

## Balance sheets for insurance companies

### The Bank's part in the compilation of sector balance sheets

National and sector balance sheets provide figures of outstanding liabilities and holdings of assets to complement the financial transactions data in the flow of funds accounts. [1] An official ten-year programme of work on the improvement of financial statistics and their extension to include balance sheets was begun in 1972. [2] The Bank undertook, as their share of the operation, to construct sector series not only for institutions such as banks, where the Bank are responsible for the basic data, but for all financial institutions, for the central government and for the overseas sector; the Bank also undertook to provide certain figures (e.g. listed issued capital) for other sectors. The first sector series, for deposit banks, were published in 1972; [3] figures for the whole banking sector appeared in 1973; [4] and those for investment trust companies in 1975. [5]

In each case, the Bank produce *integrated balance sheet and flow accounts*, that is, tables in which the flows are, as far as possible, consistent with the levels. The levels are at market values, or estimated market values. The Bank's aim is, as far as possible, to provide quarterly statistics from 1963.

### Tables for insurance companies

This article introduces integrated balance sheet and flow accounts for the most important group of financial institutions operating in the UK security markets—the insurance companies. Because of the tremendous volume of data involved, the article includes only a sample table, for 1976, but balance sheets for earlier years, beginning with 1963, are available on request.

Insurance companies' business is divided into two main classes under the Insurance Companies Acts: 'long-term' and 'general'. *Long-term business* is predominantly life assurance, which is basically a form of personal savings. The bulk of this is under contracts whereby regular premiums are paid by the policyholder and an agreed sum is paid on death or at a specified date. There are also annuities, where regular payments are made by the company to the policyholder over a specified period in return for premium payments, often for a single premium paid at the outset, and sometimes as part of a pension scheme. Life policies are frequently linked, not to the life funds as a whole, but to funds for investment in specified ways, e.g. in equities or property ('equity-linked' policies, property bonds, etc). These funds are included in the statistics as part of the companies' business, that is, as direct investment in ordinary shares and so on. Long-term funds also include relatively small amounts of long-term personal accident business and capital redemption contracts. *General insurance*

*business* is concerned with cover against contingencies such as motor accidents and fire damage. This does not involve personal saving, but the insurance companies have to maintain reserves to meet future liabilities.

Most of the larger companies carry out both life and general business, and are known as 'composite companies'. However, because the division between the two types of business is important for the analysis of behaviour, separate figures are provided for their assets. The tables cover all companies which are within the scope of the Insurance Companies Acts, 1958 to 1967 (UK-registered companies and UK branches of overseas companies), together with those covered by other legislation, such as the Friendly Companies Act, 1974, notably collecting societies, which carry out industrial assurance. Some small friendly societies are excluded, as are Lloyd's underwriters; both these groups are in the personal sector in UK national accounts.

The main statistical source is the set of voluntary returns introduced after the Radcliffe Report (the 'Radcliffe returns'). These consist of annual returns of holdings of assets, apart from direct investment abroad, and quarterly returns of holdings of short-term assets and of transactions in other assets. The returns are made to the British Insurance Association (BIA), the Association of Collecting Friendly Societies and the Department of Trade (in respect of companies not belonging to the BIA). The figures are published regularly by the Business Statistics Office in *Business Monitor*, M5.

The chief drawback to these figures is that holdings of property and securities were reported at book value (nominal value in the case of British government stocks and local authority securities) until the insurance companies began to report market values at end-1976. However, the Diamond Commission made estimates of insurance companies' holdings of listed UK ordinary shares at market value in the years 1969 to 1973. Other figures for market values have been estimated by the Bank in the ways described in the notes to the tables and can only be regarded as rough.

The 'Radcliffe returns' do not at present cover liabilities, although it is intended that they should do so as part of the programme for improving the statistics of financial institutions generally. [6] Figures for liabilities have therefore had to be estimated from other sources—stock exchange statistics (for listed capital), regulatory returns (liabilities to policyholders, unlisted capital), exchange control sources (borrowing in foreign currency) and information from the counterpart institutions (bank borrowing). Some of the estimates are very rough.

[1] See 'National balance sheets: a new analytical tool', Bank of England *Quarterly Bulletin*, December 1972, page 496, and 'Part 3: Sector balance sheets' in the Bank's *United Kingdom flow of funds accounts: 1963-1976*, page 27.

[2] D. J. Reid, 'National and Sector balance sheets', *Statistical News*, November 1976.

[3] December 1972 *Bulletin*, page 498.

[4] 'Banking sector: balance sheets', December 1973 *Bulletin*, page 453 (revised and updated figures are available on request).

[5] 'Balance sheets for investment trust companies', June 1975 *Bulletin*, page 166 (revised and updated figures are available on request).

[6] See A. H. Cowley, 'Development of inquiries to financial institutions', *Statistical News*, August 1976.

# Insurance companies: integrated balance sheet and flow accounts

£ millions

Line	End-Dec. 1975	Cash flow	Revalua- tions etc.	End-Mar. 1976	Cash flow	Revalua- tions etc.	End-June 1976
<b>Liabilities and share capital: all funds</b>							
Borrowing from UK banks:							
In sterling	57	+ 10	—	67	- 10	—	57
In foreign currency	206	+ 6	+ 3	215	+ 3	+ 20	238
Borrowing from overseas in foreign currency	76	+ 9	+ 2	87	+ 1	+ 8	96
Policyholders' funds	19,000	+568	—	19,568	+467	—	20,035
Issued capital:							
Loan capital (listed)	109	—	+ 7	116	+ 9	+ 9	134
Preference shares (listed)	4	—	—	4	—	—	4
Ordinary shares:							
Listed	2,606	+ 27	+ 64	2,697	+ 3	-212	2,488
Unlisted	1,872	—	+ 54	1,926	—	-139	1,787
<b>Total liabilities and share capital: all funds</b>	<b>23,930</b>	<b>+ 620</b>	<b>+ 130</b>	<b>24,680</b>	<b>+ 473</b>	<b>-314</b>	<b>24,839</b>
<b>Assets: long-term funds</b>							
Land and buildings	4,616	+ 80	+155	4,851	+114	+174	5,139
Cash and balances with UK banks	409	+117	- 9	517	- 66	- 8	443
Negotiable certificates of deposit:							
Sterling	51	+ 37	—	88	- 15	—	73
Foreign currency	9	- 3	—	6	+ 1	—	7
Building society deposits	32	+ 1	—	33	+ 1	—	34
Deposits with other financial institutions	74	- 12	- 1	61	+ 5	- 1	65
Treasury bills	80	- 28	—	52	—	—	52
Local authority bills and temporary money	238	—	+ 1	239	- 26	—	213
Other UK short-term assets (net)	42	- 31	- 1	10	+ 25	—	35
Short-term assets overseas (net)	16	- 8	+ 1	9	+ 1	+ 1	11
Government stocks	3,584	+324	+104	4,012	+331	+ 19	4,362
Local authority negotiable bonds and other listed securities	156	+ 1	+ 7	164	+ 10	- 3	171
Other UK fixed-interest securities:							
Loan capital:							
Listed	1,466	+ 7	+ 81	1,554	- 4	+ 35	1,585
Unlisted	354	+ 2	+ 19	375	- 1	+ 9	383
Preference shares:							
Listed	100	- 3	+ 7	104	- 7	- 1	96
Unlisted	—	—	—	—	—	—	—
Overseas fixed-interest securities:							
Government, provincial and municipal securities	81	+ 3	+ 16	100	—	—	100
Company loan capital	59	- 2	- 2	55	- 2	- 2	51
Preference shares	6	—	+ 1	7	—	—	7
UK ordinary and deferred shares:							
Listed	5,818	+ 45	+238	6,101	+ 60	-348	5,813
Unlisted	174	+ 1	+ 7	182	+ 2	- 10	174
Overseas ordinary and deferred shares	770	+ 22	+ 90	882	+ 28	+ 43	953
Unit trust units	454	+ 27	- 5	476	+ 25	- 4	497
Overseas property	—	—	—	—	—	—	—
Long-term loans to local authorities	219	+ 2	+ 11	232	+ 14	- 4	242
Loans for house purchase	1,439	+ 10	+ 6	1,455	+ 1	+ 6	1,462
Other long-term loans:							
Loans on company policies	264	- 1	- 5	258	—	- 5	253
Other UK loans	1,257	- 5	- 14	1,238	- 10	- 14	1,214
Overseas loans	56	+ 2	- 1	57	+ 1	- 1	57
Other financial assets	4	—	+ 15	19	- 1	+ 16	34
<b>Total assets: long-term funds</b>	<b>21,828</b>	<b>+ 588</b>	<b>+ 721</b>	<b>23,137</b>	<b>+ 487</b>	<b>- 98</b>	<b>23,526</b>
<b>Assets: general funds</b>							
Land and buildings	248	+ 10	+ 9	267	+ 17	+ 10	294
Cash and balances with UK banks	469	- 14	+ 7	462	+ 21	+ 8	491
Negotiable certificates of deposit:							
Sterling	32	- 10	- 1	21	- 1	—	20
Foreign currency	57	- 10	—	47	+ 12	- 1	58
Building society deposits	—	—	—	—	—	—	—
Deposits with other financial institutions	68	- 5	- 1	62	+ 3	—	65
Treasury bills	34	+ 5	+ 1	40	- 4	—	36
Local authority bills and temporary money	124	+ 15	+ 1	140	+ 7	—	147
Other UK short-term assets (net)	15	+ 7	—	22	+ 2	+ 1	25
Short-term assets overseas (net)	18	- 1	—	17	—	—	17
Government stocks	745	+ 33	+ 32	810	+ 41	+ 6	857
Local authority negotiable bonds and other listed securities	25	+ 3	+ 1	29	+ 8	- 1	36
Other UK fixed-interest securities:							
Loan capital:							
Listed	98	- 1	+ 6	103	—	+ 2	105
Unlisted	—	—	—	—	—	—	—
Preference shares:							
Listed	117	+ 3	+ 9	129	+ 14	- 1	142
Unlisted	—	—	—	—	—	—	—
Overseas fixed-interest securities:							
Government, provincial and municipal securities	64	+ 1	+ 14	79	+ 3	- 1	81
Company loan capital	45	+ 7	+ 1	53	+ 7	+ 2	62
Preference shares	3	—	—	3	—	—	3
UK ordinary and deferred shares:							
Listed	1,060	+ 35	+ 31	1,126	+ 10	- 83	1,053
Unlisted	42	+ 1	+ 1	44	—	- 2	42
Overseas ordinary and deferred shares	223	+ 7	+ 26	256	+ 9	+ 13	278
Unit trust units	1	—	—	1	—	—	1
Overseas property	—	—	—	—	—	—	—
Long-term loans to local authorities	72	+ 3	+ 3	78	+ 12	- 1	89
Loans for house purchase	81	+ 2	+ 2	85	+ 1	+ 2	88
Other long-term loans:							
Loans on company policies	2	—	—	2	—	—	2
Other UK loans	92	- 1	+ 10	101	- 1	+ 10	110
Overseas loans	7	- 1	+ 1	7	—	+ 1	8
Other financial assets	2	+ 2	+ 2	6	+ 2	+ 1	9
<b>Total assets: general funds</b>	<b>3,744</b>	<b>+ 91</b>	<b>+ 155</b>	<b>3,990</b>	<b>+ 163</b>	<b>- 34</b>	<b>4,119</b>
<b>Total assets: all funds</b>	<b>25,572</b>	<b>+ 679</b>	<b>+ 876</b>	<b>27,127</b>	<b>+ 650</b>	<b>- 132</b>	<b>27,645</b>
<b>Net worth: all funds</b>	<b>1,642</b>	<b>+ 59</b>	<b>+ 746</b>	<b>2,447</b>	<b>+ 177</b>	<b>+ 182</b>	<b>2,806</b>

[a] Rounding adjustment.

Cash flow	Revaluations etc.	End-Sept. 1976	Cash flow	Revaluations etc.	End-Dec. 1976	End-Dec. 1976	Line
					See notes		
- 6	-	51	-	-	51	51	1
- 3	+ 6	241	- 17	+ 18	242	242	2
- 3	+ 2	95	- 9	+ 7	93	93	3
+560	-	20,595	+487	+ 18[a]	21,100	21,100	4
- 1	+ 5	138	-	- 3	135	135	5
-	-	4	-	-	4	4	6
+ 5	- 453	2,040	+ 45	+178	2,263	2,263	7
-	- 301	1,486	-	+146	1,632	1,632	8
<b>+552</b>	<b>- 741</b>	<b>24,650</b>	<b>+506</b>	<b>+364</b>	<b>25,520</b>	<b>25,520</b>	9
+106	+ 157	5,402	+ 86	-144	5,344	5,254	10
+114	- 8	549	-115	- 8	426	426	11
- 19	-	54	- 1	-	53	53	12
-	-	7	- 1	- 1	5	5	13
+ 1	-	35	+ 1	-	36	36	14
- 2	- 1	62	- 17	-	45	45	15
+ 25	-	77	- 33	-	44	44	16
+ 30	-	243	+ 28	-	271	271	17
- 40	-	5	+ 37	-	32	32	18
+ 6	+ 1	18	- 1	-	17	17	19
+279	- 358	4,283	+578	+ 56	4,917	4,917	20
+ 5	- 2	174	+ 2	+ 1	177	177	21
- 15	- 120	1,450	- 50	- 20	1,380	1,380	22
- 4	- 29	350	- 14	- 5	331	331	23
+ 21	- 9	108	- 2	+ 2	108	108	24
-	-	-	-	-	-	-	25
- 4	+ 3	99	+ 3	+ 5	107	107	26
- 2	- 2	47	- 2	- 3	42	42	27
-	+ 1	8	-	-	8	8	28
+ 61	- 778	5,096	+ 10	+634	5,740	5,740	29
+ 2	- 23	153	-	+ 19	172	172	30
+ 2	+ 95	1,050	- 15	- 22	1,013	1,013	31
+ 17	- 5	509	+ 10	- 4	515	515	32
-	-	-	-	-	90	90	33
+ 6	- 4	244	+ 2	+ 2	248	248	34
- 4	+ 6	1,464	+ 2	+ 5	1,471	1,471	35
+ 1	- 5	249	-	- 6	243	243	36
- 17	- 14	1,183	- 21	- 13	1,149	1,149	37
+ 1	- 1	57	+ 1	- 1	57	57	38
-	+ 15	49	-	+ 16	65	65	39
<b>+570</b>	<b>-1,081</b>	<b>23,015</b>	<b>+488</b>	<b>+513</b>	<b>24,016</b>	<b>24,016</b>	40
+ 22	+ 9	325	+ 14	- 9	330	330	10
+ 68	+ 7	566	+ 69	+ 8	643	643	11
+ 31	-	51	- 11	-	40	40	12
+ 9	-	67	- 3	- 1	63	63	13
-	-	-	-	-	-	-	14
+ 1	- 1	65	- 10	-	55	55	15
- 5	-	31	- 21	-	10	10	16
+ 34	+ 1	182	- 46	-	136	136	17
+ 4	+ 1	30	- 18	+ 1	13	13	18
+ 9	-	26	+ 7	-	33	33	19
+ 46	- 54	849	+192	+ 17	1,058	1,058	20
+ 3	-	39	- 4	-	35	35	21
+ 10	- 8	107	+ 20	- 2	125	95	22
-	-	-	-	-	-	30	23
+ 10	- 13	139	+ 6	+ 3	148	143	24
-	-	-	-	-	-	5	25
+ 6	+ 3	90	+ 17	+ 5	112	112	26
+ 7	+ 1	70	+ 7	+ 1	78	78	27
-	-	3	-	-	3	3	28
- 32	- 175	846	+ 3	+ 83	932	932	29
- 1	- 5	36	-	+ 4	40	40	30
-	+ 27	305	- 5	- 6	294	294	31
-	-	1	-	-	1	1	32
-	-	-	-	-	-	-	33
+ 5	- 2	92	- 5	+ 1	88	88	34
+ 1	+ 2	91	+ 1	+ 2	94	94	35
-	-	2	- 1	+ 1	2	2	36
+ 8	+ 10	128	- 5	+ 10	133	133	37
-	+ 1	9	-	-	9	9	38
+ 5	+ 1	15	+ 1	+ 1	17	17	39
<b>+241</b>	<b>- 195</b>	<b>4,165</b>	<b>+208</b>	<b>+119</b>	<b>4,492</b>	<b>4,492</b>	40
<b>+811</b>	<b>-1,276</b>	<b>27,180</b>	<b>+696</b>	<b>+632</b>	<b>28,508</b>	<b>28,508</b>	41
<b>+259</b>	<b>- 535</b>	<b>2,530</b>	<b>+190</b>	<b>+268</b>	<b>2,988</b>	<b>2,988</b>	42

## Notes on definitions, sources and methods

### Coverage

Since December 1973, the 'Radcliffe' series as published in *Business Monitor*, M5 has related to all UK insurance companies, whether or not they are members of the British Insurance Association (BIA), and collecting friendly societies. The Department of Trade have made allowance in the published figures for the relatively small number of companies which are not required to fill in returns (mainly partially-authorized insurers). Lloyd's underwriters, some small friendly societies and a few other similar bodies are not included; they are part of the personal sector in the national accounts.

Commonwealth life assurance companies did not provide 'Radcliffe returns' until December 1967, while non-BIA members were not brought in until 1973, when the Department of Trade began to collect figures from a sample of them. Two levels are shown in the tables at December 1967 and December 1973 to allow for the inclusion of the new contributors.

The 'Radcliffe returns' include assets held in respect of money remitted to the United Kingdom and invested on head office account by overseas branches and subsidiaries, but they exclude direct investments by UK companies in branches and subsidiaries abroad, as well as financial assets held by, or on behalf of, those branches (even if held in the United Kingdom).

The figures cover funds relating to insured pension schemes where contributions are paid over to a life assurance company which assumes liabilities to the pension scheme and its members, and which invests the contributions as part of its overall life fund investment.

The coverage is consistent with that in the flow of funds accounts.

### Sources

The 'Radcliffe returns', which provide the figures of assets, or the basic data from which estimates of asset holdings have been calculated, are the most important source. The aggregated figures from these returns are published regularly in *Business Monitor*, M5 and in *Financial Statistics*. The main differences between those tables and the ones produced by the Bank are as follows:

- Holdings of property and securities before 1976 are shown by the Bank at estimated market prices, instead of book or nominal values.
- Figures are given for end-quarter asset holdings.
- There is additional detail for some items. Thus, for instance, quarterly transactions in UK and in overseas ordinary shares are not reported separately, but rough estimates of the division have been made for these tables.
- The item 'agents' balances etc.' reported on the returns is not included in these tables, nor is it included in flow of funds accounts. This item includes not only balances due from agents, but also outstanding premiums, reinsurance balances, outstanding interest, dividends and rents, and reversions. It is thought that agents' balances may not be very large, but outstanding premiums owed by insurance brokers and accrued interest may be more important. It is not known how far the outstanding premiums are due from companies or unincorporated businesses in the personal sector. Interest on most of the assets concerned is entered in the national accounts on a cash basis, so the accruals do not qualify for entry in the flow of funds accounts (the same applies to outstanding dividends and rent). Thus, altogether, it is difficult to judge whether 'agents' balances etc.' really qualifies for entry in the sector accounts and, if it did, which would be the counterpart sector. There is a fear that, as reinsurance balances due from other companies are included in the item, there may be a similar liability item not yet reported. If the 'Radcliffe returns' are extended to liabilities, the position will be reconsidered.
- Estimates have been made, and included here, for liabilities. The sources have been mentioned in the main text and some further details are given in the notes on individual lines.

### Consolidation

The 'Radcliffe returns' are for consolidated insurance company groups (except for overseas branches and subsidiaries). Thus intra-group transactions are omitted, and, for instance, property held by a UK property company which is a subsidiary of a reporting insurance company, or through a property bond scheme, appears as a direct holding of property in the tables.

The figures are aggregations of the amounts reported, with no attempt to omit transactions between the insurance companies, for these cannot be identified. Most are, however, thought to be in 'agents' balances etc.' the whole of which has been excluded.

[1] In the Bank's external inventory articles—see, for instance, 'An inventory of UK external assets and liabilities: end-1977' in the June *Bulletin*, page 222—figures are included from US sources for the market value of securities held by US branches and subsidiaries of UK insurance companies. These figures are not included here.

### Scope

As far as possible, the tables cover all assets and liabilities, the net total being called 'net worth'. This figure will include differences between the liabilities to policyholders as estimated from figures reported in the regulatory returns of long-term funds, and the estimated market value of the assets held by those funds (net of their other liabilities). Some of these differences arise because companies frequently do not use current market values in calculating policyholders' funds and because when they revalue their assets, they transfer part of any capital gains to their investment reserves rather than to policyholders' funds (in the form of bonuses etc). 'Net worth' also includes the reserves of general funds, which are not treated in sector accounts as an actual liability to anyone—liabilities to shareholders are measured here by entering issued shares at market value. Errors and omissions in the statistics are reflected in 'net worth' too. Among the omissions are all direct investment abroad (there are no figures for levels, [1] and quarterly transactions are not published) and part of overseas direct investment in this country (i.e. investment in branches, and in subsidiaries other than in the form of securities).

### Relationship with flow of funds accounts

The figures for insurance companies' transactions have been used in the compilation of the transactions of 'other financial institutions' in the flow of funds accounts (Table 29 of the annex). There are three lines (14, 15 and 32) in the tables which, being transactions with other institutions in the same sector, disappear on consolidation in the flow of funds tables. The various lines in the Bank's flow of funds matrix have equivalents in the balance sheets as follows:

	Flow of funds matrix	Integrated balance sheet and flow accounts
	Line	Line
Gross fixed-capital formation at home	3	10
Life assurance and pension funds	7	4
Miscellaneous investment overseas (net)	11	3, 19, 33, 38
Notes and coin	12[a]	11 (part)
Bank deposits of domestic sectors	13	11 (part), 12, 13
Bank lending to domestic sectors	16	1, 2
Loans for house purchase	18	35
Other loans and accruals	19	18, 36, 37, 39
Marketable government debt held by domestic sectors:		
Treasury bills	20	16
Stocks	21	20
Local authority debt	22	17, 21, 34
UK company and overseas securities:		
Capital issues	23	5, 6, 7, 8[b]
Other transactions	24	22, 23, 24, 25, 26, 27, 28, 29, 30, 31

[a] It is assumed that there are no significant transactions by insurance companies.

[b] The figures given in the integrated tables are rough estimates which have not so far been included in the flow of funds accounts.

### Interpolation of end-quarter figures

The insurance companies report their short-term assets quarterly, but they report other assets only annually, and figures for some of their liabilities are available only once a year too. On the assets side of the account, some items, such as long-term loans, are not subject to changes in value resulting from price or exchange rate fluctuations, so quarterly holdings can be calculated by simply adding reported transactions to the previous end-year levels. The resulting entry under 'revaluations etc.' is nil (or a small amount to cope with rounding differences) unless there is some complication. With some other assets, where there is a revaluation element, but the reported holdings are small (e.g. line 27, overseas company loan capital), the annual revaluation has been distributed evenly among the quarters.

To interpolate where there is a revaluation element involves a series of computations. First, the opening end-December level is revalued by the percentage change in an appropriate price index for the type of security to produce a figure for its value at end-March. Then the reported transactions in the first quarter, assumed to have taken place at the average daily price during the quarter, are likewise revalued to the end-March price and added to (if net purchases) or deducted from (if net sales) the revalued end-December figure. The resulting figure becomes the provisional stock estimate for end-March. The process is repeated until a figure for the following end-December has been calculated; this is then compared with that reported by the institutions. There can be several reasons for any discrepancy then disclosed: the price index may not be representative of the pattern of assets held; the transactions may not have taken place at the average daily price; or there may have been some sizable unidentified non-cash transactions, such as the exchange of one type of security for another during take-overs or the conversion of convertible

debentures into shares. The discrepancies are spread among the quarters in proportion to the size of the price change each quarter.

There has been only limited use of such interpolation in making estimates for these tables, but there has been considerable use of the same basic method to extrapolate from a bench-mark, without the check imposed by another bench-mark. In such cases, one is said to be using the *perpetual inventory method*.

#### Notes to individual lines

While separate asset details are given for long-term and general business, it is not always possible, or appropriate, to divide the estimates for liabilities in the same way. Thus, the issued capital of composite companies cannot really be attributed to either type of fund. It is not known how far borrowing in foreign currency or in sterling from UK banks has been for long-term or for general funds.

#### Line 1 Borrowing from UK banks in sterling

Since 1975, the banks have reported their lending to 'insurance enterprises' (insurance companies, pension funds and property unit trusts), while pension funds and property unit trusts report their borrowing from banks, permitting estimates of bank lending to insurance companies to be made by residual. No estimates are possible for earlier years.

#### Lines 2 and 3 Borrowing from UK banks and from overseas residents in foreign currency

Foreign currency borrowing for investment in foreign currency securities was first permitted in May 1963. Statistics on the flows since then are available from exchange control sources, and estimates of the total outstanding have been produced by perpetual inventory, taking account of changes in exchange rates.

#### Line 4 Policyholders' funds

In the UK national accounts life assurance funds are considered to be the property of the personal sector. Thus the net inflow into long-term funds—premiums, rent, dividends and interest less claims and administrative expenses—is counted as part of personal saving in the accounts, and is matched by an increase in claims on insurance companies. The companies' liabilities to policyholders were calculated by taking figures for UK companies' long-term funds from the aggregated regulatory returns [1] (which include the whole of insurance company groups, including branches and subsidiaries abroad), deducting the funds of their branches and subsidiaries abroad and adding funds of overseas companies' branches and subsidiaries operating in this country. Figures for UK companies consist of the series for long-term funds (ordinary life plus capital redemption funds before 1969) plus industrial life funds and those of collecting societies. For earlier years, the life funds of UK companies' subsidiaries operating in the larger Commonwealth countries were obtained from overseas insurance statistics, but less information was available for more recent years. However, the fund to premium ratio for the earlier years was pretty constant, and was applied to figures for premiums from overseas in later years (from the regulatory returns) to estimate the funds of UK branches and subsidiaries abroad. Figures for funds of overseas branches and subsidiaries in the United Kingdom were provided by the Life Offices Association. The transactions figures are estimates made by the Central Statistical Office (CSO) for national accounts. Quarterly levels for 1963-74 have been obtained from annual levels and quarterly transactions, dividing the residual differences between the changes in annual levels and the annual transactions by four to get quarterly figures. For years subsequent to 1974, figures from regulatory returns have not been available, and provisional estimates have been made by perpetual inventory, using the CSO's transactions figures and rough adjustments for valuation changes. These should be treated with caution.

#### Lines 5, 6 and 7 Listed issued capital

The figures of amounts outstanding are mainly based on stock exchange statistics of listed securities at market prices, supplemented by values for certain individual companies as calculated from numbers of shares and prices. The stock exchange figures are available only once a year for years before 1972, but quarterly thereafter; earlier quarterly figures were obtained by interpolation. The stock exchange statistics are compiled from closing prices at the bottom of the range, whereas mid-market closing prices are really needed; it was not thought that reliable adjustments could be made. Figures for transactions are from the Bank's new issues series.

#### Line 8 Unlisted ordinary share capital

There is no good source for these figures, and the estimates which are provided must be regarded as particularly crude. First, the book value of total 'capital paid-up' was obtained from the Department of Trade's annual aggregation of the supervisory returns. From this was deducted the nominal

value of listed capital, from stock exchange statistics, to give the book value of unlisted capital. The market to nominal value ratio for listed ordinary shares was then applied to this book value to estimate the market value. No figures from regulatory returns have been available since 1974; the later figures in the tables are mere projections. The annual changes in book values have generally been taken to be transactions, and have been spread equally over the quarters of each year. (It has been assumed that there are no unlisted debentures or loan stock.)

#### Lines 10 and 33 Land and buildings in the United Kingdom and property overseas

Holdings of property were not reported at market value until 1976. Earlier figures have been estimated by perpetual inventory and must be regarded as crude, for property is a very heterogeneous asset, and there are few available indicators of changes in prices. These estimates make use of indices for property bonds and, for some earlier years, property unit trust prices. Use was also made of ratios of market values to book values used by Cambridge University in their work. [2] At end-December 1976, the companies were asked to exclude their overseas property from other reported property holdings. Two figures are therefore shown at this date; the first includes overseas property, while the second gives domestic holdings only. The figures for overseas property since that date have been estimated.

#### Line 11 Cash and balances with UK banks

Certificates of deposit (lines 12 and 13) were included here, indistinguishably, until end-1972, but the amounts must have been very small.

#### Lines 12 and 13 Negotiable certificates of deposit

See line 11 above.

#### Lines 14 and 15 Building society deposits and deposits with other financial institutions

Figures for insurance companies' deposits with building societies are from the building societies' returns. A breakdown between long-term and general business is not available, however, and the total is allocated to long-term business, for most of the deposits are probably in connexion with 'linked' life contracts invested in building societies. These figures have been deducted from deposits with *other financial institutions* reported by insurance companies to give line 15. *Other financial institutions* are as defined for the flow of funds accounts.

#### Line 17 Local authority bills and temporary money

All lending to local authorities with an original maturity of less than one year, except for securities. Holdings are reported quarterly.

#### Line 18 Other UK short-term assets (net)

Includes balances with stockbrokers, balances due on securities bought and sold for future settlement, commercial bills and letters of credit.

#### Line 19 Short-term assets overseas (net)

Includes bank deposits abroad and overseas certificates of deposit.

#### Line 20 Government stocks

Before end-1976, the insurance companies reported these at nominal value, and it was necessary to estimate market values. The nominal values were reported in five maturity bands, and the figures for each of these were converted to market prices by specially constructed price indices, weighted by the amounts of each individual stock in issue. Quarterly holdings were estimated by interpolation. In July 1967, when steel was renationalised, £32 million of steel companies' securities were sold to the authorities by the insurance companies in the two weeks before vesting day; these transactions are classified as sales of government stocks. Another £106 million were converted into 6½% Treasury Stock 1971. Exchanges of securities are not included in the cash transactions, and there is therefore a special increase of £138 million in revaluations etc, in the third quarter of 1967, with corresponding falls elsewhere, mainly in line 29.

#### Lines 21 and 34 Local authority negotiable bonds and other listed securities, and long-term loans to local authorities

The insurance companies report combined figures for their holdings of local authority listed securities and long-term loans, annually. These totals were nominal values, until end-1976, and market values thereafter. The breakdown between securities and loans was estimated with reference to the Cambridge work (for the earlier years) and the breakdown reported by the nearest equivalent group of institutions—the private sector pension funds. For loans, the annual changes in end-year figures thus calculated were divided by four to give quarterly transactions and levels. For listed securities, the annual estimates, which were nominal values, were converted to market values with the use of nominal to market ratios for outstanding listed local authority securities calculated from stock exchange data. Quarterly transactions in

[1] Detailed figures for years up to 1970 were published by the Department of Trade in *Insurance Business Statistics*, while summary figures up to 1974 are given in the CSO's *Annual Abstract of Statistics* (both HM Stationery Office).

[2] J. R. S. Revell, *The Wealth of the Nation* (Cambridge: University Press, 1967) and A. R. Roe, *The Financial Interdependence of the Economy 1957-1966* (London: Chapman & Hall, 1971).

securities were the residuals for the combined reported transactions in loans and securities after deducting the estimates made for loans. These, used in conjunction with price indices (movements in prices of government stocks in the earlier years and in nominal to market ratios in later years), permitted the calculation of quarterly holdings by interpolation.

*Lines 22 and 23 UK loan capital*

Figures for end-1973 to end-1976 were calculated by perpetual inventory, backwards from the market values reported at end-1976. The method was not used for earlier years, because estimates were not available for what were probably sizable acquisitions of debentures in exchange for ordinary shares during take-overs and mergers in some years—these acquisitions will not have been included in the quarterly reported transactions figures. For the earlier years, rough ratios had to be estimated to convert the reported book values to market values; some of these were based on the Cambridge work. Quarterly holdings were obtained by interpolation. Listed and unlisted loan capital were not reported separately until end-1976. The earlier figures for long-term funds are estimates based on the end-1976 division between listed and unlisted stocks and the Cambridge work, while general funds reported only small holdings of unlisted stocks at end-1976, and no estimates have been made for earlier years.

The insurance companies do not report transactions in UK securities separately from those in overseas securities. Annual changes in book values of overseas debentures were taken as estimates of transactions; these were spread equally over the quarters and then deducted from total transactions in debentures to provide figures of those in UK debentures by residual.

*Lines 24, 25 and 28 UK and overseas preference shares*

The methods used were similar to those for UK loan capital.

*Line 27 Overseas company loan capital*

The market values reported at end-1976 were taken back, by perpetual inventory, using appropriate price indices and figures for transactions (estimated as changes in book values), until a point where the market values were little different from book values. Reported book values were used for the earlier years.

*Lines 29, 30 and 31 UK and overseas ordinary and deferred shares*

The methods used were similar to those for UK loan capital, but rather more information on the market values of ordinary shares was available. First, the Diamond Commission made special estimates of holdings of UK-listed shares at market prices for each of the years 1969 to 1973; secondly, Cambridge had made special estimates for earlier years based on share ownership surveys; and, thirdly, some of the larger companies have for some years provided both book and market values of their shareholdings in their annual accounts. In the case of overseas equities, since about three quarters of overseas shares held were US shares, use was made of information given in *Best's Insurance Report*, from which ratios of 'authorised value' to cost could be calculated for a sample of UK companies, and these ratios were thought to be approximately equivalent to ratios of market values to book values. US share price values were also the main ones used for perpetual inventory and interpolation. The fall in holdings of steel securities in 1967 (see notes to line 20) was taken into account. The breakdown between listed and unlisted shares, not available before end-1976, has been estimated.

*Line 32 Unit trust units*

These were not reported separately before 1969, but the amounts involved before then were probably small. The perpetual inventory method was used from end-1969 to end-1973, using the prices of ordinary shares. Market values (at bid price) were reported for end-1976; these were taken back by perpetual inventory to end-1973. There is a big break in the series at end-1973, when non-BIA members, which do most of the business in equity-linked insurance, began to contribute to the series.