

The monetary base — a statistical note

This note describes possible components of the monetary base and provides statistics back to 1919.

Although 'monetary base' is a term in common use in discussions on monetary control, there is in fact no universally accepted definition of it. Nevertheless, in general terms the monetary base comprises some or all of the liabilities of the monetary authorities. These are primarily the liabilities of the Bank of England (the remainder being coin issued by the Royal Mint),⁽¹⁾ and statistics are available over a long period. The purpose of this note is to describe these statistics, including something of their history, and to provide tables containing monthly information from 1961 to date, and annual averages back to 1919. Most of the note is related to the Bank Return, a summary balance sheet of the Bank of England, which has been published weekly since 1844.

Notes and coin

The Bank Charter Act of 1844 gave a note-issuing monopoly in England and Wales to the Bank of England, subject to certain qualifications.⁽²⁾ The Act also separated the note-issuing function of the Bank from its other business, and this separation is still reflected in the Bank Return, which is divided into the Issue and Banking Departments. At present, the issue of notes by the Bank is governed by the Currency and Bank Notes Act of 1954. Under this Act, temporary changes in the amount issued can be authorised by the Treasury, while permanent changes are formally subject to a degree of Parliamentary control.

Certain Scottish and Northern Ireland banks also retain a right to issue notes. They have their own small fiduciary issues, which in the case of the Scottish banks have remained unaltered since 1845; the last major revision to the Northern Ireland banks' fiduciary issues took effect in 1929 when the note issues of banks in Northern Ireland and the newly-formed Irish Free State were separated. These Scottish and Northern Ireland banks also make use of the facility to issue notes beyond their fiduciary issues, such notes being backed by holdings of Bank of England notes. The fiduciary issues of the Scottish and Northern Ireland banks are minor exceptions to the general rule that the cash base consists only of liabilities of the monetary authorities.

Coin is issued by the Royal Mint, which is a Government Trading Fund. Coin is not a liability of the Bank, and does not therefore appear as a liability in the Bank Return. The

Bank buys any coin it needs at its face value. Once in circulation, however, notes and coin are interchangeable, and are generally not distinguished separately in the statistics, but, at £688 million,⁽³⁾ coin represents only a small fraction of the total of notes and coin outstanding.

In Tables A and B, the total of notes and coin issued is divided into that part held by banks in the form of till money and the remainder, which constitutes the public's holdings. It should be noted that only the fiduciary issues of the Scottish and Northern Ireland banks, and not their gross issues, have been included in the total. To include the gross issues would involve double counting, since Bank of England notes issued include those used as backing for issues by other banks in excess of their fiduciary issues. Till money is likewise calculated net of notes held as backing for excess issues by the Scottish and Northern Ireland banks.

Deposits with the Banking Department

The main customers of the Bank are the Government and government departments (whose accounts constitute 'public deposits' in the Bank Return), banks, discount houses, and overseas central banks which hold working balances in sterling. There are also staff accounts and a small number of accounts for other private and public sector customers. Virtually all these deposits are held in sterling.⁽⁴⁾

Two types of deposits from banks are shown in the Bank Return—*Bankers deposits* and, since 1960, *Special deposits*.⁽⁵⁾ *Bankers deposits* have been held predominantly by the clearing banks, though the conditions under which these balances have been held have varied somewhat over time. During the inter-war period, the London clearing banks by convention maintained a cash ratio (i.e. a ratio of till money plus balances at the Bank of England to total deposits) which in aggregate was roughly stable at about 10%, but varied from bank to bank. After the war, the London clearing banks maintained a cash ratio on a daily basis of at least 8% as part of the structure of credit control then agreed with the authorities. With the introduction of Competition and Credit Control in 1971, a minimum reserve asset ratio of 12½% against eligible liabilities was introduced for all banks, and balances at the Bank of England qualified as reserve assets. Under these new arrangements, the London clearing banks ceased to

(1) In addition, from 1914 to 1928 currency notes were issued on the authority of the Treasury.

(2) See 'Bank of England notes' in the September 1978 *Bulletin*, page 359.

(3) This is the amount of coin outstanding in February 1981.

(4) However, the Return for Wednesday, 21 January 1981, and subsequent Wednesdays, includes sizable liabilities and assets denominated in foreign currency held in connexion with arrangements entered into on 20 January 1981 between the Banque Centrale d'Algerie, the Federal Reserve Bank of New York, and the Bank of England. These deposits are temporary and cannot be considered as forming part of the cash base of the UK banking system.

(5) On several occasions between 1974 and 1980 this item also included supplementary special deposits.

maintain their 8% cash ratio but agreed to hold $1\frac{1}{2}\%$ of their eligible liabilities in the form of non-interest-bearing balances with the Bank, this ratio being a norm maintained as a daily average rather than a minimum requirement. Other banks generally use their accounts with the clearing banks to settle inter-bank claims and to satisfy their own cash requirements; many of them do not hold deposits with the Bank of England.

The level of bankers deposits therefore to some extent reflects the differing institutional arrangements that have prevailed over the years, and also the decisions by individual banks whether or not to become customers of the Bank. The series shows some inherent volatility, particularly in later years, because it is partly determined as the residual of the daily clearing process between the Bank and the rest of the banking sector. Another source of volatility is seasonal factors; the statistics in Table B are not seasonally adjusted, although certain items, particularly the first two columns, do display seasonal variation, and in due course seasonally-adjusted series will also be published. For all these reasons, bankers deposits do not necessarily provide a good guide to the level or stability that such balances might display under a different regime, for example, one that left banks entirely free to choose the amount they hold or one that required all banks to hold a certain level of bankers deposits.

Special deposits have been called from time to time, initially from the clearing banks, but more recently from all banks within the scope of the credit control arrangements. When calls have been made, they have been, since 1971, for a certain proportion of each bank's eligible liabilities, and interest has normally been paid on the deposits at a rate related to the Treasury bill rate. Supplementary special deposits, on the other hand, were non-interest-bearing. They were mainly used to restrict the growth of the banking system by penalising those banks which exceeded the permitted growth of interest-bearing eligible liabilities. Funds placed with the Bank as special or supplementary special deposits cannot be used for ordinary transactions purposes.

In the tables, the series for *Bankers deposits* and *Special deposits* have been shown separately. As noted earlier, other deposit liabilities of the Banking Department include deposits of the Government, other public sector bodies, overseas central banks, etc. The series *Other liabilities* in the tables includes the capital, reserves and other internal accounts of the Bank, but these items are generally fairly stable over time.

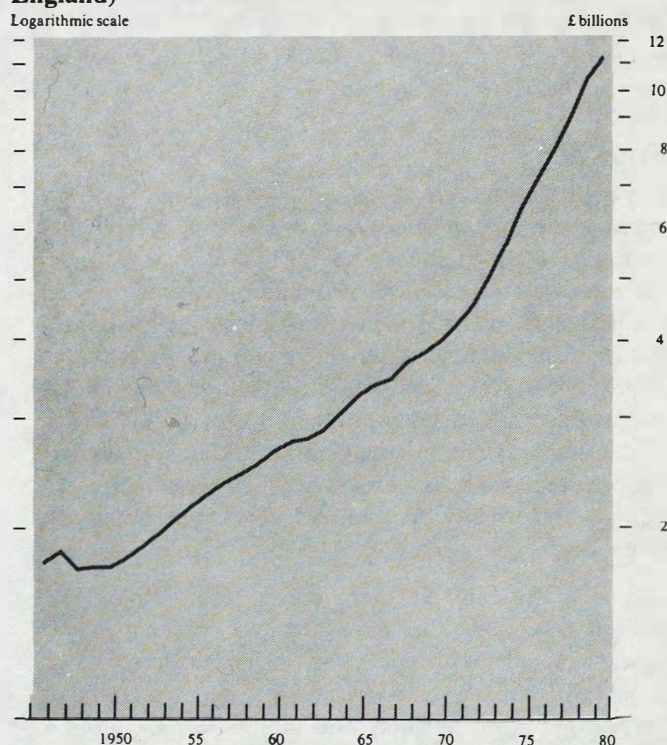
Definitions of the monetary base

Since there is no universally accepted definition of the monetary base, it seems more useful for the purpose of this note to indicate some of the possible alternatives rather than to focus exclusively on a single definition. Of the possible components, banks' till money (or vault cash) would be

widely regarded as an essential element, for this provides the means of ensuring the immediate convertibility of deposits. However, few would deny that bankers deposits, which can readily be converted into till money, should also be included in the base. A somewhat broader definition would include, in addition, notes and coin in circulation with the public. By extending the definition in this way, the base ceases to be affected by deposits and withdrawals of cash by the public during the normal course of business. The resulting aggregate, although very much larger, is also somewhat less volatile.

A definition of the base comprising these three items would probably obtain a wide measure of agreement, and the chart and the sub-total in column 6 of the accompanying tables show how such a measure has behaved since the war.

A wide definition of the monetary base (notes and coin in circulation with the public, banks' till money, and bankers deposits with the Bank of England)^(a)



(a) See column 6 in Table A.

The broadest definitions of the base would also include other deposit liabilities of the central bank. Any change in the total of these other deposit liabilities will, in the absence of counterbalancing operations by the Bank, be reflected in an equal and opposite change in bankers deposits.⁽¹⁾ Thus the same justification that can be advanced for including notes and coin in circulation with the public in the definition can also be applied to other deposits with the Bank. But there are other considerations which make the argument in this case less clear cut. Special deposits are clearly not liquid in the normal sense—indeed deliberately so, as the purpose of calling special deposits is actually to withdraw liquidity from the banking system. (But by the

(1) This does not apply to the large but temporary deposits in foreign currencies described in footnote (4) on page 59. These could not be considered as forming part of any definition of the monetary base.

same token it could be argued that, so long as a minimum average level of bankers deposits is fixed under the credit control arrangements in operation, these are not freely disposable either.) Furthermore, even though changes in deposits of overseas central banks may affect bankers deposits, the implications of such changes for UK economic

and monetary conditions are likely to be less important and less direct than are those of the corresponding changes in bankers deposits. These other deposit liabilities would therefore not form part of any narrow definition of the monetary base and even their inclusion in a wide definition is questionable.

Table A
Liabilities of the monetary authorities, 1919-1980: annual averages

£ millions

	Notes and coin in circulation outside the Bank of England		Liabilities of the Banking Department			Sub-total of columns 1-3
	In circulation with the public	Held by banks (till money)	Bankers deposits	Special deposits (a)	Other liabilities	
	1	2	3	4	5	
Averages of weekly figures						
1919	414	116	63	—	102	593
1920	429	110	84	—	79	623
1921	401	115	86	—	72	602
1922	365	111	80	—	73	556
1923	353	107	70	—	73	530
1924	356	107	70	—	75	533
1925	350	107	72	—	73	529
1926	346	106	69	—	73	521
1927	343	108	66	—	71	517
1928	341	108	66	—	70	515
1929	332	107	63	—	70	502
1930	328	106	66	—	68	500
1931	331	99	65	—	72	495
1932	337	95	81	—	69	513
1933	343	101	100	—	76	544
1934	350	102	100	—	73	552
1935	362	106	97	—	72	565
1936	394	112	96	—	73	602
1937	440	117	97	—	75	654
1938	446	121	106	—	73	673
1939	459	132	103	—	78	694
1940	525	141	110	—	93	776
1941	608	142	123	—	88	873
1942	769	147	137	—	79	1,053
1943	933	149	159	—	83	1,241
1944	1,105	155	184	—	84	1,444
1945	1,263	153	218	—	86	1,634
1946	1,341	159	255	—	86	1,755
1947	1,361	172	296	—	120	1,829
1948	1,239	177	305	—	136	1,721
1949	1,248	191	296	—	154	1,735
1950	1,244	199	292	—	323	1,735
1951	1,291	206	298	—	127	1,795
1952	1,370	220	277	—	118	1,867
1953	1,462	228	278	—	131	1,968
1954	1,551	240	281	—	106	2,072
1955	1,657	268	254	—	105	2,179
1956	1,765	281	228	—	108	2,274
1957	1,842	303	216	—	106	2,361
1958	1,905	315	218	—	103	2,438
1959	1,969	324	236	—	96	2,529
1960	2,062	339	248	77	96	2,649
Averages of monthly figures						
1961	2,151	358	250	182	102	2,759
	2,119	385	254	183	103	2,758
1962	2,130	409	250	167	104	2,789
1963	2,172	433	250	—	104	2,855
1964	2,286	485	253	—	110	3,024
1965	2,426	515	269	59	121	3,210
1966	2,563	548	268	144	138	3,379
1967	2,633	561	285	204	144	3,479
1968	2,766	586	315	219	165	3,667
1969	2,871	640	288	225	177	3,799
1970	3,067	682	192	270	181	3,941
1971	3,332	705	231	268	306	4,268
1972	3,644	653	209	10	361	4,506
1973	4,091	703	246	919	364	5,040
1974	4,591	764	259	1,047	374	5,614
1975	5,341	791	281	964	454	6,413
1976	6,106	784	308	1,143	486	7,198
1977	6,832	812	338	1,062	561	7,982
1978	7,943	849	389	992	709	9,181
1979	9,031	914	460	550	679	10,405
1980	9,763	945	516	116	701	11,224

(a) There were no special deposits before 1960. On several occasions between 1974 and 1980 this item also included supplementary special deposits.

-- Breaks in series—see notes to the tables for details.

Table B
Liabilities of the monetary authorities, 1961-1981: monthly continued

£ millions; not seasonally adjusted

	Notes and coin in circulation outside the Bank of England		Liabilities of the Banking Department			Sub-total of columns 1-3	Notes and coin in circulation outside the Bank of England		Liabilities of the Banking Department			Sub-total of columns 1-3	
	In circulation with the public	Held by banks (till money)	Bankers deposits	Special deposits (a)	Other liabilities		In circulation with the public	Held by banks (till money)	Bankers deposits	Special deposits (a)	Other liabilities		
	1	2	3	4	5	6	1	2	3	4	5	6	
1973 Jan. 17	3,851	676	196	692	335	4,723	1978 Jan. 18	7,266	796	376	1,204	718	8,438
Feb. 21	3,899	635	230	714	339	4,764	Feb. 15	7,417	754	386	1,229	715	8,557
Mar. 21	3,948	644	202	728	376	4,794	Mar. 15	7,559	778	267	1,246	739	8,604
Apr. 18	4,093	624	268	737	378	4,985	Apr. 19	7,590	855	358	1,256	780	8,803
May 16	4,039	682	264	747	377	4,985	May 17	7,743	827	355	1,294	705	8,925
June 20	4,089	685	268	754	384	5,042	June 21	7,862	835	399	656	619	9,096
July 18	4,229	749	282	772	408	5,260	July 19	8,232	992	616	872	653	9,840
Aug. 15	4,182	734	248	1,073	378	5,164	Aug. 16	8,173	887	402	235	706	9,462
Sept. 19	4,091	735	247	1,098	337	5,073	Sept. 20	8,200	822	369	641	765	9,391
Oct. 17	4,109	713	274	1,120	348	5,096	Oct. 18	8,229	817	302	1,062	682	9,348
Nov. 21	4,189	755	272	1,151	366	5,216	Nov. 15	8,308	852	417	1,105	693	9,577
Dec. 12	4,369	806	195	1,439	349	5,370	Dec. 13	8,731	967	423	1,099	728	10,121
1974 Jan. 16	4,254	771	245	1,501	325	5,270	1979 Jan. 17	8,427	881	405	1,113	711	9,713
Feb. 20	4,272	670	266	1,368	355	5,208	Feb. 21	8,632	794	404	255	684	9,830
Mar. 20	4,327	692	290	1,351	366	5,309	Mar. 21	8,725	817	426	2	622	9,968
Apr. 17	4,443	801	239	1,051	333	5,483	Apr. 18	8,897	1,025	355	1	659	10,277
May 15	4,433	711	253	893	399	5,397	May 16	8,880	879	559	719	641	10,318
June 19	4,499	753	236	884	346	5,488	June 20	8,846	917	477	741	657	10,240
July 17	4,653	788	229	902	324	5,670	July 18	9,260	1,006	455	92	608	10,721
Aug. 21	4,718	787	238	922	418	5,743	Aug. 15	9,180	924	487	520	682	10,591
Sept. 18	4,739	775	290	922	462	5,804	Sept. 19	9,156	865	497	772	720	10,518
Oct. 16	4,773	762	233	917	428	5,768	Oct. 17	9,309	924	409	779	713	10,642
Nov. 20	4,915	780	287	929	367	5,982	Nov. 21	9,344	942	589	805	717	10,875
Dec. 11	5,068	872	300	928	367	6,240	Dec. 12	9,714	996	462	805	732	11,172
1975 Jan. 15	4,918	814	210	934	587	5,942	1980 Jan. 16	9,359	906	622	28	727	10,887
Feb. 19	4,991	737	275	935	409	6,003	Feb. 20	9,407	882	579	104	708	10,868
Mar. 19	5,089	754	359	943	511	6,202	Mar. 19	9,498	868	378	132	743	10,744
Apr. 16	5,152	799	269	949	462	6,220	Apr. 16	9,603	1,026	395	216	670	11,024
May 21	5,289	795	314	957	438	6,398	May 21	9,740	978	462	219	730	11,180
June 18	5,305	797	297	966	471	6,399	June 18	9,739	889	473	242	659	11,101
July 16	5,502	818	250	960	455	6,570	July 16	9,995	984	361	456	645	11,340
Aug. 20	5,532	805	228	985	423	6,565	Aug. 20	9,964	974	679	—	692	11,617
Sept. 17	5,501	786	304	980	443	6,591	Sept. 17	9,882	926	676	—	685	11,484
Oct. 15	5,516	764	245	978	417	6,525	Oct. 15	9,864	934	502	—	727	11,300
Nov. 19	5,573	763	294	989	372	6,630	Nov. 19	9,852	935	581	—	751	11,368
Dec. 10	5,730	862	322	989	455	6,914	Dec. 10	10,255	1,043	487	—	675	11,785
1976 Jan. 21	5,599	756	304	652	391	6,659	1981 Jan. 21	9,871	909	415	—	2,096(b)	11,195
Feb. 18	5,714	725	269	980	428	6,708	Feb. 18	9,943	914	602	—	1,334(b)	11,459
Mar. 17	5,809	737	265	983	464	6,811							
Apr. 21	5,965	854	262	981	400	7,081							
May 19	5,960	760	293	1,005	643	7,013							
June 16	6,072	768	378	1,000	519	7,218							
July 21	6,333	841	313	1,008	488	7,487							
Aug. 18	6,323	813	304	1,037	495	7,440							
Sept. 15	6,319	785	272	1,043	556	7,376							
Oct. 20	6,305	774	385	1,411	457	7,464							
Nov. 17	6,345	780	325	1,806	478	7,450							
Dec. 8	6,531	814	326	1,806	516	7,671							
1977 Jan. 19	6,377	785	386	1,091	459	7,548							
Feb. 16	6,428	755	273	712	472	7,456							
Mar. 16	6,505	741	317	1,027	544	7,563							
Apr. 20	6,596	836	342	1,030	524	7,774							
May 18	6,658	760	327	1,057	492	7,745							
June 15	6,792	867	310	1,055	594	7,969							
July 20	7,011	895	390	1,069	576	8,296							
Aug. 17	6,986	822	287	1,092	594	8,095							
Sept. 21	6,995	774	335	1,110	608	8,104							
Oct. 19	6,991	773	371	1,144	598	8,135							
Nov. 16	7,058	786	292	1,171	647	8,136							
Dec. 14	7,581	952	428	1,185	623	8,961							

(a) On several occasions between 1974 and 1980 this item also included supplementary special deposits.

(b) See footnote (4) on page 59.

Notes to the tables

The main source for the tables is the Bank Return, which is published weekly by the Bank of England; all monthly figures in Table B from the Bank Return relate to close of business on the third Wednesday of each month.⁽¹⁾ *Bankers deposits, Special deposits, and Other liabilities* of the Banking Department have been taken directly from this source, as have the figures for Bank of England notes in circulation, which are the largest component of the first two columns in the tables. The notes to Table 1 in the statistical annex describe in more detail the coverage of items in the Bank Return.

Monthly estimates of coin outstanding, net of an allowance for wastage, have been obtained from the Royal Mint and have been adjusted to exclude holdings by the Issue Department (none since 1972) and the Banking Department. The total of notes and coin in circulation also includes the fiduciary issues of the Scottish and Northern Ireland banks.

The breakdown of notes and coin in circulation between banks' till money and the residual in circulation with the public is not fully consistent with other statistics throughout the period covered by the tables as the arrangements for statistical reporting and publication of figures by the banks have varied over the years. One of the major features of the statistical reporting system introduced in May 1975⁽²⁾ was that *all* banks within the credit control arrangements made returns on the third Wednesday of each month.⁽¹⁾ Thus, since May 1975, the figures in Table B are fully consistent and relate to these mid-month dates. Between May 1971 and May 1975 the coverage of the banks' till money is almost identical with the coverage after May 1975, although some of the returns are not on a consistent mid-month basis. The till money holdings of the National Girobank are included from May 1971, although the National Girobank was not brought within the credit control arrangements until October 1978. From January 1961 to May 1971 the till money figures are based primarily on the mid-month returns of the London and Scottish clearing banks,⁽³⁾ which together accounted for a very high percentage of total till money holdings. Figures for Northern Ireland banks have been taken from their monthly returns, which were not on a consistent mid-month basis, and figures for other banks have been estimated, but they were very small.

From 1961 to date, Table A has been compiled as annual averages of the monthly series in Table B. Before 1961 Table A relates to annual averages of weekly figures and the till money component is not on uniform reporting days throughout. The coverage of the till money figures is confined to the London clearing banks, the Scottish banks and the Northern Ireland banks (Irish banks before 1929). The total of notes and coin in circulation between 1919 and 1928 includes currency notes issued by the Treasury (these were first issued in 1914), but coin and Bank of England notes set aside as cover for these Treasury notes in the Currency Note Redemption Account have been excluded. These figures were published in the *London Gazette*. The very small amounts (less than £200,000) of country bank notes that were circulating up to 1921 have been ignored.

It would be difficult to extend the till money series back before 1919 because the banks did not generally distinguish in their published statements between their holdings of Bank of England and Treasury notes, and their deposits with the Bank of England.⁽⁴⁾ The break shown between 1928 and 1929, mainly affecting the series for notes and coin in circulation with the public, arises from a change in geographical coverage following the issue of notes by banks in the newly-formed Irish Free State.

(1) Second Wednesday in December, except in 1964 and 1965.

(2) For further details, see 'New banking statistics' in the June 1975 *Bulletin*, page 162.

(3) These returns were made on the same timing pattern as post-May 1975 returns, except that the returns in December 1964 and 1965 were on the third Wednesday of the month, not the second Wednesday.

(4) See *Report of the Committee on Finance and Industry* (HM Stationery Office, Cmnd. 3897, 1931) paragraph 367.