the age and composition of the second-hand tonnage bought and sold varied considerably from year to year, but the amounts involved were too small to warrant more detailed treatment.

The trade statistics for imports require slightly more

¹ For 1870–1913 silver is not included and the net import or export is treated, like gold, as part of the monetary and capital movements.

elaborate adjustment, since it is necessary to deduct the cost of freight, insurance etc. included in the c.i.f. valuation of imports.¹ Detailed information on this point is not available for any year in this period, but an allowance of 10 % seems reasonable.² The actual ratio would have varied from year to year with changes in freight rates and in the composition of imports, but any error here will be offset in the estimate for exports of services in Chapter 6.2.

Secondly, an adjustment is required to cover imports of silver and of diamonds. The latter was not recorded but a fair approximation is given in the *Statistical Abstract* [35] in the form of the value of diamonds exported to the United Kingdom from South Africa and South West Africa.³

One further correction was made to both exports and imports for 1920–2 and the first quarter of 1923. For this period Southern Ireland was still part of the United Kingdom, and the trade statistics of exports and re-exports therefore include sales of products from Southern Ireland, but exclude sales from Great Britain and Northern Ireland to Southern Ireland. Similarly, imports include purchases for Southern Ireland and exclude purchases by Great Britain and Northern Ireland from Southern Ireland. Each of these four elements must, therefore, be reversed in order to obtain the required figures for the trade of Great Britain plus Northern Ireland with the rest of the world including Southern Ireland.

Data for trade between Great Britain and Southern Ireland in the last three quarters of 1923 and the first quarter of 1924 are given in the *Board of Trade Journal* [67, 17 January and 8 May, 1924]. This was used in conjunction with data for 1920 and 1921 on trade by Ireland (North and South) with Great Britain to estimate the exports to, and imports from, Southern Ireland in 1920–2 and the first quarter of 1923.⁴

Figures for the value of imports into ports in Southern Ireland from countries other than Great Britain, and of the corresponding exports, are given for 1922 in the *Board of Trade Journal* (67, 17 January 1924]. The imports were extrapolated by reference to the *Statistical Abstract* figures for imports into ports in Ireland (North and South) from countries other than Great Britain in 1920–2. The exports in 1922 were negligible and were assumed also to be so in 1920–1.

1914–1919

For these years adjustments, made from the same sources as for 1920–38, are required for imports of diamonds, imports and exports of silver, and second-hand sales of ships; and a deduction, rising from 8 % in 1914 to a peak of 12 % in 1918, was made for the c.i.f. value of

imports to exclude insurance and freight charges etc. In addition, a special adjustment is needed for the period August 1914–June 1917, when the trade statistics omitted imports, other than food, purchased by the government or allies; and exports include goods bought in the United Kingdom by the allied governments, but exclude goods taken from government stores or goods bought by the government and shipped in government vessels. The addition for this unrecorded trade is very rough. It was based partly on a special table showing the detailed composition of imports and exports in the eighteen months from July 1917 to December 1918 of government goods not included in the accounts of trade prior to July 1917, but included therein for subsequent months;⁵ partly on the information published in the United States⁶ regarding exports from the United States to Britain of munitions, fuel, copper and other items unrecorded by Britain.

1870–1913

Exports and re-exports as shown in the *Statistical Abstract* [35] were raised to include Imlah's estimates of ships sales [181], p. 46. Until 1898 this adjustment covers both new and second-hand ships, thereafter only the latter were unrecorded.

Imports (c.i.f.) were reduced by 8 % in all years to allow for insurance and freight charges.⁷ From 1900 on-

¹ This was not done in the inter-war Board of Trade series and was allowed for in their estimates for earnings from shipping and insurance, cf. Chapter 6.2.

² This is the 'conventional' deduction quoted, for example, by the London and Cambridge Economic Service in their *Bulletin*, xxvii, No. 1, February 1949 [273], p. 29. The present Blue Book estimate for 1938 [75, 1967, p. 10] shows a deduction of just over 9 % from the recorded c.i.f. value of imports, but there is also a timing adjustment (see p. 114 above). See also n. 7 below, and p. 120, n. 1.

³ The diamonds were re-exported to Holland for cutting and then imported again. There would presumably also be some exports of the cut stones, in which case the present estimate would be too high.

⁴ Department of Agriculture and Technical Instruction for Ireland, *Report on the Trade in Imports and Exports at Irish Ports*, 1923 [97], p. xvi.

⁵ *Accounts relating to the Trade and Navigation of the United Kingdom for each Month during the Year 1918, December 1918*, H.C. 189, 1919 [7], pp. 316–18.

⁶ Department of Commerce, *Commerce and Navigation of the United States for the Year ending June 30, 1918, 1919* [108].

⁷ A comparison of the value of imports (c.i.f.) with the value of exports (f.o.b.) for the principal countries of the world for the four years 1901, 1906, 1909 and 1912 showed an average discrepancy, i.e. a very rough measure of gross carrying charges, equal to 7.3 % of imports. *Federal Reserve Bulletin*, April 1921 [271], p. 403. The calculation was attributed to the British Board of Trade and

wards an addition was also made for imports of diamonds, again using the exports from Africa. No separate adjustment was made for 1870-99, but unrecorded imports of diamonds are allowed for by Imlah [181, p. 59] as part of a residual item (see p. 122, below). The principal component of this item for 1870-99 apart from unrecorded imports, is tourist expenditure and the whole amount is treated in the present estimates as imports of services and included in Chapter 6.2.

(ii) *At constant prices*

Estimates for 1913-1948 at 1938 prices and for 1870-1913 at 1900 prices were obtained by deflating the current value series for United Kingdom exports, re-exports and imports by corresponding Paasche price indices. Since these price (more strictly, average value) indices were themselves obtained as the quotients of the current value series divided by fixed weight (Laspeyres) volume indices, the series at constant prices are effectively the 1938 or 1900 values of exports plus re-exports, and of imports (as adjusted for the present series) extrapolated by fixed weight volume indices.¹ It must, however, be noted that the average of the trade values for 1899 and 1902 was used in place of 1900 because export and import prices for 1900 (and 1901) were distorted by the inflationary effects of the Boer War.

The average value indices used are those compiled by the London and Cambridge Economic Service² from Board of Trade calculations for 1913 and 1919-48 and by Imlah [181, pp. 82-98 and 206-7] for 1870-1913. The export average value index in the *Bulletin* covers only United Kingdom products and a further index for re-exports was constructed on the same principles. For imports Imlah's index for 1870-1913 relates only to *retained* imports and it was therefore necessary to obtain the deflated series for total imports from the sum of separate series for retained imports and re-exports. The series were completed by interpolating for 1914-18 on the basis of the *Statist* wholesale price index. These current-weighted price indices are shown in Table 64.³ The aspect which must be emphasised is that the base year weights (prices) used in compiling the underlying *quantity* indices were changed frequently and the series at constant prices presented in Table 5 for 1870-1900 and 1900-48 are *not* actually weighted by the prices of 1900 and 1938. The true base year prices are: 1938-48: 1938; 1935-8, 1930-5 and 1924-30: geometric mean of

indices with prices of first and last years of each sub-period and interpolation between these years based on the index calculated with the weights of the first year; 1913-24: 1913; 1909-13: each year weighted by prices of preceding year; 1900-8: 1900; 1887-1901: 1892; and 1870-1888: 1880.⁴

In the absence of Laspeyres quantity indices with 1948 price weights (or the corresponding Paasche price indices with 1948 = 100) it is not possible to obtain the required alternative estimate (see Chapter 1.1) for 1938 at 1948 prices; and a rather inferior substitute was calculated by multiplying the current prices estimates for 1938 by the price for 1948 relative to 1938 as shown by the Paasche indices with 1938 = 100, i.e. with 1948 as quantity weights for 1948.⁵

allowed for countries like the United States where imports are not valued c.i.f. Similar calculations by Giffen showed a ratio of 9% for the late 1870s and Giffen also quotes an earlier estimate of 11% made by Bourne in 1871. R. Giffen, 'On the Use of Import and Export Statistics', *J. R. Statist. Soc.*, XLV, 1882 [168], pp. 202 and 209. See also pp. 121-2, below. Imlah [181, p. 190] uses deductions ('intended to be safely generous') of 12% in 1872 and 10% in 1913.

¹ The reason for not working directly from the available volume indices is simply that it was quicker to deflate the adjusted current value series than to repeat all the separate adjustments on the original volume series.

² *London and Cambridge Economic Bulletin*, N.S., No. 13, March 1955 [293], p. xii. For the original Board of Trade average value and volume indices see the *Statistical Abstract* [35, e.g. No. 83, pp. 368-9] and also the *Board of Trade Journal* [67], 19 January 1922, p. 57, and 22 January 1925, pp. 102-3.

³ The price indices were extended to 1965 using series for the values at current prices divided by the corresponding Board of Trade fixed weight volume series; see *Board of Trade Journal* [67], e.g. 19 May 1956, p. 679 and 13 September 1963, p. 557. The resulting price series is a Paasche index and so differs from the official (Board of Trade) export and import unit value indices which have fixed weights.

⁴ The corresponding base years for 1948-65 are: 1948-54: 1954; 1954-61: 1954 and 1961 ('ideal' index as for inter-war years); 1961-5: 1961. For a careful discussion of the effects of different weighting systems on the pre-1913 estimates see Imlah [181], pp. 199-204.

⁵ In formal terms this is:

$$\Sigma q_{38} p_{38} \cdot \frac{\Sigma q_{48} p_{48}}{\Sigma q_{48} p_{38}}$$

instead of $\Sigma q_{38} p_{38} \cdot \frac{\Sigma q_{38} p_{48}}{\Sigma q_{38} p_{38}} = \Sigma q_{38} p_{48}$.

6.2 EXPORTS AND IMPORTS OF SERVICES AT CURRENT AND CONSTANT PRICES, 1870-1965

DEFINITION OF THE SERIES¹

Exports of services cover the receipts from all sales, other than those included in Chapter 6.1, by United Kingdom residents to the rest of the world; and imports of services cover the corresponding purchases from abroad by United Kingdom residents. The following are the main services (and miscellaneous goods) involved and the definitions adopted for the estimates:

Shipping. Exports comprise the earnings of the United Kingdom shipping industry from the carriage of United Kingdom exports and from freight on cross trades; charter receipts; passenger revenue; and the disbursements of foreign ships (for bunkers, port charges, crews' expenditure, etc.) in United Kingdom ports. The corresponding imports are freight payments to foreign shipping companies for carrying United Kingdom imports; payments to non-residents for charters and for passenger fares; and disbursements by United Kingdom ships in foreign ports or canals.

Freight charges earned by United Kingdom ships by carrying United Kingdom imports are not included – this is regarded as a domestic transaction.

Civil aviation. Credits and debits for this item are defined similarly to those for shipping.

Government. Exports of services under this heading represent receipts by the government from such items as the sale of supplies and services to foreign troops stationed in the United Kingdom;² receipts from the United States government in respect of goods supplied to the United Kingdom Forces (offshore sales); the proceeds of surplus war stores disposed of abroad after World Wars I and II; and charges to India (prior to independence) for the costs of administration, British troops stationed in India etc. The principal debits are the costs of troops stationed abroad (including the personal expenditure abroad by the troops) and the costs incurred abroad by the diplomatic service. Expenditure on military service overseas is recorded partly on a net basis; in particular, in 1955/6 to 1960/61 cash contributions from the Federal German Republic towards the costs of the British forces in Germany were deducted from the expenditure.

Travel. The service exported is the expenditure by non-resident tourists, troops, businessmen and other visitors to the United Kingdom on accommodation, food, travel within the United Kingdom etc. The corresponding import is personal expenditure by

United Kingdom residents travelling for business or pleasure in overseas countries. Payments to shipping and airline companies for travel to and from the United Kingdom relevant to the balance of payments are included in transport, not in this item.

Financial and other services. This item covers all the remaining transactions in services between United Kingdom and overseas residents. The items covered include debits and credits arising from financial services: e.g. earnings from overseas residents by United Kingdom banks and other financial institutions for such services as brokerage, merchanting, arbitrage, banking, underwriting and insurance,³ commissions on exports and imports; film and television transactions; royalties, charges for services rendered (excluding royalties) between parent and subsidiary companies or other related enterprises etc. Receipts of interest and discount by banks and other financial institutions from lending abroad and the profits of their overseas subsidiaries and branches are included in 'interest, profit and dividends' (Chapter 6.3) as are payments of interest to non-residents by United Kingdom banks. Insurance earnings include the whole of the net earnings of United Kingdom insurers from underwriting risks on international cargoes and the correct net balance is obtained by including in the imports of services the premiums on cargo insurance on United Kingdom imports paid to United Kingdom insurers.

For 1920-38 the principal definitions of each of the separate services are the same – although the coverage is almost certainly less comprehensive – but there are some differences in the classification of individual items. Film royalties are omitted from 'other services' but included in property income paid abroad; earnings from bank interest and discounts are included in 'other services', not in property income from abroad; expenditure in the United Kingdom by foreign governments for the operation of embassies etc., and by foreign students and journalists, is included in travel, not in 'other services'. It should also be noted that contributions from India towards the costs of the British army in

¹ See also C.S.O. [73], pp. 441-4.

² Purchases by foreign troops from the private sector are not included here but under 'travel'.

³ The net earnings of U.K. insurance companies from their overseas branches and subsidiaries are included up to 1962; for later years these earnings can be distinguished from other insurance earnings from abroad and are treated as property income from abroad (see Chapter 6.3).

India are shown as a government credit, not netted off the expenditure estimates; and that civil aviation was negligible and is ignored.

For 1870-1919 the estimates for services other than shipping and travel (1900-19) are basically a rough

TABLE 6.4 COMPARISON WITH THE BOARD OF TRADE ESTIMATES OF THE SHIPPING CREDIT AND DEBIT IN 1936 (£M.)

	Board of Trade (1)	Present estimates (2)
Earnings of U.K. ships from:		
(a) Freight on U.K. imports	50.8	—
(b) Freight on U.K. exports	25.6	25.6
(c) Freight on cross-voyages	41.7	41.7
(d) Non-resident passenger fares ^a	12.7	12.7
(e) = Gross earnings of U.K. ships	130.8	
Add		
(f) Expenditure of foreign ships in U.K. ports	9.5	9.5
(g) = Shipping credit		89.5
Less		
(h) Freight on U.K. imports in foreign ships	—	20.0
(i) Expenditure by U.K. ships in foreign ports	56.0	56.0
(j) = Shipping debit		76.0
Net income from shipping: ^b		
(k) (e+f-i)	84.3	
(l) (g-j)		13.5

SOURCE: M. G. Kendall, 'United Kingdom Merchant Shipping Statistics', *J. R. Statist. Soc.*, cxi, 1948 [187], pp. 143-4, and 'The U.K. Mercantile Marine and its Contribution to the Balance of Payments', *J. R. Statist. Soc.* cxiii, 1950 [188], p. 24. Rows f and h are estimates by Kendall. All the other rows were collected in a special enquiry undertaken by the United Kingdom Chamber of Shipping at the request of the Board of Trade. Returns were received covering 13.8 m. gross tons out of a possible total of 14.9 m. For further details of the enquiry see J. Isserlis, 'Tramp Shipping, Cargoes and Freights', *J. R. Statist. Soc.*, ci, 1938 [182], pp. 70-3.

^a Passenger fares paid by U.K. residents to foreign ships were not treated as a debit against shipping income by the Board of Trade but are allowed for in a very rough and ready way in the present estimates. The amount paid in 1936 is estimated by Kendall [187], p. 143, as £2 m.

^b The estimate published by the Board of Trade was rounded to £85m.

allowance for the relevant items, rather than a direct measurement of individual debits and credits.

The individual services are shown for 1920-38 in Table 38. The totals are given for 1870 onwards in Table 15 and are shown, combined with exports or imports of goods, at current prices in Table 3 and at constant prices in Table 5.

SOURCES AND METHODS OF ESTIMATION

(i) At current prices

1939-1965

See pp. 112-13, above.

1920-1938

Separate estimates were made for exports and imports of services under four headings: shipping, government, travel, and financial and other services.

Shipping. The difference between the present estimates and those published by the Board of Trade for the inter-war period are wholly due to differences of definition as can be illustrated by the estimates shown in Table 6.4 for 1936, the only year for which such detailed information is available.

Row *a* was included by the Board of Trade to offset its inclusion in imports, which were retained at their c.i.f. value in the Board's balance of payments calculation; and for the same reason row *h* could be ignored. Conversely, the present estimates, taken in conjunction with the f.o.b. valuation of merchandise imports in Chapter 6.1, require the omission of row *a* and the inclusion of row *h*.

We turn now to describe the actual calculations made. In estimating the f.o.b. value of imports, a deduction of 10% was made for freight, insurance, and other charges, and it was now further assumed that 85% of this deduction, i.e. 8½% of imports, represented the freight charge, the remainder being insurance, commissions etc. This freight charge was then split between United Kingdom and foreign shipping companies on the basis that three-quarters of imports (by value) were carried in British ships in the years 1920-30 and that thereafter the proportion fell steadily to two-thirds in 1938.¹

¹ See H. Leak, 'The Carrying Trade of British Shipping', *J. R. Statist. Soc.*, cii, 1939 [196], p. 226, where the following estimates are given for the percentage of imports carried in British ships: 1913, 74%; 1931, 69%; 1936, 68.0% and 1937, 67.4%. The beginning of the decline in the share of British ships is placed in 1931 on the basis of the figures for the British proportion of the tonnage entered with cargo quoted by Leak on pp. 231-2.

This calculation yields annual estimates for rows *a* and *h*.¹

The next requirement is annual estimates for gross earnings of United Kingdom ships, for foreign expenditure in United Kingdom ports and United Kingdom expenditure in foreign ports (rows *e*, *f* and *i*). The only other year for which actual estimates are available for rows *e* and *i* is 1931.² Interpolation and extrapolation to cover the remaining years were based in the first instance on acceptance of the published Board of Trade series for the net shipping credit (row *k*). It was therefore necessary to estimate *e* + *f* - *i* in such a way that the result was equal to *k*. This was done largely on the basis of the occasional figures and the extensive commentary in the Board's annual balance of payments article.³ Row *f* is small and reasonably stable, so that the main variations are in *e* and *i*.

The annual estimates for the credit earned by United Kingdom shipping were then derived from the series for gross earnings less the estimated charge for freight on imports carried in United Kingdom ships, plus the expenditure of foreign ships in United Kingdom ports (i.e. items *e* - *a* + *f*). The corresponding debit is made up of the charge for freight on imports (and passengers) in foreign ships and the expenditure in foreign ports (items *h* + *i*).

Government. The estimates of government purchases and sales abroad of services, and of goods not covered by the overseas trade statistics (such as the local costs of barracks and other buildings constructed abroad, or surplus war stores held and disposed of abroad) are all derived from worksheets for the detailed analysis of the Central Government accounts. The estimates were prepared by Utting and others and are described fully in Chapter 4. The one other component (debit) is Rowe's series [249, II, p. 108] for the personal expenditure abroad by the Armed Forces. For details of the series see Table 6.6, p. 126.

Travel. Estimates of expenditure abroad (including travel for business purposes) by United Kingdom residents and of expenditure in this country by non-residents were made for this period by Rowe [249, II, p. 107] and are adopted without adjustment. They were calculated from records of passenger movements and estimates of average expenditure for six categories of travellers.

Financial and other services. The credit entry for this item is the Board of Trade estimate for net receipts from short interest, commissions etc.⁴ The debit entry is the remaining 1½% deducted from the c.i.f. value of imports (see p. 119, above). The Board of Trade series included premiums from marine insurance for cargoes imported into the United Kingdom [67, 4 May 1939, p. 657]. This was offset in the Board of Trade estimates by the

valuation of imports c.i.f. and in the present estimates is offset by the debit for financial and other services. This is consistent with the post-war procedure (see p. 118, above). Both debit and credit are slightly too low by the amount of bank charges, insurance etc. paid by United Kingdom residents to foreign financial institutions, but I imagine that the amounts involved were rather small in the inter-war period.

1914-1919

Four separate estimates were made for the war years; none are very reliable.⁵

Shipping. Estimation of shipping credits and debits during the war years is particularly difficult because of the various forms of government control and the absence of a free market. The most reliable information available is an estimate by Mr E. Crammond (Secretary of the Liverpool Steamship Owners' Association) for gross earnings in 1916 and 1917⁶ and there is also a Board of Trade estimate [67, 15 January 1920, p. 72] of the net shipping credit in 1919. The estimates, which are very approximate, were made by interpolating between the estimates for 1913 and 1920 on the basis of this information, the well-informed discussion of war-time shipping by Fayle⁷ and the estimates ('guesses at

¹ It should not escape notice that the estimate obtained in this way for 1936, i.e. 68% of 8.5% of c.i.f. imports of £848 m. gives a value of £49 m. for freight on imports in British ships, which agrees nicely with the completely independent figure of £51 m. derived from the enquiry. The corresponding figure for imports in foreign ships in 1936 is £23 m., which is a little above Kendall's estimate [187, p. 143] of £20 m. and serves to cover the further debit of £2 m. for passenger fares paid by U.K. residents to foreign shipping companies (see note a of Table 6.4).

² Isserlis [182], pp. 65-9.

³ See, e.g., *Board of Trade Journal* [67], 21 January 1926, pp. 68-9, and 2 February 1928, p. 134. See also H. W. Macrosty, 'Statistics of British Shipping', *J. R. Statist. Soc.*, LXXXIX, 1924 [204], pp. 500-9. Comparison of the Board's estimates with the 1931 benchmark reveals that they had arrived at the correct net shipping credit (row *k*) but had significantly understated both gross earnings and expenditure in foreign ports. A correction was made for this in the reconstruction of the individual series.

⁴ The Board of Trade estimates for 1920, 1922 and 1923 were revised upwards in the light of the revision to the estimates for 1924. See [67], 27 January 1927, p. 93. 1921, for which no estimate was published, was put at the same level as 1920 and 1922.

⁵ See, however, p. 115, above.

⁶ E. Crammond, 'The Economic Condition of the United Kingdom after Three and a Half Years of War', *Journal of the Royal Society of Arts*, LXVI, August 1918 [152], p. 594. See also C. Earnest Fayle, *The War and the Shipping Industry*, 1927 [159], pp. 180-1.

⁷ Fayle [159], *passim*.

the orders of magnitude') by Morgan [214, pp. 316-17]. The estimated freight on imports (7 % of the total c.i.f. value in 1914-15, rising to 10 % in 1918 and down to 9½ % in 1919) was allocated between British and foreign ships in proportion to the division of the tonnage entered with cargo.

Government. The credit entry for this item is equal to an estimate of the expenditure of United States troops in Britain,¹ plus the amounts shown in the Army and Navy *Appropriation Accounts* [17] for contributions towards the cost of the war from the Dominions and India.² These cover principally repayments of expenses of Dominion forces in the field and the regular Indian contribution towards the ordinary expenses of the Indian Expeditionary Force. The debit entry is also the sum of two items: a rough guess at government expenditure abroad, derived from the information in the Army and Navy *Appropriation Accounts*;³ plus the estimates for personal expenditure by troops stationed overseas (see Chapter 2.4).

Travel. These are the estimates given by Prest and Adams [232, p. 173]. They are based on passenger movements and estimates of average expenditure.

Financial and other services. The credit entry is entirely a guess at the amount earned by the United Kingdom during the war years. It attempts to allow for the rise in insurance rates and for the decline in banking and other financial services. The debit is 1 % of the c.i.f. value of imports in 1914, 2 % in 1915-18 and 1½ % in 1919.

1870-1913

For this period separate estimates were made for shipping, for travel (from 1900 only) and for other services.

Shipping. The estimates for this period are based on Imlah [181, pp. 49-56], but as with the estimates for 1920-38 it was necessary to rework the calculations and add two further items in order to obtain separate credits and debits appropriately defined. The procedure can be illustrated by reference to the figures for 1913 as set out in Table 6.5.

In order to obtain the necessary series it was first necessary to reproduce Imlah's calculations for row *c*. This is equal to the average of the net tonnage of British ships entered and cleared with cargo in the foreign trade multiplied first by estimated net earnings in 1880 of £2.79 per ton for steam shipping or £3.85 per ton for sailing vessels; and then by Imlah's import price index (with 1880 = 100) to allow for changes in freight rates [181, pp. 52-3]. Given row *c* it is possible to obtain *a* and *b* since Imlah assumed that expenditure in foreign ports was one-sixth of gross earnings (i.e. *b* = one-fifth

of *c*); and row *d* is the difference between *c* and Imlah's published series for *e*.

Rows *f* and *g* were then derived by taking 7 % of the 8 % deducted from imports c.i.f. (in Chapter 6.1) as the total freight charge on imports (leaving 1 % for insurance etc.) and splitting this between British and foreign shipping in all years in the ratio of 3:1. The basis for this

TABLE 6.5 CALCULATION OF THE SHIPPING CREDIT AND DEBIT IN 1913 (£M.)

(a)	Gross earnings of U.K. ships	101.2
(b)	Less expenditure of U.K. ships in foreign ports	16.9
(c)	= Net earnings of U.K. ships	84.3
(d)	Add expenditure of foreign ships in U.K. ports	23.1
(e)	= Net shipping credit as estimated by Imlah	107.4
(f)	Freight charge for U.K. imports in U.K. ships	40.4
(g)	Freight charge for U.K. imports in foreign ships	13.4
(h)	Total credit (<i>a</i> - <i>f</i> + <i>d</i>)	83.9
(i)	Total debit (<i>g</i> + <i>b</i>)	30.3

SOURCE: See text p. 121.

split is the report of a Departmental Committee which made a detailed survey of sea-borne trade carried by British vessels in the years immediately preceding the war, and estimated that 74 % (by value) of United Kingdom imports in 1913 were carried 'under the British flag'.⁴

Information collected by the committee also makes it possible to test the consistency of the two independent estimates. The committee's data [50, p. 145] shows that for 1911 and 1912 the transport of United Kingdom

¹ Morgan [214], p. 314, quotes an American estimate of £95 m.; this total was spread roughly over the years 1915-19.

² Other contributions were shown in the *Finance Accounts*. These were more in the nature of gifts and are included in Chapter 6.4.

³ Those who believe in fools and angels might care to refer to Morgan [214], p. 103.

⁴ *Reports of the Departmental Committee appointed by the Board of Trade to consider the position of the Shipping and Shipbuilding Industries after the War*, Cd 9092, 1918 [50], p. 143. Judging by their share of the total tonnage entered in cargo in the foreign trade, the proportion of imports carried by British ships was roughly the same in the early 1870s as in 1913, but first rose and then fell during the intervening period, with the peak at the turn of the century roughly 5 percentage points higher. See Imlah [181, pp. 173-4] for further discussion.

imports accounted for some 30 % of the total value of the cargo carried in United Kingdom ships. Imlah's estimate of gross earnings of United Kingdom ships averages £93 m. for 1911-12; 30 % of this would be £28 m. The alternative estimate obtained by taking 75 % of 7 % of the c.i.f. value of imports gives £37 m. This suggests that the allowance of 8 % for freight, insurance etc. may have been too high, at least for the later years of the period. As noted previously, however, any error here does not affect the net balance on current account.

Travel. For 1900-13 the credit and debit estimates given by Prest and Adams [232, p. 173] were used. For 1870-99 this item is covered under 'other services'.

Other services. The credit entry is Imlah's allowance [181, pp. 47-8] for profits from foreign trade and services (including the profits from the marketing and purchasing of British exports and imports, banking services abroad and also government income from charges to colonial governments) and from insurance, brokerage, shipping commissions etc. It is calculated as a percentage of the total foreign trade: $7\frac{1}{2}$ % for 1870-9, $6\frac{3}{4}$ % for 1880-92 and 6 % for 1893-1913. The debit is

the 1 % of the c.i.f. value of imports allowed above for insurance etc., plus, for 1870-99, Imlah's very rough allowance for tourism, diamonds etc. taken as 4 % of the United Kingdom exports [181, pp. 58-9]. In addition, a special estimate was made for 1899-1902 to cover the expenditure abroad by the Army in connection with the war in South Africa. It consists of items such as the pay of South African and colonial forces, purchases of horses, mules etc. and local expenditure on provisions, forage, medical supplies and transport. The proportion of the total spent in South Africa or elsewhere outside the United Kingdom can only be roughly estimated, and the estimate for the four years is taken in round numbers as (£ m.): 5, 15, 20 and 10.¹

(ii) *At constant prices*

For all services (other than the shipping credit for 1920-38) both imports and exports for 1870-1948 were deflated by the import average value index used for merchandise imports (see Table 64 and Chapter 6.1). As a lone gesture towards a more appropriate procedure, the shipping credit for 1920-38 was deflated by an index of tramp shipping freight rates.²

6.3 PROPERTY INCOME RECEIVED FROM, AND PAID TO, NON-RESIDENTS AT CURRENT AND CONSTANT PRICES, 1855-1965

DEFINITION OF THE SERIES³

The credit consists of rent, interest, profits and dividends including undistributed income 'received' from overseas by United Kingdom residents, measured before deduction of taxes on income levied by overseas governments; together with United Kingdom taxes paid by non-residents. The corresponding debits are rent, interest, profits and dividends accruing to non-residents, before deduction of United Kingdom taxes on income, together with foreign taxes paid by United Kingdom residents. From 1920 onwards the taxes are shown separately; for 1855-1919 the taxes on property income are not explicitly estimated: the amounts involved are rather small, but the credit is probably best regarded as being after deduction of foreign taxes paid by United Kingdom residents and the debit, similarly, as net of United Kingdom taxes paid by non-residents. It should be noted that in the C.S.O.'s balance of payments accounts [79] interest, profits and dividends are recorded *after* deduction of all overseas taxes. Estimates on this basis are given for 1920-38 in Table 38.

Property income from abroad is reckoned after deducting depreciation allowances but before providing for stock appreciation. For the treatment of unremitted profits and certain other aspects of the definition see

Chapter 6.0 above. Interest paid and received by the Central Government is included. The net earnings of United Kingdom insurance companies from their overseas branches and subsidiaries are included only from 1963; for earlier years they are included with exports of services.

The gross estimates, at current prices, are included in Table 15, and for 1920-38 (on balance of payments definitions) in Table 38. The net income appears at current prices in Tables 1 (from 1855) and 3 (from 1870), and at constant prices in Table 5 (from 1870).

¹ Detailed statistics on the cost of the war in South Africa are given in the *Army Appropriation Account* [17]. The estimate of the amount spent abroad is based on a detailed scrutiny of expenditure and on other information, particularly from the *Report, Minutes of Evidence and Appendices of the Royal Commission on the War in South Africa*, Cd. 1789-92, 1903 [45]. See especially appendices Nos. 38, 49 and 50.

² Isserlis [182], p. 78, continued to 1938 in the *London and Cambridge Economic Bulletin*, xviii, No. 3, 1940 [273], p. 82. In view of the method of estimation (see p. 121) it is entirely appropriate to use the import average value index to deflate the series for shipping credits for the period 1870-1913.

³ See also C.S.O. [73], pp. 445-7.

SOURCES AND METHODS OF ESTIMATION

(i) *At current prices*

1939-1965

See pp. 112-13, above.

1920-1938

The credit for profits, interest etc. received from abroad is basically the present Blue Book estimate for 1938 extrapolated by a series in which the dominant element is the inter-war Board of Trade [67] series for net income from overseas investments.¹ This was based on various sources of information, in particular the very reliable statistics collected from banks and other agents by Lord Kindersley for every year from 1929.² The Board of Trade series was given net of interest etc. paid abroad, after deduction of foreign taxes paid by United Kingdom residents, and excluding interest and dividends received from abroad by the Central Government. An estimate was included for each of these items in building up a series which totals £234 m. in 1938 and so provides a reasonable basis for extrapolation of the Blue Book figure of £247 m.

Estimates of the amount netted off for payments abroad are given for each year from 1929 to 1938 in the text of the annual Board of Trade articles on the balance of payments series [67, e.g. 17 February 1938, p. 232] and the amount was assumed to be constant at the 1929 level of £15 m. for 1920-8. A rough estimate of foreign taxes paid by United Kingdom companies is made in Chapter 3.3 above (p. 61) and this was raised by £2 m. p.a. to cover taxes paid abroad by the personal sector. This is the amount shown in the Blue Book [75, 1967, Table 2] for 1938. Interest etc. received by the government from abroad is one of the components of rent, interest and dividends receipts estimated from the government accounts in Chapter 4.2.³

The other component of property income from abroad is the income and profits tax paid to the United Kingdom by non-residents. This comprises two items: taxes on company profits due abroad and taxes paid by non-residents on portfolio income. The Blue Book estimates for these items for 1938 are £4 m. and £2 m. [75, 1967, Table 7]. The former was extrapolated by reference to the series used below as a debit for profits earned in the United Kingdom by non-resident companies; and the latter was assumed to be constant throughout the inter-war period.

The debit for profits, interest and dividends paid abroad was derived as the sum of six series. The first is the interest on the debt to foreign governments paid by the Central Government as shown in the *Finance Accounts* [20, e.g. 1927-8, p. 37].⁴ The second is the

estimate for film royalties paid abroad, described in Chapter 3.3. The third is a series for dividends received from the United Kingdom by residents of the Irish Free State. These were exempt from United Kingdom tax and data on the amount exempted was available in the unpublished Inland Revenue material used in Chapter 7.1 for the profits estimates. The fourth is the estimate made in Chapter 3.3 for profits earned in the United Kingdom by non-resident companies (and their branches or subsidiaries). And the last two are the original Board of Trade allowance for payments abroad, and the taxes paid by non-residents,⁵ both already described above. This gives an estimate for 1938 of £43 m. which agrees exactly with the Blue Book figure [75, 1967, Table 7]. This agreement is the justification for overlooking what might otherwise be considered an element of duplication in the estimates for company profits due abroad and the original Board of Trade debit;⁶ the implication is that the Board of Trade slightly understated the profits and dividends due abroad.

The other component of property income paid

¹ The Board's estimate for 1922 was originally given as £175 m., but this was after deduction of £25 m. for payments on account of the American debt, which for our purposes must be added back. *Board of Trade Journal* [67], 29 January 1925, p. 145. The estimate for 1923 was also given on this basis, but was then revised in the issue for 21 January 1926, p. 69. The series used in the present estimates for 1920 and 1921 were obtained by extrapolating the 1922 figure of £200 m. by reference to the Inland Revenue data on income from abroad, [30, 68th Report], pp. 98-102.

² Lord Kindersley's enquiries were reported annually in the *Economic Journal* [191]. They covered only dividends received and the data were adjusted by the Board of Trade for unremitted profits and certain other items. An article in *The Economist* [277, 12 December 1931] is also worth noting.

³ It is shown separately, together with the debit for interest paid, in Table 6.6.

⁴ The financial year figures were taken for the calendar year (e.g. 1927/8 = 1927) as the principal item was the interest paid to the United States on 15 December of each year from 1920 to 1932.

⁵ The reason for the seemingly illogical procedure by which taxes paid to the United Kingdom by non-residents are included in a series for interest, profits and dividends paid abroad is that the estimates for interest etc. paid abroad are measured net of United Kingdom tax and the definitions require that they be given before tax.

⁶ No duplication arises between the Board of Trade debit and the first three series on our list: interest paid by the government and film royalties were covered by the Board of Trade under other headings (government and 'other' respectively) and payments to (and from) Southern Ireland were specifically excluded. See *Board of Trade Journal* [67], 23 February 1939, p. 286.

abroad is the series for foreign taxes paid by United Kingdom companies and persons, for which a rough estimate was described on p. 123 above.

The above estimates all relate to Great Britain and Northern Ireland. An estimate for 1920 for Great Britain and Ireland was made on the basis of our figure for dividends paid by Great Britain and Northern Ireland to Irish Free State residents and estimates of total interest and dividends received and paid by the Irish Free State in 1926.¹

1914-1919

This is a very rough calculation made from two components. The first covers interest received and interest paid by the government and was based on the *Finance Accounts*. The second covers the private credits and debits and was obtained by interpolating between the corresponding estimates for 1913 and 1920 (the latter including Southern Ireland and adjusted to a net of tax basis) on the basis of the 'guess' as to net income from overseas investments (excluding government loans) made by Morgan [214, pp. 316-17].

1855-1913

Imlah [181, pp. 59-64] gives estimates of net property income from abroad. For 1886-1913 these are based on

a 1907 benchmark derived from estimates prepared by Sir George Paish² extrapolated by data from the Inland Revenue returns. For earlier years Imlah calculated the net income by applying a varying rate of return to his estimate of the accumulated investment abroad.

The 1907 base represented £159.8 m. for income received less £16 m. for income paid abroad. This debit is equal to 11 % of the net income received and I assumed that the proportion was a stable 7 % from 1870 to 1899 and then rose steadily from 8 % in 1900 to 12 % in 1913.³ The credit for total property income received is then simply Imlah's series plus this estimated debit. For 1855-69 only the net property income from abroad is required (for Table 1) and is again Imlah's estimate.

(ii) At constant prices

For estimates of net property income from abroad at constant prices (1870-1913 at 1900 prices, 1913-1948 at 1938 prices and 1938 at 1948 prices) the net estimates were deflated by the average value index used for imports of goods and services (see column (6) of Table 61 and Chapter 6.1). The same principle is used in the Blue Book estimates for 1948-64 at 1958 prices [75, 1967, Table 14]; the idea is to measure the real purchasing power of income from abroad in terms of the goods and services which might be imported with it.

6.4 GRANTS AND TRANSFERS RECEIVED FROM, AND PAID TO, NON-RESIDENTS, 1870-1965

DEFINITION OF THE SERIES

This covers gifts, grants and other receipts for which no offsetting charge is involved, received by the Central Government and the personal sector from non-residents; and the corresponding unrequited payments by these two sectors to the rest of the world. The detailed components on *current* account are as follows:

(a) *Government*. The principal receipts are defence aid grants, mainly from the United States government, for the purchase of raw materials, machinery and equipment; reparations received from Germany in 1921-31; and the contributions towards the cost of World Wars I and II received as gifts from the Dominions, India and other colonial governments.

The current grants paid abroad have three main elements: grants to colonial and other overseas governments for welfare, development, military equipment etc.; subscriptions and contributions to the United Nations, S.E.A.T.O. and other international organisations; and pensions paid to overseas residents.

(b) *Private transfers*. The credit covers sums remitted to the United Kingdom as gifts, e.g. by former emigrants,

and capital (other than personal or household belongings) brought in by immigrants. The debit covers the

¹ League of Nations, *Memoranda on International Trade and Balances of Payments, 1913-27*, vol. 1, Geneva, 1928 [102], pp. 150-1.

² G. Paish, 'Great Britain's Capital Investment in Other Lands', *J. R. Statist. Soc.*, LXXII, 1909 [224], pp. 466-75, 481-2, 489-91. For a suppressed reservation regarding the use of this estimate see Chapter 7.2, pp. 155-6.

³ This gives a debit for income due abroad of some £20-£24 m. in 1911-13. In a little-known paper prepared by the Board of Inland Revenue in 1919 it was '...conjectured that the total foreign holdings of British capital in private hands before the war amounted to some £150 m. of which the great bulk would be in industrial shares rather than in gilt-edged securities'. Royal Commission on the Income Tax, *Second Instalment of the Minutes of Evidence with Appendices*, Cmd. 288, vol. 1, 1919 [52], Appendix 11, p. 77. Interest and dividends on this would account for perhaps half of the present estimate. The Board specifically added that it had no information as to 'the amount of capital represented by shares in British companies held by foreign associate companies for the purpose of their business'. Income earned on this, together with the profits of foreign financial businesses in London, would probably account for most of the remaining half.

capital taken out by emigrants, gifts or remittances abroad by individuals and transfers abroad by missionary societies and other charitable organisations.

For 1946–53 certain *capital* grants and transfers were also received from abroad. They are defined in Chapter 4.3.

SOURCES AND METHODS OF ESTIMATION

1939–1965

See pp. 112–13, above.

1920–1938

Government. The grants received by the government are described in Chapter 4.3 and the grants paid abroad in Chapter 4.5.

Private transfers. Separate estimates were made for migrants' capital (credit and debit), for remittances to the United Kingdom and for remittances abroad by persons and non-profit-making bodies.

Estimates for migrants' capital were derived from annual statistics compiled by the Board of Trade of the number of immigrants and emigrants, and estimates of the average capital per migrant. From 1912 the statistics collected by the Board of Trade ([67], e.g. 9 March 1939, pp. 358–68; summary figures are also given in the *Statistical Abstract*) distinguished the number of passengers of British nationality for or from countries out of Europe that were described as changing their country of permanent residence from or to the United Kingdom. In addition, there was a sizeable inflow from Eire and Europe for which the only available record is the net inward movement of passengers (British and alien) from these two areas.¹

There is very little information on the subject of migrants' capital and the estimates are at best rough orders of magnitude. Most of what evidence there is refers to British emigrants in the period before 1913. Paish,² writing in 1910, thought that British emigrants brought an average of \$50 (about £10) to the United States. Viner³ quotes one estimate for those entering Canada of \$100 but himself uses figures of \$500 for saloon immigrants and \$50 for steerage passengers, which yields an average for 1900–13 of some \$70 (£14) per head. Benham, writing about Australia, uses £12 for 1901–11, £15 for 1912–20 and £20 for 1921–5.⁴ An official Australian estimate published in 1950 says: 'Various enquiries undertaken before the last war indicated that the average amount of funds brought in by immigrants was about £35–£40 per head'.⁵ The official Canadian estimates refer to a *per capita* import of capital by immigrants coming from Great Britain of \$50.⁶ The figure chosen for the present estimates for 1920–38

in the light of this selection was £50 per emigrant. In evaluating this figure (and those below for immigrants) it must be remembered that they are applied to statistics of migration which include many dependents.⁷

Estimates for the capital brought into the country are still more a matter of making bread without flour. Relying largely on the fact that the return flow of *British* nationals is said to consist 'mainly of officials of the Colonial and Indian services returning on retirement together with settlers returning in order to retire',⁸ I have allowed £200 per head for 1920–38. For the (mainly non-British) immigrants and refugees from Eire and Europe a much lower figure seems appropriate, and I have taken £30 per head.

The remaining credit to be estimated for 1900–38 is money remitted to this country, typically by former emigrants. There is, again, less information for the inter-war years than for the pre-1913 period. For 1920–38 there are some figures assembled by the United States, Canada and Australia,⁹ and I have fashioned a very rough allowance from this data. It varies between a peak of £5 m. p.a. in the late twenties and £3 m. p.a. in the more depressed thirties.

The debit for personal remittances abroad covered two items: firstly, the *Board of Trade Journal* [67, e.g. February 1939, p. 288] reported that missionary societies were remitting some £2 m. p.a. abroad in the late 1930s and the figure was assumed to be the same in all other years except 1930–2, when it was taken as £1 m. Secondly, a notional allowance for gifts and other remittances abroad by persons (including remittances

¹ See H. Leak and T. Priday, 'Migration from and to the United Kingdom'. *J. R. Statist. Soc.* xcvi, 1933 [195].

² G. Paish, *The Trade Balance of the United States*, 1910 [225], p. 181.

³ J. Viner, *Canada's Balance of International Indebtedness, 1900–1913, 1924* [257], pp. 44–7.

⁴ F. C. Benham, *The Prosperity of Australia*, 1928 [122], Appendix D, p. 264: 'Evidence for the £12 is to be found in the *Report of the Dominions Royal Commission* and enquiries by the writer enable him to state with confidence the figure of £20 for recent years.'

⁵ Commonwealth Bureau of Census and Statistics, *The Australian Balance of Payments, 1928–29 to 1948–49*, 1950 [96], p. 68.

⁶ Dominion Bureau of Statistics, *The Canadian Balance of International Payments*, 1939 [101], pp. 105 and 192.

⁷ See, e.g., Leak and Priday [195], pp. 202–8.

⁸ R. S. Walshaw, *Migration to and from the British Isles*, 1941 [258], p. 27.

⁹ Department of Commerce, *The Balance of International Payments of the United States*, annual [109], e.g., 1928, pp. 8 and 25–30; Dominion Bureau of Statistics [101], pp. 216–38; Commonwealth Bureau of Census and Statistics [96], p. 69, and *Official Year Book of the Commonwealth of Australia* [95], e.g., No. 27, 1934, pp. 874–82.

TABLE 6.6 GOVERNMENT OVERSEAS CURRENT EXPENDITURE AND RECEIPTS, 1920-38, AND COMPARISON WITH BOARD OF TRADE ESTIMATES

(£M.)

	Goods and services and transfers ^a		Interest, profits and dividends		Government current account (2+4)-(1+3) (5)	Remove Dr. for Personal expenditure abroad by armed forces ^b (6)	Add Dr. for Payments less receipts on Capital Account ^c (7)	Equals Government account present estimate on Board of Trade definition (5+6-7) (8)	Board of Trade estimate (9)	Discrepancy (8-9) (10)
	Dr. (1)	Cr. (2)	Dr. (3)	Cr. (4)						
1920	70	71	18	14	-3	21	..	..	..	—
1921	55	80	17	14	22	13	..	..	..	—
1922	36	25	32	11	-32	10	..	..	..	—
1923	30	26	36	12	-28	9	..	..	..	—
1924	24	17	36	12	-31	9	—	-22	-25	3
1925	19	27	33	14	-11	8	5	-8	-11	3
1926	20	30	33	19	-4	8	4	—	4	-4
1927	19	34	30	21	6	8	6	8	1	7
1928	19	34	30	23	8	8	3	13	15	-2
1929	19	33	29	26	11	8	5	14	24	-10
1930	17	36	29	28	18	8	2	24	19	5
1931	17	27	18	16	8	8	1	15	14	1
1932	15	7	22	5	-25	7	7	-25	-24	-1
1933	16	7	4	3	-10	7	1	-4	-2	-2
1934	16	7	—	3	-6	7	-5	6	7	-1
1935	19	7	—	3	-9	8	-2	1	-2	3
1936	19	7	—	3	-9	8	—	-1	-3	2
1937	20	8	—	3	-9	8	4	-5	-4	-1
1938	27	8	—	2	-17	10	—	-7	-13	6

^a Separate credits and debits for transfers abroad are given in Table 12, columns (6) and (14).

^b Included in column (1).

^c Present estimate of undisclosed capital account transactions included in Board of Trade estimates.

SOURCES: (1)-(6): See Chapters 6.2, 6.3 and 6.4.

(7): See Table 34, rows for 'External loans and repayments by overseas governments'. The foreign credits in 1931-2 and the £10 m. repaid by Eire in 1938 were not included in the Board of Trade estimates.

(9): *Statistical Abstract* [35], No. 83, p. 434.

to Eire by former immigrants¹) was put at £2 m. for 1920-30, rising to £4 m. p.a. for 1931-8 when the depression may have caused some reduction, but the Irish balance of payments estimates alone show the surprisingly high figure of more than £2.5 m. p.a. for the net receipts from the United Kingdom on account of the Irish Hospitals Sweepstake.²

1870-1919

Government. For 1900-19 estimates of the grants received are available from Chapter 4.3 and of the grants paid from Chapter 4.5. For 1870-99 the amounts paid were taken as zero; there were no grants received.

Private transfers. For years prior to 1912 the statistics

of passenger movement do not distinguish actual migrants, and the best measure of net emigration is the net outward movement of passengers of British nationality to countries out of Europe. Since there was certainly some immigration (in the form of British nationals returning to retire after serving as officials in India and the colonies, or those who did not like what they found in the New World) a measure of migrants' capital based only on the net outflow will understate

¹ The Irish balance of payments estimates allowed £500,000-£600,000 p.a. for remittances received from the United Kingdom. League of Nations, [104], 1939, p. 72.

² League of Nations [104], 1939, p. 73.

both debit and credit. However, this item does not affect any other estimate in the social accounts.

Private transfers are taken as zero for 1915-19. For 1914 an estimate was made in continuation of the series for earlier years. For 1870-1913 I have accepted Imlah's rough estimate of the net debit balance on emigrants' capital and remittances received [181, p. 57] but have made a separate estimate of the amount received, leaving the debit to emerge as the sum of the receipts and the net balance.

For 1900-19 the estimates for remittances assume that the amount received each year represented £10 per head for each British emigrant leaving the United Kingdom. The logic of this procedure is the assumption that most of the money remitted to this country was intended to provide the passage money for the next round of emigrants, so that the inflow of remittances was correlated with the outflow of emigrants.¹ For 1870-99 the credit is based on a series for remittances to the United Kingdom from the United States² and other countries. The total debit which results from this pro-

cedure implies an average capital per emigrant of around £20 per head, which seems very reasonable in the light of the estimates quoted on p. 125 above.³

¹ For the evidence on this see Imlah [181], p. 57; and D. C. North, 'The United States Balance of Payments, 1790-1860', and M. Simon, 'The United States Balance of Payments, 1861-1900', both in National Bureau of Economic Research, *Trends in the American Economy in the Nineteenth Century*, Studies in Income and Wealth, vol. 24, 1960 [218], pp. 616-17 and 680-1.

² For 1870-87 a series for annual remittances from the United States and Canada which was 'presented... under protest as necessarily incomplete' is given in *Copy of Statistical Tables relating to Emigration and Immigration from and to the United Kingdom*, H.C. 2, 1888 [68], p. 18. From 1875 it also covers Australia and other countries. Simon [218], pp. 682-3, used the figures for the United States and Canada as a rough estimate of the complete remittances from the United States and extrapolated the estimates to 1900.

³ For the period 1870-99 see also the estimates of capital earned by United States immigrants quoted in Simon [218], pp. 672-9.