

National balance sheets: a new analytical tool

1 General introduction

The case for sector balance sheets

For many years the Bank have been providing in the *Bulletin* a quarterly analysis of U.K. flow of funds statistics; and recently they have published a handbook which describes these accounts, their relationship to the national income accounts and their uses, such as in short-term forecasting.¹ The flow of funds accounts provide a convenient framework for the analysis of cash flows and for helping to identify some of the connections between various types of transactions. By themselves, however, they are not sufficient for a satisfactory understanding of the behaviour of the various sectors of the economy.

The reasons for cash flows between the sectors often cannot be appreciated without analysing the influences causing shifts in the desired composition of their balance sheets. Any flow which involves the purchase or sale of assets, whether real assets such as houses, machinery and stocks of goods, or financial assets such as securities and bank deposits, will affect the composition of the balance sheets of each of the parties to the transaction. Indeed, a transaction is frequently undertaken to change the owner's stock of a certain type of asset, perhaps in response to some such consideration as a change in the value of that asset, and needs to be interpreted in that light.

The interpretation of the transactions of a particular sector in terms of its balance sheet, therefore, requires that data on its cash transactions should be supplemented with figures of the levels of its assets and liabilities. For example, the cash transactions of a group of financial institutions in any selected period will depend not only on the amount of new funds accruing to them in that period, and on influences such as movements (either actual or expected) in the relative yields of various types of investment outlets, but also on the pattern of the aggregate portfolio of assets they have already accumulated and the liabilities they have incurred.

If the behaviour of all the principal sectors of the economy and the working of the markets in each of the main types of assets are to be studied properly, estimates of the levels of assets and liabilities must be obtained for every sector, covering both real and financial assets. Such comprehensive sector balance sheets are commonly known as 'national balance sheets'. These balance sheets should, as far as possible, be integrated with the figures of cash flows in the flow of funds accounts, by dividing the changes in levels between cash flows, changes in market values and other changes. The latter will include exchanges of securities (*e.g.* debentures for equities during takeovers), and changes in the composition of a sector (*e.g.* a company moving from the private to the public sector on nationalisation or an institution becoming recognised as a bank for statistical purposes).

¹ *An introduction to flow of funds accounting: 1952-70.* Details are given at the front of this *Bulletin*.

General problems of compilation

1 Valuation One problem which immediately arises in the compilation of sector balance sheets is the question of how assets should be valued. It would be useful, for purposes of analysis, to have the valuations on which the owners base their decisions. If, however, the balance sheets of all the units are to be combined into sectoral and national balance sheets it is clearly best to value the different holdings of a particular type of asset consistently. Valuation at current market prices is the most practical method for purposes of compilation. It is clearly appropriate for holdings of assets, as it measures their realisable value. Market values have the big advantage that if they are adopted throughout a set of national balance sheet accounts the total market value of, say, government stocks held by all sectors is the same as the total market value of the central government's stock liabilities. This will allow the holdings of one sector (like the personal sector) to be obtained as a residual, if they cannot be obtained directly. For issued capital in the form of ordinary shares, the case for market values is less clear. From a behavioural point of view it can be argued that nominal or book values are sometimes more pertinent, or that the value of a company's ordinary shares should be measured as the difference between the value of its total assets (including physical assets) and that of its other liabilities. But market values are at least to some extent relevant; for one thing they come into the reckoning when a takeover is intended, and for another a company considers the state of the market in its shares when contemplating a capital issue. With liabilities such as loan stock the use of nominal values would imply that companies ignore the redemption date, which is unlikely, so market values are again preferred.

2 Consolidation Another general problem in compiling and presenting balance sheet figures is how far to consolidate the transactions of individual units within a statistical group or sector. It is possible to provide figures for a group of institutions from which all liabilities and claims resulting from transactions within the group (intra-group assets) have been omitted, or to aggregate the full balance sheets of independent statistical units. For purposes of analysing behaviour, it may be argued that, for example, an individual institution is more likely to base a decision on its total short-term liabilities in relation to other items in its balance sheet, than on the extent to which such liabilities are owed to other similar institutions. The best solution is to present the data in unconsolidated form, but with intra-group assets shown separately so that the figures can be analysed in either way.

Present information

A certain amount of information on outstanding assets and liabilities has been published already. Among the regular series available, some statistics of physical assets are given in the annual National Income Blue Books,¹ while figures of U.K. holdings of overseas assets and liabilities are presented annually in this *Bulletin* and in the Balance of Payments Pink Books.² Quarterly or annual figures for the banks, investment and unit trusts are provided in the *Bulletin*, and for these and most other financial institutions in *Financial*

¹ The most recent were in Tables 63 to 66 of *National Income and Expenditure 1972*, published by Her Majesty's Stationery Office.

² The most recent estimates, for end-1971, were in the *June Bulletin*, pages 213-19, and *United Kingdom Balance of Payments 1972*, published by H.M.S.O.

*Statistics.*¹ Information on the distribution by sector of the national debt is given each year in the March *Bulletin*. This material is, however, far from comprehensive, it is not in standardised form, and assets are valued in different ways – nominal, book or market values.

In addition to these regularly published statistics, comprehensive national balance sheet figures covering all sectors of the U.K. economy have been compiled for the years 1957–66 by the Department of Applied Economics at Cambridge University as a special project financed by, among others, the Central Statistical Office and the Bank. The results of this pioneering work were published in *The Wealth of the Nation* by Jack Revell,² and *The Financial Interdependence of the Economy 1957–1966* by A. R. Roe.³ An article giving a general description of the D.A.E. figures and discussing some of the main trends appeared in "National balance sheets and national accounting – a progress report".⁴ The estimates are not, however, fully consistent with the flow of funds figures, and they are not being continued by the Department of Applied Economics. It is intended, ultimately, to compile complete national balance sheets officially, integrating them with the existing national income and flow of funds accounts, but it will be some time before figures become available for all sectors.

Work at the Bank

In the meantime, it is possible to compile some useful statistics from the official series already available. The regular series of statistics of assets and liabilities noted above generally go back at least to 1963, and, although in a number of cases assets are at book value, it is possible to make reasonable estimates of market values. Many of the series are available only annually, but, by interpolation (with the use of quarterly figures of cash transactions and information on such factors as price movements) quarterly balance sheet statistics can be constructed. Production of such series should facilitate studies of the behaviour of particular groups of institutions by econometricians and others.

The Bank therefore decided to make a start with the statistics for some groups of financial institutions. In compiling these figures the aim is to provide tables giving not only levels of assets and liabilities, but also cash flows and details of other influences which bring about changes in the figures. The first fruits of this work are now available in the form of statistics for one of the most important constituent groups among financial institutions – the deposit banks – covering the period 1963–70.

2 Figures for deposit banks

A considerable amount of official information relating to the financial assets and liabilities of the banking sector has, of course, already been made available. Figures for the whole sector, sub-divided into deposit banks; National Giro; accepting houses, overseas banks and other banks; and discount houses, are given in tables such as Table 11 in the annex to this *Bulletin*.⁵ The asset and liability categories in this table are not, however, in the appropriate detail to be related satisfactorily to the headings used in the flow of funds,

¹ Published by H.M.S.O.

² Cambridge University Press, 1967.

³ No. 11 in the series "A programme for Growth", Chapman and Hall, November 1971.

⁴ *Economic Trends*, May 1971, published by H.M.S.O.

⁵ Figures are available from March 1963 in the Bank of England *Statistical Abstract* (covering 1963–69) and in earlier issues of the *Bulletin*.

and the quarterly flows cannot all be easily obtained from them. The figures are also limited to claims on, and liabilities to, other sectors, whereas the intra-bank items, which are omitted, may be considered relevant for any behavioural study. Furthermore, the assets are at book, rather than market, value. Lastly, there are no figures for issued capital liabilities.

Figures which include intra-bank items have for many years been published for the main groups of deposit banks, but for mid-months and not end-calendar quarters (which makes it difficult to relate them to the flow of funds accounts). Moreover, until recently these monthly figures did not cover all the deposit banks, as the series for 'other' deposit banks – see Table 8 (5) of the annex – did not begin until the last quarter of 1971. It was therefore thought useful for the Bank to start by tackling the compilation of integrated stock and flow figures for the deposit banks.

The deposit banks were originally distinguished in the banking sector statistics as being those banks whose business was mainly domestic. Their liquidity behaviour also made the grouping a useful one, for, although they by no means all observed liquidity ratios, their total figures were dominated by those of the London clearing banks, which until recently observed a conventional minimum liquidity ratio of 28%.¹ However, the introduction in 1971 of uniform reserve ratios for all U.K. banks and the dismantling of certain agreements covering the London and Scottish clearing banks' borrowing and lending rates is leading to structural changes in the banking system which are making such a sub-division of the banking sector less meaningful. The deposit banks as a group are no longer strongly influenced by liquidity ratio conventions and interest rate agreements and are now on an equal footing in these respects with the rest – the accepting houses, overseas banks and other banks. Certain results are already apparent; in varying degrees some of the clearing banks and their subsidiary banks are beginning to act as more integrated units; and the clearing banks are to an increasing extent engaging, in their own names, in wider fields than before, for example, in term lending and in the parallel sterling and euro-dollar money markets. In the annex to this *Bulletin* (see, for example, Table 8) and elsewhere, the classification of the banks' assets and liabilities has therefore been changed and extended, and the categories necessary for analysing bank behaviour in the future will be different from those needed when studying the past. Thus the tables for the deposit banks in this article, which cover the period 1963–70, are essentially historical in character. Future tables of this sort are likely to provide different sub-divisions of banks (or simply give the banking system as a whole) and will certainly show a different classification of assets.

Some research into the behaviour of deposit banks, using a portfolio adjustment model, has already been carried out in the Economic Section of the Bank, and a paper giving the methods and results was presented at a conference on modelling of the U.K. economy held at the London Business School in July 1972.²

¹ The Scottish clearing banks, the second largest constituent of the group, although not formally observing this particular convention, published a common liquidity ratio, and the figure of 28% did carry some weight with them.

² "Some econometric models of deposit banks' portfolio behaviour in the United Kingdom: 1963–70" by W. R. White. This paper is to be published in the proceedings of the conference.

Deposit banks: integrated balance sheet and flow accounts

£ millions

		1963						
		End- Mar.	Cash flow	End- June	Cash flow	End- Sept.	Cash flow	End- Dec.
Liabilities and share capital								
Deposits:								
Current and deposit accounts:								
Overseas sector	1	339	+ 24	363	+ 4	367	+ 21	388
Other sectors (excluding banking sector)	2	7,795	+243	8,038	+239	8,277	+419	8,696
	3	8,134	+267	8,401	+243	8,644	+440	9,084
<i>less</i> 60% of net transit items	4	- 256	+ 23	- 233	- 84	- 317	- 12	- 329
Net deposits	5	7,878	+290	8,168	+159	8,327	+428	8,755
Banking sector deposits	6	119	+ 17	136	- 11	125	+ 20	145
Notes outstanding	7	134	+ 6	140	- 5	135	+ 2	137
Issued capital:								
Ordinary shares	8	932	—	888	—	873	+ 1	895
Fixed interest securities	9	—	—	—	—	—	—	—
Total financial liabilities and share capital		9,063	+313	9,332	+143	9,460	+451	9,932
Assets								
Notes and coin	11	416	+ 28	444	+ 73	517	+136	653
Balances with Bank of England	12	271	+101	372	- 99	273	- 29	244
Balances with other U.K. banks	13	28	+ 10	38	- 10	28	+ 14	42
Negotiable certificates of deposit	14	—	—	—	—	—	—	—
Call money with:								
U.K. banks	15	69	+ 11	80	- 8	72	- 5	67
Discount houses	16	670	- 73	597	+ 52	649	+149	798
Overseas sector	17	47	- 4	43	+ 2	45	- 1	44
Other sectors	18	132	+ 11	143	- 10	133	- 2	131
Tax reserve certificates								
Bills discounted:	19	—	—	—	—	—	—	—
Treasury bills	20	605	+240	845	+138	983	+ 50	1,033
Overseas bills	21	24	+ 2	26	—	26	- 2	24
Local authority bills	22	—	—	—	—	—	—	—
Other commercial bills	23	285	+ 3	288	- 7	281	+ 18	299
Special Deposits with Bank of England	24	—	—	—	—	—	—	—
Investments:								
Government stocks	25	1,502	- 32	1,485	+ 48	1,550	+ 50	1,580
Local authority debt	26	102	- 3	99	- 1	98	- 4	94
Other	27	192	+ 2	194	+ 2	196	+ 5	201
Advances to:								
U.K. banks	28	10	+ 11	21	- 7	14	+ 5	19
Overseas sector	29	100	- 3	97	—	97	+ 1	98
Northern Ireland central government	30	—	—	—	—	—	+ 3	3
Local authorities	31	116	- 13	103	+ 11	114	+ 28	142
Other sectors	32	4,328	+135	4,463	-109	4,354	+ 53	4,407
<i>plus</i> 40% of net transit items	33	170	- 15	155	+ 56	211	+ 9	220
Total financial assets		9,067	+411	9,493	+131	9,641	+478	10,099
Net financial assets		+ 4	+ 98	+ 161	- 12	+ 181	+ 27	+ 167
Cash flows:								
Transactions with rest of banking sector	36	—	+ 43	—	- 61	—	+114	—
Transactions with other sectors	37	—	+ 55	—	+ 49	—	- 87	—

1964								1965								Line
Cash flow	End-Mar.	Cash flow	End-June	Cash flow	End-Sept.	Cash flow	End-Dec.	Cash flow	End-Mar.	Cash flow	End-June	Cash flow	End-Sept.	Cash flow	End-Dec.	
- 6	382	- 22	360	- 2	358	+ 9	367	- 18	349	+ 19	368	- 10	358	+ 39	397	1
-251	8,445	+141	8,586	+211	8,797	+267	9,064	-178	8,886	+224	9,110	+ 86	9,196	+436	9,632	2
-257	8,827	+119	8,946	+209	9,155	+276	9,431	-196	9,235	+243	9,478	+ 76	9,554	+475	10,029	3
- 68	397	+ 77	320	+ 8	312	-106	418	+ 16	402	+ 54	348	+ 7	341	-111	452	4
-325	8,430	+196	8,626	+217	8,843	+170	9,013	-180	8,833	+297	9,130	+ 83	9,213	+364	9,577	5
+ 10	155	+ 6	161	- 19	142	+ 75	217	- 44	173	+ 31	204	- 24	180	+ 75	255	6
+ 1	138	+ 1	139	- 6	133	+ 5	138	- 2	136	+ 5	141	- 5	136	+ 5	141	7
+ 1	841	—	757	+ 10	886	—	909	—	887	—	907	—	934	—	1,069	8
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9
-313	9,564	+203	9,683	+202	10,004	+250	10,277	-226	10,029	+333	10,382	+ 54	10,463	+444	11,042	10
- 98	555	+ 37	592	- 5	587	+ 14	601	- 28	573	+ 39	612	- 69	543	+ 59	602	11
+ 19	263	+ 37	300	- 30	270	+ 58	328	- 51	277	+ 45	322	- 44	278	+117	395	12
- 7	35	+ 7	42	—	42	+ 10	52	+ 3	55	+ 8	63	- 4	59	+ 20	79	13
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14
+ 19	86	- 17	69	- 4	65	+ 11	76	+ 18	94	- 1	93	- 10	83	+ 10	93	15
-154	644	- 51	593	+ 51	644	+163	807	- 59	748	+ 23	771	+ 47	818	+177	995	16
- 2	42	—	42	- 2	40	+ 12	52	+ 4	56	- 1	55	- 1	54	—	54	17
- 12	119	- 1	118	- 5	113	- 11	102	+ 23	125	- 2	123	+ 12	135	+ 15	150	18
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
-350	683	+ 93	776	+131	907	-114	793	-363	430	+208	638	+183	821	+ 4	825	20
+ 7	31	+ 4	35	- 3	32	+ 1	33	—	33	+ 4	37	+ 4	41	—	41	21
+ 1	1	- 1	—	—	—	+ 2	2	- 1	1	—	1	+ 1	2	- 1	1	22
+ 36	335	+ 10	345	- 14	331	+ 57	388	+ 12	400	- 4	396	+ 25	421	- 9	412	23
—	—	—	—	—	—	—	—	—	—	+ 92	92	+ 2	94	+ 2	96	24
- 95	1,460	+ 10	1,445	- 4	1,437	- 90	1,327	-132	1,197	- 1	1,187	+ 40	1,247	+105	1,350	25
- 1	93	- 2	91	—	91	- 2	89	+ 2	91	- 1	90	—	90	+ 2	92	26
—	205	+ 9	214	+ 6	221	—	222	+ 3	225	+ 9	237	+ 3	241	+ 4	247	27
+ 9	28	- 17	11	+ 18	29	- 19	10	+ 13	23	- 26	3	+ 22	19	- 14	5	28
+ 4	102	+ 4	106	+ 4	110	+ 2	112	+ 8	120	+ 2	122	- 2	120	- 6	114	29
- 2	1	- 1	—	+ 1	1	+ 5	6	- 6	—	—	—	+ 1	1	+ 5	6	30
- 7	135	- 23	112	+ 11	123	+ 36	159	+ 25	184	- 71	113	- 1	112	- 3	109	31
+266	4,673	+192	4,865	+ 41	4,906	+ 49	4,955	+328	5,283	+114	5,397	-200	5,197	- 54	5,143	32
+ 45	265	- 51	214	- 6	208	+ 70	278	- 10	268	- 36	232	- 4	228	+ 74	302	33
-322	9,756	+239	9,970	+190	10,157	+254	10,392	-211	10,183	+401	10,578	+ 5	10,604	+507	11,111	34
- 9	+ 192	+ 36	+ 287	- 12	+ 153	+ 4	+ 115	+ 15	+ 154	+ 68	+ 196	- 49	+ 141	+ 63	+ 69	35
-124	—	- 47	+ 54	—	+148	—	- 32	—	+110	—	+ 37	—	+237	—	—	36
+115	—	+ 83	- 66	—	-144	—	+ 47	—	- 42	—	- 86	—	-174	—	—	37

Deposit banks: integrated balance sheet and flow accounts *continued*

£ millions

Line	1965				1966					
	End- Dec.	Cash flow	End- Mar.	Cash flow	End- June	Cash flow	End- Sept.	Cash flow	End- Dec.	
Liabilities and share capital										
Deposits:										
Current and deposit accounts:										
Overseas sector	1	397	- 3	394	- 16	378	- 38	340	+ 12	352
Other sectors (excluding banking sector)	2	9,632	- 41	9,591	- 2	9,589	+112	9,701	+ 99	9,800
	3	10,029	- 44	9,985	- 18	9,967	+ 74	10,041	+111	10,152
less 60% of net transit items	4	- 452	- 8	- 460	+ 45	- 415	- 16	- 431	+ 63	- 368
Net deposits	5	9,577	- 52	9,525	+ 27	9,552	+ 58	9,610	+174	9,784
Banking sector deposits	6	255	- 12	243	- 30	213	- 1	212	+ 55	267
Notes outstanding	7	141	+ 2	143	+ 5	148	- 8	140	+ 4	144
Issued capital:										
Ordinary shares	8	1,069	—	1,062	—	1,073	—	959	—	994
Fixed interest securities	9	—	—	—	—	—	—	—	—	—
Total financial liabilities and share capital	10	11,042	- 62	10,973	+ 2	10,986	+ 49	10,921	+233	11,189
Assets										
Notes and coin	11	602	- 51	551	+ 38	589	- 65	524	+163	687
Balances with Bank of England	12	395	-102	293	+ 94	387	- 91	296	+ 68	364
Balances with other U.K. banks	13	79	- 13	66	+ 4	70	- 8	62	+ 18	80
Negotiable certificates of deposit	14	—	—	—	—	—	—	—	—	—
Call money with:										
U.K. banks	15	93	+ 12	105	- 7	98	- 8	90	+ 27	117
Discount houses	16	995	-107	888	-131	757	+176	933	+151	1,084
Overseas sector	17	54	- 2	52	- 6	46	+ 17	63	- 6	57
Other sectors	18	150	- 10	140	- 6	134	+ 24	158	+ 3	161
Tax reserve certificates	19	—	—	—	+ 7	7	+ 48	55	+ 30	85
Bills discounted:										
Treasury bills	20	825	-154	671	+105	776	+ 20	796	-101	695
Overseas bills	21	41	- 2	39	- 5	34	- 2	32	+ 5	37
Local authority bills	22	1	—	1	- 1	—	—	—	+ 14	14
Other commercial bills	23	412	- 23	389	+ 4	393	+ 13	406	+ 1	407
Special Deposits with Bank of England	24	96	+ 1	97	+ 1	98	+100	198	—	198
Investments:										
Government stocks	25	1,350	- 73	1,277	+ 3	1,273	+ 2	1,274	+100	1,395
Local authority debt	26	92	+ 4	96	- 1	95	- 2	93	+ 1	94
Other	27	247	- 7	257	+ 14	274	+ 5	279	- 3	272
Advances to:										
U.K. banks	28	5	+ 29	34	- 11	23	+ 42	65	- 36	29
Overseas sector	29	114	+ 16	130	+ 2	132	+ 10	142	+ 2	144
Northern Ireland central government	30	6	- 5	1	+ 3	4	- 1	3	+ 3	6
Local authorities	31	109	+ 13	122	—	122	+ 27	149	- 24	125
Other sectors	32	5,143	+387	5,530	- 30	5,500	-241	5,259	-123	5,136
plus 40% of net transit items	33	302	+ 5	307	- 30	277	+ 10	287	- 42	245
Total financial assets	34	11,111	- 82	11,046	+ 47	11,089	+ 76	11,164	+251	11,432
Net financial assets	35	+ 69	- 20	+ 73	+ 45	+ 103	+ 27	+ 243	+ 18	+ 243
Cash flows:										
Transactions with rest of banking sector	36	—	-168	—	- 20	—	+212	—	+173	—
Transactions with other sectors	37	—	+148	—	+ 65	—	-185	—	-155	—

1967								1968								Line
Cash flow	End-Mar.	Cash flow	End-June	Cash flow	End-Sept.	Cash flow	End-Dec.	Cash flow	End-Mar.	Cash flow	End-June	Cash flow	End-Sept.	Cash flow	End-Dec.	
+ 3	355	+ 33	388	- 9	379	- 9	385	- 2	383	+ 27	410	+ 28	438	+ 1	439	1
- 26	9,774	+153	9,927	+233	10,160	+503	10,663	-349	10,287	+258	10,528	+322	10,838	+377	11,215	2
- 23	10,129	+186	10,315	+224	10,539	+494	11,048	-351	10,670	+285	10,938	+350	11,276	+378	11,654	3
-150	518	+ 72	446	+124	322	-101	423	+ 45	378	- 20	398	-105	503	+ 37	466	4
-173	9,611	+258	9,869	+348	10,217	+393	10,625	-306	10,292	+265	10,540	+245	10,773	+415	11,188	5
- 7	260	+ 11	271	- 56	215	+ 36	251	+ 39	290	+ 17	307	+ 4	311	+ 44	355	6
+ 4	148	+ 5	153	- 8	145	+ 6	151	+ 4	155	+ 7	162	- 8	154	+ 8	162	7
—	929	—	1,004	—	1,098	—	1,236	—	1,295	—	1,366	—	1,338	—	1,363	8
—	—	—	—	—	—	—	—	—	—	—	1	—	14	—	56	9
-176	10,948	+274	11,297	+284	11,675	+435	12,263	-263	12,032	+289	12,376	+241	12,590	+467	13,124	10
-133	554	- 11	543	+ 34	577	+144	721	-143	578	+ 26	604	+ 99	703	+161	864	11
- 63	301	+149	450	-163	287	+ 90	377	- 74	303	+137	440	-122	318	+ 26	344	12
- 12	68	- 3	65	- 20	45	+ 38	83	- 1	82	—	82	- 8	33	+ 19	52	13
—	—	—	—	—	—	—	—	—	—	—	—	—	—	+ 5	5	14
+ 2	119	+ 23	142	- 28	114	+ 15	129	+ 40	169	+ 33	202	- 7	195	- 40	155	15
-125	959	-242	717	+325	1,042	+155	1,197	-293	904	- 49	855	+294	1,149	+ 93	1,242	16
+ 4	61	- 5	56	+ 13	69	- 15	64	+ 13	77	- 12	65	+ 5	70	+ 19	89	17
- 28	133	- 36	97	+ 13	110	+ 34	144	+ 12	156	- 15	141	+ 54	195	- 36	159	18
- 17	68	+ 11	79	- 5	74	+ 1	75	- 13	62	—	62	+ 3	65	+ 2	67	19
-270	425	+286	711	+ 19	730	-176	554	-221	333	+152	485	+ 58	543	+ 10	553	20
+ 10	47	- 4	43	- 2	41	—	41	+ 10	51	+ 2	53	+ 7	60	+ 3	63	21
+ 13	27	- 26	1	+ 13	14	- 4	10	+ 15	25	+ 1	26	- 20	6	+ 28	34	22
- 1	406	+ 51	457	- 25	432	- 4	428	+ 27	455	+ 11	466	- 31	435	- 1	434	23
- 1	197	+ 5	202	+ 6	208	+ 6	214	—	214	+ 2	216	+ 6	222	+ 4	226	24
+ 92	1,506	+ 83	1,586	+ 29	1,586	+ 45	1,618	- 51	1,546	- 53	1,503	+104	1,627	+ 52	1,665	25
+ 3	97	+ 3	100	- 10	90	- 8	82	+ 4	86	+ 19	105	- 8	97	- 11	86	26
+ 4	277	+ 1	278	+ 22	290	+ 7	304	+ 4	308	+ 10	319	+ 8	327	+ 7	395	27
+ 32	61	- 46	15	+ 2	17	+ 13	30	+ 19	49	- 33	16	+ 41	98	- 7	91	28
+ 24	168	+ 29	197	+ 23	220	+ 2	222	+ 22	244	+ 35	279	+ 30	309	+ 17	326	29
- 6	—	+ 2	2	+ 1	3	+ 1	4	- 4	—	+ 3	3	+ 1	4	—	4	30
- 4	121	- 24	97	+ 57	154	+ 61	215	+ 47	235	- 40	178	- 21	145	- 25	120	31
+175	5,311	+ 43	5,354	+ 44	5,398	+ 48	5,446	+257	5,703	+ 87	5,790	-336	5,454	+153	5,607	32
+101	346	- 49	297	- 83	214	+ 68	282	- 30	252	+ 14	266	+ 70	336	- 26	310	33
-200	11,252	+240	11,489	+265	11,715	+521	12,240	-360	11,832	+330	12,156	+227	12,391	+453	12,891	34
- 24	+ 304	- 34	+ 192	- 19	+ 40	+ 86	- 23	- 97	- 200	+ 41	- 220	- 14	- 199	- 14	- 233	35
-160		-125		+178		+281		-348		+ 73		+200		+ 56		36
+136		+ 91		-197		-195		+251		- 32		-214		- 70		37

Deposit banks: integrated balance sheet and flow accounts *concluded*

£ millions		1968				1969				
		End- Dec.	Cash flow	End- Mar.	Cash flow	End- June	Cash flow	End- Sept.	Cash flow	End- Dec.
Liabilities and share capital		Line								
Deposits:										
Current and deposit accounts:										
Overseas sector	1	439	- 37	402	+ 23	425	- 46	379	+ 42	421
Other sectors (excluding banking sector)	2	11,215	-371	10,844	-122	10,722	- 2	10,720	+553	11,273
	3	11,654	-408	11,246	- 99	11,147	- 48	11,099	+595	11,694
less 60% of net transit items	4	466	-123	589	+ 37	552	+ 85	467	- 80	547
Net deposits	5	11,188	-531	10,657	- 62	10,595	+ 37	10,632	+515	11,147
Banking sector deposits	6	355	- 7	348	+ 34	382	- 22	360	- 3	357
Notes outstanding	7	162	+ 3	165	+ 3	168	- 9	159	+ 10	169
Issued capital:										
Ordinary shares	8	1,363	—	1,245	—	1,068	—	1,194	—	1,105
Fixed interest securities	9	56	—	51	—	47	—	46	—	43
Total financial liabilities and share capital	10	13,124	-535	12,466	- 25	12,260	+ 6	12,391	+522	12,821
Assets										
Notes and coin	11	864	-151	713	+ 47	760	+ 29	789	+133	922
Balances with Bank of England	12	344	- 17	327	- 26	301	- 80	221	+ 7	228
Balances with other U.K. banks	13	52	- 15	37	- 1	36	- 14	22	+ 21	43
Negotiable certificates of deposit	14	5	+ 11	16	—	16	- 11	5	+ 10	15
Call money with:										
U.K. banks	15	155	+ 30	185	+ 26	211	+ 4	215	- 20	195
Discount houses	16	1,242	-257	985	+ 69	1,054	- 11	1,043	+347	1,390
Overseas sector	17	89	—	83	+ 7	90	- 19	71	+ 9	80
Other sectors	18	159	- 8	151	+ 16	167	- 24	143	+ 49	192
Tax reserve certificates	19	67	+ 3	70	+ 3	73	+ 6	79	+ 1	80
Bills discounted:										
Treasury bills	20	553	-256	297	-105	192	+ 51	243	+141	384
Overseas bills	21	63	+ 9	72	+ 10	82	- 8	74	- 3	71
Local authority bills	22	34	—	34	- 5	29	- 2	27	+ 16	43
Other commercial bills	23	434	+ 1	435	- 20	415	+ 68	483	+ 15	498
Special Deposits with Bank of England	24	226	+ 1	227	- 6	221	+ 2	223	+ 3	226
Investments:										
Government stocks	25	1,665	-218	1,418	- 80	1,336	- 57	1,286	- 15	1,291
Local authority debt	26	86	+ 1	87	- 2	85	- 1	84	—	92
Other	27	395	+ 1	393	+ 6	387	+ 8	400	- 8	316
Advances to:										
U.K. banks	28	91	+ 35	126	- 42	84	+ 29	113	- 42	71
Overseas sector	29	326	+ 36	362	+ 12	374	+40	414	+ 35	449
Northern Ireland central government	30	4	- 4	—	+ 1	1	+ 6	7	- 1	6
Local authorities	31	120	+ 47	167	+ 19	186	+ 4	190	- 61	129
Other sectors	32	5,607	+205	5,812	+ 72	5,884	- 16	5,868	-160	5,708
plus 40% of net transit items	33	310	+ 83	393	- 24	369	- 58	311	+ 54	365
Total financial assets	34	12,891	-469	12,390	- 23	12,353	- 54	12,311	+531	12,794
Net financial assets	35	- 233	+ 66	- 76	+ 2	+ 93	- 60	- 80	+ 9	- 27
Cash flows:										
Transactions with rest of banking sector	36		-205		- 14		- 59		+329	
Transactions with other sectors	37		+271		+ 16		- 1		-320	

1970

Cash flow	End-Mar.	Cash flow	End-June	Cash flow	End-Sept.	Cash flow	End-Dec.	Line
+ 23	444	+ 4	448	+ 17	465	+ 16	481	1
-218	11,055	+228	11,283	+236	11,519	+627	12,146	2
-195	11,499	+232	11,731	+253	11,984	+643	12,627	3
-173	720	+178	542	- 68	610	- 22	632	4
-368	10,779	+410	11,189	+185	11,374	+621	11,995	5
- 44	313	+ 15	328	+ 5	333	+ 23	356	6
+ 2	171	+ 1	172	—	172	+ 7	179	7
—	1,030	—	998	—	1,142	—	1,107	8
—	88	—	78	—	90	—	85	9
-410	12,381	+426	12,765	+190	13,111	+651	13,722	10
-116	806	+ 36	842	- 23	819	+ 23	842	11
- 77	151	+ 65	216	- 38	178	+150	328	12
- 2	41	- 12	29	+ 3	32	+ 13	45	13
- 7	8	+ 7	15	+ 1	16	+ 5	21	14
+ 56	251	- 80	171	- 7	164	- 24	140	15
-424	966	+ 63	1,029	+352	1,381	+153	1,534	16
- 2	78	+ 6	84	+ 7	91	+ 4	95	17
- 24	168	- 23	145	- 12	133	+ 18	151	18
- 37	43	+ 5	48	+ 11	59	—	59	19
-321	63	+ 83	146	+ 84	230	+214	444	20
+ 11	82	+ 15	97	+ 4	101	+ 10	111	21
- 4	39	+ 11	50	- 5	45	- 9	36	22
+ 78	576	+ 9	585	+ 43	628	+ 26	654	23
- 11	215	+ 47	262	+ 8	270	+121	391	24
- 54	1,277	- 32	1,244	- 54	1,216	+ 6	1,202	25
- 3	89	- 3	86	- 4	82	+ 4	86	26
+ 16	332	+ 15	386	+ 17	412	+ 13	425	27
+ 14	85	- 17	68	+ 4	72	+ 27	99	28
- 10	439	- 18	421	+ 35	456	+ 35	491	29
- 6	—	+ 4	4	- 1	3	+ 1	4	30
+ 87	216	-124	92	- 10	82	+ 1	83	31
+378	6,086	+446	6,532	-227	6,305	-142	6,163	32
+114	479	-118	361	+ 46	407	+ 14	421	33
-344	12,490	+385	12,913	+234	13,182	+663	13,825	34
+ 66	+ 109	- 41	+ 148	+ 44	+ 71	+ 12	+ 103	35
-407		+ 58		+318		+422		36
+473		- 99		-274		-410		37

Notes on definitions, sources and methods

Deposit banks

The banks in this group, which are often referred to as 'the retail banks', are the London clearing banks, the Scottish clearing banks, the Northern Ireland banks, and certain other banks whose business is mainly domestic, viz. Co-operative Bank Ltd.; C. Hoare & Co.; Isle of Man Bank Ltd.; Lewis's Bank Ltd.; Royal Bank of Ireland Ltd. (English office); Scottish Co-operative Wholesale Society Ltd., Bankers; and Yorkshire Bank Ltd. The Banking Department of the Bank of England is not included.

Sources

Most of the figures for outstanding financial assets and liabilities have been taken from the same basic banking returns as are used to compile the figures for deposit banks in the banking sector series published in Tables 11 (1), (2) and (3) of the annex. The main differences from these tables are:

- (1) The integrated accounts, unlike the figures for deposit banks in Table 11, include intra-banking sector items *i.e.* claims on, and liabilities to, other institutions—banks and discount houses—in the banking sector. Certain other tables in the annex—Tables 8 (2) to 8 (5)—also include figures for these categories, but not for end-calendar quarters, and intra-sector items are not generally identified separately in the figures already published therein for the period covered by this article.
- (2) There are additional breakdowns of certain assets and liabilities in the integrated accounts.
- (3) The figures for holdings of government stocks in the integrated accounts are estimates at market prices, whereas those in the annex are book values.
- (4) The integrated accounts include issued capital.
- (5) The Banking Department of the Bank of England is not included in the integrated accounts.

Consolidation

The reasons for preferring to show sector balance sheets in unconsolidated form (with intra-group items given separately) were noted earlier. This was not possible for deposit banks, however, as there is no provision in their returns for separate figures of assets resulting from their transactions with each other. For instance, their deposit liabilities to the banking sector (line 6) include funds which the deposit banks have placed with one another, as reported by the banks receiving the deposits, and the placing of such funds is also recorded among the assets, in line 13 (balances with other U.K. banks), line 15 (call money with U.K. banks) or line 28 (advances to U.K. banks). It is thought, however, that these intra-group liabilities and assets were relatively unimportant during 1963–70.

Relationship with flow of funds accounts

The integrated tables provide figures for outstanding financial liabilities and assets at the end of each quarter, and for cash transactions (cash flows) during the quarters. Other changes, including exchanges of securities and breaks in the series, are described in detail below.

The figures for the deposit banks' cash transactions outside the banking sector have been compiled in the same way as the figures for the transactions of the whole banking sector with other sectors, as published in *An introduction to flow of funds accounting: 1952–70* and in the quarterly analysis of financial statistics in the *Bulletin*. The equivalents here of the figures embodied in the flow of funds matrix are as follows (the remaining lines in the integrated tables represent intra-bank transactions; as already noted these include not only the deposit banks' transactions with other banks, but also their transactions with each other):

	Flow of funds matrix	Integrated balance sheet and flow accounts
Banks' net external transactions	Line 10	Lines 1, 17, 21, 23 (part), 29
Notes and coin	12	7, 11
Bank deposits of domestic sectors	13	2, 4
Tax reserve certificates	15.2	19
Bank lending to domestic sectors	16, 18	18, 23 (part), 32, 33
Lending to Northern Ireland central government	19 (part)	23 (part), 27 (part), 30
Treasury bills	20	20
Government stocks	21	25
Local authority debt	22	22, 26, 31
U.K. company and overseas securities:		
Capital issues	23	8, 9
Other transactions	24	27 (part)

The integrated tables cover identified financial assets and liabilities only, and therefore exclude the banks' holdings of property, equipment and vehicles, and any other stocks of goods.

The integrated accounts do not include any estimates of the deposit banks' portion of the adjustment for accruals of interest on bank deposits and advances which is entered in line 19 (other loans and accruals) in the flow of funds matrix. An adjustment is necessary there because of the practice in the national accounts of entering interest each quarter as it accrues, although the financial flows recorded in the matrix are not affected until bank accounts are actually credited and debited—often at end-June and end-December. The very rough calculations of the necessary adjustment entries for the flow of funds suggest that at end-March and end-September the accrued interest on bank advances is greater than on deposits, so that there are net amounts owed to the banks. At end-September 1970 the amount due to the whole banking sector was calculated to be around £120 million. The portion attributable to deposit banks alone is likely to be a preponderant share, but the figure has not been estimated. In any case, it is open to some doubt whether such interest accruing but not yet due is relevant to a study of the banks' behaviour.

Lines 36 and 37 at the foot of the integrated table divide the cash flows into the deposit banks' transactions with the rest of the banking sector (line 36) and their transactions with other sectors (line 37). Only the latter are entered in the flow of funds matrix. Transactions between the deposit banks themselves should in principle cancel out within line 36 but, because of timing and other factors they may in practice not do so.

Notes on the compilation and definition of the figures

Lines 4 and 33, Transit items These comprise transit items both between institutions in the banking sector and between offices of the same bank. They appear in an individual bank's balance sheet both as credit items (e.g. standing orders) and debit items (e.g. cheques in course of collection). When banks' figures are aggregated these items may give rise to double counting of deposits received from customers outside the banking system or, where overdrawn or loan accounts are concerned, to the understating of total advances made to such customers. In accordance with the treatment adopted for the calculation of reserve ratios, it is assumed that 60% of the total value of debit items, less credit items, affects deposits. This proportion is therefore deducted from gross deposits in the calculation of net deposits; the remaining 40% is added to advances.

In Table 11 of the annex, net transit items are not divided between the various groups of institutions in the banking sector. It is necessary, however, to make some attempt here in order to complete the integrated tables for deposit banks. The transit items reported by deposit banks themselves are used to adjust their deposits and advances figures; those reported by other banks are ignored.

Line 7, Notes outstanding These are the liabilities of Scottish clearing banks and Northern Ireland banks in respect of issues of their own bank notes.

Lines 8 and 9, Issued capital It can be argued that, from a behavioural point of view, it would be best to enter the banks' issued capital at nominal (or book) value. However, the balance of argument, as set out earlier in the article, is for market values in sector balance sheets generally, so such values have, where practicable, been used here. It should be noted that capital issues are relatively unimportant for deposit banks—in the eight years covered by the table they raised only £12 million by this means.

The figures for quoted issues are at market values; they have been compiled from nominal amounts of capital outstanding and market prices. Those for unquoted shares are at book value. They are, in almost every case, liabilities of reporting banks which are subsidiaries of other deposit banks. As the parent banks' holdings on the other side of the accounts in line 27 are reported at book value (see notes to line 27), it is reasonable to value the figures here, as far as possible, in the same way. They are rough estimates only, based on the banks' published accounts.

Line 11, Notes and coin Includes holdings of Scottish and Northern Ireland notes.

Line 13, Balances with other U.K. banks Balances with banks other than the Bank of England, including any balances of one deposit bank with an other.

Line 19, Tax reserve certificates Figures were not reported by the banks during the period covered by the tables. The Bank compiled figures of changes from the second quarter of 1966 from their own (Loans Office) records, and it has been assumed that the deposit banks' holdings before then were insignificant.

Line 21, Overseas bills These are the figures as actually reported by the banks. In the flow of funds accounts an adjustment is made to the figures for the total banking sector, transferring sterling acceptances by U.K. banks on behalf of non-residents from 'U.K. bills' to 'overseas bills'. This is done on the assumption that these acceptances are all discounted within the U.K. banking sector and reported by banks and discount houses as U.K. bills (apart from a bank's discounts of its own acceptances on behalf of non-residents, which are assumed to be reported as overseas bills). Doubtless some sterling acceptances on behalf of non-residents were discounted with deposit banks but, as figures are not available, the adjustment could not be made in this table.

Line 23, Other commercial bills Includes, unavoidably, some bills which are treated as overseas bills in the flow of funds accounts—see notes to line 21. Separate figures for Northern Ireland Treasury bills are not available, but the deposit banks' holdings were probably very small. Excludes export and shipbuilding paper refinanced with the Issue Department of the Bank of England under special schemes.

Line 25, Government stocks The figures of holdings have been specially estimated at market value.

Line 26, Local authority debt Comprises local authority bonds, quoted securities other than bonds, and mortgages. The figures are as reported by the banks at book value. It was not found possible to produce reasonably accurate estimates of the relevant securities calculated at market value.

Line 27, Other investments Comprises overseas government, provincial and municipal securities; trade investments; other securities; and investments in other U.K. banks (the latter are not included in Table 11 (1) of the annex). The figures included £2 million of Northern Ireland government securities throughout 1963–70. Figures are all at book value; market values would be particularly difficult to determine for those securities which are unquoted, such as investments in subsidiaries.

Line 28, Advances to U.K. banks (including "other accounts") This category unavoidably includes not only genuine claims on other U.K. banks, but also what the reporting banks term 'other accounts', a category which includes various internal accounts and provisions for bad and doubtful debts. It was not possible to isolate advances to other U.K. banks, but the whole of the item is treated here as such on the assumption that the bulk of the changes were in advances to other banks.

Line 36, Cash flows: transactions with rest of banking sector These figures are the sum of lines 6, 12, 13, 14, 15, 16, 24 and 28.

Changes other than cash flows

The differences between the end-quarter figures do not always coincide with the cash flows during the

quarters, because of changes in value, exchanges of securities, breaks in the series, and so on. Details of such changes for each relevant liability and asset category are:

Line 1, Deposits by overseas sector Because of the devaluation of sterling, the change in these deposits in the fourth quarter of 1967 included an increase in the sterling equivalent of foreign currency deposits; this is estimated at £15 million.

Line 2, Deposits by other sectors (excluding banking sector) As a result of accounting changes in 1968 there were reductions in deposit figures of £27 million in the first quarter, £17 million in the second, and £12 million in the third, accompanied by corresponding changes in advances (line 31).

Line 8, Issued capital, ordinary shares As the amounts of quoted shares outstanding are at market value, there are changes in the total in most quarters because of movements in market prices. There are also changes when, for instance, a takeover of a company is financed by an issue of shares, or when capital is consolidated after the takeover of another deposit bank. The figures for these takeover and other adjustments are:

£ millions	
1963 1st quarter	+ 1
1964 1st "	+ 4
1965 2nd "	+ 7
1966 1st quarter	- 2
1968 3rd "	-13
4th "	-43
1969 1st quarter	- 6
2nd "	+10
4th "	-24
1970 3rd quarter	- 1

Line 9, Issued capital: fixed interest securities Apart from those caused by movements in security prices, changes may occur for reasons similar to those described in the notes to line 8. The figures are:

£ millions	
1968 3rd quarter	+13
4th "	+43
1970 1st quarter	+38
3rd "	+ 9

Line 13, Balances with other U.K. banks With effect from 30th September 1968 balances reported by certain banks were redefined as advances to other banks. This brought a fall of £41 million in the figure for balances with other banks (and a rise in line 28).

Line 17, Call money with overseas sector Because of the devaluation of sterling, the change in the fourth quarter of 1967 included an increase in

the sterling equivalent of call money in the form of foreign currency; this is estimated at £10 million.

Line 25, Government stocks The figures of holdings are estimated market values. Figures for cash flows are not available, and changes in the reported book values have—as in the flow of funds accounts—generally been used as an approximation to cash flows. The residual changes may be taken as the best available measurement of revaluation caused by movements in market prices. As a check, the implied price changes were compared with movements in a specially constructed price index in which price changes in two maturity bands (up to five-year, and five-year and over—including undated—stocks) were weighted by the reported book values of such stocks held by deposit banks. The comparison suggested that the implied changes were always in the right direction and generally of the right order of magnitude.

Line 26, Local authority debt The figures of holdings are as reported at book value and, with one exception, the quarterly changes are assumed to represent cash flows. The exception is the fourth quarter of 1969; from the end of 1969, the London clearing banks, Scottish clearing banks and the three Northern Ireland banks based in Northern Ireland made changes in their accounting procedures in connection with the full disclosure of profits and reserves. The valuation of securities was changed by the introduction of amortisation of investments. There was an upward revaluation of £8 million in local authority securities.

Line 27, Other investments The figures of holdings are as reported at book value. The cash flow figures, which have been compiled from a detailed examination of quarterly changes, differ from changes in book values for a number of reasons. Some examples are acquisitions of securities against new issues during takeovers, the consolidation of balance sheets following mergers, the difference between the cash proceeds of a sale of securities and the old book value and the writing-down of book values. There was an upward revaluation of £8 million in the fourth quarter of 1969 following the accounting change described in the notes to line 26.

Line 28, Advances to U.K. banks There was an increase of £41 million in the third quarter of 1968 (and a fall in line 13), when certain balances with other banks were transferred to this category.

Line 31, Advances to local authorities Accounting changes in 1968 resulted in reductions in this category—£27 million in the first quarter, £17 million in the second and £12 million in the third. There were corresponding changes in line 2.