

FEDERAL RESERVE BULLETIN

APRIL, 1928



ISSUED BY THE
FEDERAL RESERVE BOARD
AT WASHINGTON

Gold Exports and the Banking Situation
Gold Holdings of Principal Countries
Condition of All Banks in the United States



UNITED STATES
GOVERNMENT PRINTING OFFICE
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1928

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THE FEDERAL RESERVE BULLETIN is the board's medium of communication with member banks of the Federal reserve system and is the only official organ or periodical publication of the board. The BULLETIN will be sent to all member banks without charge. To others the subscription price, which covers the cost of paper and printing, is \$2. Single copies will be sold at 20 cents. Outside of the United States, Canada, Mexico, and the insular possessions, \$2.60; single copies, 25 cents

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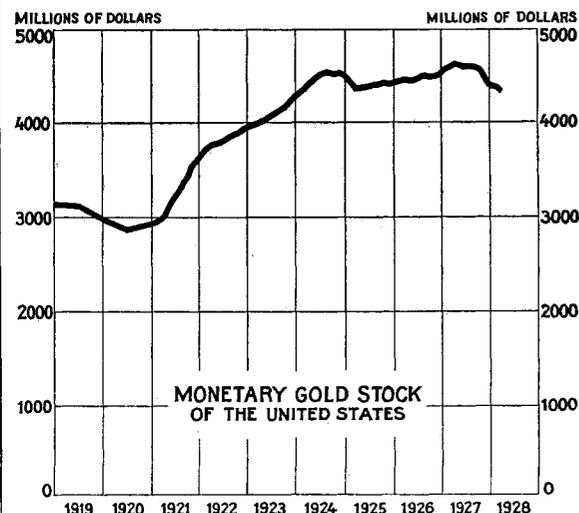
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REVIEW OF THE MONTH

During the month of March exports of gold from the United States to foreign countries were larger than for any other month on record, while gold imports were almost negligible in amount. A substantial part of the gold outflow, however, represented nothing more than the actual shipment of gold that had been previously acquired by foreign countries and held by them under earmark with the Federal reserve banks. To a considerable extent, therefore, the recent gold exports involved no current draft on the banking resources of the United States, but after adjusting the figures for all factors affecting during March the monetary gold stock of the United States there was on final reckoning a net loss of gold for the month approximating \$56,000,000. While loss in a single month of an amount greater than this has occurred several times during recent years, namely, in November and December of last year and in January and February of 1925, the loss during March was nevertheless of exceptional volume. Provision of a given amount of gold for export or earmark tends to deprive the market of a like amount of reserve funds, or to cause increased indebtedness of member banks at the reserve banks, except to the extent that this influence may be offset by coincident developments of opposite effect, notably purchases of securities by the reserve banks—which did not occur in March—or an inflow of currency from circulation. While there was an inflow of \$20,000,000 currency in the first four weeks of March, there was a subsequent outflow of \$80,000,000, with the consequence that by the end of the month both gold exports and cur-

rency demand had come to be factors making for firmness in the current credit situation.

March was the seventh consecutive month in which gold exports exceeded gold imports, net exports for the period approximating \$262,000,000. This figure does not, however, measure the actual loss of gold for the period, chiefly because there was at the same time a net increase in gold held under earmark by the



Federal reserve banks for foreign account. Measured by reduction in the gold stock of the United States, the actual loss of gold for the period from the first of September to the end of March amounted to \$283,000,000, of which \$74,000,000 represented gold lost in the first quarter of the current year. This is in sharp contrast with a gain, indicated by the chart, of more than \$100,000,000 during the first quarter of 1927. The chart also brings out the fact that the loss of gold in the last four months of

1927, amounting to \$209,000,000, represented to the extent of about one-half the transfer to foreign ownership, by export or earmark, of gold acquired by the United States during the early months of the year. Notwithstanding the large and continuous loss of gold from last September to the end of March, the total gold stock of the United States, at \$4,306,000,000, remained at a higher point than had been reached previous to 1924.

At the end of 1927, the latest date for which comprehensive figures are available, the total stock of monetary gold held by governments, central banks, and similar institutions throughout the world, either in their own vaults or under earmark with correspondents, appears to have been not less than \$9,475,000,000 and to have shown an increase for the year of at least \$300,000,000. While the net increase for the year in monetary holdings of all countries combined, including the United States (which lost about \$100,000,000), is estimated at not less than \$300,000,000, the increase for foreign countries as a group was more than \$400,000,000. This increase was considerably greater than that of other recent years, partly because of smaller takings than usual by India, but also because of the release at London during the year, through action by the Bank of France, of \$90,000,000 that had previously been held by the Bank of England as collateral security for a French debt. This had the effect of adding a substantial amount to the supply of gold made available during the year by new production from the mines. The new production, approximately \$400,000,000, was about the same as in other recent years.

In estimating the increase of more than \$400,000,000 in the monetary gold holdings of foreign countries account is taken not only of the increase of \$160,000,000 in gold holdings during the year as actually reported by foreign central banks and governments, which are shown in detail in a table elsewhere in this BULLETIN,¹ but also of the fact that the reported increase in gold earmarked in the United

States and elsewhere for foreign account was reflected to but limited extent in the gold holdings separately reported by foreign institutions. The holdings of the Banco de la Nacion of Argentina, which increased by \$54,000,000, are also taken into account.

Analysis based on the figures of gold holdings actually reported by individual foreign countries indicates that important increases during 1927 were as follows: Argentina (conversion fund and Banco de la Nacion), \$79,000,000; Brazil, \$45,000,000; Poland, \$31,000,000; Italy, \$18,000,000; and Belgium, \$14,000,000. All of these are among the countries which have reestablished their currencies on a gold basis within recent years or were engaged in 1927 in making preparations to do so. While this analysis does not take into account the full growth of gold "held abroad" by foreign countries, it indicates nevertheless that in 1927 an important source of the demand for additional gold was the progressive movement toward the general adoption of the gold standard. This movement began in certain countries at least as early as 1923, but it is since the end of 1924 that it has been of special interest and importance. During the three years from that time to the end of 1927 the net increase in the total monetary holdings of foreign central banks and governments amounted altogether to not less than \$675,000,000, while the gold holdings of the United States Treasury and Federal reserve banks decreased by \$113,000,000. When account is taken of developments since the first of the year, it appears that the increase in the monetary stock of foreign countries since the end of 1924 has exceeded \$775,000,000 and the decrease in the gold stock of the United States has been less than \$200,000,000. Thus the period in which the majority of the important foreign currencies that were deranged by the war have been again brought into definite relation with gold has been characterized by substantial growth in the gold holdings of foreign countries without the accompaniment of much reduction in the large holdings of gold that accumulated in the United States in consequence of the war.

¹ Page 260

Annual Report

The text of the Annual Report of the Federal Reserve Board, covering operations for 1927, was presented to Congress on March 26 and released for publication March 27.

Charts on Bank Credit, Money Rates, and Business Activity

A collection of 24 charts illustrating changes in bank credit, money rates, and business activity has been recently published by the Federal Reserve Board, including the principal graphic material currently prepared by the Division of Research and Statistics for presentation to the board. The charts are on a weekly or monthly basis, illustrating figures published currently in the FEDERAL RESERVE BULLETIN. They are about 7 by 10 inches in size and are ruled to provide for keeping them currently up to date by extension of curves through 1928 and 1929 as data become available. This collection, in pamphlet form, may be obtained from the Federal Reserve Board at a charge of 50 cents a copy, covering the cost of paper and printing.

CONDITION OF ALL BANKS IN THE UNITED STATES

Bank loans and investments in the United States aggregated about \$55,850,000,000 on December 31, 1927, as shown by figures for all banks in the country recently made available and given in the table below. The increase during the year of approximately \$3,580,000,000, or about 6 per cent, is divided nearly equally between loans and investments. About \$1,400,000,000 of the combined increase of loans and investments of all banks is accounted for in loans of member banks of the Federal reserve system, although member

bank loans fell off by about 2 per cent during the first three months of the year.

LOANS AND INVESTMENTS OF ALL BANKS IN THE UNITED STATES

[In millions of dollars]

	All banks	Member banks	Nonmember banks
Dec. 31, 1927:			
Loans.....	38,395	24,318	14,076
Investments.....	17,455	10,361	7,095
Total.....	55,850	34,679	21,171
Change from Dec. 31, 1926:			
Loans.....	+1,796	+1,412	+383
Investments.....	+1,783	+1,371	+413
Total.....	+3,579	+2,783	+796
Change from Oct. 10, 1927:			
Loans.....	+760	+826	-67
Investments.....	+410	+402	+9
Total.....	+1,170	+1,228	-58

The net increase of \$1,170,000,000 in total loans and investments during the last quarter of the year, or more precisely as shown by the table, between October 10 and December 31, covers an increase of \$1,228,000,000 for member banks and a decrease of \$58,000,000 for nonmember banks. Member-bank investments increased during this last quarter by about 4 per cent and investments of nonmember banks by 0.1 per cent.

More detailed compilations of the principal resources and liabilities of these banks are given on pages 300-303 of this BULLETIN. The figures, compiled by the Federal Reserve Board, reflect the condition of 26,431 member and nonmember banks, including all national, State, and private banks in the United States, except certain nonreporting private banks not under State supervision. Similar data are available for each call date since June 30, 1923, and are given for back years in Table 72 of the board's 1926 annual report.

NEW INDEXES OF SALES OF CHAIN STORES AND MAIL-ORDER HOUSES

Sales data for chain stores and mail-order houses are included with other current information on business conditions assembled by the Federal Reserve Board and the Federal Reserve banks and published in the form of monthly index numbers. Heretofore the base period for the sales indexes has been the year 1919. These indexes have now been put upon a new base, making them more easily comparable with other similar series of index numbers computed by the board. The new base period (1923-1925=100) is broader and more recent than the one which it supersedes. The data, moreover, have been adjusted so as to make systematic allowance for differences in the number of business days in the month as well as for customary seasonal variations. These new indexes, covering the period from 1919 to the present time, are presented on pages following, and a brief description of the data upon which they are based and of the method by which they have been computed is given below.

Basic data for chain-store sales are reported to the Federal Reserve system by 81 firms now operating approximately 39,000 stores in seven different lines of retail trade—groceries, 5-and-10-cent variety merchandise, wearing apparel, drugs, cigars, shoes, and candy. The reporting firms, including many of the larger companies in each of these seven lines, operate stores in many sections of the country, although from firm to firm the number of stores operated varies widely. Sales of mail-order houses are furnished by four different companies, including two of the largest in the United States. Table I shows in detail for the years 1919-1927 the number of reporting firms, their annual sales, and, for reporting chain-store companies, the number of stores operated.

TABLE I.—NUMBER OF REPORTING COMPANIES, NUMBER OF STORES AT END OF YEAR, AND ANNUAL SALES, 1919-1927

Type of company and year	Number of reporting companies	Number of stores operated	Annual sales
Grocery chains:			
1919	28	7,801	\$338,538,466
1920	28	8,945	492,928,972
1921	28	9,942	438,945,854
1922	28	13,572	512,027,821
1923	37	17,533	663,262,417
1924	37	20,394	755,859,519
1925	37	25,001	925,395,725
1926	34	27,337	1,115,168,097
1927	34	29,433	1,359,371,361

TABLE I.—NUMBER OF REPORTING COMPANIES, NUMBER OF STORES AT END OF YEAR, AND ANNUAL SALES, 1919-1927—Continued

Type of company and year	Number of reporting companies	Number of stores operated	Annual sales
5-and-10-cent chains:			
1919	7	1,727	\$209,276,659
1920	7	1,813	250,883,834
1921	8	1,809	260,988,102
1922	8	1,875	295,952,070
1923	14	2,143	357,365,352
1924	14	2,316	401,700,389
1925	14	2,459	457,858,867
1926	14	2,664	506,142,684
1927	14	2,944	560,773,589
Apparel chains:			
1919	2	230	36,505,986
1920	2	350	52,960,157
1921	2	358	59,254,380
1922	2	421	64,120,272
1923	5	563	86,600,322
1924	5	677	102,849,341
1925	5	783	125,108,269
1926	5	887	155,986,661
1927	5	1,080	198,672,838
Drug chains:			
1919	10	404	47,107,149
1920	10	414	56,687,996
1921	10	429	57,591,680
1922	10	445	59,977,626
1923	16	560	78,169,174
1924	16	593	82,686,121
1925	15	681	92,101,645
1926	15	828	106,465,669
1927	13	936	120,222,701
Cigar chains:			
1919	3	2,173	71,102,170
1920	3	2,196	94,225,063
1921	3	2,241	98,605,746
1922	3	2,767	91,457,602
1923	5	2,730	97,714,607
1924	5	2,867	99,679,585
1925	5	3,282	101,857,061
1926	5	3,455	110,391,749
1927	4	3,471	110,119,595
Shoe chains:			
1919	6	281	28,043,501
1920	6	285	33,649,781
1921	6	293	31,807,549
1922	6	322	31,952,353
1923	7	366	35,166,416
1924	7	454	37,971,954
1925	7	523	39,878,328
1926	7	578	42,414,837
1927	7	625	43,183,331
Candy chains:			
1919	4	54	11,385,142
1920	4	72	15,698,267
1921	4	82	16,181,032
1922	4	102	16,691,096
1923	5	170	25,591,413
1924	5	179	27,679,484
1925	5	234	28,991,547
1926	5	249	31,332,400
1927	4	269	32,717,017
Mail-order houses:			
1919	4	-----	438,827,998
1920	4	-----	452,321,249
1921	4	-----	314,274,907
1922	4	-----	344,338,946
1923	4	-----	433,176,515
1924	4	-----	461,046,766
1925	4	-----	518,043,348
1926	4	-----	541,325,885
1927	4	-----	562,765,581

Since complete data covering the total volume of retail sales by all chain stores in the United States are not available, it is impossible

to determine accurately what proportion of total chain-store sales is represented by the figures reported to the Federal reserve system. It has been estimated, however, by Paul H. Nystrom that sales of all chain stores in the United States amounted to \$4,800,000,000 in 1926.¹ Of the total so estimated, sales of companies reporting to the Federal reserve system constitute about 40 per cent and provide a fairly representative sample of chain-store trade. A similar estimate of sales for mail-order houses, as amounting to \$1,600,000,000, indicates that firms reporting to the Federal reserve system and having annual sales of over \$550,000,000 are also fairly representative of their particular branch of retail trade.

Indexes without seasonal adjustment.—In constructing the several series of index numbers without seasonal adjustment, monthly totals of dollar sales for reporting companies in each line were obtained and these totals were converted into percentage relatives by dividing the total for each month by the average monthly sales of *identical companies* in the base period; i. e., in the three years, 1923, 1924, and 1925. As the number of companies reporting varied from year to year, it was necessary to compute several separate averages for the base period so that the indexes would in each case express the relationship between sales in the given month and average monthly sales in the base period for identical companies. Sales during 1923, 1924, and 1925 of the companies which did not report in the earlier years, for example, were subtracted from total sales of all companies reporting in the base period, and the monthly average for the base period of this reduced sales figure was used in computing relatives for the period in which the particular companies were not reporting. Similar adjustments were made in the base for firms which have discontinued reporting since 1925.

Relatives thus derived for each line of retail trade represented by the chain-store reports are the index numbers of sales without adjustment for seasonal variation. They are shown in Table II, together with a similarly computed series covering sales of mail-order houses.

On examination of the sales indexes so computed, it became evident that the course of sales of chain stores was affected (1) by rapid expansion and growth, resulting partly from increases in the number of stores operated by individual companies, and (2) by fairly regular fluctuations attributable to seasonal influences or to conventions that characterize buying at retail stores. The number of stores operated by chain-store companies has increased at widely different rates in the several lines of retail trade and as between individual companies in the same line. For mail-order houses growth in sales is likewise attributable in some measure to increase in the number of branch houses and to the opening of retail stores, but to a smaller degree than in the case of chain-store systems. In computing the indexes, no adjustment has been made to eliminate the influence of increase in the number of stores, and the full growth of the business of these companies is reflected in the indexes.

Adjustment for seasonal variations.—In adjusting the indexes to eliminate the influence of typical seasonal variations, average daily sales were computed by dividing the total sales for each month by the number of actual business days in the month, making allowance for Sundays and for six national holidays. An index of average daily sales was then constructed by a process similar to that used in computing the unadjusted index, and this index was adjusted for seasonal variations according to the ratio-to-moving-average method. This method which has been used in preparing other Federal Reserve Board indexes of trade and industry, is described in detail on pages 236-242 of this BULLETIN. The adjustment factors developed by this method and used in adjusting the indexes of chain-store and mail-order-house sales are given in Table III. In the case of mail-order houses, 5-and-10-cent chains, apparel chains, and shoe chains, special adjustments similar to those made in the index of department-store sales were made in order to eliminate the effects of variation in the date of the Easter trading season. The seasonal adjustment factors for March and April, which are given in Table III, are the *average* monthly quotas which form the basis for the sliding scale of adjustment factors, varying according to the date of Easter.²

¹ Survey of Retail Trade in the United States, Journal of Commerce, Jan. 28, 1928.

² See pp. 240-241 of this issue.

TABLE II.—SALES OF MAIL-ORDER HOUSES AND CHAIN STORES

[Index numbers. Monthly average 1923-1925=100]

Year and month	Index without seasonal adjustment								Index with seasonal adjustment							
	Mail-order houses	Chain stores							Mail-order houses	Chain stores						
		Grocery	5-and-10-cent	Wear-ing ap-parel	Drug	Cigar	Shoe	Candy		Grocery	5-and-10-cent	Wear-ing ap-parel	Drug	Cigar	Shoe	Candy
ANNUAL INDEXES																
1919.....	93	45	53	36	64	72	76	53	-----	-----	-----	-----	-----	-----	-----	
1920.....	96	66	64	52	78	96	91	73	-----	-----	-----	-----	-----	-----	-----	
1921.....	67	59	66	59	79	95	86	75	-----	-----	-----	-----	-----	-----	-----	
1922.....	73	69	74	64	82	93	86	77	-----	-----	-----	-----	-----	-----	-----	
1923.....	92	85	88	83	93	98	93	93	-----	-----	-----	-----	-----	-----	-----	
1924.....	98	97	99	98	98	100	101	101	-----	-----	-----	-----	-----	-----	-----	
1925.....	110	118	113	119	109	102	106	106	-----	-----	-----	-----	-----	-----	-----	
1926.....	115	143	125	149	126	111	113	114	-----	-----	-----	-----	-----	-----	-----	
1927.....	120	174	138	189	143	110	115	119	-----	-----	-----	-----	-----	-----	-----	
MONTHLY INDEXES																
1919																
January.....	80	40	37	20	59	54	52	40	83	39	48	31	59	60	68	48
February.....	68	38	38	20	54	56	46	41	76	40	49	31	58	65	67	48
March.....	77	43	48	29	62	68	59	43	74	42	55	35	62	72	66	45
April.....	85	42	50	34	61	66	83	50	81	41	50	32	62	67	65	47
May.....	76	44	51	37	61	74	80	46	87	42	53	36	60	70	70	46
June.....	69	41	46	34	60	67	72	43	82	43	53	36	64	71	68	47
July.....	71	46	47	30	65	71	67	48	93	46	52	36	64	71	73	49
August.....	77	44	50	34	66	72	77	53	101	48	56	41	68	76	96	55
September.....	95	45	49	41	64	69	81	53	98	48	54	40	66	70	86	53
October.....	145	54	58	53	67	80	95	58	111	51	52	39	65	75	85	55
November.....	138	51	61	48	67	83	96	60	115	52	60	39	73	89	95	62
December.....	136	56	104	55	87	108	103	99	104	51	54	34	71	77	75	69
1920																
January.....	112	59	46	26	74	77	68	57	116	57	60	41	75	86	89	70
February.....	114	57	44	25	70	77	58	58	127	60	67	38	75	89	84	68
March.....	122	67	60	37	76	87	92	68	112	65	65	42	76	92	94	72
April.....	100	71	60	44	72	89	102	70	100	69	64	46	72	90	84	65
May.....	84	69	61	55	76	98	109	69	100	69	66	55	78	97	98	72
June.....	81	71	59	53	76	94	95	66	92	71	64	54	77	96	87	70
July.....	75	72	60	48	81	99	92	74	99	73	67	59	80	99	101	76
August.....	75	65	60	49	78	93	71	73	98	71	67	60	80	98	89	76
September.....	84	65	60	64	78	99	83	74	87	69	66	62	81	100	89	74
October.....	97	67	70	78	80	109	107	80	77	66	66	59	81	107	100	78
November.....	117	65	68	70	74	97	101	72	94	64	65	56	78	100	96	71
December.....	91	65	117	81	97	130	114	112	70	59	60	50	79	93	83	79
1921																
January.....	64	58	46	40	76	87	67	64	69	59	62	66	79	101	90	81
February.....	60	56	49	41	72	84	63	62	67	59	64	62	77	98	91	73
March.....	89	61	64	55	80	95	104	83	78	58	66	59	78	97	101	84
April.....	72	57	59	57	79	97	104	71	73	55	64	61	79	99	86	66
May.....	56	55	60	58	78	93	100	71	67	55	64	58	79	93	91	74
June.....	58	55	58	59	78	92	94	72	66	56	64	60	80	95	85	76
July.....	46	54	58	51	79	93	72	75	63	57	66	64	81	96	82	80
August.....	53	57	61	50	78	92	62	76	66	60	66	58	78	93	74	76
September.....	68	56	60	61	77	92	74	74	70	60	66	59	80	94	79	73
October.....	83	64	75	78	80	100	98	74	66	63	70	60	81	93	91	73
November.....	78	63	71	71	75	90	88	68	62	63	68	56	79	93	84	68
December.....	75	69	129	84	94	125	108	107	57	64	66	52	77	89	79	75
1922																
January.....	61	64	50	35	75	80	62	61	66	65	67	57	79	93	84	78
February.....	55	61	53	37	74	79	61	63	62	64	68	57	80	91	87	74
March.....	78	71	63	49	80	90	75	71	72	66	69	58	77	92	81	71
April.....	72	66	72	61	77	90	115	79	71	66	76	61	81	95	93	77
May.....	65	66	69	62	80	93	94	75	75	64	71	60	78	89	82	75
June.....	64	66	67	61	80	89	90	72	73	67	74	62	81	91	82	76
July.....	54	65	67	50	82	92	79	74	74	68	77	64	84	95	91	79
August.....	53	67	69	52	83	92	64	79	67	70	74	61	83	92	77	79
September.....	70	69	72	70	83	98	88	81	72	73	79	68	86	99	94	81
October.....	101	72	83	88	86	92	92	79	80	71	78	67	87	90	86	78
November.....	103	76	81	87	80	92	93	76	82	75	77	69	84	95	88	76
December.....	100	80	149	110	105	129	123	116	80	77	80	70	89	96	93	85
1923																
January.....	83	78	61	47	82	83	65	69	86	76	79	73	83	93	85	85
February.....	78	77	62	48	80	79	55	73	87	81	80	73	87	92	79	85
March.....	105	89	86	72	93	97	110	102	93	84	90	78	90	99	109	103
April.....	96	82	75	72	87	90	95	82	99	82	84	78	91	96	82	79
May.....	91	86	82	81	91	99	108	89	105	83	85	78	90	95	95	90
June.....	80	84	83	83	96	99	109	90	91	84	90	84	97	101	99	96
July.....	69	81	77	62	90	92	78	90	94	85	88	78	93	96	88	96
August.....	68	82	82	67	93	98	72	94	86	86	88	79	93	99	87	94
September.....	85	83	81	90	92	101	96	93	92	93	93	91	99	107	107	97
October.....	125	91	96	115	98	100	105	99	96	87	87	84	95	95	94	94
November.....	114	92	94	110	90	97	99	95	91	91	90	88	95	100	94	95
December.....	110	92	179	145	120	140	129	143	87	88	96	93	101	104	98	105

TABLE II.—SALES OF MAIL-ORDER HOUSES AND CHAIN STORES—Continued

Year and month	Index without seasonal adjustment							Index with seasonal adjustment								
	Mail-order houses	Chain stores						Mail-order houses	Chain stores							
		Grocery	5-and-10-cent	Wear-ing ap-parel	Drug	Cigar	Shoe		Candy	Grocery	5-and-10-cent	Wear-ing ap-parel	Drug	Cigar	Shoe	Candy
MONTHLY INDEXES—con.																
1924																
January.....	92	92	67	58	91	86	75	82	95	90	87	90	91	96	97	100
February.....	89	91	74	62	92	89	70	89	95	91	92	91	96	100	98	100
March.....	98	91	87	77	97	98	89	98	95	89	100	95	98	104	100	102
April.....	106	95	95	94	95	94	135	109	100	91	97	91	95	96	105	102
May.....	84	97	93	96	98	104	114	99	96	93	97	93	97	99	100	100
June.....	83	90	87	88	94	95	106	90	97	94	99	93	99	101	101	99
July.....	64	93	87	74	96	93	86	94	84	94	97	91	95	92	95	97
August.....	69	91	92	81	99	100	83	95	91	99	103	99	103	105	104	99
September.....	99	94	91	101	95	99	94	101	102	101	100	98	98	101	101	100
October.....	132	108	109	130	103	104	105	106	101	102	98	95	100	99	94	101
November.....	122	105	107	142	94	100	110	99	102	107	107	118	104	107	109	102
December.....	138	115	199	173	122	138	141	150	105	106	102	107	99	99	103	106
1925																
January.....	100	113	80	69	100	88	82	86	104	110	104	107	101	99	106	105
February.....	98	105	83	72	95	86	76	93	109	110	107	110	102	99	110	109
March.....	111	114	95	96	104	95	96	100	106	111	107	115	104	100	106	105
April.....	109	116	105	114	103	96	134	111	104	112	108	112	104	98	106	104
May.....	88	115	102	112	106	103	113	104	105	115	110	112	108	102	102	108
June.....	95	114	101	111	107	96	115	98	107	115	110	113	109	99	105	104
July.....	81	116	98	91	107	98	93	96	107	118	109	111	105	97	102	99
August.....	83	109	105	100	111	102	92	107	109	120	117	122	115	107	115	111
September.....	106	114	103	123	109	102	99	107	109	122	113	119	113	104	105	107
October.....	158	136	128	182	116	109	124	114	121	129	116	134	112	104	111	108
November.....	135	125	119	151	108	98	104	104	112	128	119	125	119	106	103	108
December.....	156	144	235	211	146	152	143	149	119	133	121	130	119	109	105	105
1926																
January.....	108	131	89	84	114	92	83	89	116	133	103	136	119	107	112	112
February.....	103	129	92	88	111	92	75	92	115	135	118	134	119	106	108	108
March.....	121	144	107	122	124	102	109	110	107	135	112	131	120	104	108	111
April.....	112	147	110	134	122	108	126	120	112	142	117	140	123	109	104	112
May.....	98	140	116	150	122	115	132	117	117	140	125	151	125	114	120	122
June.....	105	143	111	138	119	109	116	108	119	143	121	140	121	112	106	115
July.....	91	143	112	127	126	112	111	112	119	145	124	154	124	111	121	114
August.....	91	131	111	122	123	106	93	103	120	143	124	149	128	111	116	107
September.....	113	133	115	157	124	109	108	116	111	142	127	152	128	111	115	115
October.....	140	150	140	201	133	116	120	121	116	148	132	153	134	115	112	119
November.....	143	155	135	200	128	107	114	123	114	153	130	159	135	111	108	123
December.....	155	167	258	263	169	159	163	161	118	154	133	162	137	114	119	113
1927																
January.....	103	155	96	100	134	97	82	95	111	157	130	163	140	113	111	120
February.....	101	148	104	114	129	99	84	103	112	155	133	173	139	115	121	121
March.....	125	174	116	148	143	111	96	115	117	163	128	175	139	113	104	116
April.....	120	172	135	199	144	113	150	136	113	166	137	192	144	115	117	127
May.....	99	171	123	171	134	113	109	115	118	172	132	172	137	113	99	120
June.....	107	178	123	172	136	109	118	114	121	179	135	175	138	112	108	121
July.....	93	167	121	157	141	111	109	112	127	176	139	199	144	114	124	119
August.....	105	170	130	165	140	106	101	110	133	179	140	193	139	107	121	110
September.....	118	171	128	198	137	106	108	119	122	183	141	192	141	107	115	118
October.....	147	190	153	250	151	111	121	124	117	187	144	191	152	109	112	122
November.....	149	189	146	250	144	105	118	125	119	186	140	198	152	107	112	124
December.....	167	202	279	350	182	156	178	164	128	186	147	215	148	111	130	115
1928																
January.....	105	188	104	121	146	90	87	100	113	191	140	197	153	105	117	126
February.....	108	194	115	137	148	96	86	106	116	195	142	201	153	107	120	120

TABLE III.—SEASONAL ADJUSTMENT FACTORS USED IN INDEX OF SALES OF CHAIN STORES AND MAIL-ORDER HOUSES

	Janu-ary	Febru-ary	March	April	May	June	July	August	Sep-tember	Octo-ber	Nov-ember	De-cember
Chain stores:												
Grocery.....	101	102	101	102	102	98	97	90	96	100	104	107
5-and-10.....	76	83	89	94	95	90	89	88	93	105	107	191
Apparel.....	63	70	85	97	102	97	81	81	106	129	129	160
Drugs.....	98	99	98	98	100	97	100	95	99	98	97	121
Cigars.....	88	92	93	97	103	96	99	94	101	100	99	138
Shoes.....	76	74	93	122	113	108	90	79	96	106	108	135
Candy.....	81	91	94	106	98	93	96	95	103	100	103	140
Mail-order houses.....	95	96	105	101	86	87	75	75	99	124	128	129

SEASONAL VARIATIONS IN WHOLESALE AND RETAIL TRADE

Many of the Federal Reserve Board's indexes of production and trade are presented in the FEDERAL RESERVE BULLETIN in two forms, as "adjusted for seasonal variations" and "without seasonal adjustment."¹ The "unadjusted" indexes reflect the net composite effect upon industry and trade of seasonal variations, changes in general business conditions, long-time growth, and temporary accidental changes such as those occasioned by strikes. In the "adjusted" index the influence of regular seasonal variations is eliminated. The present article deals in some detail with the simple mathematical processes by which adjustments have been effected for eliminating the particular effects of seasonal influences upon the volume of wholesale and retail sales. In any such account descriptive of mathematical processes it is difficult to avoid a somewhat fictitious implication of perfect regularity of incidence and variation in seasonal changes and a further implication of complete adequacy of data for measuring these effects. No such implications are here intended. The adjusted index for sales is presented as being only an approximation in which the margin of error is too small to invalidate the index as a measure of nonseasonal fluctuations and trends in the volume of trade.

Seasonal variations may be described as those fluctuations in the volume of industry—whether agriculture, manufacture, trade, or transportation—which recur regularly at annual intervals, with a periodicity determined by climatic or other seasonal influences or by social conventions. The custom of purchasing new spring wardrobes at Easter time, for instance, regularly occasions during the weeks immediately preceding greater activity in the manufacture and sale of clothing year after year. In the months of February and March the factory output of fabrics, of shoes, and of millinery increases and sales of wholesale clothing firms also are greater. Somewhat later—in March and April, according to the date of Easter—sales of department and apparel stores, mail-order houses, and 5-and-10-cent stores increase in volume. Summer brings some recession in almost all lines of business, followed by an expansion of production and trade in the autumn, and by a great increase of retail sales in December, particularly at Christmas time.

¹ Descriptions of these index numbers are to be found in the following issues of the FEDERAL RESERVE BULLETIN: Industrial production, February, 1927, pp. 100-103, and March, 1927, pp. 170-177; building contracts, freight-car loadings, and revised index of automobile production, August, 1927, pp. 562-563; wholesale distribution, December, 1927, pp. 817-828; department-store sales and stocks, February, 1928, pp. 114-124; revised indexes of chain-store and mail-order house sales, this issue.

A wide seasonal swing exists when the business of the year is concentrated within a few months and other months are very dull in contrast. Lines of industry differ materially in the magnitude of their characteristic seasonal fluctuation. Production and wholesale sales of men's and women's clothing, for example, are commonly described as "highly seasonal," while wholesale sales of such products as meats, groceries, drugs, and hardware are found to be more evenly distributed throughout the year.

Recognition of these seasonal variations has impelled those who interpret the current state of business activity by the use of figures for actual sales, or of index numbers based upon those figures, to take into account the customary seasonal change. But such interpretations made without reference to some mathematical measure of the share of the year's business usually done in the given month are at best of uncertain and unverifiable value. In interpreting the unadjusted index number of 184 for department-store sales in December, 1926, to take a specific instance, it is necessary to know not simply that sales in December are usually above the average for the year, but that sales in this month usually exceed the average by approximately a given percentage. An index number from which the regular seasonal peaks have been eliminated reveals the direction and measures the extent of nonseasonal monthly changes and of long-time trends. In constructing the Federal Reserve Board's new indexes of wholesale and retail trade such a mathematical measurement in the form of a percentage is substituted for an informal allowance made for months considered "slack" or "busy," and is used as a near approximation to a typical quota of business done in each month in the year. These monthly quotas are used as divisors of current volume index numbers for appropriate months, and the resulting index numbers are "adjusted for seasonal variations."

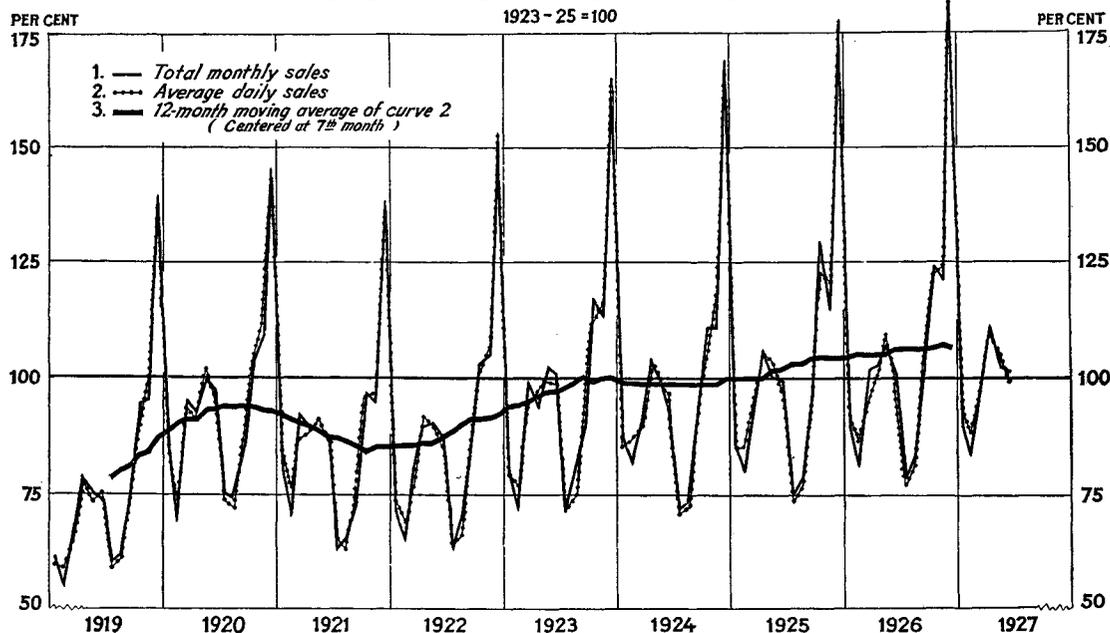
Original data.—The original data from which current volume index numbers and their seasonal-adjustment quotas were prepared appear in the FEDERAL RESERVE BULLETIN for December, 1927, February, 1928, and April, 1928. For the purpose of deriving mathematical measures of seasonal variations these data are in two respects somewhat deficient: (1) The period for which they are available is relatively short, and (2) the dollar values upon which they are based are subject to wide price fluctuations. For lines of wholesale distribution

and retail trade data were generally available for about nine years, from 1919 to June, 1927. Sales in three of the nine lines represented by the index of wholesale distribution—meats, furniture, and drugs—had been reported to the Federal reserve banks for a somewhat shorter period—about six or seven years. Computations from the dollar volume of sales at wholesale were complicated by the rise in wholesale prices throughout 1919 and the spring of 1920 and their fall from May of 1920 to 1921. Because of the highly accidental character of changes from month to month during this period, data for

application to index numbers of wholesale distribution, department-store sales and stocks, chain-store and mail-order house sales are described below and illustrated by the computations for department-store sales for the United States.

“Average daily” and “monthly total” figures.—A distinctive feature of the new “adjusted” indexes of department and chain store and mail-order-house sales is that they are based on average daily sales, instead of total sales during the calendar month, and are, therefore, not influenced by differences in the number of days in the month or by the occurrence of

CHART I
INDEXES OF DEPARTMENT STORE SALES



these early years were given little weight in determining seasonal adjustment factors.

Method of deriving adjustment factors.—Various statistical devices are employed in deriving measures of seasonal variations, each device furnishing a mere *approximation*, which must be revised occasionally to take account of gradual changes, evidently in progress in many lines of trade, which affect their seasonal variations.

The device adopted by the Federal Reserve Board for use in computing its revised indexes is the ratio to moving average.² Details of its ap-

plication to index numbers of wholesale distribution, department-store sales and stocks, chain-store and mail-order house sales are described below and illustrated by the computations for department-store sales for the United States.

A survey made by the Federal Reserve Board to determine the days on which department stores are ordinarily closed indicated that Sundays and the six national holidays—January 1, May 30, July 4, Labor Day, Thanksgiving Day, and December 25—should be deducted from the total number of days in the month. The observance of other holidays was not sufficiently uniform throughout the United States to make it practicable to take them into account. The adjustment effected

² See FEDERAL RESERVE BULLETIN for December, 1922, p. 1416, and March, 1927, p. 172, for descriptions of the use of this device in computing indexes of industrial production.

by dividing monthly total sales by the number of business days is shown by a comparison of the indexes of monthly sales and average daily sales. (Chart I, curves 1 and 2.)

In the indexes of wholesale distribution no adjustment was made for number of selling days, since variation in the number of business days in different months has a less pronounced effect on the volume of sales than in the case of retail trade. Seasonal adjustments for wholesale trade are therefore computed directly from the unadjusted index, as are also, for obvious reasons, adjustments for department-store stocks, for which end-of-month figures only are reported.

The ratio to moving average.—(1) In estimating the proportion of yearly sales which is customarily made in each month, the simplest method is to obtain an average of sales in each month in the years from 1919 to 1927 and to compute the percentage which each average formed of the average for the 12. Inaccuracy would result from such a procedure because, for example, the upward trend in department-store sales subsequent to 1922 (see Chart I) would result in a higher average for each of the late months of the year—December, for instance—than would be warranted by the true seasonal movement. It has therefore been necessary to construct a curve roughly describing this year-to-year growth and other important nonseasonal factors, such as the effect of short-time fluctuations in the industry, in order to obtain a more correct average measure for each month. The device used is a 12-month moving average placed opposite the seventh month of its set of 12. The method of computation is shown in Table 1. The index figures of average daily sales of department stores for the 12 months of 1926, for example, were added and averaged and the average placed opposite July; the next average, for the 12 months from February, 1926, through January, 1927, was placed opposite August of

1926, and thus the average moved on throughout the series. Accurate values for the six months at either end of the series were, of necessity, lacking, but approximate figures were estimated.

TABLE 1.—METHOD OF SEASONAL ADJUSTMENT OF DEPARTMENT-STORE SALES

Year and month	1 Index of average daily sales (1923-25= 100) ¹	2 12-month moving total cen- tered at seventh month	3 12-month moving average centered at seventh month	4 Ratio of index of average daily sales to moving average [(1÷3)100]
1926				
January.....	91.0	1,251.0	104.3	87.2
February.....	86.7	1,254.0	104.5	82.9
March.....	96.2	1,258.8	104.9	91.7
April.....	101.6	1,265.6	105.5	96.3
May.....	109.4	1,264.9	105.4	103.8
June.....	99.3	1,267.6	105.6	94.0
July.....	76.9	1,273.3	106.1	72.5
August.....	81.4	1,273.5	106.1	76.7
September.....	103.6	1,275.0	106.3	97.5
October.....	121.8	1,273.4	106.1	114.8
November.....	124.1	1,281.2	106.8	116.2
December.....	181.3	1,276.5	106.4	170.4

¹ The figures for July through December, 1925, and January through June, 1927, which were necessary to compute the moving totals and averages are as follows: 1925—July, 73.9; August, 76.6; September, 96.8; October, 122.5; November, 121.4; and December, 175.6. 1927—January, 91.2; February, 88.2; March, 94.6; April, 109.4; May, 104.7; and June, 99.8.

The resulting curve (Chart I, curve 3) is a relatively smooth one, which reflects the more important nonseasonal fluctuations in department-store sales—the depression of 1921 and the first half of 1922 and the gradual rise which took place in the succeeding four years.

(2) The influence of the nonseasonal fluctuations measured in this manner was then eliminated by dividing each monthly figure in the index of average daily sales by the moving average placed opposite it (and multiplying by 100 to remove decimals). (See Table 1, column 4.) The ratios derived by this procedure reflect all the seasonal fluctuations, but none of the nonseasonal elements measured by the moving average. These ratios are arranged by months, chronologically, in Table 2.

TABLE 2.—SEASONAL ADJUSTMENT FACTORS—DEPARTMENT-STORES SALES

Years	Ratios of index of average daily sales to moving average, monthly ¹											
	January	Febru- ary	March	April	May	June	July	August	Septem- ber	October	Novem- ber	Decem- ber
1919.....							76.1	76.4	94.2	106.9	120.4	158.0
1920.....	93.2	82.1	102.9	99.2	110.3	101.8	78.3	77.0	92.8	109.4	119.2	154.9
1921.....	90.3	83.6	96.9	98.3	102.3	97.9	74.7	73.1	87.6	113.3	114.3	160.8
1922.....	86.6	81.4	90.2	106.5	103.1	97.8	72.9	74.1	95.3	111.5	117.0	166.2
1923.....	84.1	81.6	98.6	100.5	103.4	101.8	73.7	75.9	95.5	111.6	116.1	165.6
1924.....	85.5	87.6	90.0	103.5	100.0	97.7	71.9	73.3	96.6	106.1	119.2	165.8
1925.....	84.8	85.5	93.4	104.4	100.9	95.4	71.8	74.0	93.4	118.0	117.3	168.7
1926.....	87.2	82.9	91.7	96.3	103.8	94.0	72.5	76.7	97.5	114.8	116.2	170.4
Total 2 or 3 middle items.....	259.3	248.6	282.0	303.2	308.8	293.4	146.6	150.0	189.5	223.1	234.3	331.4
Average 2 or 3 middle items.....	86.4	82.9	94.0	101.1	102.9	97.8	73.3	75.0	94.8	111.6	117.2	165.7
Final seasonal adjustment fac- tors.....	86	83	93	101	102	97	74	76	95	111	117	165

¹ Middle ratios are in bold-face type.

(3) The ratios were next arranged in monthly groups in order of size, without regard to chronology. The clustering of the ratios within a narrow range of values in each monthly group (Chart II) indicates that sales in each month approximate the same proportion, year after year, of the annual total.

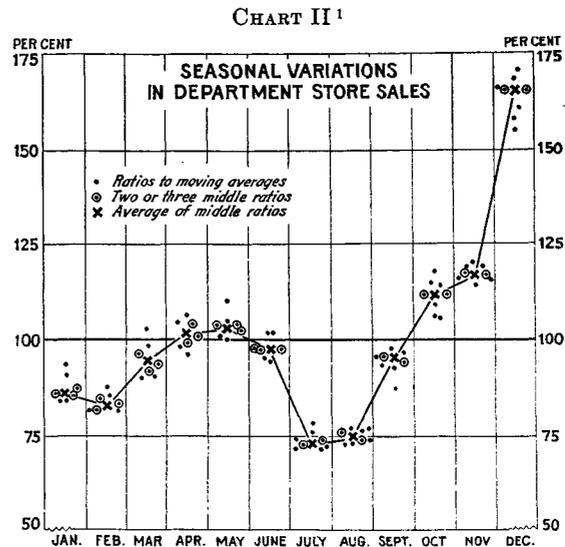
(4) An average figure was obtained for each month by computing averages of the two or three middle items of these arrays. (See Table 2.) The number of items composing the average varied according to whether ratios were available for an odd or an even number of years. This average is believed to be a more accurate one for obtaining a typical figure than either a median, which in so small an array of items is likely to be erratic, or a simple arithmetic average, in which large items have an undue influence. In the month of May, for example, a ratio of 110.3 in 1920, when retail prices were at their peak, and a low ratio of 100 during the period of business recession in 1924 were not included in the average. The middle items in each series are shown in bold-face type in Table 2 and indicated on Chart II by dots surrounded by circles. The averages are shown on the chart by cross marks (x).

(5) The 12 average ratios were then rounded off to whole numbers and adjusted to total 1,200 in order that each monthly measure might express the proportionate volume of sales in that month to 100 as the average for the year. (See Table 2.) This adjustment to 1,200 was based in part on the evident tendency of a particular month to increase or decrease in relation to the other months in recent years, or, in other words, to some extent the known change in seasons was taken into account.

(6) After the averages of the middle items for each of the 12 months had been adjusted to total 1,200, the resultant figures were inspected to determine whether they measured the typical seasonal movement or gave evidence of accidental variations of a nonseasonal character. To test their accuracy a provisional index adjusted for seasonal variations by dividing each monthly relative by the appropriate provisional seasonal factor was constructed. Occasionally the "adjusted" figures so derived showed an increase or decrease between certain consecutive months in nearly every year, indicating a fixed error. When this occurred the seasonal factor in question was raised or lowered by one or two points to correct the error, which usually arose from

accidents in selection of the two or three middle items in the original small array.

(7) After a satisfactory set of seasonal adjustment factors had been derived, an index finally adjusted for seasonal variations was obtained by dividing each monthly relative in the index of average daily sales (Table 1, column 1) by the ratio figures representing seasonal variation for the given month. Thus the relative of average daily sales of department stores for January, 1927, 91.2, was divided by



¹ Figures are given in Table 2.

86, the seasonal adjustment factor for January (and multiplied by 100 to remove decimals), to obtain an adjusted relative of 106 per cent, and so on for each month of the year.

For most lines of trade this method gave fair measures of seasonal variations, and adjusted the indexes satisfactorily.³ It was necessary to modify this basic formula in the case of department stores and 5-and-10-cent chain stores and mail-order houses because of Easter fluctuations, and in the case of wholesale sales of men's and women's clothing because of changes in seasonal fluctuations.

Adjustment for Easter fluctuations in retail sales.—After the adjustments just described were made, sharp peaks in March and April remained in the provisionally adjusted curve of department-store sales, these peaks representing the seasonal increase in sales because of Easter purchases. The fact that Easter, which is second only to Christmas in increasing

³ Seasonal adjustment factors for the various indexes are given in the articles referred to in footnote 1.

the volume of retail trade, may occur as early as March 22 or as late as April 25 makes adjustment by means of a single set of 12 adjustment factors unsatisfactory. When Easter comes in March, retail sales are much greater in that month than they would otherwise be, and if it comes later than the middle of April, April sales are large and those of March proportionately small.

For the sake of accurate comparisons of sales in the spring months, a sliding scale of adjustment factors, varying with the date of Easter, was devised for removing the seasonal influence of Easter from the sales figures. Five different sets of these seasonal factors were derived for the months of March and April and used with constant seasonal adjustment factors for the other 10 months given in Table 2, so that the total was always 1,200. The Easter adjustment factors for department-store sales for the United States are shown in the following table. The figures in parentheses indicate the sliding scale of differences between the adjustment factors used for March and April when Easter falls in the respective periods shown and the average adjustment factors for those two months—i. e., those which are used when Easter comes in the middle period, April 5 to April 8.

TABLE 3.—EASTER SEASONAL ADJUSTMENT FACTORS FOR DEPARTMENT-STORE SALES

Date of Easter	Adjustment factors	
	March	April
Before Mar. 31.....	96 (average+3)....	98 (average-3).
Apr. 1-Apr. 4.....	95 (average+2)....	99 (average-2).
Apr. 5-Apr. 8 (average).....	93 (average).....	101 (average).
Apr. 9-Apr. 14.....	91 (average-2)....	103 (average+2).
After Apr. 15.....	90 (average-3)....	104 (average+3).

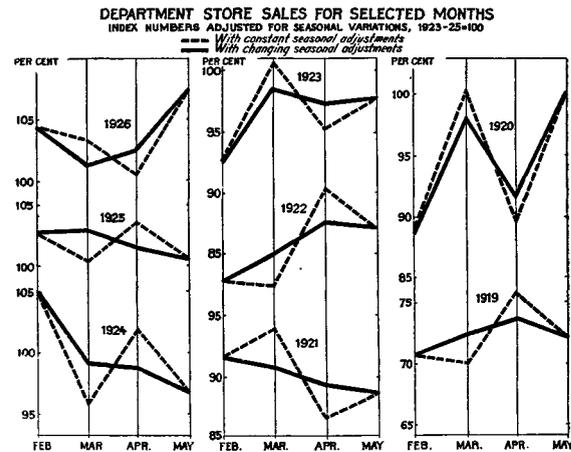
This scale of adjustment factors was derived in the following manner:

(1) One set of 12 monthly seasonal adjustment factors was obtained by the ratio to moving average method described above. The preliminary adjusted curve resulting from the application of these 12 adjustment factors to the index of average daily sales contained, as has been noted, a March or April peak in every year, directly attributable to Easter sales and varying in intensity according to the date of Easter. This is shown on Chart III by the broken-line curves representing the index adjusted by means of constant seasonal factors.

(2) The provisionally adjusted curve was then studied and the differences between the relatives for March and April in each year were calculated and arranged in order according to the date of Easter. For example, in 1924, when Easter was on April 20, the preliminary adjusted relative of department-store sales for March was approximately 96 and for April 102, a difference of 8 points.

(3) From a study of these differences, the amount by which the average adjustment factors (see paragraph (6) above) must be raised or lowered to smooth the provisionally adjusted curve was determined. Within the period under review, for example, Easter has occurred after the 15th of April in four years—1919, 1922, 1924, and 1927. To adjust this group

CHART III



of March and April relatives it was necessary to lower the average March adjustment factor (93) to 90 and raise the average April factor (101) by the same amount to 104. In a similar experimental fashion adjustment factors for the other periods shown in Table 3 were derived.

The length of the periods chosen and changes in the sliding scale are not uniform, since they have been determined with reference to the actual distribution of sales between the two months as affected by the incidence of Easter in different years. For example, if Easter falls in March, all of the Easter trading will presumably be in that month; hence all dates in March are grouped in one period; if in the first four days of April, most of the Easter sales will be in March, and therefore April 1 to April 4 was considered as one period; if between April 5 and April 8, selected as the average period, there are sufficient days in April before

Easter to permit some Easter trading in that month. If Easter is later than April 8, a considerably larger portion of the sales is made in April, but the variation of the date by a few days causes a much smaller relative variation in sales than earlier in the month; therefore, the period is made longer, extending to April 14. If Easter comes at any time after April 14, the exact date has practically no significance in respect to the distribution of sales between March and April. Therefore, one set of factors was applied to this period.

(4) Finally, the relatives of average daily sales for March and April were divided by appropriate adjustment factors to obtain the adjusted index.

The dates of Easter for the years 1919-1930 and the scale of differences to be applied to the average adjustment factors (those used for the period April 5-April 8 and shown for March and April in Table 2) in order to adjust for Easter variations are shown in Table 4, and the newly adjusted indexes are shown by the heavy lines on Chart III.

TABLE 4

Year	Date of Easter	Difference from average adjustment factor	
		March	April
1919	Apr. 20	-3	+3
1920	Apr. 4	+2	-2
1921	Mar. 27	+3	-3
1922	Apr. 16	-3	+3
1923	Apr. 1	+2	-2
1924	Apr. 20	-3	+3
1925	Apr. 12	-2	+2
1926	Apr. 4	+2	-2
1927	Apr. 17	-3	+3
1928	Apr. 8	Average.	Average.
1929	Mar. 31	+3	-3
1930	Apr. 20	-3	+3

This sliding scale of adjustment factors is reasonably effective in the elimination of Easter variations in the indexes of department-store sales and 5-and-10-cent-chain store and mail-order-house sales for the years 1919-1927, but a wider scale of differences from the average is necessary in the case of sales of shoes and other wearing apparel by chain stores, owing to the fact that Easter purchases are of greater importance in shops whose specialty is clothing.⁴

Changing seasonal variations in wholesale sales of men's and women's clothing.—In most lines of production and trade there is evidence that the seasons are shifting, and the

⁴ These seasonal adjustment factors are available at the Division of Research and Statistics and may be obtained upon request.

distribution of business among the 12 months of the year is changing. As the Christmas trade has grown, for example, the proportion of annual department-store sales made in December has increased year after year. (See Table 2.) In this instance, as in most lines of wholesale and retail trade, the changes have been of such small magnitude from 1919 to 1927 that one fairly typical set of 12 seasonal factors could be derived. In wholesale sales in the clothing trade, however, the changes were so marked during the period that it was necessary to derive changing seasonal adjustment factors, by an adaptation of the ratio to moving average method.

The first two steps in the procedure described above—computation of a 12-month moving average and of ratios of the original index to the corresponding moving average were identical. These ratios were then tabulated and charted in chronological order, in monthly groups, in the manner shown in Table 2. Instead of obtaining one typical figure for each month for all years, a complete set of 12 factors was derived for each year in the following manner:

(a) A three-year-period moving average of the ratios was computed and tabulated opposite the central year.

(b) The curves obtained by the use of this moving average were then smoothed, free-hand, and projected for the first and last years of each monthly group, and the resulting figures were read off the chart. Each yearly group was adjusted to total 1,200 in the manner described above. Thus the set of 12 adjustment factors was obtained for each year.⁵ These computations are extended annually in order to obtain seasonal factors for the current year.

(c) Adjusted indexes of sales of men's and women's clothing were computed by dividing each unadjusted relative of monthly sales by the seasonal adjustment factor for that particular month.⁶

The resulting adjusted indexes of men's and women's clothing appeared to be much more satisfactory than any obtained by other methods. The fact that the period used was so short and that the years of violent price changes (1919-1921) were necessarily given little weight may somewhat invalidate the results, which are accordingly subject to revision as more data accumulate. There can

⁵ See FEDERAL RESERVE BULLETIN, December, 1927, p. 823.

⁶ Adjustments for changing seasonal variations have been made for several series in the index of industrial production. A detailed description of the method used, together with illustrations, may be obtained from the Division of Research and Statistics.

be little doubt, however, that seasonal variations have changed for the firms reporting sales of men's and women's clothing and that the business of these firms is more unevenly distributed throughout the year now than formerly. Sales in the late winter and early spring buying season, as well as that in late summer and

early fall, have been increased, and the early summer months, when trade is usually dull, have had an ever smaller proportion of yearly sales. Owing to the fact that these clothing firms are all located in the New York Federal reserve district, generalizations for the clothing trade as a whole can not be drawn from them.

CHANGES IN MEMBERSHIP IN THE FEDERAL RESERVE SYSTEM

Between October 10 and December 31, 1927, there was a further decline of 53 in the number of member banks in active operation in the Federal reserve system, as indicated by the number of banks submitting the required reports of condition on the two dates. The decline in membership represented decreases of 39 in the number of national banks and of 14 in the number of member State banks, and was the result largely of mergers between member banks, suspensions, and insolvencies, and the absorption of member banks by existing non-member banks. Changes in membership during the last quarter of the year are summarized in the following table:

CHANGES IN MEMBERSHIP IN THE FEDERAL RESERVE SYSTEM, OCTOBER 11, 1927, TO DECEMBER 31, 1927

Class of change	Number of banks
Active member banks, Oct. 11, 1927.....	9,087
Banks joining the system.....	26
Banks withdrawing from the system.....	135
Net decrease from banks joining and withdrawing.....	9
Decrease in membership through mergers between member banks, suspensions, and voluntary liquidations.....	44
Net decrease for the period.....	53
Active member banks, Dec. 31, 1927.....	9,034

¹ Includes 21 withdrawals which were incidental to the absorption of member banks by existing nonmember banks.

On December 31, 1927, there were 7,759 member national banks and 1,275 member State banks in active operation, making a total of 9,034 member banks in the system. This represents a decline during the year of 147 in the number of member national banks and of 79 in the number of member State banks. That the total decline of 226 in the number of member banks in operation was the result

chiefly of mergers between member banks and of suspensions is shown in the following table:

CHANGES IN MEMBERSHIP IN THE FEDERAL RESERVE SYSTEM, JANUARY 1, 1927, TO DECEMBER 31, 1927

Class of change	Number of banks
Active member banks, Jan. 1, 1927.....	9,260
Banks joining the system.....	154
Banks withdrawing from the system.....	101
Net increase from banks joining and withdrawing.....	53
Decrease in membership through mergers between member banks, suspensions, and voluntary liquidations.....	279
Net decrease for the year.....	226
Active member banks, Dec. 31, 1927.....	9,034

¹ Includes 55 withdrawals which were incidental to the absorption of member banks by existing nonmember banks.

During the year 154 banks joined the system and 101 banks withdrew, with the net result that there was a net voluntary accession of 53 member banks to membership in the system. Of the banks that joined, 83 were newly organized national banks (including one bank organized to succeed a member bank that had previously suspended) and 61 were State banks that entered the system, 32 becoming national banks and 29 being admitted with the status of State institutions. Ten banks, which had previously suspended, resumed operations again. Of the member banks that withdrew from the system, 24 were State banks that withdrew after advance notice to the Federal Reserve Board, two were banks that were dropped from membership in the system at the expiration of their State charters, 20 were banks succeeded by nonmember banks organized for the purpose, 55 were absorbed by existing nonmember banks; the latter, losses to membership through the

absorption of member by nonmember banks, may or may not have reflected the exercise of the banks' option in regard to membership in the system.

The excess of banks joining the system over banks withdrawing was offset by losses incidental to mergers and suspensions. Merger between member banks accounted for the loss of 146 banks (as against 107 in 1926), and suspensions for the loss of 124 (as against 160 in 1926). In addition there were 9 instances in which the existence of banks was terminated by voluntary liquidation.

Mergers between member banks, which accounted for the loss of 115 national bank members and 31 State bank members, were more numerous in 1927 than in any year since the beginning of the system. The larger number of bank consolidations and absorptions which occurred last year may be in part accounted for as an effect of the act of February 25, 1927, which amended the Federal banking laws with reference particularly to the charter powers of national banks and to the authority for direct consolidations of State banks and trust companies with national banks. Losses to membership resulting from mergers between member banks occurred in all Federal reserve districts. Such mergers were most numerous in the San Francisco district, where the total of 49 for the year reflected largely mergers consummated early in the year by branch banking systems in the State of California. Of the total number of mergers between member banks, 116 were in the New York, Cleveland, Chicago, Kansas City, Dallas, and San Francisco districts.

In the following table changes in membership are summarized, by class of member bank, for the year ending December 31, 1927:

CHANGES IN THE NUMBER OF MEMBER BANKS IN THE FEDERAL RESERVE SYSTEM, BY CLASS OF MEMBER, JANUARY 1 TO DECEMBER 31, 1927

Class of change	Number of member banks		
	Total	National	State
Active member banks, Jan. 1, 1927.....	9,260	7,906	1,354
Additions to membership:			
Organization of national bank.....	82	82	-----
Conversion of nonmember bank to national.....	32	32	-----
Admission of State bank.....	29	-----	29
Resumption following suspension.....	10	8	3
Conversion within the system.....	-----	18	12
Other additions.....	1	1	-----
Total additions.....	154	131	34
Losses to membership:			
Merger between member banks—			
Intraclass.....	110	96	14
Interclass.....	36	19	17
Voluntary liquidation (terminal).....	9	8	1
Suspension and insolvency.....	124	91	33
Absorption of member bank by nonmember bank.....	55	49	6
Conversion of member bank to nonmember bank.....	20	12	8
Withdrawal of State bank.....	26	-----	26
Conversion within the system.....	-----	13	18
Total losses.....	380	278	113
Net change.....	-266	-147	-79
Active member banks, Dec. 31, 1927.....	8,994	7,759	1,275

¹ Succession between members of one class and members of the other without effect on the number of banks in the system.

² National bank organized to succeed a national bank that previously suspended.

³ Includes 26 banks that were absorbed by nonmember banks which were in turn absorbed by a national bank.

⁴ Includes 2 national banks which together with a member State bank were succeeded by a single member State bank organized for the purpose.

⁵ Includes 2 banks which were dropped from membership in the system at the expiration of their State charters.

NATIONAL SUMMARY OF BUSINESS CONDITIONS

Production and distribution of commodities increased further in February, while wholesale commodity prices remained practically unchanged. Commercial loans of member banks showed a larger increase in February and the first half of March than at the same season in other recent years.

Production.—Production of manufactures in February, as indicated by the Federal Reserve Board's index, increased 4 per cent over January and was 3 per cent larger than a year ago, while production of minerals declined slightly and continued to be substantially smaller than last year. Factory employment and pay rolls showed a seasonal increase in February, but continued at a lower level than a year ago. Output of iron and steel, automobiles, and agricultural machinery has increased considerably since the first of the year. Daily average production of steel ingots in February was larger than in any other month since last March, and current reports indicate that output was sustained in the first three weeks in March. Production of nonferrous metals also increased in February. Activity in the textile industries has shown little change since the first of the year. Production of bituminous coal and crude petroleum, which decreased in February, increased slightly in the first half of March.

Building contracts awarded were larger in February than in the corresponding month of any previous year, reflecting chiefly a large volume of awards for residential construction in the New York and Chicago districts. Contracts let in the first two weeks of March were in approximately the same volume as in the corresponding period of last year.

Trade.—Sales of wholesale firms in leading lines increased in February and were slightly larger than a year ago, while sales of department stores, after allowance for the customary seasonal changes, were in about the same volume as in January and somewhat smaller than

a year ago. Stocks of merchandise carried both by wholesale firms and by department stores showed a seasonal increase in February.

Freight-car loadings have shown somewhat more than the usual seasonal increase since the beginning of the year, but have continued to be in smaller volume than in the corresponding period of last year, owing chiefly to much smaller shipments of coal. Loadings of merchandise in less than carload lots and of miscellaneous commodities have been less than in corresponding period of the last two years, while loadings of livestock and grain products have been larger.

Prices.—The general level of wholesale commodity prices, as indicated by the Bureau of Labor Statistics index, remained practically unchanged in February at approximately 96 per cent of the 1926 average. There were decreases in the prices of cotton, sugar, nonferrous metals, chemicals, and rubber, as well as a seasonal decline in dairy products. Increases occurred in prices of grains, metals, hides and leather products, and steel. In the first two weeks in March, prices of grains, hogs, and cotton advanced while those of cattle and rubber showed further declines.

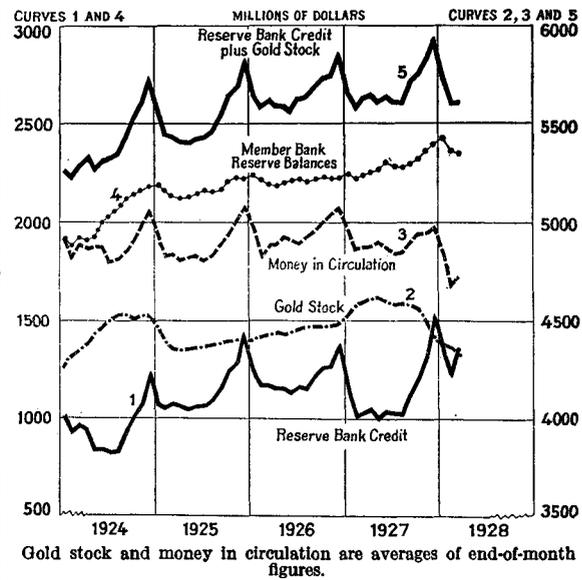
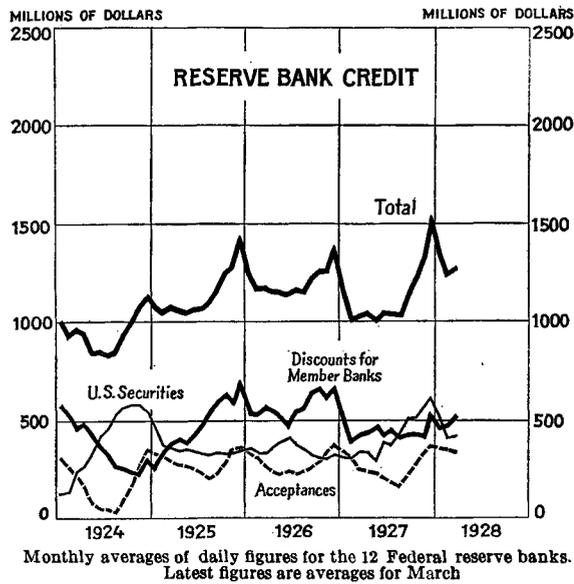
Bank credit.—From the middle of February to the middle of March the loans and investments of member banks in leading cities increased by \$200,000,000, reflecting a growth in the banks' commercial loans. The banks' loans on securities and investments showed little change for the period.

The volume of reserve bank credit outstanding increased somewhat from February to March, chiefly in consequence of increased borrowings by member banks, which in part reflected further withdrawals of gold for export.

During the four weeks ending March 21 conditions in the money market were firmer; the rate on prime commercial paper increased from 4 to 4-4¼ per cent and there were advances in time rates on security loans.

FINANCIAL, INDUSTRIAL, AND COMMERCIAL STATISTICS

RESERVE BANK CREDIT



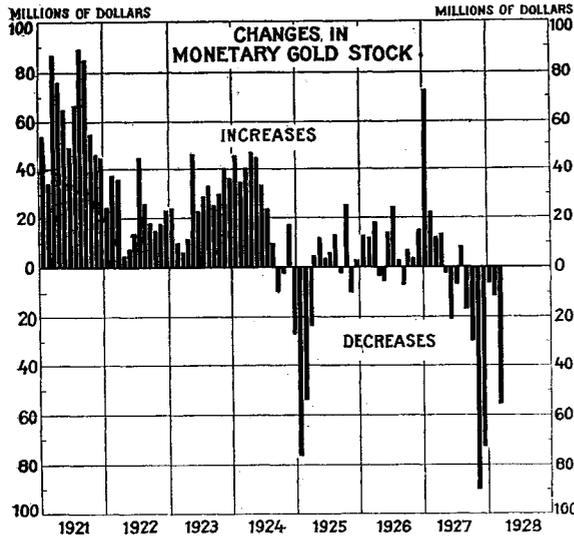
RESERVE BANK CREDIT IN USE

[Monthly averages of daily figures. In thousands of dollars]

Month	Reserve bank credit in use				Deposits of Federal reserve banks			
	Total ¹	Discounts for member banks	Acceptances (bills bought)	United States securities	Total	Member bank reserve balances	Government deposits	Other deposits
1926—April	1,158,891	539,594	235,956	369,779	2,251,846	2,183,479	42,143	26,224
May	1,155,191	514,559	230,555	398,249	2,253,204	2,199,229	27,671	26,394
June	1,139,808	476,044	244,038	408,776	2,241,415	2,205,974	12,193	23,248
July	1,166,564	548,966	231,132	379,745	2,262,420	2,211,545	26,246	24,629
August	1,158,284	555,799	245,094	353,903	2,253,350	2,200,909	25,098	27,343
September	1,225,236	641,797	263,992	315,747	2,273,205	2,211,367	31,723	30,115
October	1,269,356	665,566	294,296	306,413	2,280,180	2,219,023	34,264	26,893
November	1,270,057	618,367	346,859	302,309	2,279,135	2,214,441	28,229	36,465
December	1,380,571	671,722	384,826	321,446	2,289,632	2,218,186	39,758	31,688
1927—January	1,138,106	480,622	343,448	310,486	2,300,204	2,242,854	24,132	33,218
February	1,005,923	392,996	304,071	306,606	2,266,460	2,212,206	28,132	26,122
March	1,024,251	424,543	252,722	344,922	2,284,809	2,239,952	21,823	23,084
April	1,038,857	447,286	248,429	341,081	2,301,120	2,248,302	29,622	23,196
May	999,504	472,984	233,224	291,495	2,326,816	2,262,397	25,374	39,045
June	1,033,123	428,563	205,273	397,754	2,355,428	2,300,897	20,660	33,871
July	1,026,152	453,997	189,774	381,081	2,339,478	2,288,948	17,420	33,110
August	1,021,830	409,439	173,122	438,511	2,331,452	2,283,097	17,890	30,465
September	1,139,342	422,192	215,926	500,637	2,350,875	2,300,450	20,324	30,101
October	1,213,191	424,413	281,903	506,177	2,380,856	2,326,009	20,426	34,421
November	1,331,008	415,216	335,908	579,238	2,429,976	2,372,954	12,812	44,210
December	1,513,119	528,624	377,712	605,841	2,435,984	2,399,182	9,976	26,826
1928—January	1,350,322	465,275	372,538	511,852	2,472,428	2,426,360	19,438	26,630
February	1,236,649	470,680	359,883	405,551	2,419,482	2,368,092	25,606	25,784
March	1,271,525	513,233	342,790	414,681	2,411,714	2,365,030	23,018	23,666

¹ Total holdings of bills and securities by all Federal reserve banks, including "other securities" and foreign loans on gold ² Revised.

MONETARY GOLD STOCK AND MONEY IN CIRCULATION



NET IMPORTS OR NET EXPORTS (-) OF GOLD

[In thousands of dollars]

Month	1922	1923	1924	1925	1926	1927	1928
January	25,708	24,348	44,855	-68,488	16,264	44,465	-13,766
February	27,007	6,984	34,606	-46,997	21,565	19,895	-11,090
March	32,525	5,559	33,505	-17,768	39,188	10,757	-96,235
April	10,665	8,533	44,027	-12,734	-4,768	11,911	
May	5,587	45,332	40,481	-1,997	-6,498	31,702	
June	11,376	18,885	24,913	-2,287	15,544	12,771	
July	42,343	27,407	18,507	5,787	14,751	8,935	
August	18,136	30,655	15,732	-2,726	-17,764	-8,353	
September	23,066	26,941	2,076	-2,656	-7,094	-11,465	
October	3,275	28,488	15,577	-22,702	7,701	-8,642	
November	14,877	39,010	13,173	-13,904	9,011	-53,184	
December	23,730	31,930	-29,401	1,248	9,808	-67,418	
Total	238,295	294,073	258,073	-134,367	97,796	6,080	

¹ Preliminary.

INCREASE OR DECREASE (-) IN GOLD STOCK THROUGH CHANGES IN GOLD UNDER EAR-MARK FOR FOREIGN ACCOUNT

[In thousands of dollars]

Month	1922	1923	1924	1925	1926	1927	1928
January		-1,629		-810	-6,043	19,487	5,500
February		4,329	593	-1,366	-11,000	3,180	2,868
March			-2,452	-6,825	-22,988	-1,502	35,800
April		1,000	-558	14,850		-1,000	
May			1,000	12,725		-95,000	
June			2,000	5,075	-580	-500	
July		-1,500	-2,583	-3,901	4,000	184	
August			-7,984	8,725	19,200	-2,501	
September		500	-13,229	901	-2,400	-9,000	
October	-1,500	-2,000	-17,000	2,870	4	-25,001	
November	-200		-500	2,000	-7,498	-40,000	
December	-2,000		-1,500	-2,000	1,008	-8,500	
Total	-3,700	+700	-42,213	+32,244	-26,297	-160,153	

MONETARY GOLD STOCK OF THE UNITED STATES

[In millions of dollars]

Month	End of month figures						
	1922	1923	1924	1925	1926	1927	1928
January	3,685	3,953	4,289	4,423	4,412	4,564	4,373
February	3,723	3,963	4,323	4,369	4,423	4,586	4,362
March	3,760	3,970	4,364	4,346	4,442	4,597	4,306
April	3,764	3,982	4,411	4,350	4,438	4,610	
May	3,771	4,028	4,455	4,361	4,433	4,608	
June	3,785	4,050	4,488	4,365	4,447	4,587	
July	3,829	4,079	4,511	4,370	4,471	4,580	
August	3,855	4,111	4,521	4,383	4,473	4,588	
September	3,873	4,136	4,511	4,382	4,466	4,571	
October	3,888	4,167	4,509	4,407	4,473	4,541	
November	3,906	4,207	4,527	4,397	4,477	4,451	
December	3,929	4,244	4,490	4,399	4,492	4,379	

¹ Preliminary.

UNITED STATES MONEY IN CIRCULATION

[In millions of dollars]

Month	End of month figures						
	1922	1923	1924	1925	1926	1927	1928
January	4,441	4,614	4,777	4,802	4,841	4,846	4,677
February	4,491	4,703	4,887	4,853	4,904	4,885	4,600
March	4,497	4,747	4,899	4,818	4,860	4,862	4,750
April	4,468	4,759	4,853	4,789	4,907	4,891	
May	4,455	4,797	4,905	4,841	4,923	4,893	
June	4,463	4,823	4,849	4,815	4,885	4,851	
July	4,424	4,787	4,756	4,795	4,909	4,846	
August	4,480	4,876	4,859	4,867	4,930	4,854	
September	4,608	4,945	4,863	4,916	4,978	4,948	
October	4,646	4,925	4,942	4,969	5,021	4,946	
November	4,704	5,018	5,052	5,044	5,037	4,952	
December	4,817	5,044	5,047	5,104	5,095	5,003	

¹ Preliminary.

KINDS OF MONEY IN CIRCULATION

[End of month figures]

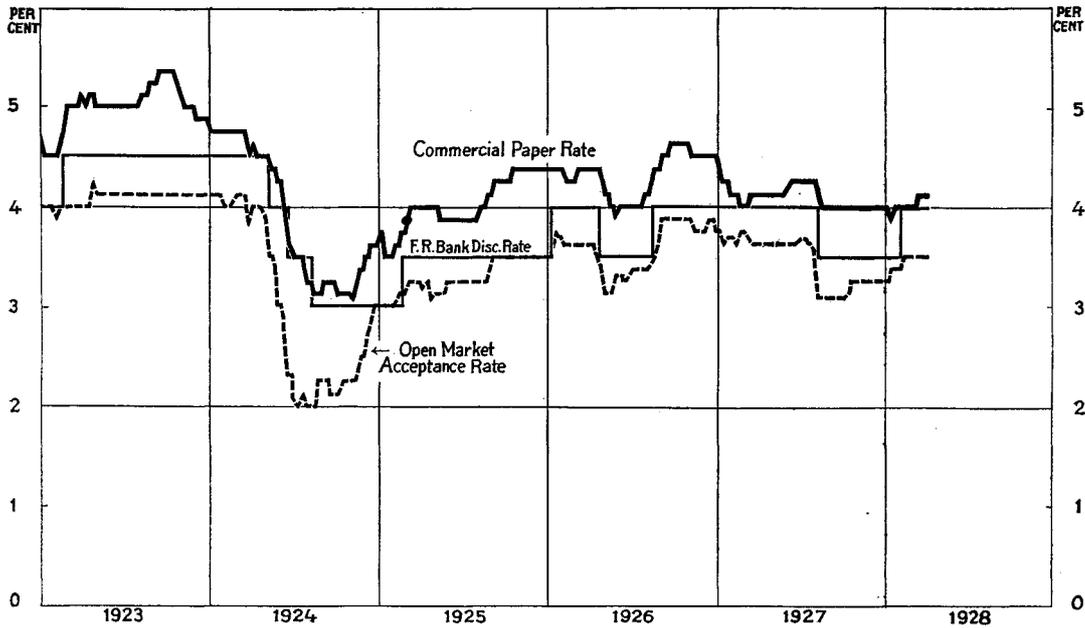
[In millions of dollars]

Month	Total	Gold coin	Gold certificates	Federal reserve notes	National bank notes	U. S. notes, silver certificates, and all other money
1927-January	4,846	396	1,037	1,684	631	1,097
February	4,885	393	1,035	1,710	645	1,102
March	4,862	390	1,019	1,707	648	1,097
April	4,891	389	1,019	1,724	654	1,104
May	4,893	387	1,004	1,734	660	1,109
June	4,851	385	1,007	1,703	650	1,106
July	4,846	383	1,031	1,668	652	1,112
August	4,854	382	1,045	1,657	651	1,119
September	4,948	380	1,061	1,715	653	1,138
October	4,946	381	1,068	1,711	648	1,137
November	4,952	383	1,095	1,694	639	1,141
December	5,003	402	1,074	1,763	619	1,145
1928-January	4,677	389	1,016	1,561	617	1,094
February	4,690	386	1,004	1,570	639	1,091
March ¹	4,750	385	1,025	1,588	654	1,098

¹ Preliminary.

² For back figures see FEDERAL RESERVE BULLETIN, March, 1928, p 176.

MONEY RATES IN NEW YORK CITY



FEDERAL RESERVE BANK RATES

DISCOUNT RATES

[Rates on all classes and maturities of eligible paper]

Federal reserve bank	Rate in effect on Apr. 1	Date established	Previous rate
Boston.....	4	Feb. 8, 1928.....	3½
New York.....	4	Feb. 3, 1928.....	3½
Philadelphia.....	4	Feb. 16, 1928.....	3½
Cleveland.....	4	Mar. 1, 1928.....	3½
Richmond.....	4	Jan. 27, 1928.....	3½
Atlanta.....	4	Feb. 11, 1928.....	3½
Chicago.....	4	Jan. 25, 1928.....	3½
St. Louis.....	4	Feb. 21, 1928.....	3½
Minneapolis.....	4	Feb. 7, 1928.....	3½
Kansas City.....	4	Feb. 10, 1928.....	3½
Dallas.....	4	Feb. 8, 1928.....	3½
San Francisco.....	4	Feb. 4, 1928.....	3½

BUYING RATES ON ACCEPTANCES

[Buying rates at the Federal Reserve Bank of New York]

Maturity	Rate in effect on Apr. 1	Date established	Previous rate
1-15 days.....	3½	Mar. 30, 1928.....	3¼
16-30 days.....	3½	do.....	3¼
31-45 days.....	3½	do.....	3¼
46-60 days.....	3½	do.....	3½
61-90 days.....	3½	do.....	3½
91-120 days.....	3½	do.....	3½
121-180 days.....	4	do.....	3½

OPEN-MARKET RATES

RATES IN NEW YORK CITY

Month or week	Prevailing rate on—			Average rate on—		Average yield on—	
	Prime commercial paper, 4 to 6 months	Prime bankers' acceptances, 90 days	Time loans, 90 days ¹	Call loans ¹		U. S. Treasury notes and certificates, 3 to 6 months	Treasury bonds ²
				New	Renewal		
1927							
January.....	4-4½	3½-3¾	4½	4.27	4.32	3.23	3.60
February.....	4-4½	3½-3¾	4½-4½	4.06	4.03	3.29	3.58
March.....	4-4½	3½	4½-4½	4.13	4.13	3.21	3.48
April.....	4-4½	3½	4½-4½	4.21	4.18	3.39	3.47
May.....	4-4½	3½	4½	4.27	4.26	3.33	3.44
June.....	4½	3½	4½	4.26	4.33	3.09	3.47
July.....	4½	3½-3½	4½-4½	3.95	4.05	2.96	3.44
August.....	4	3½	4-4½	3.66	3.68	2.70	3.48
September.....	4	3½	4-4½	3.84	3.80	2.81	3.45
October.....	4	3½	4½-4½	3.88	3.90	3.08	3.43
November.....	4	3½	4½-4½	3.60	3.60	3.04	3.39
December.....	4	3½	4-4½	4.43	4.38	3.17	3.34
1928							
January.....	4	3½	4½-4½	4.15	4.24	3.31	3.35
February.....	4	3½	4½-4½	4.33	4.38	3.33	3.36
March.....	4-4¼	3½	4½-4½	4.47	4.48	3.23	3.30
Week ending—						3.30	
Mar. 3.....	4	3½	4½-4½	4.42	4.45	3.30	3.33
Mar. 10.....	4-4¼	3½	4½-4½	4.25	4.25	3.25	3.30
Mar. 17.....	4-4¼	3½	4½	4.50	4.50	3.22	3.30
Mar. 24.....	4-4¼	3½	4½	4.45	4.45	3.33	3.28
Mar. 31.....	4-4¼	3½	4½-4½	4.65	4.73	3.33	3.29

NOTE.—Rates on prime bankers' acceptances. Higher rates may be charged for other classes of bills.

¹ Stock exchange call loans; new and renewal rates.
² Stock exchange 90-day time loans.
³ 3 issues—3½, 4, and 4½ per cent; yields calculated on basis of last redemption dates—1956, 1954, and 1952.
⁴ Change of issues on which yield is com

PREVAILING RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

The rates shown are those at which the bulk of the loans of each class were made by representative banks during the week ending with the 15th of the month. Rates reported by about 200 banks with loans exceeding \$7,500,000,000.

FEDERAL RESERVE BANK CITIES

Month	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Prime commercial loans												
1927—March	4 1/4-4 1/2	4 1/2	4 1/4-4 3/4	4 1/2-5 1/2	5 1/4-6	4 1/2-6	4 1/4-4 3/4	4 1/2-5	4 1/2-5 1/2	5	4 1/2-6	5-6
April	4 1/2	4 1/2	4 1/4-4 3/4	4 1/2-5 1/2	5-6	5-6	4 1/4-4 3/4	4 1/2-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5 1/2
May	4 1/2	4 1/2	4 1/4-4 3/4	4 1/2-5 1/2	5-6	5-6	4 1/4-5	4 1/2-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5 1/2
June	4 1/2	4 1/2	4 1/2-5	4-5 1/2	4 1/2-6	5-6	4 1/4-4 3/4	4 1/2-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5 1/2
July	4 1/4-4 1/2	4 1/2	4 1/2-4 3/4	4-5	5-6	5-6	4 1/4-5	4 1/2-5	4-5 1/2	5	4 1/2-6	4 1/2-5 1/2
August	4-4 1/2	4 1/4-4 1/2	4 1/2	4-5	5 1/4-6	5-6	4 1/4-5	4 1/2-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5 1/2
September	4-4 1/2	4 1/4-4 1/2	4 1/4-4 1/2	4 1/2-5	5-5 1/2	5-6	4 1/4-4 3/4	4-5	4 1/2-5 1/2	5	4-6	4 1/2-5 1/2
October	4-4 1/2	4 1/4-4 1/2	4 1/4-4 1/2	4 1/2-5	5-5 1/2	4 1/2-6	4 1/4-4 3/4	4 1/2-5	4 1/2-6	5	4 1/2-6	4 1/2-5 1/2
November	4-4 1/2	4-4 1/2	4 1/4-4 1/2	4 1/2-5	5-5 1/2	4 1/2-6	4 1/4-5	4-5	4 1/2-5 1/2	5	4-6	4 1/2-5 1/2
December	4-4 1/2	4 1/4-4 1/2	4 1/4-4 1/2	4-6	4 1/2-5 1/2	4 1/2-6	4 1/4-4 3/4	4-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5 1/2
1928—January	4-4 1/2	4 1/4-4 1/2	4-4 1/2	4-5	4 1/2-5	4 1/2-6	4 1/4-4 3/4	4-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5 1/2
February	4 1/2	4 1/2	4 1/4-4 1/2	4-5	4 1/2-5	4 1/2-6	4 1/4-4 3/4	4-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5 1/2
March	4 1/4-4 1/2	4 1/4-4 1/2	4 1/2-4 3/4	4 1/2-6	5	4 1/2-6	4 1/4-5	4 1/2-5	4 1/2-5 1/2	5	4 1/2-6	4 1/2-5
Loans secured by prime stock exchange collateral												
1927—September	4 1/4-4 1/2	4 1/2-5	4 1/4-4 3/4	4 1/2-6	5-6	5-6	4 1/4-5	5	4 1/2-6	5-6	5-6	5-6
October	4 1/4-4 1/2	4 1/2-5	4 1/4-4 3/4	4 1/2-6	4 1/2-6	5-6	4 1/4-5	4 1/2-5 1/2	4 1/2-6	5-6	5-7	5-6
November	4 1/2-4 3/4	4 1/2-5	4 1/4-4 1/2	5-6	4 1/2-6	5-6	4 1/4-5	4 1/2-5 1/2	4 1/2-5 1/2	5-6	5-7	5-6
December	4 1/4-4 1/2	4 1/2-5	4 1/4-4 1/2	4 1/2-6	4 1/2-6	5-6	4 1/4-4 3/4	4 1/2-5 1/2	4 1/2-5 1/2	5-6	5-7	5-6
1928—January	4 1/2-4 3/4	4 1/2-5	4 1/4-4 1/2	4 1/2-6	4 1/2-6	5-6	4 1/4-5	4 1/2-5 1/2	4 1/2-5 1/2	5-6	5-7	5-6
February	4 1/2-4 3/4	4 1/2-5	4 1/4-4 1/2	5-6	4 1/2-6	5-6	4 1/4-5	4 1/2-5 1/2	4 1/2-5 1/2	5	5-7	5-6
March	4 1/2-5	4 1/2-5	4 1/4-4 3/4	4 1/2-6	5-6	5-6	4 1/4-5	4 1/2-5 1/2	4 1/2-5 1/2	5	5-7	5-6
Loans secured by warehouse receipts												
1927—September	4 1/2-5	4 1/2-5	4 1/2-6	4 1/2-6	5-6	5-6	4 1/4-5	4 1/2-5	4 1/2-5	5-6	5-6	5-6
October	5	4 1/2-5	5-6	4 1/2-6	5-6	5-6	4 1/4-5	4 1/2-5	4 1/2-5	5-6	5-6	5-6
November	5	5	5-6	4 1/2-6	5 1/2	5-6	4 1/4-5	4 1/2-5	4 1/2-5	5-6	5-6	5-6
December	5-5 1/2	5	5-6	4 1/2-6	6	5-6	4 1/4-5	4 1/2-5	4 1/2-5 1/2	5-6	5-6	5-6
1928—January	5	4 1/2-5	5-6	4 1/2-6	6	5-6	4 1/4-5	4 1/2-5	4 1/2-5	5-6	5-6	5-6
February	5	4 1/2-5	5-6	4 1/2-6	6	5-6	4 1/4-5	4 1/2-5 1/2	4 1/2-5 1/2	5-6	5-6	5-6
March	5	4 1/2-5	5-6	4 1/2-6	5 1/2	5-6	4 1/4-5	4 1/2-6	4 1/2-5 1/2	5-6	5-6	5-6
Interbank loans												
1927—September	4	4 1/4-4 1/2	4 1/2-5	5	5	5-6	5	5-5 1/2	5-6	6	5	5-6
October	4	4-4 1/2	4 1/2	4 1/2-5	5	5-6	5	4 1/2-5 1/2	5-6	6	5-6	5-6
November	4	4-4 1/2	4 1/2	4 1/2-5	4 1/2-5	5-6	5	4-5 1/2	5-6	6	5	5-6
December	4	4-4 1/2	4 1/2-5	5	4 1/2	5-6	5	4 1/2-5 1/2	4 1/2-6	6	5	5-6
1928—January	4	4 1/4	4 1/2-5	5	4 1/2	5-6	5	4 1/2-5 1/2	5-5 1/2	6	5	5-6
February	4 1/2	4 1/4-4 1/2	4 1/2-5	4-5	5-6	5-6	5	4 1/2-5 1/2	5-6	6	5	5-6
March	4 1/2	4 1/4-4 1/2	4 1/2-5	4 1/2-5 1/2	5	5-6	4 1/2-5	5-5 1/2	5-5 1/2	6	5-6	5-6

FEDERAL RESERVE BRANCH CITIES

City	Prime commercial loans			Loans secured by prime stock-exchange collateral			Loans secured by warehouse receipts			Interbank loans		
	January, 1928	February, 1928	March, 1928	January, 1928	February, 1928	March, 1928	January, 1928	February, 1928	March, 1928	January, 1928	February, 1928	March, 1928
Buffalo	5-6	5-6	5-6	5-6	5-6	5-6	6	6	6	4 1/4-5	5	5
Cincinnati	4 1/2-6	4 1/2-6	4 1/2-6	4 1/2-6	4 1/2-6	4 1/2-6	6-7	6-7	6-7	5-6	5-6	5-6
Pittsburgh	5-6	4 1/2-5 1/2	4 1/2-6	5-6	5-6	5-6	6	6	6	5-6	5-6	5-6
Baltimore	4-5 1/2	5-5 1/2	5-5 1/2	5-6	5 1/2-6	5 1/2-6	5 1/2-6	5 1/2-6	6	5-5 1/2	5-5 1/2	5-5 1/2
Charlotte		5-6	5-6		5-6	5-6		5-6	5-6		5 1/2-6	5-6
Birmingham	5-6	5-6	5-6	6	6	6	6	6	6	5-6	5-6	5-6
Jacksonville	5-6	5-6	5-6	5-8	5-8	5-8	4 1/2-7	5-7	4 1/2-7	6	6	6
Nashville	6	6	6	6	6	6	5 1/2-6	5 1/2-6	5 1/2-6	5 1/2-6	5 1/2-6	5 1/2-6
New Orleans	5 1/2-6	5-6	5-6	5 1/2-6	5 1/2-6	5 1/2-6	5 1/2-6	5-6	5-6	5-6	5-6	5-6
Detroit	4 1/2-6	5-6	4 1/2-6	5-6	5-6	5 1/2-6	5-6	5-6	5 1/2-6	5-6	5-5 1/2	5-6
Little Rock	5-6	5-6	5-6	5-7	5-7	5-6	5-7	6-7	5 1/2-7	6	6	6
Louisville	5-6	5 1/2-6	5 1/2-6	5-6	5-6	5 1/2-6	6	6	6	6	5	5
Helena	8	8	8	8	8	8	6-8	6-8	6-8	6-8	6-8	6-8
Denver	6	6	6	5 1/2-6	6	5-6	5 1/2-6	5 1/2-6	5 1/2-8	6-6 1/2	6-6 1/2	5 1/2-6 1/2
Oklahoma City	5-6	5-6	5-6	6	6	6	6	6	6	6	6	6
Omaha	4 3/4-6	4 3/4-6	4 3/4-6	6	5 1/2-6	5 1/2-6	6	6-6 1/2	6-6 1/2	6	5 1/2-6	5 1/2-6
El Paso	8	8	8	6-8	6-8	6-8	7-8	7-8	7-8	6	6	6
Houston	5-6	5-6	5-6	5-6	5-6	5-6	5-7	5-7	5-7	5	4 1/2-5	5
San Antonio	4 1/4-6	5-7	4 1/4-6	6-8	6-8	6-8	6-8	6-8	6-8	5-6	5-6	5-6
Los Angeles	6-7	6-7	6-7	6-7	6-7	6-7	6-7	6-7	6-7	6	6	6
Portland	6	6	6	6	6	6	6-7	6-7	6-7	6	6	5-6
Salt Lake City	6	6	6	6	6	6	7	7	7	6	6	6
Seattle	6	6	6	6-7	6-7	6-7	6 1/2-7	6 1/2-7	6-7	6	6	6
Spokane	6	6	6	6	6	6	7	7	6-8	6	6	6

¹ Revised.

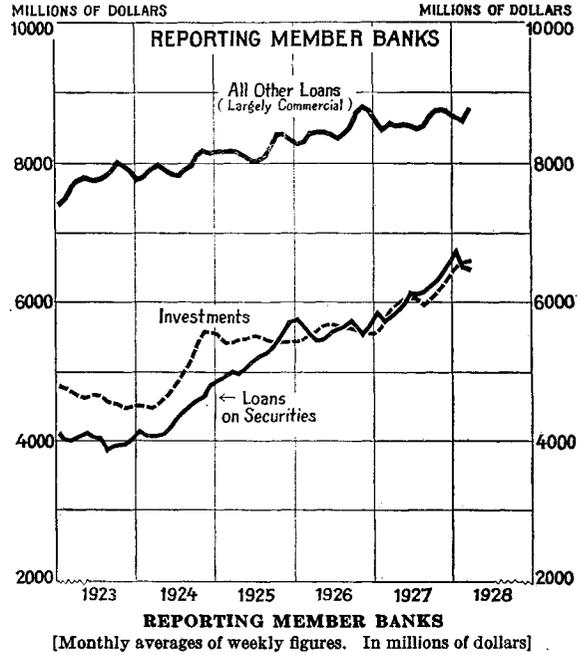
MEMBER BANK CREDIT

ALL MEMBER BANKS

[In millions of dollars]

Month	All member banks	Reporting member banks in leading cities				Member banks outside leading cities
		Total	New York City	Other leading cities		
				Total	Chicago	
Borrowings at Federal reserve bank:						
1927—March	419	268	73	195	20	151
April	421	270	78	192	20	151
May	459	302	90	212	19	157
June	435	271	51	220	20	164
July	434	273	59	214	12	161
August	413	256	74	182	6	157
September	417	267	90	177	8	150
October	428	283	75	208	10	145
November	421	276	73	203	11	145
December	532	338	127	261	21	143
1928—January	439	315	94	221	23	124
February	463	338	78	260	13	125
March	489	362	75	287	25	127
Reserve balances:						
1927—March	2,265	1,671	710	961	162	593
April	2,254	1,659	689	970	169	595
May	2,290	1,697	720	977	175	594
June	2,342	1,749	776	973	173	593
July	2,299	1,696	728	968	167	603
August	2,313	1,707	724	983	182	605
September	2,323	1,709	726	983	182	614
October	2,355	1,725	728	997	186	630
November	2,400	1,767	768	999	180	634
December	2,410	1,787	769	1,018	189	623
1928—January	2,436	1,805	781	1,024	193	631
February	2,384	1,764	754	1,010	186	620
March	2,351	1,733	738	995	181	618
Net demand plus time deposits:						
1927—March	30,257	19,136	5,997	13,139	1,779	11,192
April	30,348	19,166	6,016	13,150	1,777	11,218
May	30,595	19,405	6,135	13,270	1,833	11,253
June	30,693	19,688	6,400	13,288	1,839	11,252
July	30,816	19,593	6,257	13,336	1,864	11,405
August	30,827	19,616	6,224	13,392	1,908	11,409
September	31,119	19,723	6,228	13,495	1,914	11,567
October	31,457	19,871	6,269	13,602	1,929	11,721
November	31,759	20,217	6,485	13,732	1,939	11,823
December	32,263	20,395	6,604	13,791	1,931	11,832
1928—January	32,647	20,648	6,732	13,916	1,964	11,909
February	32,152	20,349	6,564	13,785	1,919	11,811
March	32,159	20,323	6,547	13,776	1,923	11,845
Net demand deposits:						
1927—March	18,357	13,069	5,068	8,001	1,208	5,294
April	18,346	13,069	5,068	8,003	1,203	5,305
May	18,471	13,215	5,179	8,036	1,249	5,279
June	18,534	13,449	5,390	8,059	1,245	5,280
July	18,555	13,340	5,265	8,075	1,260	5,355
August	18,493	13,309	5,213	8,096	1,291	5,329
September	18,667	13,374	5,224	8,150	1,301	5,437
October	18,960	13,447	5,255	8,192	1,304	5,558
November	19,180	13,734	5,430	8,304	1,317	5,650
December	19,586	13,904	5,570	8,334	1,298	5,627
1928—January	19,719	14,014	5,633	8,381	1,326	5,609
February	19,162	13,695	5,471	8,224	1,272	5,487
March	19,104	13,597	5,467	8,130	1,262	5,466
Time deposits:						
1927—March	11,900	6,067	929	5,138	571	5,899
April	12,002	6,097	950	5,147	574	5,914
May	12,124	6,190	956	5,234	584	5,974
June	12,159	6,239	1,010	5,229	594	5,973
July	12,261	6,253	992	5,261	604	5,051
August	12,384	6,307	1,010	5,297	617	5,081
September	12,452	6,349	1,004	5,345	613	5,130
October	12,527	6,424	1,015	5,409	625	5,163
November	12,579	6,483	1,055	5,428	622	5,174
December	12,677	6,491	1,034	5,457	633	5,205
1928—January	12,928	6,634	1,099	5,535	638	6,300
February	12,990	6,653	1,093	5,560	647	6,324
March	13,055	6,726	1,080	5,646	661	6,379

NOTE.—All figures in this table are monthly averages of weekly figures except those for deposits of (1) all member banks, and (2) banks outside leading cities; these are for a single date in the month. See BULLETIN for December, 1927, p. 323.



REPORTING MEMBER BANKS
[Monthly averages of weekly figures. In millions of dollars]

Month	Total loans and investments	Loans			Investments
		Total	On securities	All other	
Total:					
1927—February	19,847	14,208	5,705	8,503	5,639
March	20,261	14,382	5,790	8,592	5,878
April	20,333	14,401	5,854	8,547	5,933
May	20,542	14,502	5,941	8,562	6,040
June	20,779	14,685	6,146	8,539	6,094
July	20,682	14,616	6,116	8,500	6,066
August	20,641	14,666	6,125	8,541	5,975
September	20,946	14,913	6,221	8,692	6,033
October	21,222	15,108	6,325	8,782	6,114
November	21,458	15,193	6,410	8,783	6,284
December	21,724	15,328	6,594	8,735	6,396
1928—January	21,915	15,394	6,726	8,668	6,522
February	21,687	15,142	6,520	8,622	6,545
March	21,873	15,290	6,498	8,792	6,583
New York City:					
1927—February	6,189	4,432	2,047	2,389	1,752
March	6,349	4,528	2,097	2,429	1,824
April	6,421	4,570	2,156	2,414	1,851
May	6,535	4,629	2,201	2,428	1,906
June	6,692	4,767	2,326	2,441	1,925
July	6,602	4,720	2,281	2,439	1,882
August	6,579	4,748	2,275	2,473	1,831
September	6,705	4,911	2,313	2,508	1,794
October	6,783	5,009	2,370	2,640	1,773
November	6,954	5,115	2,465	2,651	1,838
December	7,124	5,228	2,605	2,622	1,897
1928—January	7,277	5,312	2,692	2,619	1,965
February	7,103	5,111	2,509	2,602	1,992
March	7,143	5,143	2,429	2,714	2,005
Other leading cities:					
1927—February	13,657	9,771	3,657	6,114	3,886
March	13,911	9,857	3,693	6,163	4,054
April	13,912	9,831	3,698	6,133	4,082
May	14,008	9,874	3,740	6,134	4,134
June	14,087	9,918	3,820	6,097	4,169
July	14,080	9,896	3,833	6,063	4,184
August	14,063	9,918	3,850	6,068	4,145
September	14,241	10,002	3,908	6,094	4,239
October	14,439	10,098	3,956	6,142	4,341
November	14,504	10,078	3,946	6,132	4,426
December	14,600	10,101	3,988	6,112	4,499
1928—January	14,639	10,082	4,034	6,048	4,557
February	14,584	10,031	4,011	6,020	4,553
March	14,725	10,147	4,069	6,078	4,578

BANKERS' BALANCES OF REPORTING MEMBER BANKS IN LEADING CITIES

[Monthly averages of weekly figures. In millions of dollars]

	Total	New York City	Other leading cities														
			Total	Boston	Phila- delphia	Pitts- burgh	Cleve- land	Chi- cago	St. Louis	Min- neapolis	Kansas City	San Francisco	All other				
Due to banks:																	
1926—February		1,084		127.2	179.1		46.9	377.3	92.0	55.8	103.0	102.4					
March		1,116		130.3	178.2		45.9	387.5	84.9	54.8	94.0	94.4					
April		1,086		135.1	180.9		47.5	383.2	84.3	47.3	91.0	89.0					
May		1,072		131.2	180.0		45.0	379.9	83.7	50.4	91.6	87.8					
June		1,098		126.4	179.4		46.3	381.5	81.4	48.6	93.7	94.8					
July		1,067		130.2	174.7		49.5	373.3	83.9	46.7	108.8	101.2					
August		1,040		119.9	167.8		48.9	371.7	82.7	43.1	110.5	106.5					
September		1,062		119.5	170.0		49.9	374.6	80.3	45.6	103.7	109.0					
October		1,067		125.8	170.8		48.2	359.7	79.3	50.4	98.4	107.2					
November		1,052		128.3	165.6		46.6	349.2	78.9	52.7	97.0	105.8					
December		1,078		126.5	163.1		45.1	349.1	79.5	50.8	96.7	107.6					
1927—January		1,107		136.8	173.0		48.8	372.4	88.5	53.1	101.2	105.9					
February	3,302	1,090	2,212	135.8	173.1	134.5	53.6	364.5	88.3	55.5	95.3	127.1	983.8				
March	3,304	1,118	2,186	134.6	172.5	128.8	54.0	374.1	87.0	53.6	90.3	104.1	986.7				
April	3,243	1,104	2,139	142.2	170.6	128.8	55.6	364.8	86.1	50.9	86.7	94.9	958.2				
May	3,225	1,117	2,108	137.3	169.1	124.3	55.1	374.4	81.8	47.5	82.6	98.4	937.8				
June	3,229	1,171	2,058	143.1	164.2	121.3	56.1	347.9	81.4	47.5	82.7	99.9	913.8				
July	3,308	1,164	2,144	160.7	169.1	125.0	60.3	363.4	81.9	46.5	91.8	108.4	936.6				
August	3,313	1,180	2,154	152.1	167.9	128.5	60.4	363.9	78.6	45.5	91.2	107.4	958.2				
September	3,379	1,177	2,202	141.4	168.6	127.3	61.4	372.0	78.7	57.6	87.9	105.7	1,001.5				
October	3,475	1,209	2,266	146.8	172.9	130.8	61.2	376.8	78.9	63.8	83.8	110.1	1,040.8				
November	3,653	1,324	2,330	156.5	173.5	132.9	63.1	368.1	85.3	62.3	83.8	127.9	1,076.1				
December	3,587	1,282	2,306	150.7	168.0	131.2	59.6	370.0	86.4	58.4	88.1	126.3	1,066.9				
1928—January	3,720	1,373	2,347	167.5	179.6	131.3	62.0	379.8	88.5	57.1	92.2	117.7	1,071.6				
February	3,610	1,331	2,280	148.9	169.2	132.2	62.9	375.0	85.9	58.1	92.9	114.5	1,040.3				
March	3,524	1,318	2,206	141.3	164.7	118.4	61.2	378.6	77.9	61.8	89.4	117.1	995.6				
Due from banks:																	
1926—February		97		35.2	62.7		25.8	149.3	30.5	19.0	41.7	52.1					
March		97		37.9	67.9		27.4	150.1	28.2	20.6	39.9	50.1					
April		108		44.5	69.6		28.6	153.2	28.6	21.8	38.4	50.1					
May		101		42.6	63.7		27.1	165.4	30.2	21.6	39.5	48.4					
June		108		44.3	65.9		30.0	168.3	29.3	21.6	37.8	51.3					
July		105		39.5	58.8		27.1	157.1	27.9	22.6	47.0	54.0					
August		92		38.7	53.4		25.6	148.9	26.2	19.3	46.9	50.3					
September		102		40.3	59.3		25.1	151.7	25.6	20.3	44.9	53.9					
October		111		37.0	53.4		27.6	155.6	28.0	22.3	43.7	53.0					
November		103		41.0	56.8		27.1	154.6	29.5	22.8	50.5	50.6					
December		97		37.8	55.1		24.3	161.8	28.4	22.2	43.7	54.4					
1927—January		100		40.2	55.2		27.5	154.2	31.7	21.5	44.6	50.8					
February	1,177	93	1,083	39.1	58.0	35.5	23.3	144.5	29.9	20.0	41.9	52.1	639.2				
March	1,194	100	1,094	41.0	55.4	43.2	22.3	154.9	29.9	19.8	40.6	54.4	632.5				
April	1,175	107	1,068	48.2	54.4	36.8	22.9	151.8	28.2	19.8	38.6	50.8	616.7				
May	1,166	102	1,064	42.8	53.4	38.4	22.7	173.9	27.3	19.6	33.5	51.3	601.4				
June	1,152	95	1,057	45.8	56.4	40.9	24.5	150.6	26.5	19.9	33.4	53.5	605.9				
July	1,148	92	1,056	45.9	50.7	36.1	22.9	148.3	25.6	21.7	36.0	52.3	616.1				
August	1,129	85	1,044	44.1	52.3	39.7	24.2	146.8	27.0	19.8	33.1	53.3	603.5				
September	1,194	95	1,099	43.1	51.2	38.3	26.4	152.2	25.6	27.7	32.9	58.8	642.6				
October	1,253	111	1,142	52.6	52.3	41.0	24.9	152.7	28.0	29.3	36.1	56.8	668.4				
November	1,275	104	1,171	45.7	60.9	37.3	24.3	158.1	30.6	24.5	35.1	66.8	687.7				
December	1,215	103	1,113	42.2	52.6	33.3	22.3	150.4	33.1	20.5	36.0	70.5	651.9				
1928—January	1,267	112	1,155	52.3	56.7	36.7	23.6	147.7	36.6	21.0	35.2	68.8	676.5				
February	1,185	105	1,080	41.2	52.1	34.6	24.9	145.9	32.9	18.8	33.1	64.7	631.6				
March	1,163	110	1,053	36.7	50.3	32.7	23.1	150.8	29.9	19.7	31.8	61.8	616.2				

BANKERS' ACCEPTANCES AND COMMERCIAL PAPER OUTSTANDING

[In millions of dollars]

End of—	Bankers' acceptances outstanding ¹				Commercial paper outstanding ²						
	1925	1926	1927	1928	1922	1923	1924	1925	1926	1927	1928
January	835	788	774	1,058	705	807	818	820	654	551	577
February	808	767	785	1,056	718	838	867	820	655	577	567
March	800	746	809		760	864	889	813	668	606	
April	757	721	811		792	867	871	801	663	599	
May	680	685	775		791	888	852	776	668	582	
June	608	622	751		795	885	864	759	652	579	
July	569	600	741		805	854	879	727	655	569	
August	555	583	782		807	831	911	722	638	591	
September	607	614	864		805	803	915	708	612	600	
October	674	682	975		775	815	925	684	593	611	
November	690	726	1,029		748	799	888	666	566	603	
December	774	755	1,081		722	763	798	621	526	555	

¹ Figures collected and compiled by American Acceptance Council.
² Paper maturing within 7 months. Figures reported by 25 dealers to the Federal Reserve Bank of New York; prior to January, 1928, 26 dealers reported.
³ Revised.

BROKERS' LOANS

BROKERS' BORROWINGS ON COLLATERAL, IN NEW YORK CITY, REPORTED BY THE NEW YORK STOCK EXCHANGE
 [Net borrowings. In millions of dollars]

Date	On demand and on time			On demand			On time		
	Total	From New York banks and trust companies	From private banks, brokers, foreign banking agencies, etc.	Total	From New York banks and trust companies	From private banks, brokers, foreign banking agencies, etc.	Total	From New York banks and trust companies	From private banks, brokers, foreign banking agencies, etc.
1926-Jan. 30.....	3,513	3,043	470	2,517	2,123	394	996	920	76.1
Feb. 27.....	3,536	3,081	455	2,495	2,123	372	1,041	958	83.0
Mar. 31.....	3,000	2,553	447	2,033	1,678	355	967	875	91.6
Apr. 30.....	2,836	2,469	367	1,970	1,699	271	866	770	96.1
May 31.....	2,767	2,393	375	1,987	1,703	285	780	690	90.4
June 30.....	2,926	2,509	417	2,225	1,852	374	701	657	43.4
July 31.....	2,998	2,583	415	2,283	1,918	365	715	665	50.2
Aug. 31.....	3,142	2,697	444	2,364	1,984	379	778	713	65.0
Sept. 30.....	3,219	2,745	474	2,419	2,021	398	800	724	75.8
Oct. 30.....	3,111	2,667	444	2,289	1,924	365	822	743	78.5
Nov. 30.....	3,129	2,636	493	2,330	1,932	397	800	704	95.9
Dec. 31.....	3,293	2,804	489	2,542	2,128	414	751	676	75.6
1927-Jan. 31.....	3,139	2,671	469	2,328	1,964	365	810	707	103.9
Feb. 28.....	3,256	2,758	499	2,475	2,085	391	781	673	108.4
Mar. 31.....	3,290	2,791	500	2,505	2,112	393	785	679	106.6
Apr. 30.....	3,341	2,865	476	2,541	2,146	395	800	719	81.4
May 31.....	3,458	2,967	490	2,674	2,254	420	784	713	70.5
June 30.....	3,569	3,065	504	2,757	2,316	441	812	749	63.5
July 30.....	3,642	3,145	497	2,765	2,343	421	877	802	75.5
Aug. 31.....	3,674	3,170	504	2,746	2,330	415	928	840	88.8
Sept. 30.....	3,915	3,340	575	3,018	2,539	479	897	801	95.8
Oct. 31.....	3,946	3,363	583	3,023	2,549	475	923	814	108.5
Nov. 30.....	4,092	3,519	573	3,134	2,675	459	958	844	113.4
Dec. 31.....	4,433	3,812	621	3,481	2,963	518	952	849	103.4
1928-Jan. 31.....	4,420	3,805	615	3,393	2,882	511	1,027	923	104.2
Feb. 29.....	4,323	3,737	585	3,294	2,807	488	1,028	931	97.7
Mar. 31.....	4,640	3,947	693	3,580	3,016	564	1,060	931	128.8

LOANS TO BROKERS AND DEALERS IN SECURITIES MADE BY REPORTING MEMBER BANKS IN NEW YORK CITY
 [In millions of dollars. Monthly data are averages of weekly figures]

Month or date	Demand and time loans				Demand loans				Time loans			
	Total	For own account	For account of out-of-town banks	For account of others	Total	For own account	For account of out-of-town banks	For account of others	Total	For own account	For account of out-of-town banks	For account of others
1926-January.....	3,126	1,259	1,281	585	2,185	782	884	519	941	477	398	65.6
February.....	3,119	1,182	1,329	608	2,153	695	922	536	967	487	408	71.8
March.....	2,800	1,051	1,173	576	1,878	587	785	506	922	464	388	70.6
April.....	2,467	905	1,035	528	1,645	472	705	468	822	433	330	59.6
May.....	2,452	913	998	541	1,719	516	717	486	733	396	232	55.3
June.....	2,517	973	944	600	1,838	613	699	536	678	359	255	63.8
July.....	2,607	960	1,000	646	1,935	605	746	584	671	355	254	62.1
August.....	2,720	948	1,073	699	2,027	610	793	624	693	337	280	75.4
September.....	2,783	974	1,128	682	2,074	656	807	611	710	318	321	71.0
October.....	2,698	866	1,106	726	1,975	549	773	653	723	317	333	72.8
November.....	2,615	819	1,048	748	1,911	520	728	663	704	298	320	85.4
December.....	2,698	887	1,045	766	2,012	596	737	679	686	291	308	87.0
1927-January.....	2,778	933	1,104	741	2,094	639	799	656	685	295	305	84.8
February.....	2,733	841	1,127	765	2,069	548	843	678	664	293	284	87.1
March.....	2,816	901	1,091	824	2,154	615	805	734	661	285	286	89.9
April.....	2,866	929	1,131	806	2,190	642	830	718	677	287	301	88.4
May.....	2,933	936	1,191	805	2,219	639	861	719	714	297	330	86.4
June.....	3,115	1,077	1,180	858	2,385	772	851	762	730	306	328	95.8
July.....	3,096	1,032	1,188	877	2,336	705	857	774	760	327	330	102.9
August.....	3,181	1,048	1,225	908	2,366	726	849	791	815	322	376	116.4
September.....	3,261	1,061	1,285	916	2,463	777	891	795	799	284	394	120.5
October.....	3,392	1,103	1,326	962	2,603	820	942	841	789	283	385	121.4
November.....	3,441	1,175	1,276	990	2,632	879	902	851	809	296	374	138.7
December.....	3,621	1,282	1,354	985	2,782	948	981	853	839	334	373	132.3
1928-January.....	3,802	1,342	1,470	990	2,938	992	1,083	863	863	350	387	126.8
February.....	3,784	1,167	1,500	1,117	2,871	820	1,084	967	913	347	416	150.0
March.....	3,761	1,064	1,450	1,247	2,861	741	1,036	1,084	900	323	414	162.9
Mar. 7.....	3,696	1,019	1,462	1,215	2,790	690	1,044	1,056	906	329	418	158.7
Mar. 14.....	3,746	1,090	1,446	1,210	2,847	766	1,031	1,050	899	324	416	159.6
Mar. 21.....	3,779	1,027	1,467	1,285	2,884	706	1,055	1,123	895	321	412	161.9
Mar. 28.....	3,825	1,121	1,427	1,277	2,925	802	1,017	1,106	900	319	410	171.1

COMMODITY PRICES, SECURITY PRICES, AND SECURITY ISSUES

WHOLESALE PRICES, BY COMMODITY GROUPS ¹

[1926=100]

Month	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous
1927—January.....	96.6	96.5	96.9	101.0	94.3	97.7	98.8	97.5	97.6	97.9	90.3
February.....	95.9	95.4	95.9	100.2	94.6	95.8	98.0	96.2	97.6	97.9	90.6
March.....	94.5	94.2	94.5	100.5	94.0	90.0	98.2	95.3	97.1	97.8	90.9
April.....	93.7	94.3	94.6	101.7	94.2	84.9	97.8	95.0	97.8	97.8	91.3
May.....	93.7	96.3	94.4	103.7	93.9	83.9	98.6	95.1	95.4	97.8	91.3
June.....	93.8	96.5	94.4	107.3	94.3	84.2	98.2	94.6	95.8	98.0	90.2
July.....	94.1	97.6	93.9	111.7	94.3	84.2	97.7	93.7	95.3	98.0	89.3
August.....	95.2	102.2	94.2	111.7	96.2	84.1	98.0	92.9	95.4	98.6	89.9
September.....	96.5	105.9	96.5	112.5	98.5	84.2	97.6	92.1	96.4	98.6	89.2
October.....	97.0	105.0	100.0	113.0	98.4	83.8	97.1	91.6	97.1	98.5	88.3
November.....	96.7	104.3	101.5	114.3	97.5	82.9	97.0	90.2	97.4	98.9	88.3
December.....	96.8	104.4	100.7	116.9	97.2	82.5	98.4	90.4	97.2	98.8	89.0
1928—January.....	96.3	106.1	98.5	121.0	96.7	80.8	98.1	90.8	96.3	98.6	89.0
February.....	96.4	104.5	98.7	124.1	96.6	81.2	98.3	91.0	95.8	98.4	87.3

¹ New index of Bureau of Labor Statistics. See BULLETIN for October, 1927, pp. 696-699.PRICES OF FARM PRODUCTS AT THE FARM ¹

[August, 1909-July, 1914=100]

Month	30 commodities	Grains	Fruit and vegetables	Meat animals	Dairy and poultry products	Cotton and cottonseed	Un-classified
1927							
January.....	126	120	140	140	152	85	87
February.....	127	122	142	143	142	94	84
March.....	126	121	140	144	133	102	81
April.....	125	119	147	143	133	101	80
May.....	126	127	158	137	130	113	79
June.....	130	140	201	129	124	119	82
July.....	130	139	195	131	125	124	81
August.....	132	138	172	136	127	136	81
September.....	140	134	145	142	137	179	87
October.....	139	128	138	145	146	169	83
November.....	137	120	136	141	153	162	86
December.....	137	123	141	138	158	153	90
1928							
January.....	137	125	144	138	154	152	91
February.....	135	128	153	139	144	141	90
March.....	137	136	174	139	137	147	89

¹ Index numbers of Department of Agriculture.

DOMESTIC CAPITAL ISSUES

[In millions of dollars]

Class of issue	February, 1928		January-February			
	New	Re-funding	1928		1927	
			New	Re-funding	New	Re-funding
Total.....	509.2	193.2	941.6	350.0	1,235.2	352.2
Corporate issues.....	376.1	191.7	709.3	346.7	966.5	347.6
Bonds and notes.....						
Long-term.....	240.6	160.3	448.1	289.8	590.7	308.1
Short-term.....	20.8	19.3	37.3	19.8	23.6	6.5
Stocks.....	114.7	12.1	223.9	37.1	352.2	33.0
Farm-loan issues.....	2.3		3.8		28.7	
Municipal issues.....	130.8	1.5	228.5	3.3	240.0	4.6
Total new and refunding....	702.4		1,291.6		1,587.4	

SECURITY PRICES

Month or week	Common stocks ¹			Bonds: Average price of 40 issues ²
	197 industrial stocks ³	31 railroad stocks ³	Total 228 stocks	
1927—March.....	165.7	143.1	159.0	96.63
April.....	165.1	147.4	166.2	97.24
May.....	174.5	150.5	167.5	97.55
June.....	175.4	151.9	168.5	97.06
July.....	179.0	153.9	171.7	97.03
August.....	189.0	156.0	179.3	97.76
September.....	197.0	157.1	191.1	98.00
October.....	197.5	158.9	186.2	98.62
November.....	202.1	158.6	189.4	98.98
December.....	208.7	160.6	194.6	99.25
1928—January.....	210.4	158.2	195.2	99.35
February.....	207.6	153.7	191.9	99.31
March.....	221.0	159.0	202.9	99.20
Week ending—				
Mar. 3.....	209.9	154.8	193.8	99.07
Mar. 10.....	215.4	155.8	198.0	99.08
Mar. 17.....	220.6	161.8	203.4	99.25
Mar. 24.....	227.6	160.4	208.0	99.32
Mar. 31.....	231.7	162.1	211.4	99.29

¹ Index numbers of Standard Statistics Co.² Average of 1917-1921 prices=100.³ Average of yearly high and low prices, 1913-1922=100.

FOREIGN CAPITAL ISSUES

[In millions of dollars]

Class of issue	February, 1928		January-February			
	Gov-ernment	Cor-porate	1928		1927	
			Gov-ernment	Cor-porate	Gov-ernment	Cor-porate
Total.....	103.8	31.9	212.1	95.9	155.7	97.8
New issues.....	72.5	25.1	168.4	85.1	118.7	86.2
Europe.....	19.0	11.3	52.8	50.0	2.1	42.8
Canada and Newfoundland.....	7.0		15.3	18.8	30.1	5.8
Latin America.....	40.0		92.8	2.5	62.1	8.0
United States insular possessions.....			1.0		1.4	4.6
Miscellaneous.....	6.5	13.9	6.5	13.9	23.0	25.0
Refunding issues.....	31.2	6.8	43.7	10.7	37.0	11.7
Total, Government and corporate.....	135.6		308.0		253.5	

PRODUCTION, EMPLOYMENT, AND TRADE

[Index numbers of the Federal Reserve Board]

Year and month	Industrial production ¹	Production of manufactures ¹	Production of minerals ¹	Factory employment	Factory pay rolls	Building contracts awarded ¹		Freight car loadings ¹	Wholesale distribution		Department-store sales ¹		Department-store stocks ¹				
						Unad-justed	Ad-justed		Unad-justed	Ad-justed	Unad-justed	Ad-justed	Unad-justed	Ad-justed			
						Monthly average 1923-1925=100											
	Mo. av. 1923-1925=100			Mo. av. 1919=100													
ANNUAL INDEX																	
1919.....	83	84	77	100	100	64	-----	84	110	-----	73	-----	79	-----			
1920.....	87	87	89	103	124	63	-----	91	114	-----	94	-----	105	-----			
1921.....	67	67	70	82	84	57	-----	79	87	-----	87	-----	89	-----			
1922.....	85	87	74	90	89	81	-----	86	89	-----	88	-----	88	-----			
1923.....	101	101	105	104	113	84	-----	100	101	-----	98	-----	98	-----			
1924.....	95	94	96	95	104	95	-----	98	98	-----	99	-----	101	-----			
1925.....	104	105	99	95	107	122	-----	103	101	-----	103	-----	101	-----			
1926.....	108	108	107	96	109	129	-----	107	98	-----	106	-----	103	-----			
1927.....	106	106	107	92	105	128	-----	103	95	-----	106	-----	102	-----			
MONTHLY INDEX																	
1923																	
July.....	103	102	111	104	113	79	76	102	92	101	71	98	90	97			
August.....	102	100	110	104	113	75	72	101	115	103	79	99	96	100			
September.....	100	101	98	104	114	73	76	99	115	99	89	100	105	101			
October.....	99	98	104	104	117	91	88	97	123	103	117	100	111	100			
November.....	98	96	105	103	115	80	90	99	100	100	113	99	114	101			
December.....	96	96	99	101	113	76	90	95	82	95	161	100	94	100			
1924																	
January.....	100	99	102	100	108	76	101	99	94	103	87	99	90	101			
February.....	102	102	104	101	114	78	101	103	98	102	82	105	97	102			
March.....	100	101	99	101	113	109	99	99	102	94	91	99	105	102			
April.....	95	95	92	99	111	121	96	98	96	99	104	99	107	103			
May.....	89	88	93	96	105	108	95	97	87	95	100	97	104	102			
June.....	85	84	92	93	100	101	91	92	82	91	94	100	97	100			
July.....	83	82	92	89	92	87	84	92	86	93	72	96	93	100			
August.....	89	88	92	89	96	89	85	95	105	95	74	95	96	100			
September.....	94	93	97	91	99	87	90	99	113	101	93	100	105	101			
October.....	94	95	89	93	103	103	100	99	118	99	111	95	111	101			
November.....	97	97	96	92	101	95	103	99	97	99	111	101	113	100			
December.....	101	101	100	94	106	83	94	100	88	101	168	100	94	100			
1925																	
January.....	105	106	104	94	103	75	101	103	93	102	86	98	90	102			
February.....	105	106	100	96	109	76	104	103	97	101	80	103	96	101			
March.....	104	106	96	96	110	120	107	100	109	100	95	103	104	101			
April.....	103	103	98	96	107	138	112	104	98	100	106	102	106	101			
May.....	103	103	104	95	107	124	115	105	90	99	100	101	103	100			
June.....	102	102	101	94	105	137	125	101	91	100	99	100	97	100			
July.....	103	103	104	93	102	133	128	101	94	102	75	100	94	101			
August.....	103	102	108	94	105	149	135	105	113	101	78	101	98	102			
September.....	102	104	90	95	104	138	135	102	117	100	95	102	106	102			
October.....	105	107	91	97	111	129	129	100	124	105	129	110	111	101			
November.....	106	109	94	97	112	116	127	104	99	100	114	104	115	102			
December.....	108	110	93	97	112	129	138	105	89	98	178	106	97	103			
1926																	
January.....	106	109	92	96	107	111	146	102	94	102	89	106	93	105			
February.....	107	108	96	97	112	99	136	104	97	101	81	104	98	108			
March.....	107	108	106	97	113	146	128	105	107	100	102	101	107	104			
April.....	107	107	106	96	110	139	120	107	94	97	103	103	107	103			
May.....	106	107	104	96	109	134	125	108	91	99	107	107	103	101			
June.....	107	107	106	95	109	133	125	109	91	99	101	102	98	101			
July.....	107	107	107	93	104	126	124	108	91	97	78	104	94	101			
August.....	111	111	109	94	108	146	129	108	107	97	83	107	97	101			
September.....	112	112	111	96	108	137	130	109	117	100	101	109	107	108			
October.....	111	110	115	96	112	126	126	109	111	94	124	110	114	103			
November.....	108	106	118	95	109	119	130	108	97	98	121	106	117	104			
December.....	105	103	119	94	108	131	136	106	84	95	184	110	96	102			
1927																	
January.....	107	105	116	92	102	94	123	105	87	94	89	106	92	103			
February.....	109	107	118	94	109	96	131	109	91	95	83	106	97	102			
March.....	111	110	118	94	110	151	131	109	103	95	100	105	106	103			
April.....	108	109	104	93	108	147	128	108	90	98	111	105	106	102			
May.....	111	111	108	93	108	135	126	107	87	95	102	103	103	101			
June.....	108	108	104	92	106	154	144	104	87	93	101	103	97	100			
July.....	106	106	100	91	101	130	128	101	88	95	75	103	94	101			
August.....	107	107	106	91	104	135	119	104	111	100	89	111	97	101			
September.....	105	105	105	92	104	127	121	104	112	96	100	108	107	103			
October.....	103	102	105	92	105	137	137	101	106	91	119	105	113	103			
November.....	99	98	101	90	101	114	125	96	93	95	122	107	116	103			
December.....	99	99	103	89	102	116	121	94	82	93	186	111	96	102			
1928																	
January.....	106	107	103	88	98	104	137	100	87	95	88	105	91	103			
February.....	110	111	103	89	104	113	155	102	92	97	85	105	97	102			

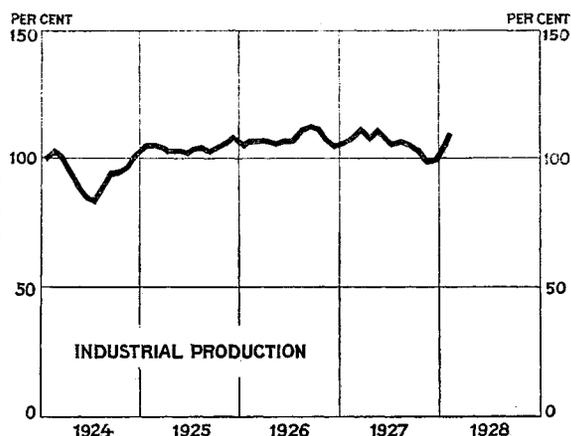
¹ The indexes of production and car loadings are adjusted to allow for seasonal variation; the indexes of building contracts, wholesale distribution, and department-store sales and stocks are shown both with and without seasonal adjustments.

INDUSTRIAL PRODUCTION

INDEX OF INDUSTRIAL PRODUCTION

[Index numbers, adjusted for seasonal variations.
1923-1925 average = 100]

Month	1922	1923	1924	1925	1926	1927	1928
January.....	73	100	100	105	106	107	106
February.....	76	100	102	105	107	109	110
March.....	80	103	100	104	107	111	-----
April.....	77	107	95	103	107	108	-----
May.....	81	107	89	103	106	111	-----
June.....	86	105	85	102	107	108	-----
July.....	86	103	83	103	107	106	-----
August.....	84	102	89	103	111	107	-----
September.....	88	100	94	102	112	105	-----
October.....	94	99	94	105	111	103	-----
November.....	97	97	97	106	108	99	-----
December.....	100	96	101	108	105	99	-----
Annual index.....	85	101	95	104	108	106	-----



INDEX OF PRODUCTION OF MANUFACTURES, BY GROUPS

Year and month	Total	Iron and steel	Textiles	Food products	Paper and printing	Lumber	Auto-mob-iles	Leather and shoes	Cement, brick, and glass	Non-ferrous metals	Petro-leum refining	Rubber tires	Tobacco manu-factures
MONTHLY INDEX													
1927													
January.....	105	105	108	95	113	96	95	99	101	116	135	118	114
February.....	107	113	108	93	113	95	99	102	107	112	134	117	113
March.....	110	114	114	99	113	91	104	98	119	108	135	123	116
April.....	109	115	112	98	114	88	104	98	109	112	134	131	122
May.....	111	116	116	103	112	95	105	100	108	111	132	127	122
June.....	108	104	121	102	112	93	93	105	109	108	134	131	116
July.....	108	102	118	96	114	95	83	113	111	106	136	124	109
August.....	107	101	119	97	112	95	88	112	115	108	136	119	119
September.....	105	97	118	93	113	99	81	113	113	107	139	113	123
October.....	102	93	113	94	111	94	71	108	108	106	142	116	121
November.....	98	87	112	94	110	96	47	97	107	106	140	117	122
December.....	99	92	105	95	112	93	53	96	105	111	137	110	112
1928													
January.....	107	110	106	102	117	97	91	98	111	101	135	126	118
February.....	111	114	107	110	118	98	102	100	115	109	139	136	118

INDEX OF PRODUCTION OF MINERALS, BY PRODUCTS

Year and month	Total	Bitumi-nous coal	Anthracite coal	Crude petro-leum	Iron-ore ship-ments	Copper	Zinc	Lead	Silver
MONTHLY INDEX									
1927									
January.....	116	119	101	120	-----	114	113	113	97
February.....	118	125	95	123	-----	111	113	112	95
March.....	118	131	88	123	-----	100	114	115	90
April.....	104	87	108	119	-----	106	110	120	90
May.....	108	94	117	120	120	107	108	113	90
June.....	104	91	102	120	101	105	114	112	93
July.....	100	87	107	124	99	101	109	116	94
August.....	106	92	100	124	99	101	114	112	94
September.....	105	92	107	124	87	104	111	111	90
October.....	105	90	107	124	95	102	110	105	91
November.....	101	85	106	124	49	106	107	110	100
December.....	103	87	92	124	-----	105	109	109	95
1928									
January.....	103	92	88	121	-----	102	104	104	93
February.....	103	94	88	119	-----	104	107	111	83

¹ Revised.

NOTE.—These tables contain, for certain months, index numbers of industrial production, together with group indexes for important components. The combined index of industrial production is computed from figures for 80 statistical series, 52 of manufactures, and 8 of minerals. Adjustments have been made in the different industries for the varying number of working days in each month and for customary seasonal variations, and the individual products and industries have been weighted in accordance with their relative importance. The sources of data and methods of construction were described and monthly indexes for the above groups were published in the BULLETIN for February and March, 1927.

PRODUCTION OF MANUFACTURES, BY INDIVIDUAL LINES

	February, 1928	January, 1928	February, 1927		February, 1928	January, 1928	February, 1927
Iron and steel:				Leather and products:			
Pig iron.....	100	95	105	Leather, tanning—			
Steel ingots.....	116	111	114	Sole leather ¹	98	92	100
Textiles:				Upper leather—			
Cotton consumption.....	104	104	112	Cattle.....	68	68	90
Wool—				Calf and kip.....	103	102	93
Consumption.....	97	92	97	Goat and kid.....	122	131	120
Machinery activity ¹	86	87	89	Boots and shoes.....	102	99	102
Carpet and rug loom activity ¹	92	93	87	Stone, clay, and glass:			
Silk—				Cement.....	111	129	96
Deliveries.....	144	137	127	Brick—			
Loom activity ¹	124	119	110	Face brick.....	109	100	119
Food products:				Plate glass.....	122	101	123
Slaughtering and meat packing—				Nonferrous metals:			
Hogs.....	130	101	79	Copper.....	112	102	113
Cattle.....	98	92	107	Lead.....	111	104	112
Calves.....	100	102	105	Zinc.....	107	104	113
Sheep.....	112	115	111	Tin ¹	96	85	105
Flour.....	113	101	96	Chemicals and allied products:			
Sugar meltings.....	78	115	95	Petroleum refining—			
Paper and printing:				Gasoline ¹	155	151	150
Wood pulp and paper—				Kerosene.....	101	100	97
Newsprint.....	94	94	105	Fuel oil ¹	120	117	122
Book paper.....	123	120	116	Lubricating oil ¹	122	111	109
Fine paper.....	129	118	102	Coke production—			
Wrapping paper.....	121	124	103	By-products.....	122	121	117
Paper board.....	119	118	112	Beehive.....	29	29	59
Wood pulp, mechanical.....	105	100	105	Rubber tires and tubes:			
Wood pulp, chemical.....	105	103	108	Tires, pneumatic.....	139	130	119
Paper boxes.....	119	115	131	Inner tubes.....	113	97	99
Newsprint consumption.....	125	129	125	Tobacco products:			
Lumber:				Cigars.....	90	85	94
Lumber, cut.....	97	97	94	Cigarettes.....	140	143	129
Flooring.....	109	100	109	Manufactured tobacco and snuff.....	94	95	97
Transportation equipment:							
Automobiles.....	102	91	99				
Locomotives.....	39	34	65				
Shipbuilding.....		153	164				

¹ Without seasonal adjustment.

FACTORY EMPLOYMENT AND PAY ROLLS

[Index numbers without seasonal adjustment. Monthly average, 1919=100]

Month	Total	Metals and products		Textiles and products			Lumber and products	Railroad vehicles	Automobiles	Paper and printing	Foods and products	Leather and products	Stone, clay, and glass	Tobacco products	Chemicals and products
		Group	Iron and steel	Group	Fabrics	Products									
Employment:															
1927—January...	92.4	88.9	88.7	95.2	97.6	92.2	92.9	79.8	104.2	108.8	85.1	88.5	109.6	73.5	77.6
February...	93.6	90.1	90.1	96.9	98.5	94.7	91.8	79.2	117.3	109.0	88.9	110.1	79.0	77.8	
March...	93.9	90.6	90.3	96.6	98.3	94.5	91.2	78.0	122.4	108.0	84.1	88.6	115.9	78.9	
April...	93.2	89.9	89.6	95.1	97.5	92.0	91.0	78.4	123.4	108.1	83.1	84.2	121.5	77.3	
May...	92.6	88.7	88.4	93.6	96.5	89.9	91.6	78.5	123.7	107.3	83.7	82.6	124.0	78.2	
June...	92.4	87.8	87.5	93.1	96.3	88.9	91.8	78.9	117.2	106.9	87.6	82.2	124.2	80.3	
July...	90.7	85.7	85.4	91.0	94.8	86.2	91.2	78.2	109.9	106.3	86.7	85.3	119.5	80.3	
August...	91.2	85.4	85.0	92.3	95.6	88.2	92.4	76.7	114.3	106.9	85.8	88.2	120.2	74.4	
September...	91.9	85.1	84.7	93.9	96.5	90.5	93.0	76.1	111.0	107.8	88.7	88.5	119.3	83.5	
October...	91.7	84.4	84.0	94.5	97.0	91.4	92.4	75.5	109.9	108.6	89.2	86.5	116.2	85.3	
November...	90.1	82.8	82.3	94.2	97.2	90.3	91.2	73.4	100.7	109.7	87.7	81.5	114.7	84.6	
December...	89.0	81.8	81.4	93.6	96.4	89.9	88.0	72.0	105.0	110.1	86.7	79.8	109.0	80.3	
1928—January...	87.9	80.9	80.7	92.9	95.1	89.9	84.5	70.5	114.0	108.6	83.8	83.2	101.6	73.8	
February...	89.4	83.1	82.7	93.8	95.1	92.3	84.7	70.4	124.8	108.1	84.8	84.6	101.9	77.1	
Pay rolls:															
1927—January...	102.0	94.1	93.8	105.3	107.6	102.6	101.6	84.6	94.0	150.3	99.3	90.0	129.5	76.2	107.0
February...	108.6	99.1	98.7	111.0	111.7	110.3	103.4	89.3	140.2	150.8	99.3	95.6	136.8	79.2	108.9
March...	110.0	100.7	100.1	110.8	111.3	110.3	104.6	87.0	153.4	152.2	99.1	93.2	144.9	80.9	111.7
April...	108.5	99.5	99.1	105.1	108.1	101.4	103.2	88.0	157.7	150.7	98.0	87.0	151.6	77.9	109.9
May...	108.1	96.8	96.2	103.3	107.6	98.1	105.3	89.8	158.7	150.3	100.7	84.4	157.6	83.6	107.0
June...	105.8	95.2	94.7	102.8	107.0	97.6	104.8	87.9	131.4	148.2	104.6	85.1	154.5	86.7	109.1
July...	101.1	87.4	86.7	99.1	102.8	94.6	101.1	83.0	125.2	145.4	103.1	90.2	143.7	85.7	108.6
August...	104.4	90.4	89.8	102.7	105.8	98.9	105.8	85.4	136.3	147.2	101.7	97.5	149.0	79.7	105.2
September...	103.8	87.9	87.3	104.8	107.3	101.9	107.3	81.3	128.7	148.9	104.4	95.2	145.7	90.5	105.7
October...	105.1	88.9	88.2	106.9	108.9	104.3	109.1	83.6	133.6	151.0	104.8	88.5	145.0	91.3	110.0
November...	101.0	86.0	85.2	101.6	104.5	98.1	106.3	82.2	117.6	149.0	103.0	76.8	140.8	90.5	109.7
December...	101.8	87.6	86.6	103.6	106.1	100.6	102.5	80.2	127.8	152.7	102.2	77.8	133.6	87.0	112.4
1928—January...	97.7	84.8	84.1	100.2	100.3	100.0	91.2	75.1	127.2	148.8	99.0	83.5	122.1	78.1	106.3
February...	103.5	92.1	91.2	103.5	102.4	104.8	95.4	78.2	160.0	147.5	100.8	88.9	123.8	78.1	109.3

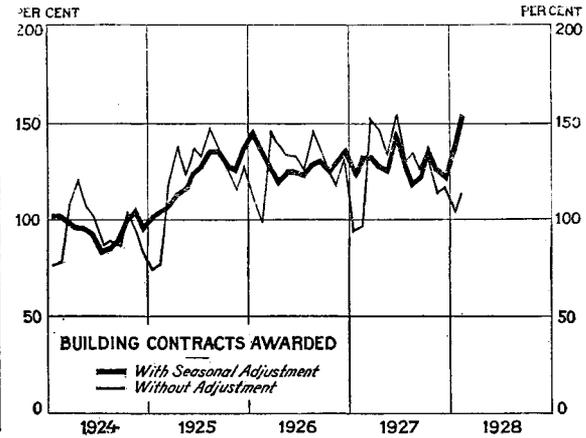
NOTE.—This table contains for certain months general index numbers of employment and pay rolls, together with group indexes for important industrial components. The general index is a weighted average of relatives for 34 individual industries. The method of construction was described in detail and indexes for the above groups since January, 1919, were published in the BULLETIN for May, 1925. See also p. 668 of BULLETIN for September, 1925, for certain revisions.

BUILDING

BUILDING CONTRACTS AWARDED

[Index numbers based on value of contracts. Monthly average, 1923-1925=100]

Month	Without seasonal adjustment				With seasonal adjustment			
	1925	1926	1927	1928	1925	1926	1927	1928
January.....	75	111	94	104	101	146	123	137
February.....	76	99	96	113	104	136	131	155
March.....	120	146	151	144	107	128	131	125
April.....	138	139	147	.....	112	120	128	.....
May.....	124	134	135	.....	115	125	126	.....
June.....	137	133	154	.....	125	125	144	.....
July.....	133	126	130	.....	128	124	128	.....
August.....	149	146	135	.....	135	129	119	.....
September.....	138	137	127	.....	135	130	121	.....
October.....	129	126	137	.....	129	126	137	.....
November.....	116	119	114	.....	127	130	125	.....
December.....	129	131	116	.....	138	136	121	.....



BUILDING CONTRACTS AWARDED, BY FEDERAL RESERVE DISTRICTS

[Value of contracts in thousands of dollars]

Month	Total	Federal Reserve District										
		Boston	New York 1	Phila- delphia 1	Cleve- land 1	Rich- mond	Atlanta	Chicago 1	St. Louis	Minne- apolis 1	Kansas City	Dallas
1927												
February.....	393,583	20,298	105,709	28,269	50,808	24,944	31,928	70,905	25,697	4,342	16,173	14,510
March.....	620,738	42,807	156,074	60,141	56,741	34,694	45,921	124,235	42,704	13,298	16,342	27,781
April.....	604,391	40,649	165,459	52,652	77,350	31,192	31,004	114,013	34,888	12,001	22,644	22,539
May.....	552,349	39,023	141,469	37,724	70,938	39,736	31,100	105,089	31,344	11,136	21,528	23,262
June.....	632,478	33,569	177,235	54,644	64,011	35,502	31,188	140,608	44,171	11,712	17,598	22,240
July.....	534,390	29,658	158,435	33,982	57,465	34,241	28,093	107,480	32,205	13,111	17,203	22,517
August.....	552,488	37,461	144,049	53,519	62,447	31,813	28,176	109,646	34,134	12,371	19,061	19,811
September.....	521,611	32,863	107,448	40,174	65,235	57,464	30,917	106,296	32,573	8,038	22,253	18,350
October.....	562,816	27,486	169,299	34,211	49,315	29,553	26,023	141,523	41,405	9,305	19,317	15,379
November.....	466,393	40,070	132,481	30,138	39,136	24,811	39,151	84,182	27,793	7,138	16,516	24,977
December.....	477,364	29,407	130,346	28,634	35,275	37,285	24,816	126,841	33,352	4,473	12,316	14,619
1928												
January.....	427,169	33,410	133,271	35,765	26,403	27,607	27,696	77,806	29,187	4,428	13,318	18,278
February.....	465,331	21,826	140,227	34,980	37,841	22,301	23,376	108,789	35,294	3,968	13,793	22,936

BUILDING CONTRACTS AWARDED, BY TYPES OF BUILDING

[Value of contracts in thousands of dollars]

Month	Resi- dential	Indus- trial	Com- mercial	Public works and public utilities	Educa- tional	All other
1927						
February.....	163,088	41,247	67,896	52,180	22,046	47,126
March.....	250,078	48,077	113,766	106,827	36,522	65,468
April.....	267,417	44,602	80,754	116,264	35,678	59,676
May.....	219,980	44,889	72,541	111,368	34,545	69,026
June.....	239,814	33,879	88,122	151,399	42,122	77,142
July.....	186,935	30,303	83,010	143,916	36,434	53,792
August.....	209,456	41,039	76,915	119,741	41,035	64,302
September.....	202,877	48,546	59,617	126,230	29,244	55,097
October.....	243,562	50,712	79,720	108,210	30,170	50,442
November.....	214,963	52,890	43,521	76,089	31,741	47,189
December.....	207,281	29,989	86,933	92,657	23,248	37,256
1928						
January.....	193,189	37,970	68,852	72,039	23,369	31,750
February.....	238,985	57,695	34,881	59,980	18,651	55,139

BUILDING PERMITS ISSUED, BY FEDERAL RESERVE DISTRICTS

[Value of permits in thousands of dollars]

Federal reserve district	Number of cities	Febru- ary, 1928	January, 1928	Febru- ary, 1927
United States.....	168	271,771	207,760	244,696
Boston.....	14	7,347	5,553	17,171
New York.....	22	137,509	83,846	94,603
Philadelphia.....	14	13,742	8,783	11,249
Cleveland.....	12	14,643	9,685	11,731
Richmond.....	15	10,318	14,014	10,004
Atlanta.....	15	7,368	7,810	9,808
Chicago.....	19	37,226	38,151	57,291
St. Louis.....	5	6,223	5,385	7,435
Minneapolis.....	9	2,028	2,056	1,476
Kansas City.....	14	6,502	4,663	5,272
Dallas.....	9	5,981	6,856	5,778
San Francisco.....	20	22,884	20,958	22,878

¹ Figures for these districts have been revised. Information for earlier years will be furnished upon request.

NOTE.—Figures for building contracts awarded are for 37 States east of the Rocky Mountains, as reported by the F. W. Dodge Corporation. Adjusted indexes by months from 1910 to date given in the BULLETIN for August, 1927, p. 563.

COMMODITY MOVEMENTS

FREIGHT-CAR LOADINGS, BY LINES

[Index numbers, adjusted for seasonal variations. 1923-1925=100]

Month	Total	Grain and grain products	Live-stock	Coal	Forest products	Merchandise l. c. l. and miscellaneous
1927-January	105	96	88	114	94	108
February	109	102	87	121	95	109
March	109	98	92	122	91	110
April	108	97	92	107	90	110
May	107	100	95	103	93	108
June	104	105	93	96	91	108
July	101	97	89	89	94	107
August	104	98	91	102	95	109
September	104	103	87	102	95	108
October	101	106	94	94	93	106
November	96	94	87	91	87	102
December	94	94	82	93	82	99
1928-January	100	102	91	94	90	106
February	102	108	101	96	93	106

For description and early figures see p. 562 of August BULLETIN.

AGRICULTURAL MOVEMENTS

[Index numbers, without seasonal adjustment. 1919=100]

Month	Total	Live-stock	Animal products	Grains	Cotton	Vegetables	Fruits	Tobacco
1927-January	115	99	86	86	152	118	99	404
February	104	81	95	84	118	113	97	383
March	103	91	118	71	117	146	100	212
April	85	82	137	50	74	146	128	31
May	94	95	161	63	58	140	174	8
June	94	91	169	84	32	162	127	1
July	95	79	149	135	13	133	140	-----
August	123	93	129	195	80	119	142	50
September	165	87	102	207	205	233	267	255
October	185	111	95	182	284	266	357	323
November	149	105	110	119	244	145	154	323
December	121	95	116	108	155	96	88	317
1928-January	112	110	101	108	87	133	72	425
February	97	103	102	107	59	140	69	179

For description and early figures see BULLETIN for March, 1924, and for certain revisions see p. 739 of the BULLETIN for October, 1925.

WHOLESALE TRADE

INDEX OF WHOLESALE DISTRIBUTION—NINE LINES OF TRADE

[1923-1925 average=100]

Month	Sales with seasonal adjustment						Sales without seasonal adjustment					
	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
January	102	103	102	102	94	95	93	94	93	94	87	87
February	100	102	101	101	95	97	96	98	97	97	91	92
March	104	94	100	100	95	-----	114	102	109	107	103	-----
April	100	99	100	97	93	-----	97	96	98	94	90	-----
May	103	95	99	99	95	-----	94	87	90	91	87	-----
June	102	91	100	99	93	-----	92	82	91	91	87	-----
July	101	93	102	97	95	-----	92	86	94	91	88	-----
August	103	95	101	97	100	-----	115	105	113	107	111	-----
September	99	101	100	100	96	-----	115	118	117	117	112	-----
October	103	99	105	94	91	-----	123	118	124	111	106	-----
November	100	99	100	98	95	-----	100	97	99	97	93	-----
December	95	101	98	95	93	-----	82	88	89	84	82	-----

SALES IN INDIVIDUAL LINES OF TRADE

Month	With seasonal adjustment									Without seasonal adjustment								
	Groceries	Meats	Dry goods	Men's clothing	Wom-en's clothing	Boots and shoes	Hard-ware	Drugs	Fur-niture	Groceries	Meats	Dry goods	Men's clothing	Wom-en's clothing	Boots and shoes	Hard-ware	Drugs	Fur-niture
1927																		
January	93	113	83	84	77	112	92	104	100	86	113	78	65	71	92	82	102	88
February	93	112	87	97	75	110	93	103	96	81	107	88	123	95	87	82	95	96
March	96	108	90	101	67	97	98	106	96	94	104	95	138	108	111	102	117	109
April	95	111	86	87	88	94	94	106	95	90	104	76	85	64	100	96	108	96
May	97	109	87	87	69	110	91	104	93	95	109	76	52	39	111	93	98	88
June	98	164	88	90	65	90	92	106	100	101	106	78	46	28	85	96	99	88
July	91	102	88	90	79	134	92	105	104	92	104	81	78	43	107	90	100	85
August	97	109	102	101	72	111	97	112	106	97	111	125	165	98	122	98	110	109
September	94	109	91	92	66	104	99	114	104	102	117	113	140	95	127	106	122	118
October	90	109	86	81	54	91	94	111	96	102	122	99	101	87	114	105	123	114
November	94	105	89	86	67	105	100	112	99	100	101	88	61	45	110	98	113	104
December	92	109	87	93	61	101	97	106	90	90	103	70	48	39	82	90	99	85
1928																		
January	93	106	89	101	70	114	92	108	91	85	106	85	76	65	94	82	106	80
February	98	114	88	101	70	109	93	109	89	85	108	89	128	88	87	82	101	89

NOTE.—The basic data used and the methods of construction of the index of wholesale distribution were described and monthly indexes from January, 1919, to October, 1927, were published in the BULLETIN for December, 1927, pp. 817-823.

RETAIL TRADE

DEPARTMENT STORE SALES AND STOCKS, BY FEDERAL RESERVE DISTRICTS

[Index numbers.¹ Monthly average 1923-1925=100]

Month	United States	Federal Reserve District											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City ²	Dallas	San Francisco
Sales (unadjusted):													
1927-January	89	103	96	80	85	84	85	84	79	81	80	87	96
February	83	78	85	78	82	78	88	90	83	76	76	86	85
December	186	182	201	174	176	195	191	185	177	155	165	189	195
1928-January	88	98	94	74	85	81	85	85	82	76	79	89	98
February	85	78	88	71	85	82	91	89	85	75	77	88	92
Sales (adjusted):													
1927-January	106	113	111	96	105	106	107	105	100	98		105	112
February	106	104	109	97	104	104	109	114	103	103		108	111
December	111	107	115	102	108	108	114	115	106	101		115	117
1928-January	105	108	108	88	104	103	107	112	104	90		106	114
February	105	100	109	85	103	105	108	115	101	96		105	115
Stocks (unadjusted):													
1927-January	92	91	98	91	87	91	90	92	90	81	97	77	97
February	97	95	97	95	96	97	100	97	95	87	109	85	102
December	96	101	99	95	93	97	90	93	93	80	102	74	100
1928-January	91	93	96	88	90	89	92	92	84	80	98	75	98
February	97	97	97	91	94	96	101	99	93	88	111	83	105
Stocks (adjusted):													
1927-January	103	101	106	99	103	104	97	104	103	91		89	105
February	102	101	105	100	101	102	102	102	101	90		88	106
December	102	103	103	99	101	103	101	100	102	89		85	109
1928-January	103	102	104	96	106	102	101	103	97	90		86	106
February	102	103	104	96	99	101	103	104	99	91		86	109

¹ For description of department store indexes given in this table see BULLETIN for February, 1928.² Monthly average in 1925=100.

SALES OF MAIL-ORDER HOUSES AND CHAIN STORES

[Index numbers of sales. Monthly average 1923-1925=100]

	Sales without seasonal adjustment								Sales with seasonal adjustment							
	Mail-order houses (4)	Chains							Mail-order houses (4)	Chains						
		Grocery (34)	5-and-10-cent (14)	Apparel (5)	Drug (13)	Cigar (5)	Shoe (4)	Candy (7)		Grocery (34)	5-and-10-cent (14)	Apparel (5)	Drug (13)	Cigar (5)	Shoe (4)	Candy (7)
1926-December	155	167	258	263	169	159	163	161	118	154	133	162	137	114	119	113
1927-January	103	155	96	100	134	97	82	95	111	157	130	163	140	113	111	120
February	101	148	104	114	129	99	84	103	112	155	133	173	139	115	121	121
March	125	174	116	148	143	111	96	115	117	163	128	175	139	113	104	116
December	167	202	279	350	182	156	173	164	128	186	147	215	148	111	130	115
1928-January	105	188	104	121	146	90	87	100	113	191	140	197	153	105	117	126
February	108	194	115	137	148	96	86	106	116	195	142	201	153	107	120	120

NOTE.—For description of indexes given in this table and of the data upon which they are based, see pp. 232-235 of this BULLETIN. Monthly indexes from 1919 to 1927 are given on pp. 234-235.

BANK SUSPENSIONS AND COMMERCIAL FAILURES

BANK SUSPENSIONS, BY CLASS OF BANK

[Amounts in thousands of dollars]

	All banks		Member banks		Nonmember banks	
	Number	Total deposits	Number	Total deposits	Number	Total deposits
1926						
January	65	13,384	11	3,992	54	9,392
February	52	11,763	10	2,861	42	8,902
March	51	10,249	6	710	45	9,539
April	56	12,512	6	3,534	50	8,978
May	68	16,324	10	4,234	58	12,090
June	77	34,229	16	5,318	61	28,911
July	140	48,618	5	1,637	135	46,981
August	52	10,001	9	2,127	43	7,874
September	37	12,050	8	4,317	29	7,733
October	88	18,209	19	6,280	69	11,929
November	154	45,983	33	19,389	121	26,594
December	116	39,166	27	14,413	89	24,753
Total	956	272,488	160	68,812	796	203,676
1927						
January	133	32,038	27	11,555	106	20,483
February	81	25,157	16	8,744	65	16,413
March	75	31,222	16	7,700	59	23,522
April	49	11,750	10	5,462	39	6,288
May	47	13,198	11	6,434	36	6,764
June	41	10,784	9	5,521	32	5,263
July	37	12,162	2	2,638	35	9,524
August	27	17,364	5	8,881	22	8,483
September	36	8,988	6	1,257	30	7,731
October	44	11,542	9	3,729	35	7,813
November	43	11,210	6	3,105	37	8,105
December	49	8,476	7	1,310	42	7,166
Total	662	193,891	124	66,336	538	127,555
1928						
January	53	12,535	8	3,456	45	9,079
February	50	20,669	11	10,082	39	10,587
Total, 2 months	103	33,204	19	13,538	84	19,666

BANK SUSPENSIONS¹ IN FEBRUARY, 1928, BY DISTRICTS

[Amounts in thousands of dollars]

Federal reserve district	All banks		Member banks ²		Nonmember banks	
	Number	Total deposits ³	Number	Total deposits ³	Number	Total deposits ³
Boston						
New York						
Philadelphia						
Cleveland						
Richmond	3	530	1	304	2	226
Atlanta	6	9,623	2	5,558	4	4,065
Chicago	10	1,753	4	996	6	757
St. Louis	7	1,279			7	1,279
Minneapolis	7	768			7	768
Kansas City	11	1,931	1	292	10	1,639
Dallas	2	1,616			2	1,616
San Francisco	4	3,169	3	2,932	1	237
Total	450	20,669	11	10,082	39	10,587

¹ Banks closed to the public by order of supervisory authorities or by the directors of the banks on account of financial difficulties.
² Comprise 7 national banks with deposits of \$3,809,000 and 4 State member banks with deposits of \$6,273,000.
³ Figures represent deposits for the latest available date prior to the suspensions and are subject to revision when information for the dates of suspension becomes available.
⁴ Includes 3 banks for which deposit figures are not available.

COMMERCIAL FAILURES, BY CLASS OF ENTERPRISE¹

[Amounts in thousands of dollars]

	Number				Liabilities			
	Total	Manu- factur- ing	Trad- ing	Agents, brokers, etc.	Total	Manu- factur- ing	Trad- ing	Agents, brokers, etc.
1926								
January	2,296	510	1,696	90	43,051	16,094	21,502	6,055
February	1,801	447	1,282	72	34,176	10,822	20,317	3,037
March	1,984	469	1,424	91	30,623	9,862	18,623	2,138
April	1,957	494	1,378	85	38,487	16,734	19,094	2,659
May	1,730	437	1,216	77	33,543	16,157	15,710	1,676
June	1,708	435	1,160	113	29,408	10,092	15,525	3,791
July	1,605	396	1,122	87	29,680	11,168	14,614	3,898
August	1,593	449	1,071	73	28,130	12,516	14,096	1,518
September	1,437	374	958	105	29,990	10,093	11,243	8,654
October	1,763	450	1,205	108	33,231	11,650	15,874	5,707
November	1,830	440	1,283	105	32,694	16,097	14,158	2,439
December	2,069	494	1,471	104	45,620	16,759	20,579	8,282
Total	21,773	5,395	15,268	1,110	409,233	158,044	201,335	49,854
1927								
January	2,465	501	1,842	122	51,290	19,996	24,530	6,764
February	2,035	411	1,508	116	46,941	10,518	23,406	13,017
March	2,143	569	1,468	106	57,891	22,368	28,191	7,332
April	1,968	492	1,342	134	53,156	25,278	22,308	5,570
May	1,852	444	1,292	116	37,785	13,802	19,978	4,005
June	1,833	427	1,310	96	34,465	13,587	17,856	3,022
July	1,756	448	1,187	121	43,150	16,743	16,832	9,575
August	1,708	438	1,174	96	39,196	14,921	14,702	9,573
September	1,573	389	1,083	101	32,786	15,349	12,052	5,385
October	1,787	488	1,170	129	36,236	17,134	14,657	4,445
November	1,864	478	1,276	110	36,147	12,786	16,949	6,412
December	2,162	597	1,430	135	51,062	29,024	16,733	5,305
Total	23,146	5,682	16,082	1,382	520,105	211,506	228,194	80,405
1928								
January	2,643	553	1,946	144	47,634	14,870	26,446	6,318
February	2,176	468	1,581	127	45,071	12,751	24,952	7,368
Total, 2 mos.	4,819	1,021	3,527	271	92,705	27,621	51,398	13,686

COMMERCIAL FAILURES, BY DISTRICTS¹

[Amounts in thousands of dollars]

Federal reserve district	Number			Liabilities		
	Feb., 1928	Jan., 1928	Feb., 1927	Feb., 1928	Jan., 1928	Feb., 1927
Boston	238	272	210	3,950	4,909	3,412
New York	369	587	276	9,285	14,371	9,723
Philadelphia	99	103	68	2,297	1,436	8,273
Cleveland	186	269	162	4,728	5,995	3,494
Richmond	158	197	156	4,304	3,193	4,249
Atlanta	294	137	191	7,254	1,204	1,686
Chicago	128	384	260	2,205	5,629	3,738
St. Louis	105	148	127	1,853	3,859	2,006
Minneapolis	72	94	77	384	553	1,114
Kansas City	144	131	143	2,284	1,606	2,137
Dallas	47	104	103	1,637	1,768	2,023
San Francisco	336	217	262	4,890	3,111	5,086
Total	2,176	2,643	2,035	45,071	47,634	46,941

¹ Figures furnished by R. G. Dun & Co.

FOREIGN BANKING AND BUSINESS CONDITIONS

GOLD HOLDINGS OF PRINCIPAL COUNTRIES AT THE END OF 1927

A table is presented herewith showing for the end of 1927, with comparative figures back to 1913, gold holdings of all the countries for which satisfactory figures are available. The figures represent actual gold officially reported as held by central banks and public treasuries, whether held at home or held abroad. They do not include gold technically known as "in circulation," that is, gold held by commercial banks, business concerns, and private individuals; no items are included, furthermore, that are understood to represent, to any extent whatever, holdings of any foreign assets other than earmarked gold. The exclusion of gold in circulation is unavoidable for the reason that satisfactory figures for such gold are not available for any country.¹

Reported gold holdings of the 40 countries included in the table amounted at the end of 1927 to about \$9,200,000,000, of which the United States Treasury and Federal reserve banks held about 43 per cent. Holdings of the United States Treasury and Federal reserve banks decreased during the year by \$106,000,000, and reported holdings of foreign countries increased by \$161,000,000. Changes during 1927 in the holdings of central banks and governments, as indicated by the reported figures,² are shown in the table in the adjoining column.

Holdings of commercial banks.—At the end of 1927 the gold held by national banks in the

United States amounted to \$17,000,000; by Canadian banks, about \$75,000,000; by the commercial banks of Australia (September 30, 1927), \$125,000,000 (including a small amount of silver); and by Argentine banks, \$79,000,000 (of which \$68,000,000 was held by the Banco de la Nacion, or \$54,000,000 more than at the end of 1926).

CHANGES IN GOLD HOLDINGS OF CENTRAL BANKS AND GOVERNMENTS

[In millions of dollars]

Country	Holdings at end of year		Changes during 1927
	1926	1927	
Countries in which holdings decreased:			
United States.....	4,083	3,977	106
Japan.....	562	542	20
Java.....	79	72	7
Denmark.....	56	49	7
Canada.....	158	152	6
Netherlands.....	166	161	5
6 other countries showing decrease.....	887	879	8
Total decreases.....			159
Countries in which holdings increased:			
Brazil.....	56	101	45
Poland.....	27	58	31
Argentina.....	436	461	25
Italy.....	221	239	18
Belgium.....	86	100	14
Russia.....	85	97	12
India.....	109	119	10
Switzerland.....	91	100	9
Spain.....	493	502	9
Germany.....	436	444	8
England.....	735	742	7
Austria.....	7	12	5
28 other countries showing increase.....	374	396	22
Total increases.....			214

¹ The table includes, for the United States as well as for foreign countries, all metallic gold in central holdings and excludes all classes of paper money (e. g., gold certificates). See BULLETIN for April, 1927, p. 276.

² Changes occurred also in holdings not separately reported by individual countries; see Review of the Month, p. 230.

GOLD HOLDINGS OF CENTRAL BANKS AND GOVERNMENTS 1913-1927

[In thousands of dollars, converted at par of exchange]

End of year	Total ¹	United States ²	European countries (central banks)											
			Total ¹	England ³	France	Germany	Italy	Austria	Austria-Hungary ⁴	Belgium	Bulgaria	Czechoslovakia ⁵	Denmark	Estonia
1913	4,771,492	1,290,420	2,330,900	170,245	678,856	278,687	288,103	-----	251,421	59,131	10,615	-----	19,666	-----
1914	5,283,565	1,205,487	3,484,039	428,221	802,591	498,508	299,759	-----	213,757	56,619	10,615	-----	24,506	-----
1915	6,219,282	1,706,922	3,803,838	389,205	967,950	581,954	293,453	-----	138,750	50,759	11,773	-----	29,833	-----
1916	6,486,818	2,193,531	3,503,234	402,970	652,885	599,873	255,772	-----	58,759	50,759	13,124	-----	42,847	-----
1917	7,078,160	2,520,156	3,572,259	422,594	639,682	572,768	238,931	-----	53,717	50,759	12,159	-----	46,611	-----
1918	6,756,725	2,655,898	3,081,345	523,632	664,017	538,861	243,566	-----	53,074	57,145	12,352	-----	52,159	-----
1919	6,664,068	2,524,679	2,890,703	583,211	694,847	259,519	203,441	-----	45,011	51,417	7,141	-----	60,807	-----
1920	7,117,049	2,434,168	3,033,982	762,912	689,517	260,028	204,362	-----	⁶ 11	51,438	7,141	4,053	60,992	-----
1921	7,930,981	3,221,215	3,032,941	763,719	690,141	237,102	210,739	-----	⁶ 16	51,451	7,334	12,545	61,192	-----
1922	8,290,913	3,505,551	3,043,400	751,597	708,403	227,436	217,284	-----	⁶ 9	51,001	7,415	20,874	61,173	-----
1923	8,570,026	3,833,735	2,993,885	754,400	709,479	111,247	215,699	1,313	-----	52,204	7,565	22,574	56,171	-----
1924	8,908,153	4,090,067	3,083,897	757,033	710,394	180,939	218,382	1,560	-----	52,543	7,792	31,745	56,145	1,384
1925	8,875,660	3,985,399	3,135,522	703,482	710,968	287,763	218,825	2,087	-----	52,855	7,981	30,575	56,085	1,279
1926	9,148,432	4,083,380	3,363,151	735,421	711,106	436,235	220,732	7,388	-----	86,214	8,464	30,731	56,007	1,312
1927	9,203,597	3,977,181	3,472,605	741,698	710,339	444,158	239,180	11,883	-----	99,878	9,250	29,766	48,780	2,722

End of year	European countries (central banks)—Continued														
	Finland	Greece ⁶	Hungary	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Rumania	Russia	Spain	Sweden	Switzerland	Yugoslavia ⁶
1913	6,948	4,825	-----	-----	-----	60,898	12,846	-----	8,760	29,242	786,800	92,490	27,372	32,801	11,194
1914	8,229	7,527	-----	-----	-----	83,663	11,181	-----	9,261	29,714	803,400	110,444	29,088	45,922	11,034
1915	8,229	11,194	-----	-----	-----	172,530	11,028	-----	9,261	36,264	831,200	166,414	33,385	48,275	12,331
1916	8,229	11,580	-----	-----	-----	236,217	33,027	-----	9,261	22	758,396	241,424	49,183	66,585	12,321
1917	8,229	12,159	-----	-----	-----	280,689	31,214	-----	9,261	-----	667,041	379,597	65,513	69,025	12,310
1918	8,229	10,248	-----	-----	-----	277,155	32,691	-----	9,263	2	(?)	430,072	76,532	80,041	12,306
1919	8,229	10,750	-----	-----	-----	256,204	39,690	1,667	9,266	200	(?)	472,041	75,350	99,779	12,233
1920	8,229	10,769	-----	-----	-----	255,729	39,472	2,858	9,266	329	(?)	474,228	75,516	104,780	12,352
1921	8,229	10,769	-----	2,123	-----	243,600	39,475	5,955	9,267	329	(?)	484,984	73,631	106,058	14,282
1922	8,371	5,944	-----	2,548	1,520	233,880	39,474	9,769	9,267	7,585	2,607	487,278	73,428	103,283	12,354
1923	8,242	7,180	-----	3,223	1,640	233,876	39,472	13,078	9,267	24,563	45,043	487,841	72,853	103,669	13,286
1924	8,354	7,527	7,460	4,555	3,080	202,854	39,457	19,949	9,267	26,020	73,050	489,292	63,508	97,642	13,965
1925	8,357	7,833	10,365	4,555	3,230	178,080	39,456	25,793	9,267	26,735	93,876	489,631	61,647	90,140	14,657
1926	8,250	8,729	29,526	4,555	3,136	166,231	39,457	26,677	9,267	27,787	84,605	493,489	60,162	91,050	16,620
1927	7,979	9,890	34,432	4,632	3,320	160,796	39,458	58,041	9,267	29,006	97,043	502,484	61,685	99,785	17,133

End of year	Total	Other countries													
		Canada: Minister of Finance ⁸	Argentine Government conversion fund	Bank of Brazil ⁹	Central Bank of Chile ¹⁰	Columbia: Bank of the Republic	Reserve Bank of Peru	Uruguay: Bank of the Republic	Australia: Note reserves	New Zealand: Reserve banks	India: Government rupee reserve	Domestic holdings of the Bank of Japan and of the Government	Bank of Java	National Bank of Egypt	South Africa: Reserve Bank
1913	650,172	115,894	224,989	53,202	-----	-----	-----	10,826	21,899	25,306	72,780	64,963	10,027	10,381	39,905
1914	¹ 593,039	98,817	213,906	26,601	1,330	-----	-----	13,483	38,932	27,739	30,202	64,062	12,418	21,750	43,799
1915	708,522	126,329	228,939	14,598	1,330	-----	-----	22,530	73,484	33,092	41,361	68,187	18,804	35,096	44,772
1916	790,053	131,092	251,158	14,598	1,330	-----	-----	33,251	78,351	36,012	38,636	113,411	28,984	29,164	34,066
1917	985,745	139,452	252,390	14,598	9,039	-----	-----	42,003	85,650	39,419	86,712	229,981	37,051	19,278	30,172
1918	1,019,482	129,436	269,628	15,571	23,413	-----	-----	46,718	104,143	39,419	63,842	225,821	51,600	16,312	33,579
1919	1,248,686	129,322	299,119	15,571	24,384	-----	-----	56,756	116,796	38,932	96,205	349,947	69,817	16,312	35,525
1920	1,648,899	112,648	450,057	19,464	32,893	-----	-----	57,307	115,336	37,472	116,249	551,840	88,214	16,807	50,612
1921	1,676,825	94,635	450,057	25,303	34,025	-----	-----	59,494	113,389	37,472	118,341	610,663	58,728	16,807	57,911
1922	1,741,962	146,434	450,057	27,401	34,025	-----	19,646	56,807	116,499	38,367	118,341	605,678	61,306	16,619	50,782
1923	1,742,406	126,882	454,035	48,665	34,025	1,849	20,736	56,812	121,088	38,294	108,609	600,194	62,869	16,510	51,838
1924	1,734,189	151,208	435,880	53,799	34,025	6,910	19,753	56,809	121,200	37,581	108,609	585,738	53,726	16,510	52,441
1925	¹ 1,754,739	156,580	435,880	54,300	34,025	14,599	19,164	56,811	127,838	37,667	108,609	575,768	73,394	16,510	43,594
1926	¹ 1,701,901	158,105	435,880	56,325	10,301	16,495	20,084	56,819	106,975	¹ 38,007	108,609	561,810	¹ 79,278	16,510	36,703
1927	1,753,811	151,978	460,771	100,735	7,411	19,962	19,437	59,319	105,121	38,280	¹¹ 119,097	541,739	71,640	18,289	40,032

¹ Revised figures.
² Treasury and Federal reserve banks; revised figures.
³ Gold held by Bank of England in both issue and banking departments; the latter (\$4,576,525 in 1927) includes some silver. Figures include currency note reserve, which prior to 1925 was held by exchequer.
⁴ Prior to 1926, Banking Office of Minister of Finance.
⁵ Austrian account only.
⁶ Prior to 1920, National Bank of Serbia.
⁷ Figures not available.
⁸ Includes government reserve against Dominion notes, savings banks account, and such gold as is held in deposit by chartered banks in the Central Reserve.
⁹ Prior to 1923, guarantee of currency fund.
¹⁰ Prior to 1926, Government conversion fund.
¹¹ Includes gold in gold standard reserve (\$10,473,000).

ANNUAL REPORT OF THE BANK OF BELGIUM FOR 1927

The annual report of the National Bank of Belgium for 1927, presented to the meeting of shareholders on February 27, 1928, contains the following account of economic conditions in Belgium and of the operations of the bank:

The important financial events, which were the subject of our preceding report, have acquired sufficient perspective to make possible to-day an appraisal of the influences which they have exerted on the situation of the country.

Stabilization and currency reform.—Currency stabilization, made effective on October 25, 1926, has been working out its effects during the past 14 months without causing any crisis in the national economy. The belga has been remarkably stable, and at no time has the ease of the money market been disturbed. Abundance of short-time funds has been evidenced by the moderate rates charged for discounts in the open market and for day-to-day loans.

The ratio of total reserves to aggregate demand liabilities of the bank was constantly above 50 per cent, rising gradually throughout the year to 55 per cent, the proportion shown on the last balance sheet for 1927. The bank has not found any occasion to use its foreign exchange reserve, the creation of which was considered advisable at the time of stabilization. On the contrary, the influx of foreign exchange following upon stabilization has made these holdings still larger.

The methods adopted for monetary reform were intended so far as possible to prevent a too rapid adjustment of domestic prices to prices abroad, such as might have caused a serious crisis. No disturbance of this kind was experienced. The index of wholesale prices, reflecting changes in the great international markets for raw materials, declined from 865 in November, 1926, to 841 in December, 1927, a fall of 24 points. On the other hand, the index of retail prices recorded a moderate advance—from 730 on November 15, 1926, to 812 on December 15, 1927. Converted to a gold basis, this index rose during the period under review from 105 to 117½, an increase of 11.9 per cent. The country was the better able to support this increase for the reason that it was very gradually effected.

If, on the whole, short-term credit has been inexpensive during the past year, long-term credits have been less easily available. It is

true that the capital market has absorbed the issues of shares floated by well-established or by new enterprises. On the other hand, the high rate charged has had a restrictive effect upon bond issues and mortgage loans. This condition of affairs has also been experienced in other countries following monetary stabilization. It is only temporary and should pass as the difficulties which Belgian finances have known since the war are forgotten. It is, nevertheless, one which has during the past year weighed heavily on securities with fixed yield. May one not fairly anticipate that the reasons which led the public to reject these investment opportunities while the currency was depreciating will disappear as soon as the monetary unit, having again become firm and steady, assures to such securities a continuance of their full value?

Balance of payments.—It may be well to emphasize the fact that this country, besides having an abundance of funds available in the domestic market, is a creditor for very considerable amounts in the more important foreign markets.

The balance of payments is certainly favorable. The movement of our foreign commerce, which constitutes the principal item in this balance, has been very satisfactory during the year in spite of the steady disappearance of those advantages, for the most part deceptive, which our exporters formerly derived from currency depreciation. When one remembers that in 1913 the proportion of exports to imports was 73.6 per cent according to official statistics, and that in 1927 it was in the neighborhood of 90 per cent, the success of our effort at recovery is obvious.

Industrial conditions.—Examination of the condition of our principal industries confirms this impression. On the whole, the first year following our currency stabilization has been characterized by a measure of prosperity which promises well for the future, and by great activity. The export trades are almost all in excellent condition. With respect to concerns which produce exclusively for the domestic market and for local trade, if they have experienced some difficulty, this has resulted chiefly from decrease in expenditures and revival of a spirit of economy, under the stimulus of restoration of the currency to a stable basis.

It is true that some serious problems, quite independent of the monetary question, are still to be solved. Coal mining, after the tem-

porary advantage afforded by the English strike, suffered again from difficulties which certainly are not limited to our own country. Stocks of coal have begun once more to accumulate at the mine heads, and international competition has made itself keenly felt. The building industry also finds itself still in a difficult position. The struggle over prices, in which a number of mill and factory owners have engaged on foreign markets, is harmful to the general welfare in that it causes a considerable lowering of our export profits. Consolidation and the abandonment of old-fashioned methods in favor of a policy of cooperation would strengthen the position of our manufacturers relative to that of their foreign competitors by increasing appreciably their range of activity and the margin of their profits.

Manufacturers of matches and chocolate manufacturers have gone through a crisis owing to lack of markets. The building industry, since the completion of reconstruction in the devastated regions, has had a period of inactivity. Stone quarries have suffered from a lack of orders. In a majority of the other branches of our national industry, however, the situation is satisfactory. The steel and iron industries experienced a period of genuine prosperity. Working conditions and prospects in the zinc industry have improved. The construction of a great copper refinery, which is ready to begin operations, promises to give to Belgium, in this interesting field, the place to which, in view of the rich deposits of Katanga, she may fairly aspire. To strengthen its position and to enable it more effectively to meet foreign competition, the chemical industry has been extensively "rationalized." The glass works continued during the year to enjoy a satisfactory volume of business. In this industry establishments using machinery have been very busy, although activity at old-fashioned factories for blown glass continued to decline. In all branches of our textile industry, so important for this country, conditions are favorable. Artificial cement factories and brick kilns, the output of which is for the most part exported, have been in flourishing condition. Business has been excellent also for the marble works. The diamond-cutting industry in Antwerp has continued to maintain a leading position. The output of the Kongo mines has further strengthened the position which this industry holds on the international market.

It is with satisfaction that we have observed the very apparent development which a

vigorous tendency toward concentration has effected in our more important industries. This movement, facilitated by the terms of the law of July 23, 1927, has been particularly evident in the metallurgical industries, in the production of rolling stock, in bolt making, in the automobile industry, in coal mining, in electrical undertakings, in the chemical industry, and finally in the match industry.

Although unfavorable weather prevailed during the summer, agriculture has on the basis of results little reason to complain. With unequalled activity, great ingenuity, and rare adaptability, our agriculturists, our kitchen gardeners, and our cattle breeders have developed their foreign markets and contributed much to the improvement of our trade balance. In this respect the business of exporting eggs furnishes a characteristic example; it has been of real benefit to the country.

As indications of satisfactory activity in business, it may be noted that unemployment has been exceedingly small and that labor troubles have been few. Salaries have gradually come into line with the new economic conditions. These changes have been made with caution. Our working class is well aware that the maintenance and development of exports are of the highest importance to them.

Increasing activity at our seaports is indicated by tonnage statistics, as shown by the following figures for the port of Antwerp:

Year	Number of vessels cleared	Tonnage
1913.....	7,056	14,147,000
1926.....	11,599	22,793,000
1927.....	11,418	23,490,000

The cession by the Government to the city of Antwerp of a considerable tract of land north of the city is in line with the growth of our shipping and guarantees its future.

Financial conditions.—The fiscal efforts of the country, which are the essential basis of financial recovery, have been nobly supported by all classes of the people. Owing to the favorable return of emergency taxes, the yield of which was allocated to the amortization fund, this fund was able to realize without change the program which had been outlined for it by the legislature. In 18 months, if we include amortization payments charged to the ordinary budget, the public debt was reduced by 2,937,000,000 francs. These repayments have restored large capital sums to the money

market. Public saving, by virtue of habits of economy so firmly implanted in the country that even currency disorders were not able to destroy them completely, increased in a very striking manner.

Average of monthly excess of deposits over withdrawals at the General Savings and Pension Office:

	Francs
1926.....	7, 436, 000
1927.....	48, 215, 000

The bourses of Antwerp and Brussels have been very active. As might have been expected, part of the available funds accruing from repatriation of capital and redemption of treasury bonds found its way into the market for speculative securities. A readjustment of security prices was sure to follow the return to stable money; certain circumstances have even accelerated it. On the one hand, foreigners wishing to profit by the favorable level of security prices made large purchases of Belgian securities. Among our own people, on the other hand, the state of mind created by the monetary troubles of recent years has persisted since stabilization. A speculative movement developed as a result of the confusion wrought in properties by the war and its financial consequences. Certain classes of people, unfamiliar with this kind of business, were drawn into stock-market speculation.

At the present time the security market has not yet become normal. Although in all countries on a stable money basis interest rates on long-term investments have declined, permitting a higher valuation of securities with fixed yield, we must admit that in Belgium, in spite of the strength of the monetary situation, government, municipal, industrial, and mortgage securities have not sufficiently regained favor with the public, which is still too ready to sacrifice safety and the certainty of a good return to the gambler's chances inherent in the pursuit of supervalues.

The importance of the market for public issues in our national economy can not be disregarded. Furthermore, the bank of issue is only performing its duty in reestablishing the savings habit on the basis of sound financial principles and wise traditions.

Having drawn for you in broad outline the picture of our economic situation during the first year following the monetary reform, we may repeat that, by restoring sound monetary conditions for our enterprises and by giving to those directing these enterprises that peace of mind which is indispensable to business and to

the reforms which you have seen accomplished, stabilization of the currency has fortified the country for its economic struggle.

Policy of the bank in aid of exports.—It seems fitting at this point to explain to you what has been the policy adopted by our institution in regard to those serious questions which it is the special duty of the bank to solve.

You realize, of course, that the monetary problem is not a problem purely of technique. The capacity for expansion of our industry and commerce, the possibilities of development of our agriculture, the ability and initiative of our financial establishments determine in large measure our balance of payments, and therefore the condition of our exchanges and the ease of our money market.

Shortly after the armistice the National Bank, in its desire to encourage exports, brought about the creation of the National Society for Credits to Industry, which was organized chiefly to obtain for establishments seeking foreign markets intermediate or even long-term credits similar to those enjoyed by their foreign competitors, such credits being often a condition of success. In the beginning we gave the new institution the benefit of our experience, and the results obtained during the first years have been excellent. We are happy to say that the National Society, strengthened by the cooperation of our great institutions of credit, has no further need today of such close collaboration with us. It has been able to develop into an independent organization, and at the end of the past year it left our premises to establish itself in its own offices. Our most cordial good wishes go with it in the new course which it has undertaken. The discount department of the bank will continue business relations with the society.

It goes without saying that our various departments will in every way continue to encourage the development of our export business, which is so essential for Belgium. We are giving our utmost support at home and abroad to the Belgian banks specializing along this line.

Our foreign commerce statistics indicate the progress achieved in foreign markets since the war by our more important industries. But the smaller industries, too, and particularly those which produce luxury commodities and works of art, incorporating a great deal of handwork, can contribute materially to this progress. During recent times new and satisfactory developments in this connection, which we have taken pains to assist, have been in evidence. Hosiery, toilet articles, ready-made clothing, lingerie, carpets, furniture, fabrics for

covering furniture, articles of morocco leather, gloves, embroidery, laces, and many other such articles are entering in larger and larger volume into our exports. This, however, is only a beginning. On the occasion of his visit to the United States the governor of the bank had occasion to call the attention of interested Americans to the great opportunities offered by these industries of which we have just spoken.

Furthermore, in cooperation with the Minister of Foreign Affairs, we have organized a mission to make a study in America of possible outlets for these industries in that immense and rich market. At our request the Chamber of Commerce at Brussels has undertaken to welcome and advise foreign agents and commercial travelers who visit Belgium for the purpose of buying stocks of commodities for their houses. Likewise, on our recommendations, closer relations have been established between chambers of commerce throughout the country and the National Department of Commerce, whose organization has been greatly extended of late and whose useful and practical activity is not yet sufficiently known; also, a consulting committee of the chambers of commerce has been appointed at the Department of Commerce by the Minister of Foreign Affairs. For our part we have compiled an interesting amount of material concerning the smaller industries not only in Belgium but in the principal countries of Europe. We expect to use this material for publication. Our staff has already prepared a pamphlet explaining concisely what every exporter ought to know about financing the operations of foreign commerce. Along the same line we have tried to reestablish at our institution those financing operations of the bank which are connected with the control of imports. This business, which was much in request before the war, has completely died out in our country following the enemy occupation and the serious difficulties from which our currency suffered. Being convinced of its importance, we have granted special facilities to those banks, manufacturers, and merchants who were in a position to resume dealings of this character. Some results have been obtained, but the development will be slow and only by degrees will this type of business regain its former importance.

Credit policy of the bank.—After the monetary reform it was to be expected that there might be an enormous influx of capital on our market. This influx took place and brought about a considerable increase in the fiduciary circulation, while the rest of the circulation was

covered by a parallel increase in gold values. We have applied various suitable means to lessen the effects of this phenomenon and to restrict it within the narrowest possible limits.

By maintaining its rates at a high level for several months, the bank reduced the total of its Belgian portfolio and of its advances. These rates could be maintained for a considerable period because the abundance of capital and the great prosperity of Belgian industries enabled them to support the high costs. When these costs began to be too heavy the bank gradually reduced its discount rate to $4\frac{1}{2}$ per cent. In order, however, not to stimulate speculation, the rate on advances secured by Government funds was not reduced below 6 per cent.

It is true that this restrictive policy would not have been sufficient if the bank had not been able at the same time to concentrate under its management large capital sums belonging not only to the treasury but also to various official or semiofficial organizations. According to the principles of modern financial science, it is essential that available funds of public or semipublic institutions shall be deposited in the central bank, which finds its position on the money market thereby strengthened. A large part of these available funds we invested in foreign exchange bills. This permitted us at the same time to guard against an excessive growth of the fiduciary circulation and still to increase the gold reserve against our notes; the bank, in fact, does not liquidate these investments unless it is able at the same time to substitute for the foreign exchange in question other assets, and especially drafts on Belgium and loans and advances.

The building up by the treasury, working in cooperation with the bank, of a gold reserve in the ratio of 50 per cent against the liabilities of the postal check department, is also in line with the policy which we have outlined. This is a wise measure of security, which does credit to the Government. Similar arrangements have been made with regard to the small notes of 5 and 20 francs, which are in circulation for Government account under the terms of the royal decree of October 26, 1926. Following an agreement made between the Government and the bank, these small notes, which in the aggregate can not exceed 750,000,000, and which, as you know, are to be replaced by metallic currency, have a cover of 300,000,000 belgas in gold exchanges and in silver reckoned at gold value, an amount equal to 40 per cent of the maximum circulation.

A very effective measure clearly recommended by the aims which we were following, and one to which we have not failed to call the Government's attention, would have been to start, on the day after stabilization, the redemption of treasury bonds still held by the bank. Having in mind the strength of the monetary situation, however, we have had to admit that it was necessary before everything else to pay off those holders of 5 per cent bonds who had not availed themselves of the privilege of converting their old securities into preferred shares of the National Society of Belgian Railways.

It was not until the end of the past year that a repayment of 30,000,000 francs was made to the bank. Since the 1st of January, 1928, these repayments have been continued at the rate of 20,000,000 francs each month, which will amount to almost a quarter of a billion per annum. These funds will be invested in Government obligations or in Belgian or foreign commercial securities, and the income accruing from them, added to the principal, will reduce the debt of the State still further. If, however, it should be necessary, the bank of issue will dispose of a sufficient amount to maintain the fiduciary circulation within reasonable limits and in accord with the needs of the national economy. No one is unaware how important it is to avoid any extreme rise in prices—a danger more serious perhaps for us than for others because it threatens our power of competing in the world market.

Most certainly the policy followed along this line has borne fruit. If in the period from the 22d of December, 1926, to the 22d of December, 1927, the total of our demand liabilities rose from 10,036,739,000 to 10,783,294,000 francs, this increase has been in proportion to the rise of domestic prices.

Gold policy of the bank.—While the bank sought to keep the fiduciary circulation within reasonable limits, it likewise pursued the policy of progressively building up its gold reserve. Thus we were led to conclude arrangements with the Society of Gold Mines of Kilo-Moto and with other Belgian colonial societies, which secured for us practically all the gold produced by them. However, as we were not satisfied with these supplies, we made a strong demand for gold in the world market. Since November 25, 1926, we have held the 30 per cent of gold which the law requires. The amount of our metallic reserve on that date was 3,100,923,459 francs. By December 22, 1927, the gold had risen to 3,592,155,054 francs, an increase of 491,231,595 francs. This total has increased since then, and the foreign exchange which the

bank has at its disposal, especially in London and in New York, will permit it to increase the metallic part of its reserve whenever the need may arise. Under these conditions the National Bank is in a position to exchange its notes for gold. Convertibility of the Belgian fiduciary currency is thus assured.

But it is well to bear in mind that the bank is not obligated to purchase gold except within the limits of the metallic reserve prescribed by law. Otherwise, the reserve would increase enormously whether or not the monetary situation called for these additions. Experience shows that this freedom of purchase is entirely logical. The bank of issue has not hesitated to import gold when the position of the exchanges rendered that advisable, but it is always free to choose its own time with regard to conditions on the international market.

During the past year, and especially during the second half, the far-sighted policy of the Federal reserve banks of the United States has helped in the reconstruction of gold reserves of European central banks. By refraining from expanding the volume of credit to the extent made possible by accumulation of an enormous metallic reserve, these American banks of issue have not only helped to maintain extraordinary economic stability in the United States since 1921 but have also been of great assistance in effecting monetary recovery in Europe. The Bank of England has been no less active in this respect.

Recently certain distinguished experts have been asking whether the world is not threatened with a scarcity of gold, in the sense that it may become more and more difficult to provide for currency requirements. They believe that they have discovered in the rate of production at the mines premonitory signs of an approaching insufficiency and of a consequent general decline in prices. Other authorities do not hesitate to prophecy, on the contrary, a still greater abundance of the precious metal. This is not the place to analyze this problem. We feel less called upon to do so because, in our opinion, the banks of issue are able to meet either one or the other of the eventualities apprehended. On the one hand, experience has shown how to neutralize the effects of any actual superabundance of the yellow metal. On the other hand, if it is true that the production of gold has not recovered its pre-war level and the decline in the purchasing power of gold has a proportionally depressing effect, it would appear that central banks can bring about further notable economics in the use of the metal, both by general application of the

principles of the "gold exchange standard" and by intelligent cooperation for the best interest of all nations.

Exchange policy of the bank.—It remains to discuss the policy which we have adopted in the exchange market. This policy has been dictated by our statutes, which intrust to our institution the task of maintaining currency stability.

From this point of view, it is necessary to the public welfare that the National Bank shall exercise control over the money market in a way to prevent either excess or stringency of credit, and thus to assist in maintaining equilibrium in the country's balance of payments. But it does not by any means follow that the bank of issue shall restrain the free action of economic forces; that is what it would be doing if it were to fix the course of the exchange in any rigid fashion or manage it arbitrarily. It is, in fact, normal for exchanges to fluctuate between the gold points, and we never intervene to prevent these natural fluctuations. By following changes in the exchange rates, the country should be able to see for itself what influence its economic activity is exerting on the balance of payments; so it may be apprized in time, and often by very slight fluctuations, of mistakes which it was about to commit. The belga has been maintained constantly near, often rising above, gold par.

General policies of the bank.—On the eve of financial reforms which a number of countries are preparing, and in the presence of the extreme difficulties which still dominate the economic life of many nations, the counsels of moderation and prudence with which we closed our report last year are still pertinent. It is true that our monetary situation is firmly established to-day and secure from danger. The bank of issue holds a quantity of gold values such as it has never before possessed in the course of its history. Nevertheless, one should not forget that money is in the last analysis only an instrument. However important its part, it does not comprise the entire national economy, and its stability alone is not

sufficient to make a country prosperous. For years to come a vigorous policy of financial wisdom will continue to be necessary for individuals as well as for public authorities.

Belgium can live only by exporting. Private enterprises, therefore, should maintain that low cost of production which even by the admission of their competitors constitutes one of their more valuable advantages. Therefore, economy and work are equally indispensable; by aiding the development of capital and of national equipment, by maintaining within the country a cost of living below the level of other countries, we shall be able to compete on advantageous terms in the world's markets.

The war left us a heavy domestic debt and in addition a very large foreign debt. We must decrease the former and repatriate the latter. The Government is to be congratulated on having abstained from floating any loan, even for the execution of its program of public works. Furthermore, it is absolutely necessary to continue the policy of amortization which was courageously adopted at a very difficult time. In other countries well-informed people are following with sustained attention the progress, painful but beneficial, which we are making along the path of debt repayment.

Participation of the bank in Polish and Italian credits.—After having benefited now for more than a year by the international agreement in aid of our currency stabilization, it was pleasant for us to be able in our turn, and in collaboration with the principal banks of issue of the world, to give our support to the monetary reforms undertaken under excellent auspices by Italy and by Poland. During the course of the past year, moreover, the heads of the central banks in neighboring countries repaid the visits of courtesy which the governor of our bank had made to them, thus strengthening the cordial relations which we have entered into with these distinguished men. The collaboration and the solidarity of the central banks thus becomes closer all the time. It is a development full of happy omens which is more than ever to be commended.

ANNUAL REPORT OF THE BANK OF SWITZERLAND

The annual report of the Bank of Switzerland for 1927, presented at the meeting of stockholders on February 10, 1928, deals as follows with the economic and financial situation of the country during the past year and with the operations of the bank:

The year 1927 was not characterized to the same degree as other recent years have been, by great events in the domain of international politics. It was, nevertheless, a year of important achievement in the long task of economic recovery throughout the world and in the establishment of peace.

Further progress in the way of strengthening the political, social, economic, and financial situation was clearly registered by that very sensitive barometer, the exchange market.

Additions to list of countries on gold basis.—In the matter of monetary stabilization the year just past was marked by new successes. The economic conference at Geneva in 1922, where the gold problem formed, as it were, the pivot of the discussions, established a program for a general return to the gold standard. At that time the situation did not permit an immediate return in all countries to the complete gold standard. In fact, no country has as yet fully returned to gold, with exception of the United States, which has always maintained the convertibility of its bank notes into legal money. If in the beginning the Geneva resolutions had on the whole only an academic value, they have since acquired a practical influence, for a series of countries have now adopted gold as the basis for their monetary systems and the list of European nations on a stable monetary basis has been further extended during the course of the year. We noted in our last report that Hungary and Denmark had reorganized their currency as from January 1, 1926 and 1927, respectively. With the assistance of credits extended not only by banks of issue—under the leadership of the Bank of England and of the Federal Reserve Bank of New York—but also by private banks, two other European Governments, Poland and Italy, have stabilized their currency on the basis of a gold-exchange standard, following a plan of reorganization similar to that carried out so successfully by Belgium in 1926. In Poland stabilization was made effective on the basis of 1.72 zlotys for 1 gold franc; and in Italy on the basis of 7.919 grams of fine gold for 100 paper lire, thereby establishing gold parity at

19 lire for \$1, or 0.27277 Swiss franc for 1 lira. The National Bank of Switzerland took part in both these revaluation operations. In the case of the Italian credit the participating banks made our institution fiduciary agent for administration of the exchange securities which the Bank of Italy must furnish if it makes use of the credit.

French exchange, which in 1926 was subject to severe fluctuations, was this year as stable as the exchanges based on gold. It remains still to make legally effective this *de facto* stabilization which was brought about by the wise financial policy of the Government and the bank of issue.

Outside of Europe another important country, the Argentine Republic, has reestablished convertibility of its notes on the basis of the pre-war parity of 1 paper peso equal to 0.44 gold peso, without by such procedure, in this country any more than in other countries, putting gold coins again into circulation. India, likewise, has taken action of the highest importance by adoption in March of the currency act, which is a first step in the way of gradual introduction of the gold standard in that country. This act fixes the legal value of the rupee at 1s. 6d. and definitely demonetizes silver.

International movements of capital.—Stability of the exchange market has been greatly assisted by international movements of capital, representing principally a flow of funds from the United States to Europe, to the great advantage of both continents. This stability helped in turn to reestablish relations between the several financial markets which, under the injurious influence of excessive exchange fluctuations, had been isolated from one another since the war. Interest rates still show far greater divergencies, comparing one country with another, than in pre-war times. In this respect equilibrium is reestablished slowly; it would not be desirable to have it otherwise, since a too rapid leveling might bring about disturbances in the money and capital market of creditor countries and might create in those countries which have need of capital a fictitious and therefore unhealthy prosperity.

The necessity for international agreement and cooperation both among nations as such and in the business world is manifest. It finds expression in resolutions voted by international conferences looking toward the conclusion of general agreements, the carrying out of which,

unfortunately, is still too often effected in a spirit of protectionism more extreme than that of the war or postwar periods. It has even happened on occasion that the proclamation of free-trade principles has led to the paradoxical result that customs barriers have been made still higher. In this respect the commercial treaty concluded last summer between France and Germany, with its most-favored-nation clause, is particularly important for our country. In itself the conclusion of this treaty is certainly a happy event, in that it sets forth a larger conception of international economic relations. Its value, however, has been rendered illusory to some extent through the simultaneous withdrawal by both contracting parties of the right of entry of a whole series of articles. Thus indirectly the agreement has had an unfavorable effect on the commercial relations of France with a number of other countries, and particularly on those of France with Switzerland. The negotiations entered upon between these two latter countries, following an increase greatly prejudicial to our commerce in French customs duties, are long and difficult; the point which they had reached at the end of the year, however, permits us to hope that they will lead to an arrangement as desired in harmony with Switzerland's essential requirements. It is advisable at present not to exaggerate the influence of the proclamation of free-trade principles by the economic conference which met at Geneva in May, since the practical application of these principles is blocked by great difficulties. Even the diplomatic conference held at Geneva in October and November to study the problem of removing import and export prohibitions still in force with respect to a number of products and raw materials has only a moderate success to record. One must nevertheless recognize the value of these efforts as preparation for moral disarmament in the matter of international economic relations.

Revival of economic activity.—The economic activity of Switzerland revived during the past year in an encouraging way, although, unfortunately, not all branches of industry participated in the revival. Certain lines—for example, the ribbon industry and to a less degree embroidery—continue to be depressed, and their immediate prospects seem by no means favorable. Others, however, have transacted a satisfactory business; among these are the textile, the metallurgical, and the chemical industries. In watchmaking no improvement was felt until the second half of the year. Agriculture has not yet emerged from its

period of crisis, and the unfavorable weather, accompanied by hail storms and cyclones which ravaged the entire country, seriously injured the crops. Some slight progress, however, is to be recorded in exportation of dairy products and in cattle breeding; an advance in the price of milk, slight as it was, had nevertheless a favorable effect on the income from agricultural products. In spite of the variable weather, and although hopes aroused in the spring were not fully realized, it was a good year for those who derive their principal income from the tourist business. The revival of economic activity has been well supported by the stability of interest rates at a relatively favorable level, and we can state with satisfaction that it has been possible to meet increased demands for funds without any considerable raising of the rates.

Financial situation.—The financial situation of the country may be characterized as sound. It is true that the budgets of the Confederation and of the various Cantons are not yet wholly in balance. But the deficits are exceedingly small and in a majority of cases are more apparent than real, because as a rule the budgets provide for regular amortization of the debts. However that may be, the Confederation, the Cantons, and the communes will still find it necessary to make prolonged efforts in order that they may, by gradually paying off their unproductive debts which have greatly increased since the war, lighten the heavy burden of imports and so remove one cause working in the international market to weaken the competitive power of Swiss economy.

The financial situation of the Federal railways, also, which since the war have experienced an era of deficits, is improving. The auxiliary enterprise of the S. E. S. A. (Swiss Express Joint Stock Co.) at Zurich, which was organized last year, has contributed to this improvement. If traffic develops favorably, and if the administration continues the wise policy of economy which it has undertaken, it may be hoped that the financial situation of our greatest state enterprise will become normal again.

Capital market.—Revival of economic activity brought about heavy demands on the capital market. Thus the issues of Swiss Government loans absorbed 205,200,000 francs of new money as against only 45,000,000 francs the year before, which year, it is true, showed a particularly low figure. Public issues of shares also were in a larger amount, reaching 212,600,000 francs as compared with 141,600,000 francs in 1926. The Confederation had

occasion to place only one conversion loan, by which in the spring it converted the 151,400,000 francs of 1923 $4\frac{1}{2}$ per cent treasury bonds into a loan of the same character to mature in 15 years, issued at 97 per cent. In September the Federal railways floated a loan of 100,000,000 francs for the purpose of funding their floating debt and covering their current expenses. In spite of a rise in the price of money during the interval, they succeeded in obtaining capital at $4\frac{1}{2}$ per cent interest, although they made certain concessions as to the price of issue, which was set at 95 per cent; thus the yield of this loan, which is payable in 18 years, comes to about 5 per cent. During the course of the summer the great banks one after another adopted a rate of 5 per cent for their cash loans; a certain number of banks in the cantons found themselves obliged *nolens volens* to follow this example, although others succeeded in maintaining a rate of $4\frac{3}{4}$ or even $4\frac{1}{2}$ per cent, or in bringing the rate down to these levels. This increase in the rate on loans occasioned some apprehension of a rise in mortgage rates, which, however, was fortunately avoided. On our mortgage market the abnormal supply of short-term obligations, which were exposed to constant fluctuations in interest rates, clearly showed an unhealthy situation in our capital market, for which there was perhaps no remedy except in creating mortgage bonds. The higher price of money has affected only new loans and has not exercised any marked influence on general rates of interest; the yield of gilt-edged securities, moreover, remained at about $4\frac{3}{4}$ per cent throughout the entire year.

Money market.—The Swiss money market was influenced again by a vigorous international circulation of capital. On the one hand, the market was strongly supported by an influx of foreign funds seeking a refuge either in Swiss investments or in foreign securities quoted in our currency or in operations on the stock exchange. On the other hand, the market continued to be drawn upon by the public issue of foreign loans and by private investment in securities of other countries. Under these conditions the problem of capital outflow was in the highest degree one involving the public welfare; it will continue to be such until the application of the *modus vivendi* which is coming to be established with the banks, sufficient account is taken of the possible influence of operations of this kind on our money market and on our rate of exchange. There is no question here of hindering the activity of the banks, but it is highly important to control foreign issues. The

directors of the bank are perfectly aware that the active balance of revenue arising from investments abroad is a necessary element in the equilibrium of our general balance of payments, which is heavily burdened by the deficit in our commercial balance properly so called; the bank of issue, however, can not imagine that anyone would, without consulting it, float great loans abroad at the risk of thwarting its policy, which aims to assure to the greatest possible extent stability of exchange and of interest rates. But it is good to record the fact that the great financial establishments, almost without exception, have formed the habit of informing the bank regularly of whatever operations they have under way; it is to be hoped that in future this habit will become universal.

The Swiss money market was greatly influenced also by the inflow and outflow of short-term funds occasioned by differences of interest rates in the various foreign money markets. The abundance of funds which prevailed at the beginning of the year increased as a result of retiring from circulation gold coins of the Latin Union minted in other countries, of which some had been hoarded up to that time and now reappeared seeking investment. Foreseeing the economic needs of the country, the bank of issue tried to keep these available funds which were not immediately invested, within the country by rediscounting money orders for the banks without charging interest, in order to give opportunity for investment. In spite of everything, this measure proved ineffectual for preventing the exportation of funds, which began to flow toward countries with higher interest rates. By favor of the stability of her exchange rates and of the extensive foreign relations of her financial establishments, Switzerland in larger measure than ever before functioned as international collector and distributor of funds. As the higher rates abroad attracted funds thither and the possibility of investing capital within the country remained very limited, important capital sums found their way abroad particularly during the first half year, taking with them a considerable proportion of Swiss money. The consequent tightening of our market was not slow in bringing about a higher discount rate, which at times rose almost to the level of the official rate. As a result and during the second half of the year the private rate was generally maintained at only a fraction below the official rate.

Discount rates.—Switzerland has the lowest private rate of any European country with exception of France, where an abnormal abund-

ance of short-term money prevails in strong contrast to the high rates for long-term capital. This state of things is the more remarkable because, as we have said before, the high rates abroad were favorable to exportation of capital from Switzerland and because the recent revival of economic activity in Switzerland called for larger financial resources. The cautious policy of the banks in the matter of new engagements abroad—a caution dictated by the attitude of the central bank in admitting to discount bank acceptances in favor of foreign customers—has checked the tendency of these foreign discounts to increase to the same degree as they have done on other markets where a similar situation has sometimes brought about increases in the official discount rates. The National Bank has been able throughout the year to maintain the discount rate at $3\frac{1}{2}$ per cent, effective since October 19, 1925. Certain groups have indeed insisted, first in June and then in September and October, upon an increase in the rate. A measure of this kind would not have been justified unless it had been dictated by the situation in the domestic market. The close relation which the bank maintained with the market showed, however, that the stringency which was making itself felt was not caused by needs of Swiss economic enterprises for money. The bank was soon convinced that it could give up any idea of a rise in the discount rate, especially since other means still remained at its disposal. Thus an increase in the price of money was avoided as well as those unfavorable influences which from the first might have retarded the revival of activity already becoming manifest in commerce and industry. This decision was made easier by the strong situation of the bank. The rate of $4\frac{1}{2}$ per cent for advances on securities, which was lower than the yield of gilt-edged securities, was maintained in spite of intense activity on the stock exchange. For the rest, the bank made use of an efficient measure of defense against being drawn upon for Lombard credit, which, like its discount credit, was short term, and differed in this respect from business of the same kind at the commercial banks; it had only to refuse unjustifiable demands, in particular those of a speculative character. Accordingly advances granted this year have scarcely exceeded those of the preceding years. In this connection the bank has more and more given preference to collateral consisting of government obligations properly so called, as offering greater security than shares of private enterprises with higher yield.

The official discount rate in Switzerland averaged $3\frac{1}{2}$ per cent in 1927, as also in 1926, against 3.9 per cent in 1925. The average of rates on advances on securities rose to $4\frac{1}{2}$ per cent, while in 1926 and 1925 it was $4\frac{1}{2}$ and 4.9 per cent, respectively.

Movement of the exchanges.—During the year the movement of the Swiss franc was closely involved with fluctuations on the national money and capital market. For foreign bills the demand was already strong in January and continued through the first half year to the point of exerting at times a slight pressure on the course of our exchange. The Swiss franc, which at the beginning of the year was slightly above par in comparison with the dollar, weakened during January to a fraction of a point below parity, while the dollar was at a premium over our money—of about 0.3 per cent—but without ever reaching the “gold point.” During several months the rate of exchange fluctuated around this level. Even at the higher rates the market was not always in a position to meet the demand for foreign bills. That is why the bank of issue, upon which rests among other responsibilities that of stabilizing the franc to the full measure possible, found itself obliged from time to time to intervene with sales of foreign exchange. During the course of the second half year, the demand for foreign bills having slackened somewhat, the discount in comparison with the dollar declined gradually and gave place toward the end of the year to a slight premium of the Swiss franc over the dollar. During the closing months of the year the English pound, the Dutch florin, and several other currencies showed a premium over the Swiss franc and also over the dollar, which resulted from the high level of interest rates in these countries in comparison with rates in effect in the United States and in Switzerland. This development even caused a flow of the yellow metal from America to Europe in the form of exports of gold from the United States to England and Holland—a thing which had not happened since 1915.

Note circulation.—Note circulation during the past year rose in comparison with that of the previous year for the first time since 1920—always excepting the year 1923, during which the fiduciary circulation still showed the effects of the disturbance caused the year before by the suggestion of a capital levy. It reached at that time an abnormal level not at all in accord with the economic situation. The yearly average of the circulation for 1927 exceeded by

30,000,000 francs that for 1926. This increase, already noticeable in February, was accentuated as a result of demonetizing gold coins of other countries of the former Latin Union, part of which were exchanged for notes. The notes issued under these circumstances found their way but slowly to the National Bank; some of them were hoarded in place of the gold against which they had been exchanged; some of them replaced gold in circulation; some of them were required to satisfy the increasing need for currency consequent upon the revival of economic activity.

Retirement of gold coins of the Latin Monetary Union.—The dissolution of the Latin Monetary Union, of which we spoke in our last annual report, has resulted in the retirement from circulation in Switzerland of gold coins of other countries belonging to the union. This was decreed by the Federal Council on February 8, 1927. The time for their withdrawal was extended from February 8 to the end of March in order to permit the public, without losing thereby, to convert into legal-tender coins of the union minted in other countries, some of which had been circulating as legal tender in Switzerland since 1860. After the date agreed upon foreign coins were not accepted by the National Bank or by the Federal treasuries except at only 99 per cent of their face value. Conversion was made by order of and for account of the Confederation, through the good offices of the National Bank assisted by the Federal treasuries. It was made either in the form of an addition to deposit accounts or by the delivery of bank notes and specie. At the beginning of these operations conversion into Swiss gold coins was limited to a maximum of 500 francs for deliveries not exceeding 2,000 francs and to a quarter of any sum offered for conversion in excess of the latter amount. To holders of foreign gold pieces presented for conversion, however, the privilege was extended of demanding a total equivalent in Swiss gold money after making deduction of 1 per cent of the face value of the delivery for wear and tear of the coins and for the costs of reminting. In fact, very moderate use was made of this conversion privilege.

It does not seem to be understood in certain quarters how great a sacrifice these conversion operations represented both for the Confederation and for the bank of issue. According to the terms of an agreement entered into before the demonetization of foreign gold coins, the National Bank absorbed charges for loss in

weight and costs of reminting for all the gold pieces of this kind in its possession at the time of their demonetization. To this charge a further loss was added by the end of the year on the 3,000,000 francs returned by France in exchange for French 5-franc pieces which had been demonetized in Switzerland. The bank was obligated, furthermore, to assume the costs of reminting all coins turned in during the conversion period. On the other hand, the Confederation charged to its own account the loss of weight on these latter coins. It is still further burdened with minting costs for an amount of 100,000,000 francs which it turned over to the National Bank. The total conversion of foreign gold pieces of the Latin Union amounted to about 111,300,000 francs. Of this amount 53,000,000 francs were simply added to deposit accounts, while 26,500,000 francs were exchanged for bank notes and 31,800,000 francs for Swiss gold coins. The loss assumed on these foreign coins by the Confederation, including the minting costs on 100,000,000 francs mentioned above, amounted to 670,226.75 francs, and the loss suffered by the National Bank amounted to 437,958.15 francs. The loss resulting to the Federal treasury was met by funds from the currency reserve.

It is true that during the course of the year the National Bank succeeded in getting rid of a small part of these coins without loss. It is to be expected, however, that the bank will receive other payments in coins of this character and that it must undergo further losses until these operations of repatriating foreign coin, are finished, the time allowed being until the beginning of 1932.

The amount of the losses mentioned above shows that the withdrawal of gold coins of other countries of the old Latin Monetary Union, a measure which would not have been legal before the dissolution of the union, was necessary to insure the soundness of our own monetary system. If the free circulation of these gold coins had been continued they would have come into Switzerland in large amounts whenever our exchange reached or passed the gold-import point—just as happened in 1920 with the 5-franc pieces of the Latin Union—and we should have been compelled to accept them as Swiss money so long as they were not abraded in excess of the legal tolerance. If one estimates that the total of these coins reached 12,800,000,000 Swiss francs and that the margin of profit between their intrinsic value and their nominal value might have been as much as 1 per cent it is easy to

see how large the business of importing these coins might have become and what losses it might have occasioned to the Federal treasury and to the bank of issue. These coins would in the end have been left in the Federal treasury or in the vaults of the National Bank, which could have done nothing with them except sell them as bullion or remint them into Swiss coins of full weight, as was done with some of the coins which were left with us after their withdrawal from circulation.

By the withdrawal of these gold coins from circulation, following upon the withdrawal of the silver coins, the Swiss monetary system has been completely nationalized. Swiss gold coins at the end of 1927 amounted to 379,573,560 francs (of which 180,794,270 francs are in the vaults of the National Bank and 198,779,290 francs in circulation or in the commercial banks), so that the country is thoroughly prepared for the adoption of gold monometalism; the only thing left to do is to restore the 5-franc pieces to the status of subsidiary currency. It is estimated that before the war the total amount of gold coins in circulation or in the commercial banks reached a maximum of 100,000,000 francs; at the end of 1927 the circulation of 20-franc notes amounted to 122,000,000 francs.

On many previous occasions the board of directors and the authorities of the bank have taken part in the reform of Swiss monetary legislation. Reform has again been made necessary as a result of the dissolution of the Latin Union. The bank has undertaken the necessary studies in collaboration with the Federal Department of Finance.

Metallic reserves.—The metallic cover for notes in circulation fluctuated during the year between 59.23 per cent and 72.12 per cent (compared with 61.17 per cent and 73.07 per cent in 1926), and has averaged 65.06 per cent for the year (compared with 66.96 per cent the year before). The gold cover alone reached a maximum of 61.54 per cent, a minimum of 51.55 per cent, and a yearly average of 56.39 per cent (compared with 55.79 per cent in 1926). The slight decline in the ratio between our metallic reserve and the note circulation is explained by the increase of the latter, for in actual figures the metallic reserve has averaged higher than during 1926.

General condition of the bank.—The condition of the bank has been perfectly liquid throughout the year. Its total liabilities have been covered on the average in the ratio of 79.68 per cent by the metallic reserve and the holdings of foreign exchange in gold currencies. The note circulation has been covered in the ratio of 90.74 per cent. The total cover (metal, bill portfolio, holdings at sight, and advances on security) has been maintained throughout the year at a figure so high that, even without including advances on security, it has always stood at 100 per cent of the note circulation.

The demands on the National Bank made by the Confederation and the State railways have been limited to the discount of small amounts for the temporary cover of short-term needs. At the end of the year the bank no longer held any Government bills in its portfolio, with exception of those providing for the withdrawal of foreign 5-franc coins.

FINANCIAL STATISTICS FOR FOREIGN COUNTRIES

CONDITION OF CENTRAL BANKS

[Figures are for the last report date of month]

	1928		1927			1928		1927	
	Febru- ary	Janu- ary	Decem- ber	Febru- ary		Febru- ary	Janu- ary	Decem- ber	Febru- ary
Bank of England (millions of pounds sterling):					National Bank of Bulgaria (mil- lions of leva):				
Issue department—					Gold.....	1,233	1,279	1,277	1,205
Gold coin and bullion.....	156.4	155.3	151.5	148.8	Foreign bills, etc.....	513	374	477	213
Notes issued.....	176.2	175.0	171.2	168.6	Loans and discounts.....	788	832	948	1,072
Banking department—					Advances to State.....	4,471	4,471	4,514	4,512
Gold and silver coin.....	.9	.9	.9	1.3	Note circulation.....	3,494	3,588	3,727	3,246
Bank notes.....	40.8	40.4	32.5	32.0	Deposits.....	2,723	2,775	2,957	3,260
Government securities.....	30.7	35.3	48.6	30.0	Central Bank of Chile (millions of pesos):				
Other securities.....	54.6	56.7	74.4	71.3	Gold at home.....	61	61	61	85
Public deposits.....	10.1	16.5	14.6	17.8	Gold abroad.....	471	408	402	579
Other deposits.....	98.5	98.7	124.0	98.5	Loans and discounts.....	36	44	45	20
Ratio of gold and note re- serve to deposit liabilities (per cent).....	38.3	35.8	24.1	28.6	Note circulation.....	276	270	274	259
Bank notes in circulation ¹	79.1	78.4	82.5	80.4	Deposits.....	173	123	107	236
Currency notes and certificates.....	287.5	288.0	299.8	281.5	Bank of the Republic of Colombia (thousands of pesos):				
Bank of France (millions of francs):					Gold at home.....	21,305	21,009	20,510	19,815
Gold reserve.....	3,680	3,680	3,681	3,684	Gold abroad.....	26,724	25,613	23,711	23,446
Silver reserve.....	343	343	343	342	Loans and discounts.....	14,601	15,677	18,237	12,591
Gold, silver, and foreign exchange	2,424	2,406	2,373	1,827	Note circulation.....	46,092	45,510	46,370	40,508
Credits abroad.....	55	56	53	86	Deposits.....	8,651	8,612	7,109	8,735
Loans and discounts.....	3,408	3,316	3,840	5,195	Czechoslovak National Bank (mil- lions of Czechoslovak crowns):				
Advances to the Government.....	22,400	23,500	24,550	29,600	Gold and silver.....	1,118	1,108	1,108	1,048
Miscellaneous assets.....	26,365	27,302	26,551	9,075	Foreign balances and currency...	1,963	2,052	2,424	2,021
Note circulation.....	57,702	57,128	56,551	51,697	Loans and advances.....	68	83	126	133
Total deposits.....	8,372	10,932	10,507	4,845	Assets of banking office in liqui- dation.....	491	495	498	571
German Reichsbank (millions of reichsmarks):					Note circulation.....	7,075	7,099	8,417	6,917
Gold reserve.....	1,803	1,782	1,783	1,741	Deposits.....	813	949	690	1,726
Gold abroad.....	86	84	81	93	Bank of Danzig (thousands of Dan- zig gulden):				
Reserves in foreign exchange.....	282	296	282	204	Gold.....	2,571	2,595	2,381	2,842
Bills of exchange and checks.....	2,336	2,373	3,129	1,644	Balances with Bank of England...	14,485	15,019	14,139	13,944
Miscellaneous assets.....	552	599	499	506	Foreign bills, etc.....	30,452	32,284	34,605	13,498
Deposits.....	491	498	779	539	Loans and discounts.....	21,267	20,417	22,238	21,321
Reichsmarks in circulation.....	4,268	4,251	4,564	3,465	Note circulation.....	35,038	34,824	36,008	34,702
Rentenmarks in circulation.....	649	651	740	1,149	Deposits.....	2,389	3,461	2,920	2,755
Bank of Italy (millions of lire ²):					National Bank of Denmark (millions of kroner):				
Gold at home.....	4,547	4,547	-----	4,197	Gold.....	182	182	182	202
Credits and balances abroad.....	7,927	7,570	-----	3,081	Foreign bills, etc.....	68	76	97	36
Loans and discounts.....	4,053	4,355	-----	7,604	Loans and discounts.....	79	81	95	127
Advances to Treasury.....	-----	-----	-----	4,229	Note circulation.....	336	336	354	356
Total note circulation.....	17,270	17,381	-----	17,816	Deposits.....	22	24	45	25
Public deposits.....	352	114	-----	248	National Bank of Egypt (thousands of Egyptian pounds sterling):				
Other deposits.....	3,653	3,636	-----	2,332	Gold.....	-----	-----	-----	3,613
Bank of Japan (millions of yen):					English Government securities.....	-----	-----	-----	24,005
Gold.....	1,063	1,062	1,063	1,058	Egyptian Government securities.....	-----	-----	-----	25,135
Advances and discounts.....	795	831	888	330	Note circulation.....	-----	-----	-----	27,086
Advances on foreign bills.....	10	23	78	56	Government deposits.....	-----	-----	-----	20,817
Government bonds.....	174	205	228	270	Other deposits.....	-----	-----	-----	16,194
Notes issued.....	1,240	1,397	1,682	1,232	Bank of Estonia (thousands of krones):				
Total deposits.....	919	844	702	660	Gold.....	10,281	10,285	-----	5,060
Austrian National Bank (millions of schillings):					Net foreign exchange.....	29,822	30,843	-----	5,674
Gold.....	117	84	84	57	Loans and discounts.....	28,862	29,281	-----	57,884
Foreign bills of the reserve.....	314	337	379	458	Note circulation.....	38,529	37,106	-----	19,520
Other foreign bills.....	262	264	274	144	Deposits—				
Domestic bills.....	94	105	132	59	Government.....	13,102	15,237	-----	39,147
Treasury bills.....	173	173	173	176	Bankers.....	2,048	2,111	-----	-----
Note circulation.....	917	920	1,005	874	Other.....	6,715	7,094	-----	8,543
Deposits.....	44	47	40	27	National Bank of Belgium (mil- lions of belgas):				
National Bank of Belgium (mil- lions of belgas):					Gold.....	743	741	719	624
Gold.....	743	741	719	624	Foreign bills and balances in gold.....	454	475	525	425
Foreign bills and balances in gold.....	454	475	525	425	Domestic and foreign bills.....	537	559	585	481
Domestic and foreign bills.....	537	559	585	481	Loans to State.....	386	394	394	400
Loans to State.....	386	394	394	400	Note circulation.....	2,066	2,056	2,043	1,823
Note circulation.....	2,066	2,056	2,043	1,823	Deposits.....	110	155	214	146
Deposits.....	110	155	214	146					

¹ Notes issued, less amounts held in banking department and in currency note account.

² Not including gold held abroad.

³ New par.

⁴ Not including 1,535 million lire of gold pledged abroad.

⁵ Revised.

CONDITION OF CENTRAL BANKS—Continued

	1928		1927			1928		1927	
	February	January	December	February		February	January	December	February
Bank of Finland (millions of Finnish marks):					Bank of Portugal (millions of escudos):				
Gold.....	315	316	317	326	Gold.....	9	9	9	
Balances abroad and foreign credits.....	1,202	1,312	1,360	1,127	Balances abroad.....	175	161	186	
Foreign bills.....	46	43	48	63	Bills.....	226	213	213	
Domestic bills.....	753	692	640	533	Note circulation.....	1,834	1,832	1,783	
State debts.....	107	107	122	124	Deposits.....	79	96	48	
Note circulation.....	1,593	1,503	1,514	1,447	National Bank of Rumania (millions of lei):				
Demand liabilities.....	428	665	634	408	Gold ¹	152	151	150	145
National Bank of Hungary (millions of pengö):					Bills.....	8,966	8,877	8,878	8,882
Gold.....	197	197	197	169	Advances to State.....	16,803	16,803	16,359	10,679
Foreign bills, etc.....	105	106	114	110	Note circulation.....	21,026	21,027	21,025	20,990
Loans and discounts.....	304	313	332	190	Deposits.....	10,171	10,656	10,590	9,130
Advances to treasury.....	106	111	111	122	State Bank of Russia (note-issuing department; thousands of cher-ventsi):				
Other assets.....	218	217	244	262	Gold.....	17,745	19,183	18,858	16,442
Note circulation.....	442	467	487	416	Foreign currency.....	6,985	6,710	7,350	8,186
Deposits.....	314	295	309	260	Loans and discounts.....	68,536	70,373	77,445	61,067
Miscellaneous liabilities.....	149	159	179	149	Bank notes.....	94,121	97,489	104,404	85,851
Bank of Java (millions of florins):					National Bank of the Kingdom of Serbs, Croats, and Slovenes (millions of dinars):				
Gold.....	174	176	173	195	Gold.....	89	89	89	87
Foreign bills.....	29	30	24	19	Foreign notes and credits.....	295	316	346	324
Loans and discounts.....	98	109	128	85	Loans and discounts.....	1,570	1,613	1,683	1,340
Note circulation.....	309	315	320	305	Advances to State.....	2,966	2,966	2,966	2,966
Deposits.....	38	44	54	57	Note circulation.....	5,397	5,382	5,743	5,502
Bank of Latvia (millions of lats):					Deposits.....	950	1,198	1,087	710
Gold.....	24	24	24	24	South African Reserve Bank (thousands of pounds sterling):				
Foreign exchange reserve.....	61	50	49	29	Gold.....	8,638	8,145	8,226	8,151
Bills.....	80	79	79	71	Foreign bills.....	6,986	7,039	7,702	6,295
Loans.....	47	53	53	53	Domestic bills.....	602	821	1,197	1,028
Note circulation.....	39	37	40	28	Note circulation.....	7,638	8,152	9,309	8,158
Government deposits.....	100	98	97	81	Deposits—				
Other deposits.....	65	60	56	43	Government.....	1,696	1,603	1,963	1,132
Bank of Lithuania (millions of litas):					Bankers.....	6,626	5,014	4,923	6,004
Gold.....	34	33	33	31	Others.....	346	505	164	277
Foreign currency.....	57	57	52	39	Bank of Spain (millions of pesetas):				
Loans and discounts.....	78	82	81	57	Gold.....	2,606	2,606	2,604	2,582
Note circulation.....	100	101	97	90	Silver.....	698	695	685	691
Deposits.....	66	65	65	36	Balances abroad.....	43	41	37	38
Netherlands Bank (millions of florins):					Loans and discounts.....	1,703	1,673	1,730	2,069
Gold.....	435	433	400	414	Note circulation.....	4,170	4,157	4,202	4,309
Foreign bills.....	182	183	168	141	Deposits.....	991	1,077	1,079	992
Loans and discounts.....	180	221	247	243	Bank of Sweden (millions of kronor):				
Note circulation.....	777	788	797	814	Gold.....	233	234	230	223
Deposits.....	48	91	99	31	Foreign bills, etc.....	217	240	264	184
Bank of Norway (millions of kroner):					Loans and discounts.....	274	260	374	254
Gold.....	147	147	147	147	Note circulation.....	478	473	526	485
Foreign balances and bills.....	33	10	47	49	Deposits.....	179	195	268	103
Domestic credits.....	314	309	261	398	Swiss National Bank (millions of francs):				
Note circulation.....	314	325	331	319	Gold.....	433	451	517	446
Foreign deposits.....	4	4	5	16	Funds on demand abroad.....	24	63	29	26
Total deposits.....	139	101	95	275	Loans and discounts.....	378	357	449	354
Reserve Bank of Peru (thousands of libras):					Note circulation.....	819	814	917	800
Gold.....	4,171	4,154	3,994	4,091	Deposits.....	65	114	153	89
Gold against demand deposits.....	245	282	422	325	Bank of the Republic of Uruguay (thousands of pesos):				
Foreign exchange reserve.....	806	719	785	709	Gold.....	60,258	57,357	54,941	
Bills.....	1,736	1,760	1,865	2,052	Loans and discounts.....	97,344	99,638	100,907	
Note circulation.....	5,938	5,897	6,036	5,998	Note circulation.....	70,730	71,787	68,918	
Deposits.....	490	525	843	655	Deposits.....	78,132	79,023	70,610	
Bank of Poland (millions of zlotys):									
Gold at home.....	353	353	353	149					
Gold abroad.....	173	173	164						
Foreign exchange, etc.—									
Serving as note cover.....	646	637	688	220					
All other.....	206	200	207						
Loans and discounts.....	515	502	497	369					
Note circulation.....	1,048	1,003	1,003	634					
Current account of the Treasury.....	400	406	361	64					
Other current accounts.....	234	231	299	149					

¹ Not including gold held abroad.² Figures for Dec. 24, 1927.³ Revised.

CONDITION OF COMMERCIAL BANKS

[Figures are for the last report date of month except for London clearing banks, which are daily averages]

	1928		1927			1928		1927	
	Febru- ary	Janu- ary	De- cember	Febru- ary		Janu- ary	De- cember	Nov- ember	Janu- ary
Nine London clearing banks (mil- lions of pounds sterling):									
Money at call and short notice.....	143	146	155	117					
Advances and discounts.....	1,142	1,179	1,149	1,122					
Investments.....	244	245	234	243					
Deposits.....	1,698	1,747	1,729	1,653					
Tokyo banks (millions of yen):¹									
Cash on hand.....	282	266	273	123					
Total loans.....	2,191	2,262	2,292	2,628					
Total deposits.....	1,548	1,932	1,932	1,975					
Total clearings.....	2,210	2,407	2,943	2,807					
	1928	1927				1928	1927		
	Janu- ary	De- cember	Nov- ember	Janu- ary		Janu- ary	De- cember	Nov- ember	Janu- ary
Chartered banks of Canada (millions of dollars):									
Gold coin and bullion ²	70	69	69	72					
Current loans and discounts.....	1,356	1,347	1,329	1,255					
Money at call and short notice.....	480	533	522	432					
Public and railway securities.....	552	529	488	496					
Note circulation.....	162	183	181	160					
Individual deposits.....	2,454	2,503	2,521	2,273					
Gold reserve against Dominion notes.....	96	128	135	93					
Dominion note circulation.....	179	221	214	172					
Joint-stock banks of Denmark (mil- lions of kroner):									
Loans and discounts.....	1,872	1,890	1,882	1,953					
Due from foreign banks.....	59	60	53	53					
Due to foreign banks.....	110	122	102	155					
Deposits and current accounts.....	2,029	2,028	2,059	2,011					
Joint-stock banks of Finland (mil- lions of Finnish marks):									
Loans and discounts.....	8,279	8,118	8,066	7,199					
Due from abroad.....	405	367	391	372					
Due to abroad.....	364	359	372	317					
Deposits.....	7,187	6,982	6,868	6,390					
Three commercial banks of France (millions of francs):									
Bills and national defense bonds.....		15,473	14,863	15,030					
Loans and advances.....		5,682	5,527	5,092					
Demand deposits.....		25,543	24,642	21,954					
Time deposits.....		409	432	317					
Six Berlin banks (millions of reichs- marks):									
Bills and treasury notes.....		1,914		¹ 1,558					
Due from other banks.....		1,074		¹ 787					
Miscellaneous loans.....		5,218		¹ 4,024					
Deposits.....		7,785		¹ 5,967					
Acceptances.....		422		¹ 524					
Four private banks of Italy (millions of lire):									
Cash.....				¹ 1,240					
Bills discounted.....				¹ 9,130					
Due from correspondents.....				¹ 5,169					
Due to correspondents.....				¹ 13,007					
Deposits.....				¹ 2,401					
Joint-stock banks of Norway (mil- lions of kroner):									
Loans and discounts.....			1,599	1,723					
Due from foreign banks.....			79	76					
Due to foreign banks.....			174	227					
Rediscouunts.....			133	159					
Deposits.....			1,706	1,925					
Joint-stock banks of Sweden (mil- lions of kronor):									
Loans and discounts.....	4,096	4,044	4,116	4,260					
Foreign bills and credits abroad.....	303	321	308	170					
Due to foreign banks.....	133	144	147	132					
Rediscouunts.....	111	186	70	91					
Deposits.....	3,541	3,484	3,553	3,534					
Swiss Cantonal banks (millions of francs):									
Loans and discounts.....	1,808	1,803	1,789	1,731					
Mortgages.....	2,908	2,885	2,867	2,787					
Foreign bills.....	22	23	21	25					
Due from banks and correspond- ents.....	324	295	313	263					
Commercial deposits.....	755	738	738	687					
Savings deposits.....	1,621	1,567	1,562	1,532					

¹ Beginning in November figures are included for 10 banks not previously covered by the reports.² Not including gold held abroad.³ Figures are for December, 1926.

DISCOUNT RATES OF 33 CENTRAL BANKS

[Prevailing rates, with date of last change]

Country	Rate	In effect since—	Country	Rate	In effect since—	Country	Rate	In effect since—	Country	Rate	In effect since—
Austria.....	6	Jan. 28, 1928	Estonia.....	7½	Jan. 2, 1928	Japan.....	5.48	Oct. 10, 1927	Portugal....	8	July 27, 1926
Belgium.....	4½	Nov. 16, 1927	Finland.....	6	Nov. 24, 1927	Java.....	6	May 3, 1925	Rumania....	6	Sept. 4, 1920
Bulgaria.....	10	Aug. 31, 1924	France.....	3½	Jan. 19, 1928	Latvia.....	7	Jan. 1, 1927	Russia.....	8	Mar. 22, 1927
Chile.....	6½	Dec. 12, 1927	Germany.....	7	Oct. 4, 1927	Lithuania..	6	Nov. 9, 1927	South Africa	5½	Jan. 9, 1928
Colombia.....	7	May 15, 1924	Greece.....	10	June 6, 1927	Netherlands.	4½	Oct. 13, 1927	Spain.....	5	Mar. 23, 1923
Czechoslovakia.	5	Mar. 8, 1927	Hungary.....	6	Aug. 26, 1926	Norway.....	5½	Mar. 27, 1928	Sweden.....	3½	Jan. 1, 1928
Danzig.....	6	June 21, 1927	India.....	7	Dec. 22, 1927	Peru.....	7	Jan. 31, 1928	Switzerland.	3½	Oct. 22, 1925
Denmark.....	5	June 24, 1926	Italy.....	6	Apr. 3, 1928	Poland.....	8	May 13, 1927	Yugoslavia..	6	June 23, 1922
England.....	4½	Apr. 21, 1927									

Changes: Bank of Norway from 6 to 5½ per cent on March 27, 1928; Bank of Italy from 6½ to 6 per cent on April 3, 1928.

MONEY RATES IN FOREIGN COUNTRIES

Month	England (London)				Germany (Berlin)			Netherlands (Amsterdam)		Switzerland
	Bankers' acceptances, 3 months	Treasury bills, 3 months	Day-to-day money	Bankers' allowance on deposits	Private discount rate	Money for 1 month	Day-to-day money	Private discount rate	Money for 1 month	Private discount rate
1926										
January	4.76	4.78	4.00	3	6.28	8.07	7.04	2.95	2.93	2.44
February	4.31	4.25	4.00	3	5.46	6.66	6.03	2.19	2.40	2.22
March	4.37	4.34	4.26	3	5.00	6.73	5.63	2.67	2.82	2.18
April	4.33	4.34	3.92	3	4.88	6.02	4.77	2.90	2.93	2.30
May	4.37	4.43	4.18	3	4.69	5.53	4.80	2.95	2.94	2.38
June	4.27	4.29	3.82	3	4.53	5.81	4.76	2.83	3.00	2.38
July	4.26	4.29	3.86	3	4.54	5.73	4.93	2.74	2.72	2.37
August	4.45	4.55	3.99	3	4.61	5.80	4.85	2.63	2.50	2.34
September	4.54	4.65	3.99	3	4.88	6.21	4.77	2.78	2.81	2.52
October	4.69	4.80	4.07	3	4.82	6.14	4.75	2.83	2.75	2.80
November	4.57	4.80	3.95	3	4.63	6.12	4.45	3.21	3.23	2.96
December	4.53	4.60	3.78	3	4.72	7.13	5.88	3.39	3.96	3.35
1927										
January	4.16	4.21	3.76	3	4.21	5.82	3.78	2.97	2.92	3.16
February	4.18	4.32	3.93	3	4.28	5.77	5.19	3.46	3.66	2.87
March	4.34	4.36	4.09	3	4.59	6.91	4.87	3.48	3.63	2.98
April	4.11	4.04	3.64	3-2½	4.59	6.57	5.63	3.46	3.78	3.13
May	3.90	3.84	3.54	2½	4.90	6.95	5.99	3.45	3.78	3.19
June	4.34	4.36	3.44	2½	5.39	7.73	5.79	3.57	3.87	3.42
July	4.34	4.33	3.50	2½	5.90	8.49	7.06	3.52	3.25	3.47
August	4.34	4.35	3.61	2½	5.83	8.37	5.81	3.45	3.40	3.44
September	4.32	4.33	3.57	2½	5.90	8.30	6.00	3.55	3.82	3.39
October	4.33	4.33	3.58	2½	6.74	8.72	7.19	4.08	4.29	3.38
November	4.34	4.34	3.65	2½	6.76	8.72	6.03	4.47	4.72	3.39
December	4.31	4.31	3.43	2½	7.24	9.10	6.87	4.50	4.84	3.40
1928										
January	4.19	4.13	3.48	2½	6.25	7.66	5.16	4.26	4.11	3.29
February	4.19	4.18	3.62	2½	6.20	7.30	6.66	3.94	3.79	3.12

Month	Belgium (Brussels)	France (Paris)	Italy (Milan)	Austria (Vienna)		Hungary		Sweden (Stockholm)	Japan (Tokyo)	
	Private discount rate	Private discount rate	Private discount rate	Private discount rate	Money for 1 month	Prime commercial paper	Day-to-day money	Loans up to 3 months	Discounted bills	Call money overnight
1926										
January	6.71	4.57	8.18	7½-8¼	8 -11½	(9¼)	7 -10½	4½-5½	6.75-9.13	4.56-8.03
February	6.59	4.27	8.00	7½-7¾	7½-10½	10½-11½	7 -11	4½-5½	6.57-8.76	4.38-7.30
March	6.75	4.25	8.00	7¼-7¾	7¼-10½	10 -11½	6½-7	4½-5½	6.57-8.40	4.75-7.67
April	6.75	4.25	8.00	6¾-7¼	6¾-10½	10 -11½	7	4½-5½	6.75-8.76	6.02-7.30
May	6.65	5.15	8.00	6¾-6¾	6¾-9½	9½-10½	7	4½-6	6.75-8.76	4.75-7.30
June	6.65	5.73	8.17	6¼-6¼	6¾-9½	9 -10	7	4½-6	7.12-8.76	5.11-8.76
July	6.70	6.00	8.50	6 -6¾	6¾-9¼	8¾-10	6 -7	4½-6	6.94-8.76	5.11-8.03
August	6.75	7.00	8.50	5¾-6	6 -8¼	8¼-10	6 -7	4½-6	6.75-8.40	5.84-7.48
September	6.72	6.98	8.50	5¾-6	5¾-8¼	7½-9	6 -7	4½-6	6.39-8.40	4.93-7.30
October	6.64	7.25	8.96	5¾-6¼	6¼-8¼	7½-8½	5½-7	4½-6	6.21-8.40	5.11-7.12
November	5.77	6.69	9.25	6¼-6¾	7½-9	7 -8½	6 -7	4½-6	6.39-8.40	4.75-7.48
December	4.34	5.77	9.25	6¾-6¾	7½-9¼	7 -8½	6 -7½	4½-6	6.75-8.76	5.11-8.03
1927										
January	3.90	4.99	9.25	5¼-6¼	6¾-8¼	6¾-8	5½-6¾	4½-6	6.39-8.76	4.56-7.30
February	3.99	4.45	9.25	4¾-5	6 -7½	6½-7½	5½-6¾	4½-6	6.21-8.03	2.92-7.30
March	4.19	3.89	9.25	4¾-5¼	6¼-7¼	6½-7½	6 -6¾	4½-6	5.84-7.67	4.38-6.21
April	4.33	3.17	9.25	5½-5¾	6¼-7¼	6½-7½	5½-6¾	4 -6	5.84-8.03	4.38-5.29
May	4.23	2.46	8.50	5½-5¾	6½-8	6½-7½	5½-6¾	4 -6	6.57-7.67	4.38-4.75
June	4.17	2.25	7.60	5½-5¾	6¾-7¼	7 -7¾	5½-6¾	4 -6	6.57-8.76	4.38-5.11
July	3.84	2.13	7.00	5¾-6¾	7 -8¼	7¼-8	6 -7	4 -6	6.21-8.40	3.65-5.11
August	3.84	2.04	7.00	6¼-6¾	7½-8¼	7½-8½	6 -7¾	4 -6	5.48-8.03	3.65-4.75
September	3.75	2.01	6.81	6¼-6¾	7 -8¼	7½-8½	6 -7½	4 -6	5.11-7.67	2.19-4.38
October	3.87	1.82	6.50	6¼-6¾	7½-8¼	7½-8½	6 -7¾	4 -6	4.75-7.30	2.19-4.38
November	4.09	2.75	6.27	6¼-6¾	7½-8¼	7 -8½	5¾-7¾	4 -6	5.11-7.30	2.74-4.02
December	4.15	2.95	6.00	6¾-6¾	6¾-8¼	7½-8½	5½-7¾	4 -6	5.48-7.67	2.19-5.84
1928										
January	4.08	2.81	6.00	5¾-6¾	6¾-8	7½-8½	5½-7¾	4 -6	4.38-7.67	1.64-5.11
February	3.90	2.75	5.89					4 -6		

NOTE.—For sources used, methods of quotation, and back figures, see the FEDERAL RESERVE BULLETINS for November, 1926, and April, 1927.

GOLD MOVEMENTS

[In thousands of dollars]

Month	United States			Germany			Great Britain			Netherlands			South Africa	India
	Im-ports	Ex-ports	Net imports or exports (-)	Im-ports	Ex-ports	Net imports or exports (-)	Im-ports	Ex-ports	Net imports or exports (-)	Im-ports	Ex-ports	Net imports or exports (-)	Net imports or exports (-)	Net imports or exports (-)
1926														
July.....	19,820	5,069	14,751	626	621	5	19,510	6,210	13,300	330	2,014	-1,684	-22,668	4,104
August.....	11,979	29,743	-17,764	10,631	634	9,997	18,867	8,959	9,908	136	60	76	-15,723	4,404
September.....	15,987	23,081	-7,094	23,608	702	22,906	12,137	5,017	7,120	800	656	144	-8,686	4,839
October.....	8,857	1,156	7,701	36,343	869	35,474	16,916	21,262	-4,346	580	150	430	-29,082	4,004
November.....	16,738	7,727	9,011	16,462	902	15,560	18,561	24,590	-6,029	464	174	290	-13,376	3,466
December.....	17,004	7,196	9,808	18,407	858	17,549	14,531	18,609	-4,078	108	2,613	-2,505	-10,553	3,530
Total (12 months).....	213,504	115,708	97,796	137,987	8,720	129,267	187,608	132,140	55,468	11,174	6,483	4,691	-212,152	83,627
1927														
January.....	59,355	14,890	44,465	14,088	525	13,563	11,514	18,181	-6,667	1,303	74	1,228	-17,522	2,518
February.....	22,309	2,414	19,895	6,231	659	5,572	15,742	15,480	262	411	-----	411	-14,079	6,543
March.....	16,382	5,625	10,757	6,576	840	5,736	7,526	6,894	632	488	39	449	-20,718	10,041
April.....	14,503	2,592	11,911	935	666	269	24,678	3,735	20,943	281	1,334	-1,053	-23,146	4,941
May.....	34,212	2,510	31,702	705	673	32	16,464	26,580	-10,116	46	3,015	-2,969	-15,717	4,890
June.....	14,611	1,840	12,771	711	662	49	8,435	9,674	-1,239	2,653	5,190	-2,537	-17,470	7,122
July.....	10,738	1,803	8,935	705	685	20	13,071	6,061	7,010	202	4,623	-4,421	-----	5,936
August.....	7,877	1,524	6,353	11,259	680	10,579	21,469	5,782	15,687	103	2,477	-2,373	-----	2,860
September.....	12,979	24,444	-11,465	1,483	876	607	8,381	7,637	744	125	47	78	-----	3,315
October.....	2,056	10,698	-8,642	1,668	969	699	6,126	4,726	1,400	189	35	154	-----	2,685
November.....	2,082	55,266	-53,184	1,627	975	652	15,012	21,709	-6,696	433	102	331	-----	4,408
December.....	10,431	77,849	-67,418	1,635	925	710	9,485	10,546	-1,060	4,264	2	4,262	-----	3,916
Total.....	207,535	201,455	6,080	47,622	9,135	38,487	157,905	137,008	20,896	10,498	16,937	-6,439	-----	59,175
1928														
January.....	38,320	52,086	-13,766	1,113	1,704	1,409	20,042	10,875	9,167	12,725	8	12,716	-----	8,590
February.....	14,686	25,776	-11,090	6,074	781	5,293	13,026	19,257	-6,231	227	1,147	-920	-----	-----

1 Revised.

MOVEMENTS TO AND FROM UNITED STATES

[In thousands of dollars]

Country of origin or destination	1928		1927			
	February		January-February		Calendar year	
	Imports	Exports	Imports	Exports	Imports	Exports
Belgium.....	-----	-----	2,000	1	2,200	-----
England.....	2	-----	39,396	8,562	10,000	-----
France.....	7,500	1	15,000	21,048	10,000	-----
Germany.....	210	-----	315	1	13,994	-----
Netherlands.....	-----	-----	4,000	15,075	8,055	-----
Canada.....	8,481	34	45,241	75	63,653	20,698
Central America.....	97	-----	204	-----	1,224	253
Mexico.....	602	-----	909	1,019	6,001	6,984
Argentina.....	312	12,000	-----	31,750	23	61,499
Brazil.....	-----	-----	11,800	-----	34,351	-----
Chile.....	14	-----	75	-----	7,021	-----
Colombia.....	62	-----	185	-----	1,489	1,001
Ecuador.....	137	-----	239	-----	2,247	-----
Peru.....	80	-----	311	-----	2,266	-----
Uruguay.....	-----	3,000	-----	6,000	-----	2,000
Venezuela.....	19	1,200	56	1,900	531	1,530
Australia.....	-----	-----	-----	-----	21,920	-----
British India.....	-----	-----	-----	1,408	-----	2,974
British Malaya.....	-----	67	-----	238	-----	3,064
China and Hong Kong.....	-----	1,014	-----	2,045	1,674	7,166
Dutch East Indies.....	111	-----	215	230	1,499	1,960
Japan.....	-----	62	-----	62	20,000	21
Philippine Islands.....	68	-----	190	-----	1,667	-----
All other countries.....	5,302	5	5,375	20	800	6,141
Total.....	14,686	25,776	53,005	77,862	207,535	201,455

MOVEMENTS TO AND FROM GREAT BRITAIN

[In thousands of dollars]

Country of origin or destination	1928		1927			
	February		January-February		Calendar year	
	Imports	Exports	Imports	Exports	Imports	Exports
France.....	15,064	-----	15,734	627	4,718	-----
Netherlands.....	226	-----	32	4,943	2,313	6,486
Russia.....	88	-----	5,483	-----	1,049	7,732
Spain and Canaries.....	-----	81	-----	106	-----	7,445
Switzerland.....	-----	762	-----	1,780	-----	6,213
United States.....	-----	-----	15	-----	8,567	23,042
South America.....	1	-----	3	-----	2,017	6,959
British India.....	1,460	-----	2,561	-----	12,462	-----
British Malaya.....	391	-----	547	-----	3,452	-----
Egypt.....	277	-----	279	-----	3,799	-----
Rhodesia.....	430	-----	868	-----	5,958	-----
Transvaal.....	12,082	-----	22,255	-----	124,348	-----
West Africa.....	399	5	703	5	4,705	20
All other countries.....	24	991	3,708	4,177	8,320	49,680
Total.....	13,026	19,257	33,067	30,132	157,905	137,008

FOREIGN EXCHANGE RATES

[Monthly averages of daily quotations.¹ In cents per unit of foreign currency]

	EUROPE										
	Austria (schilling)	Belgium (belga)	Bulgaria (lev)	Czechoslo- vakia (crown)	Denmark (krone)	England (pound)	Finland (markka)	France (franc)	Germany (reichs- mark)	Greece (drachma)	Hungary (pengo)
Par value.....	14. 07	13. 90	19. 30	-----	26. 80	486. 65	2. 52	19. 30	23. 82	19. 30	17. 49
1927—March.....	14. 0738	13. 9000	. 7246	2. 9616	26. 6456	485. 4025	2. 5205	3. 9126	23. 7137	1. 2898	17. 5074
August.....	14. 0629	13. 9107	. 7230	2. 9627	26. 7785	486. 0233	2. 5189	3. 9193	23. 7859	1. 3083	17. 4363
September.....	14. 0816	13. 9220	. 7246	2. 9626	26. 7680	486. 3528	2. 5189	3. 9200	23. 8004	1. 3243	17. 4688
October.....	14. 0820	13. 9260	. 7229	2. 9627	26. 7932	486. 9676	2. 5187	3. 9236	23. 8624	1. 3262	17. 4624
November.....	14. 0874	13. 9467	. 7230	2. 9629	26. 7988	487. 4012	2. 5191	3. 9288	23. 8629	1. 3242	17. 4658
December.....	14. 0946	13. 9885	. 7235	2. 9630	26. 8192	488. 2542	2. 5191	3. 9396	23. 8904	1. 3294	17. 4773
1928—January.....	14. 0936	13. 9444	. 7234	2. 9628	26. 7829	487. 5330	2. 5187	3. 9308	23. 8264	1. 3255	17. 4748
February.....	14. 0823	13. 9232	. 7214	2. 9625	26. 7733	487. 4840	2. 5179	3. 9304	23. 8577	1. 3229	17. 4663
March.....	14. 0728	13. 9387	. 7218	2. 9622	26. 7912	487. 9944	2. 5176	3. 9343	23. 9047	1. 3237	17. 4685

	EUROPE (continued)										
	Italy (lira)	Nether- lands (florin)	Norway (krone)	Poland (zloty)	Portugal (escudo)	Rumania (leu)	Russia ¹ (chervon- netz)	Spain (peseta)	Sweden (krona)	Switzer- land (franc)	Yugo- slavia (dinar)
Par value.....	5. 26	40. 20	26. 80	11. 22	108. 05	19. 30	514. 60	19. 30	26. 80	19. 30	19. 30
1927—March.....	4. 5059	40. 0137	26. 0474	11. 3703	5. 1170	. 6128	515. 0000	17. 4088	26. 7452	19. 2359	1. 7593
August.....	5. 4386	40. 0719	25. 9374	11. 2240	4. 9574	. 6163	515. 0000	16. 9000	26. 8203	19. 2759	1. 7596
September.....	5. 4432	40. 0776	26. 3620	11. 2168	4. 9288	. 6181	515. 0000	17. 1504	26. 8752	19. 2816	1. 7604
October.....	5. 4616	40. 1920	26. 3404	11. 2096	4. 9456	. 6193	515. 0000	17. 2540	26. 9256	19. 2868	1. 7607
November.....	5. 4458	40. 3612	26. 4871	11. 2063	4. 9396	. 6155	514. 1700	16. 9400	26. 9246	19. 2850	1. 7607
December.....	5. 3800	40. 4381	26. 6169	11. 2204	4. 9550	. 6188	515. 0000	16. 6623	27. 0015	19. 3150	1. 7615
1928—January.....	5. 2881	40. 3334	26. 5985	11. 2402	4. 9285	. 6177	515. 0000	17. 0975	26. 8780	19. 2695	1. 7925
February.....	5. 2950	40. 2550	26. 6098	11. 2312	4. 7573	. 6145	515. 0000	16. 9732	26. 8371	19. 2389	1. 7598
March.....	5. 2822	40. 2501	26. 6634	11. 2255	4. 2572	. 6185	515. 0000	16. 8212	26. 8388	19. 2561	1. 7596

	NORTH AMERICA				SOUTH AMERICA						
	Canada (dollar)	Cuba (peso)	Mexico (peso)	Argentina (peso-gold)	Bolivia ¹ (boliviano)	Brazil (milreis)	Chile (peso)	Colombia ¹ (peso)	Ecuador ¹ (sucre)	Peru ¹ (libra)	Uruguay (peso)
Par value.....	100. 00	100. 00	49. 85	96. 48	38. 93	32. 44	12. 17	97. 33	20. 00	486. 65	103. 42
1927—March.....	99. 9019	100. 0265	47. 0084	95. 9811	34. 0000	11. 8452	12. 0041	97. 5663	18. 3125	366. 5926	101. 2763
August.....	99. 9404	100. 0073	47. 3931	96. 8448	34. 7546	11. 8237	12. 0292	98. 2798	19. 3750	374. 9626	100. 1381
September.....	100. 0497	99. 9524	47. 7219	97. 1248	34. 8000	11. 8596	12. 0736	97. 9872	19. 3750	388. 5600	100. 4052
October.....	100. 1099	99. 9387	47. 6667	97. 1572	34. 8000	11. 9172	12. 1712	97. 4736	19. 3750	384. 1600	101. 8796
November.....	100. 1369	99. 9289	47. 9125	97. 0521	34. 8000	11. 9333	12. 1763	97. 4950	19. 3750	376. 1458	103. 3658
December.....	99. 8974	99. 9154	48. 4506	97. 2304	34. 8000	11. 9677	12. 2062	97. 7381	19. 3750	389. 8500	103. 8692
1928—January.....	99. 8159	99. 9157	48. 6946	97. 1136	34. 8000	11. 9977	12. 2098	98. 0036	19. 3750	390. 3400	102. 7734
February.....	99. 8126	100. 0428	48. 6710	97. 1376	34. 8000	12. 0088	12. 2065	98. 0400	19. 5870	390. 1600	102. 9357
March.....	99. 9963	100. 0644	48. 7436	97. 2547	34. 8000	12. 0265	12. 2115	97. 7944	19. 9537	391. 0925	103. 8775

	SOUTH AMERICA—continued	ASIA									AFRICA
	Vene- zuela ¹ (bolivar)	China ¹ (Mexican dollar)	China ¹ (Shanghai tael)	China ¹ (Yuan dollar)	Hong Kong ¹ (dollar)	India (rupee)	Japan (yen)	Java ¹ (florin)	Straits Settle- ments (Singapore dollar)	Turkey (Turkish pound)	Egypt (Egyptian pound)
Par value.....	19. 30	48. 11	66. 85	47. 50	47. 77	36. 50	49. 85	40. 20	56. 78	439. 65	494. 31
1927—March.....	18. 7500	44. 1341	60. 5048	42. 8956	48. 6855	36. 3004	49. 1411	40. 1702	55. 9556	50. 3122	497. 6670
August.....	19. 1552	43. 3807	60. 3781	42. 6259	48. 1600	36. 1252	47. 3322	40. 1740	55. 9711	49. 9774	498. 2844
September.....	19. 1700	43. 9572	61. 2068	43. 2164	48. 4980	36. 3356	46. 8248	40. 1675	55. 9908	50. 9640	-----
October.....	19. 1700	44. 7376	61. 8328	44. 0600	48. 8552	36. 4092	46. 5664	40. 2618	56. 0332	52. 9824	499. 3900
November.....	19. 1700	45. 5958	63. 2663	44. 8638	49. 7917	36. 4504	45. 9796	40. 4090	56. 0687	52. 4871	499. 6888
December.....	19. 1700	45. 9092	63. 7884	45. 1877	50. 3085	36. 7369	46. 1881	40. 5319	56. 7269	51. 7846	500. 5719
1928—January.....	19. 1700	45. 7410	63. 7548	45. 1408	50. 4096	36. 7224	46. 8784	40. 5596	56. 7650	51. 5040	499. 8315
February.....	19. 1943	45. 3620	63. 1137	44. 9818	49. 8564	36. 5189	46. 8740	40. 5243	56. 7038	50. 4843	499. 7511
March.....	19. 2500	45. 6106	63. 0545	45. 3688	49. 8008	36. 5280	47. 1468	40. 3498	56. 3469	-----	-----

¹ Based on noon buying rates for cable transfers in New York as certified to the Treasury by the Federal Reserve Bank of New York, in pursuance of the provisions of sec. 522 of the tariff act of 1921. For back figures see BULLETIN for January, 1928, pp. 56-62.

² Averages based on daily quotations of closing rates as published by New York Journal of Commerce.

³ Nominal.

⁴ Silver currency. Parity represents gold value of unit in 1913 computed by multiplying silver content of unit by New York average price of silver for 1913. This average price was \$0.61241 per fine ounce, which compares with an average price of \$0.57557 for March, 1928, \$0.57328 for February, 1928, and \$0.56620 for March, 1927. The corresponding London prices (converted at average rate of exchange) were \$0.57875, \$0.57522, and \$0.56096.

PRICE MOVEMENTS IN PRINCIPAL COUNTRIES

WHOLESALE PRICES

ALL COMMODITIES

Month	United States (Bureau of Labor Statistics) ¹	EUROPE													
		Austria (gold basis)	Belgium	Bulgaria	Czechoslovakia	Denmark	England (Board of Trade)	Finland (gold basis)	France		Germany (Federal Statistical Bureau)	Hungary (gold basis)	Italy (Bachi)	Netherlands	Norway (Oslo)
									Statistical Bureau	Federal Reserve Board					
1926															
August.....	99	126	836	2,759	962	162	149	143	770	691	134	122	633	140	196
September.....	100	123	859	2,723	973	162	151	143	787	691	135	122	622	140	197
October.....	99	125	856	2,716	972	178	152	143	752	695	136	125	597	143	188
November.....	98	128	865	2,739	978	170	152	143	684	662	137	127	594	147	182
December.....	98	127	860	2,718	978	158	146	144	627	592	137	126	574	146	176
1927															
January.....	97	130	856	2,708	979	157	144	144	622	591	136	127	558	146	176
February.....	96	130	854	2,688	975	156	143	144	632	595	136	129	556	145	165
March.....	95	133	858	2,649	976	153	141	143	641	600	135	128	545	144	160
April.....	94	135	846	2,592	979	152	140	143	636	610	135	130	521	143	159
May.....	94	137	848	2,751	988	152	141	142	629	618	137	133	496	146	160
June.....	94	142	851	2,823	990	152	142	144	623	605	138	133	473	143	159
July.....	94	140	845	2,775	992	152	141	144	617	590	138	133	467	150	160
August.....	95	133	850	2,745	983	153	141	147	618	578	138	134	465	149	161
September.....	97	130	837	2,736	975	153	142	148	601	574	140	133	465	150	158
October.....	97	129	839	2,747	966	154	141	148	587	554	140	133	468	150	157
November.....	97	127	838	-----	967	154	141	149	595	545	140	133	466	152	157
December.....	97	127	841	-----	975	154	140	148	604	567	140	135	463	152	156
1928															
January.....	96	129	851	2,782	982	153	141	144	607	569	139	135	463	154	157
February.....	96	128	848	-----	-----	-----	140	143	609	569	138	-----	461	151	157
March.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Month	EUROPE—continued					Canada	Peru	ASIA AND OCEANIA						AFRICA	
	Poland ²	Russia ³	Spain	Sweden	Switzerland ³			Australia	China (Shanghai)	Dutch East Indies	India (Calcutta)	Japan (Tokyo)	New Zealand	Egypt (Cairo)	South Africa
1926															
August.....	188	182	180	147	146	154	204	162	161	155	147	177	154	129	-----
September.....	190	180	178	146	146	153	202	158	164	156	146	175	153	129	-----
October.....	192	179	179	148	145	151	202	154	171	158	144	174	153	129	126
November.....	193	178	185	148	147	152	198	155	174	157	146	171	151	130	-----
December.....	195	178	186	150	148	151	199	155	172	156	146	170	153	130	-----
1927															
January.....	195	177	184	146	147	151	200	154	173	156	146	170	151	126	128
February.....	197	179	180	146	145	150	204	153	172	156	148	171	147	124	-----
March.....	200	179	179	145	147	149	206	150	175	154	146	170	147	124	-----
April.....	206	177	177	143	147	149	201	151	173	154	145	170	147	122	126
May.....	208	175	172	145	147	152	207	152	171	155	146	171	145	124	-----
June.....	206	174	171	146	147	154	206	155	169	155	149	173	146	123	-----
July.....	207	173	168	146	147	152	205	161	171	153	150	170	146	118	120
August.....	207	171	168	146	147	152	204	165	171	154	151	167	146	117	-----
September.....	206	170	169	148	148	151	205	170	172	153	150	169	146	120	-----
October.....	206	170	169	147	148	152	200	173	169	152	147	170	146	118	122
November.....	208	170	168	148	149	152	200	166	166	151	148	168	147	115	-----
December.....	205	170	169	148	150	152	199	162	164	-----	148	168	148	114	-----
1928															
January.....	204	171	166	148	-----	151	199	163	163	-----	145	169	150	114	120
February.....	203	171	-----	147	-----	151	195	160	164	-----	144	169	-----	114	-----
March.....	-----	171	-----	-----	-----	-----	193	-----	-----	-----	-----	-----	-----	-----	-----

¹ New index—1926=100.² First of month figures.³ New index.

NOTE.—These indexes are in most cases published here on their original bases, usually 1913 or 1914, as determined by the various foreign statistical offices which compile the index numbers and furnish them to the Federal Reserve Board. In several cases, however, viz, France, Netherlands, Japan, New Zealand, and South Africa, they have been recomputed from original bases (1901-1910; 1910-1910; October, 1900; 1909-1913; 1910) to a 1913 base. Index numbers of commodity groups for most of the countries are also available in the office of the Division of Research and Statistics and may be had upon request. Further information as to base periods, sources, numbers of commodities, and the period of the month to which the figures refer may be found on pages 769-770 of the November, 1927, BULLETIN.

WHOLESALE PRICES—Continued

GROUPS OF COMMODITIES

[Pre-war=100]

ENGLAND—BOARD OF TRADE

	1928		1927			
	Feb- ruary	Jan- uary	De- cem- ber	No- vem- ber	Octo- ber	Feb- ruary
All commodities.....	140	141	140	141	141	143
Total food.....	152	153	151	152	153	152
Cereals.....	151	152	151	152	156	149
Meat and fish.....	136	144	140	138	138	141
Other foods.....	167	164	161	166	164	166
Industrial products.....	134	134	135	135	136	137
Iron and steel.....	113	113	114	114	115	127
Other minerals and metals.....	112	113	114	114	113	134
Cotton.....	157	158	161	167	172	137
Other textiles.....	167	164	162	161	159	152
Miscellaneous.....	146	147	146	144	144	142

ITALY—CHAMBER OF COMMERCE OF MILAN

	1928		1927			
	Feb- ruary	Jan- uary	De- cem- ber	No- vem- ber	Octo- ber	Feb- ruary
All commodities.....	489	490	483	484	484	601
Total food.....	548	540	525	525	520	643
Vegetable foods.....	579	569	550	549	541	681
Animal foods.....	509	505	493	496	495	596
All industrial products.....	466	470	466	468	470	534
Textiles.....	437	439	434	441	447	551
Chemicals.....	450	451	445	446	450	552
Minerals and metals.....	426	433	435	441	447	698
Building materials.....	522	531	532	535	537	653
Other vegetable prod- ucts.....	509	511	503	495	474	603
Sundries.....	566	574	563	553	548	618

FRANCE—STATISTICAL BUREAU

	1928	1927	1926	1925	1924	1923
All commodities.....	609	607	604	595	587	632
All foods.....	577	568	564	543	530	630
Animal foods.....	548	534	546	505	496	583
Vegetable foods.....	575	575	553	551	547	641
Sugar, coffee, cocoa.....	624	611	604	594	577	689
All industrial material.....	636	639	636	636	633	634
Minerals.....	517	531	540	535	530	621
Textiles.....	796	777	756	773	790	696
Sundries.....	637	643	644	638	625	619

GERMANY—FEDERAL STATISTICAL BUREAU

	1928	1927	1926	1925	1924	1923
All commodities.....	138	139	140	140	140	136
Total agricultural products.....	130	132	136	137	138	139
Vegetable foods.....	141	145	144	142	144	156
Cattle.....	103	102	105	109	115	111
Animal products.....	143	147	158	163	154	147
Fodder.....	141	141	141	142	142	144
Provisions.....	130	130	130	132	131	128
Total industrial raw materi- als and semi-finished products.....	134	134	134	134	134	129
Coal.....	131	131	131	131	131	135
Iron.....	127	126	125	124	124	125
Nonferrous metals.....	104	106	107	105	104	109
Textiles.....	159	159	159	162	163	141
Hides and leather.....	160	167	161	153	145	122
Chemicals.....	126	126	124	124	124	125
Artificial fertilizers.....	82	82	81	80	83	87
Technical oils and fats.....	113	115	119	120	121	133
Rubber.....	40	48	50	46	42	47
Paper materials and paper.....	150	152	152	152	151	149
Building material.....	158	158	158	161	162	151
Total industrial finished products.....	157	156	156	155	153	142
Producers' goods.....	135	134	134	132	131	129
Consumers' goods.....	173	173	172	172	169	151

SWITZERLAND—DR. J. LORENZ

	1928	1927	1926	1925	1924
All commodities.....	150	149	148	145	145
Consumers' goods.....	162	160	159	157	157
Agricultural products.....	128	126	124	118	118
Industrial products.....	143	144	145	142	142

SWEDEN—BOARD OF TRADE

	1928	1927	1926	1925	1924	1923
All commodities.....	147	148	148	148	147	146
Vegetable products.....	142	143	142	141	144	147
Animal products.....	137	137	142	146	143	136
Fuels and oils.....	112	116	113	113	114	125
Raw materials for manu- facture in iron and metal industry.....	112	114	115	115	115	122
Paper pulp and paper.....	160	160	157	157	157	166
Raw materials for manu- facture in leather indus- try.....	146	149	144	140	135	120
Raw and manufactured chemicals.....	165	166	166	166	167	170
Raw materials.....	142	143	142	142	140	138
Semifinished materials.....	149	150	150	149	149	146
Finished materials.....	149	149	149	150	150	151
Producers' goods.....	138	138	137	137	137	135
Consumers' goods.....	156	156	156	156	156	155

AUSTRALIA—BUREAU OF CENSUS AND STATISTICS

	1928	1927	1926	1925	1924	1923
All commodities.....	160	163	162	166	173	153
Metals and coal.....	175	176	175	176	176	180
Textiles.....	170	169	167	168	164	138
Agricultural products.....	166	174	176	180	195	170
Dairy products.....	140	143	145	147	153	145
Groceries and tobacco.....	166	168	169	169	168	165
Meat.....	136	136	128	148	168	105
Building materials.....	157	156	148	141	143	147
Chemicals.....	190	186	186	186	186	180

INDIA (CALCUTTA)—DEPARTMENT OF STATISTICS

	1928	1927				
	Jan- uary	De- cem- ber	No- vem- ber	Octo- ber	Sep- tem- ber	Jan- uary
All commodities.....	145	148	148	147	150	146
Cereals.....	135	137	139	133	136	143
Pulses.....	149	155	154	155	155	155
Tea.....	175	185	192	180	181	140
Other foods.....	165	166	167	172	170	165
Oil seeds.....	139	141	138	142	145	141
Raw jute.....	89	91	86	87	92	93
Jute manufactures.....	143	151	146	146	156	139
Raw cotton.....	170	170	180	180	201	127
Cotton manufactures.....	158	157	158	161	163	156
Other textiles.....	131	123	127	127	123	122
Hides and skins.....	153	152	141	121	109	117
Metals.....	125	127	126	129	133	138
Other articles.....	136	149	148	148	152	149

1 1st-of-month figures.

RETAIL FOOD PRICES AND COST OF LIVING

RETAIL FOOD PRICES

[Pre-war=100]

Month	United States (51 cities)	EUROPEAN COUNTRIES														OTHER COUNTRIES				
		Austria (Vienna)	Belgium	Bulgaria	Czechoslovakia	England	Es-tonia	France (Paris)	Germany	Greece (Athens)	Italy (Milan)	Netherlands	Norway	Russia	Switzerland	Canada	Australia	India (Bombay)	New Zealand	South Africa
1926																				
August	153	117	187	2,637	878	161	138	587	146	1,871	660	146	196	234	157	150	157	153	149	117
September	156	116	184	2,641	878	162	128	590	145	1,890	652	145	193	231	158	147	155	152	148	117
October	157	117	194	2,597	888	163	127	624	145	1,933	654	146	191	230	160	147	153	153	147	120
November	158	117	204	2,618	902	169	127	628	148	1,986	630	147	186	234	159	148	155	152	146	119
December	159	118	206	2,598	912	169	128	599	150	1,973	631	146	184	235	159	151	158	154	149	117
1927																				
January	156	119	207	2,586	914	167	131	592	151	2,002	625	147	180	208	158	153	158	155	148	116
February	153	119	210	2,569	914	164	132	585	152	1,995	642	146	177	208	157	151	153	152	146	117
March	151	118	201	2,533	915	162	129	581	151	1,997	635	146	173	205	156	149	151	152	146	118
April	151	119	200	2,478	923	155	130	580	150	2,021	617	145	169	203	156	146	151	151	145	119
May	152	119	196	2,630	930	154	130	589	151	2,063	565	145	169	201	156	145	152	150	145	121
June	155	122	201	2,699	949	154	131	580	153	2,063	541	145	172	199	157	146	153	151	144	120
July	150	122	205	2,653	962	159	134	557	156	2,059	524	144	175	199	157	147	152	154	144	119
August	149	120	202	2,625	914	156	130	539	150	2,044	518	143	175	199	157	147	155	155	143	118
September	151	126	206	2,615	910	157	122	532	151	2,070	509	143	174	198	158	147	157	151	143	117
October	153	127	210	2,626	907	161	123	520	152	2,071	509	146	173	198	158	148	159	148	143	119
November	153	126	211	-----	905	163	124	500	152	2,086	510	148	171	199	161	149	157	147	144	119
December	153	128	212	-----	913	163	124	523	153	2,101	513	148	171	200	160	151	155	149	146	119
1928																				
January	152	129	211	-----	913	162	-----	530	152	2,127	-----	148	170	201	159	151	154	151	146	117
February	149	-----	207	-----	-----	159	-----	-----	151	-----	-----	149	170	202	-----	149	152	146	-----	115
March	-----	-----	-----	-----	-----	155	-----	-----	151	-----	-----	-----	-----	203	-----	-----	-----	142	-----	-----

COST OF LIVING

[Pre-war=100]

Month	Massachusetts	EUROPEAN COUNTRIES														OTHER COUNTRIES				
		Belgium	Czechoslovakia	England	Finland	France (Paris)	Germany	Greece (Athens)	Hungary	Italy (Milan)	Netherlands	Norway	Poland	Spain	Sweden	Switzerland	Canada	Australia	India (Bombay)	South Africa
1926																				
August	158	175	728	170	1,213	-----	143	1,818	116	652	-----	-----	182	178	-----	159	150	-----	155	130
September	158	174	727	172	1,203	539	142	1,833	114	647	164	217	189	187	-----	159	149	158	155	130
October	158	184	732	174	1,197	-----	142	1,862	114	672	-----	-----	193	190	171	160	149	-----	155	131
November	159	191	740	179	1,193	-----	144	1,895	116	657	-----	-----	197	191	-----	159	150	-----	154	131
December	159	195	741	179	1,197	545	144	1,889	116	657	168	213	199	193	-----	159	151	157	156	129
1927																				
January	158	198	747	175	1,187	-----	145	1,900	119	655	-----	-----	202	196	171	160	152	-----	156	130
February	157	200	746	172	1,189	-----	145	1,896	120	667	-----	-----	201	190	-----	160	151	-----	155	130
March	156	195	744	171	1,183	524	145	1,898	119	663	166	203	200	194	-----	159	150	156	155	131
April	156	195	749	165	1,173	-----	146	1,911	119	651	-----	-----	203	196	170	158	148	-----	153	131
May	157	193	756	164	1,166	-----	147	1,938	119	612	-----	-----	205	179	-----	159	148	-----	152	132
June	156	196	761	163	1,184	525	148	1,951	121	586	167	201	205	179	-----	160	149	155	154	132
July	155	199	753	166	1,203	-----	150	1,960	119	548	-----	-----	199	189	169	160	149	-----	156	132
August	155	198	739	164	1,237	-----	147	1,951	119	543	-----	-----	201	221	-----	160	149	-----	157	131
September	155	202	736	165	1,230	507	147	1,955	119	537	167	197	202	226	-----	161	149	-----	154	131
October	155	207	734	167	1,237	-----	150	1,956	120	536	-----	-----	205	227	172	161	150	-----	151	132
November	157	208	735	169	1,251	-----	151	1,964	120	536	-----	-----	210	225	-----	162	150	-----	150	132
December	157	208	740	169	1,243	498	151	1,978	120	531	170	195	205	229	-----	162	151	-----	151	132
1928																				
January	157	210	741	168	1,216	-----	151	1,986	121	-----	-----	-----	207	178	171	161	151	-----	154	132
February	156	207	-----	166	1,206	-----	151	-----	-----	-----	-----	-----	204	-----	-----	-----	150	-----	148	-----
March	-----	-----	-----	164	-----	-----	151	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	145	-----

¹ 1921=100. The cost of living index for Belgium has been changed from an average of 7 provinces, on April, 1914, base, to a workingman's budget in 59 cities, on a 1921 base.

² First of the month figures.

NOTE.—Information as to the number of foods and items included, the original base periods, and sources may be found on page 276 of the April, 1926, issue of the BULLETIN.

LAW DEPARTMENT

Amendment to law regarding interlocking bank directorates.

There is published below the text of an act of Congress approved March 9, 1928, amending section 8 of the Clayton Antitrust Act in such a manner as to broaden the power of the Federal Reserve Board to grant permits for interlocking directorates between banks in the classes affected by that section. Previous to this amendment the board could grant such permits only (1) if the banks were not in substantial competition, and (2) if a member bank of the Federal reserve system was involved. Under the amendment the board is authorized to grant such permits if in the judgment of the board the issuance of such a permit is not incompatible with the public interest, and such permits may be granted even though no member bank of the Federal reserve system is involved. As heretofore, the Federal Reserve Board is authorized to grant permits to serve not more than three banks in the prohibited classes.

An Act To amend section 8 of the Act entitled "An Act to supplement existing laws against unlawful restraints and monopolies, and for other purposes," approved October 15, 1914, as amended.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the last proviso of the second paragraph of section 8 of the Act entitled "An Act to supplement existing laws against unlawful restraints and monopolies, and for other purposes," found in title 15, chapter 1, section 19, United States Code, approved October 15, 1914, as amended, is amended to read as follows:

"And provided further, That nothing in this Act shall prohibit any private banker from being an officer, director, or employee of not more than two banks, banking associations, or trust companies, or prohibit any officer, director, or employee of any bank, banking association, or trust company, or any class A director of a Federal reserve bank, from being an officer, director, or employee of not more than two other banks, banking associations, or trust companies, whether organized under the laws of the United States or any State, if in any such case there is in force a permit therefor issued by the Federal Reserve Board; and the Federal Reserve Board is authorized to issue such permit if in its judgment it is not incompatible with the public interest,

and to revoke any such permit whenever it finds, after reasonable notice and opportunity to be heard, that the public interest requires its revocation."

Approved, March 9, 1928.

Revision of board's regulations regarding interlocking bank directorates.

The Federal Reserve Board has revised its Regulation L on the subject of interlocking bank directorates under the Clayton Act so as to conform to the change in the law made by the amendment of March 9, 1928, which is set out above. The text of the board's Regulation L as revised is as follows:

REGULATION L, SECOND SERIES OF 1928

(Superseding Regulation L of 1928)

INTERLOCKING BANK DIRECTORATES UNDER THE CLAYTON ACT

SECTION I.—Definitions

Within the meaning of this regulation—

The term "bank" shall include any bank, banking association, or trust company organized or operating under the laws of the United States or of any State thereof.

The term "national bank" shall be construed to apply not only to national banking associations but also to banks, banking associations, and trust companies organized or operating under the laws of the United States, including all banks and trust companies doing business in the District of Columbia, regardless of the sources of their charters.

The term "resources" shall be construed to mean an amount equal to the sum of the deposits, capital, surplus, and undivided profits.

The term "State bank" shall include any bank, banking association, or trust company incorporated under State law.

The term "private banker" shall apply to any unincorporated individual engaging in one or more phases of the banking business as that term is generally understood and to any member of an unincorporated firm engaging in such business.

The term "Edge corporation" shall mean any corporation organized under the provisions of section 25 (a) of the Federal reserve act, as amended.

The term "city of over 200,000 inhabitants" includes any city, incorporated town, or village of more than 200,000 inhabitants, as shown by the last preceding

decennial census of the United States. Any bank located anywhere within the corporate limits of such city is located in a city of over 200,000 inhabitants within the meaning of the Clayton Act, even though it is located in a suburb or an outlying district at some distance from the principal part of the city.

SECTION II.—*Prohibitions of Clayton Act*

Under section 8 of the Clayton Antitrust Act—

(1) No person who is a director or other officer or employee of a national bank having resources aggregating more than \$5,000,000, can legally serve at the same time as director, officer, or employee of any other national bank, regardless of its location.

(2) No person who is a director in a State bank or trust company having resources aggregating more than \$5,000,000 or who is a private banker having resources aggregating more than \$5,000,000 can legally serve at the same time as director of any national bank, regardless of its location.

(3) No person can legally be a director, officer, or employee of a national bank located in a city of more than 200,000 inhabitants who is at the same time a private banker in the same city or a director, officer, or employee of any other bank (State or national) located in the same city, regardless of the size of such bank.

The eligibility of a director, officer, or employee under the foregoing provisions is determined by the average amount of deposits, capital, surplus, and undivided profits as shown in the official statements of such bank, banking association, or trust company filed as provided by law during the fiscal year next preceding the date set for the annual election of directors, and when a director, officer, or employee has been elected or selected in accordance with the provisions of the Clayton Act it is lawful for him to continue as such for one year thereafter under said election or employment.

When any person elected or chosen as a director, officer, or employee of any bank is eligible at the time of his election or selection to act for such bank in such capacity his eligibility to act in such capacity is not affected by reason of any change in the affairs of such bank from whatsoever cause until the expiration of one year from the date of his election or employment.

SECTION III.—*Exceptions*

The provisions of section 8 of the Clayton Act—

(1) Do not apply to mutual savings banks not having a capital stock represented by shares.

(2) Do not prohibit a person from being at the same time a director, officer, or employee of a national bank and not more than one other national bank, State bank, or trust company, where the entire capital stock of one is owned by the stockholders of the other.

(3) Do not prohibit a person from being at the same time a class A director of a Federal reserve bank and also an officer or director, or both an officer and a director, in one member bank.

(4) Do not prohibit a person who is serving as director, officer, or employee of a national bank, even though it has resources aggregating over \$5,000,000, from serving at the same time as director, officer, or employee of any number of State banks and trust companies, provided such State institutions are not located in the same city of over 200,000 inhabitants as the national bank and do not have resources aggregating in the case of any one bank more than \$5,000,000.

(5) Do not prohibit a person from serving at the same time as director, officer, or employee of any number of national banks, provided no two of them are located in the same city of over 200,000 inhabitants and no one of them has resources aggregating over \$5,000,000.

(6) Do not prohibit a person who is not a director, officer, or employee of any national bank from serving at the same time as officer, director, or employee of any number of State banks or trust companies, regardless of their locations and resources.

(7) Do not prohibit a person who is an officer or employee but not a director of a State bank from serving as director, officer, or employee of a national bank, even though either or both of such banks have resources aggregating over \$5,000,000, provided both banks are not located in the same city of over 200,000 inhabitants.

(8) Do not prohibit a person who is an officer or employee but not a director of a national bank from serving at the same time as director, officer, or employee of a State bank, even though either or both of such banks have resources aggregating over \$5,000,000, provided both banks are not located in the same city of over 200,000 inhabitants.

(9) Do not prohibit a private banker or an officer, director, or employee of any bank or a class A director of a Federal reserve bank from being at the same time an officer, director, or employee of not more than two other banks within the prohibitions of the Clayton Act, if there is in force a permit therefor issued by the Federal Reserve Board.

Exceptions cumulative.—The above exceptions are cumulative.

SECTION IV.—*Permission of the Federal Reserve Board*

(a) **In general.**—Section 8 of the Clayton Antitrust Act, as amended by the acts of May 15, 1916, May 26, 1920, and March 9, 1928, authorizes the Federal Reserve Board to permit any private banker or any officer, director, or employee of any bank, banking association, or trust company, or any class A director of a Federal reserve bank to serve as director, officer, or employee of not more than two other banks, banking

associations, or trust companies coming within the prohibitions of the Clayton Act, if in the judgment of the Federal Reserve Board it is not incompatible with the public interest.

(b) **When obtained.**—Inasmuch as this exception to the prohibitions of the Clayton Act applies only when "there is in force a permit therefor issued by the Federal Reserve Board," it is a violation of the law to serve two or more banks in the prohibited classes before such a permit has been obtained. A permit should be obtained, therefore, before becoming an officer, director, or employee of more than one bank in the prohibited classes. It may be procured before the person applying therefor has been elected as a director or appointed an officer or employee of any bank in the prohibited classes.

(c) **Applications for permission.**—A person wishing to obtain a permit from the Federal Reserve Board to serve banks coming within the prohibitions of the Clayton Act should—

(1) Make formal application on F. R. B. Form 94, or, if a private banker, on F. R. B. Form 94d. Each of these forms is made a part of this regulation.

(2) Obtain from each of the banks involved a statement on F. R. B. Form 94a, which is made a part of this regulation, showing the character of its business, together with a copy of its last published statement of condition, and, if a private banker, make a statement on F. R. B. Form 94e showing the character of his or his firm's business.

(3) Forward all these papers to the Federal reserve agent of his district, who will attach his recommendation on F. R. B. Form 94b, which is made a part of this regulation, and forward them in due course to the Federal Reserve Board.

(d) **Compatibility with the public interest.**—In determining whether the issuance of such a permit would be compatible with the public interest, the Federal Reserve Board will consider:

(1) Whether the banks involved are natural competitors;

(2) Whether their having the same directors, officers, or employees would tend to lessen competition or to restrict credit; and

(3) Any other facts having a bearing upon the interest of the public in such banks as affected by their having the same directors, officers, or employees.

(e) **Approval or disapproval.**—As soon as an application is acted upon by the board, the applicant will be advised of the action taken.

If the board approves the application, a formal permit to serve on the banks involved will be issued to the applicant.

(f) **Hearing.**—If it appears to the board that it would be incompatible with the public interest to grant such permit the board will so notify the applicant and will afford him every opportunity to present any additional facts or arguments bearing on the subject before making any final decision in the case.

(g) **Effect of permits.**—A permit once granted continues in force until revoked, and need not be renewed.

(h) **Revocation.**—All permits, however, are subject to revocation whenever the Federal Reserve Board, after giving reasonable notice to the persons to whom they were issued and affording them an opportunity to be heard, finds that the public interest requires their revocation.

SECTION V.—*Permits under section 25 of the Federal reserve act*

With the approval of the Federal Reserve Board, any director, officer, or employee of a member bank which has invested in the stock of any corporation principally engaged in international or foreign banking or financial operations or banking in a dependency or insular possession of the United States, under the provisions of section 25 of the Federal reserve act, may serve as director, officer, or employee of any such foreign bank or financial corporation.

Applications for approval.—The approval of the Federal Reserve Board for such interlocking directorates may be obtained through an informal application in the form of a letter addressed to the Federal Reserve Board either by the officer, director, or employee involved, or in his behalf by one of the banks which he is serving. Such application should be sent directly to the Federal Reserve Board.

SECTION VI.—*Permits to serve Edge corporations*

With the approval of the Federal Reserve Board—

(1) Any officer, director, or employee of any member bank may serve at the same time as director, officer, or employee of any Edge corporation in whose capital stock the member bank shall have invested.

(2) Any officer, director, or employee of any Edge corporation may serve at the same time as officer, director, or employee of any other corporation in whose capital stock such Edge corporation shall have invested under the provisions of the Edge Act.

Applications for approval.—Such approval may be obtained through an informal application in the form of a letter addressed to the Federal Reserve Board either by the director, officer, or employee involved, or in his behalf by one of the banks or corporations involved. Such applications should be sent directly to the Federal Reserve Board.

Changes in State Bank Membership

The following list shows the changes affecting State bank membership during the month ended March 21, 1928, on which date 1,267 State institutions were members of the system:

ADMISSIONS

	Capital	Surplus	Total resources
<i>District No. 3</i>			
Wildwood Title & Trust Co., Wildwood, N. J.	\$100,000	\$150,000	\$1,499,784
Lansdale Title & Trust Co., Lansdale, Pa.	125,000	37,500	162,500
<i>District No. 11</i>			
First State Bank, Wolfe City, Tex.	25,000	-----	128,893
<i>District No. 12</i>			
First Security Bank, Pocatello, Idaho	100,000	50,000	1,701,146

CHANGES

	Capital	Surplus	Total resources
<i>District No. 2</i>			
East Orange Bank, East Orange, N. J., member	\$250,000	\$150,000	\$4,603,000
Central Trust Co. of Essex County, East Orange, N. J., nonmember (Above banks merged into Savings Investment & Trust Co., East Orange, N. J., a member.)	250,000	125,000	375,000
<i>District No. 4</i>			
West Lafayette Bank Co., West Lafayette, Ohio (reopened)	100,000	50,000	1,130,000
Farmers & Merchants Bank Co., Metamora, Ohio (closed)	25,000	9,000	362,994
<i>District No. 6</i>			
Douglasville Banking Co., Douglasville, Ga. (closed)	75,000	25,000	567,208
<i>District No. 7</i>			
Farmers Savings Bank, Lytton, Iowa (closed)	30,000	8,500	287,648
<i>District No. 9</i>			
Enderlin State Bank, Enderlin, N. Dak. (consolidated with nonmember)	50,000	3,500	356,494
<i>District No. 10</i>			
Farmers State Bank, St. Edward, Nebr. (withdrawal)	25,000	4,500	261,862
Bank of Chelsea, Chelsea, Okla. (voluntary withdrawal)	50,000	-----	461,361
<i>District No. 11</i>			
First State Bank, Rice, Tex. (succeeded by First State Bank, Rice, Tex., nonmember)	50,000	1,000	286,464
<i>District No. 12</i>			
Security State Bank, Ashton, Idaho (closed)	50,000	-----	335,734

Fiduciary Powers Granted to National Banks

During the month ended March 21, 1928, the Federal Reserve Board approved applications of the national banks listed below for permission to exercise one or more of the fiduciary powers named in section 11 (k) of the Federal reserve act as amended, as follows: (1) Trustee; (2) executor; (3) administrator; (4) registrar of stocks and bonds; (5) guardian of estates; (6) assignee; (7) receiver; (8) committee of estates of lunatics; (9) in any other fiduciary capacity in which State banks, trust companies, or other corporations which come into competition with national banks are permitted to act under the laws of the State in which the national bank is located.

Location	District No.	Name of bank	Powers granted
Boston, Mass.	1	Boston National Bank	1 to 9.
Orange, Mass.	1	Orange National Bank	1 to 9.
South Norwalk, Conn.	2	City National Bank	5. ¹
Passaic, N. J.	2	Lincoln National Bank	1 to 9.
Lynbrook, N. Y.	2	Lynbrook National Bank	1 to 9.
White Plains, N. Y.	2	Peoples National Bank	1 to 9.
Berwick, Pa.	3	First National Bank	1 to 9.
Kennett Square, Pa.	3	National Bank of	1 to 9.
Philadelphia, Pa.	3	City National Bank and Trust Co.	1 to 9.
Strasburg, Va.	5	First National Bank	1 to 9.
Woodstock, Ill.	7	American National Bank	1 to 9.
Kokomo, Ind.	7	Citizens National Bank	5 to 9. ¹
Lebanon, Ind.	7	First National Bank	1 to 9.
Martinsville, Ind.	7	Citizens National Bank	1 to 9.
Vincennes, Ind.	8	American National Bank	1 to 9.
Deer Lodge, Mont.	9	United States National Bank	1 to 5, 7, 8.
Superior, Wis.	9	National Bank of Commerce	1 to 9.
Independence, Mo.	10	First National Bank	1 to 9.

¹ Supplemental.

Changes in National Bank Membership

The Comptroller of the Currency reports the following increases and reductions in the number and capital of national banks during the period from February 25 to March 23, 1928, inclusive:

	Number of banks	Amount of capital
New charters issued	10	\$1,060,000
Restored to solvency	0	0
Increase of capital approved ¹	25	14,015,000
Aggregate of new charters, banks restored to solvency, and banks increasing capital	35	15,075,000
Liquidations	19	1,475,000
Reducing capital	1	50,000
Total liquidations and reductions of capital	20	1,525,000
Consolidation of national banks under act of Nov. 7, 1918	2	5,050,000
Consolidation of a national bank and a State bank under act of Feb. 25, 1927	3	215,000
Total consolidations	5	5,265,000
Aggregate increased capital for period	-----	15,075,000
Reduction of capital owing to liquidations, etc.	-----	1,525,000
Net increase	-----	13,550,000

¹ Includes 3 increases in capital aggregating \$90,000 incident to consolidations of State banks under act of Feb. 25, 1927.

DETAILED BANKING STATISTICS FOR THE UNITED STATES
FEDERAL RESERVE BANKS

BILLS DISCOUNTED, AND DEPOSITS BY CLASS OF DEPOSIT

[Monthly averages of daily figures. In millions of dollars]

	Total	Federal Reserve Bank											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Bills discounted:													
1927—February	393.0	29.0	91.2	35.7	38.9	23.4	26.8	78.5	14.6	4.0	9.3	3.1	38.6
March	424.5	35.8	112.2	41.0	31.7	22.1	31.7	71.1	14.4	4.5	8.6	3.2	48.3
April	447.3	23.2	121.6	43.7	53.9	22.5	34.1	56.3	16.2	6.1	11.9	4.4	53.3
May	473.0	37.1	137.8	48.8	43.6	25.5	34.6	52.7	24.0	6.7	17.3	4.7	43.1
June	428.6	33.8	91.9	45.2	41.8	22.4	32.6	63.9	26.3	6.5	16.5	6.2	41.4
July	454.0	29.7	122.9	46.8	35.4	21.8	36.3	59.7	29.8	6.0	12.5	7.4	45.8
August	409.4	29.9	118.4	39.6	27.8	19.7	34.7	40.5	24.7	6.1	9.3	12.7	46.1
September	422.2	28.4	142.4	38.2	34.8	26.3	31.1	31.4	28.0	4.4	10.7	11.0	35.6
October	424.4	33.3	126.9	38.4	43.7	28.9	26.0	36.5	21.5	2.7	15.7	7.2	43.7
November	415.2	36.4	106.5	38.1	46.8	21.5	32.7	46.9	18.1	2.6	18.1	8.4	39.1
December	528.6	40.2	171.1	47.9	58.6	24.4	36.1	65.0	19.3	3.0	15.2	5.4	42.4
1928—January	465.3	23.5	152.9	44.4	51.0	26.9	29.3	59.0	16.6	3.7	12.7	4.3	41.0
February	470.7	45.2	119.3	53.1	50.8	27.3	28.3	50.9	24.0	4.0	11.4	4.1	52.3
March	513.2	49.5	130.0	49.2	37.0	27.8	25.2	67.9	26.1	3.3	10.5	3.8	63.1
Total deposits:													
1927—February	2,266.5	149.1	856.1	139.4	183.0	72.3	72.5	329.7	83.8	50.8	91.4	63.8	174.7
March	2,284.8	146.2	873.3	138.9	188.4	70.5	71.1	328.2	82.8	51.5	90.8	63.2	175.0
April	2,301.1	148.4	882.4	140.5	188.1	71.2	72.8	332.4	83.8	50.4	90.8	62.6	177.8
May	2,326.8	148.0	908.2	139.0	188.4	72.6	71.1	339.0	83.2	49.2	89.4	61.6	177.2
June	2,355.4	149.8	941.9	137.9	190.2	71.7	68.8	338.5	82.4	49.7	88.3	59.8	176.3
July	2,339.5	152.6	918.9	138.0	189.6	74.3	68.5	337.9	82.6	50.6	90.9	60.2	175.4
August	2,331.5	152.0	902.1	138.6	192.1	74.5	67.5	345.5	81.6	49.7	91.6	59.8	176.5
September	2,350.9	153.4	911.1	140.9	190.5	74.6	68.8	344.0	81.6	52.6	90.2	63.0	180.2
October	2,380.9	157.2	921.3	141.5	190.1	74.7	70.8	346.8	84.7	55.6	90.5	66.4	181.1
November	2,430.0	161.7	946.3	142.3	192.8	76.7	70.4	345.7	87.9	57.8	94.2	69.2	184.9
December	2,436.0	156.8	959.1	140.1	188.8	75.1	70.5	350.0	87.9	56.4	93.3	69.8	188.1
1928—January	2,472.4	158.4	974.4	143.8	192.0	76.0	72.6	355.8	87.6	55.1	94.3	70.6	191.9
February	2,419.5	154.1	942.7	140.4	192.2	75.1	72.5	349.7	87.5	54.6	95.0	70.6	185.0
March	2,411.7	153.7	948.8	140.7	189.5	72.9	71.2	349.7	84.5	55.3	94.4	68.5	182.5
Member bank reserve balances:													
1927—February	2,212.2	144.5	838.3	136.7	179.9	69.4	69.8	324.6	81.2	49.2	89.1	62.4	167.1
March	2,240.0	144.1	856.6	136.9	185.7	68.9	69.5	325.1	81.4	50.3	89.6	62.2	169.7
April	2,248.3	145.6	863.3	137.4	184.7	68.3	69.4	328.0	81.6	48.9	89.0	60.9	171.3
May	2,262.4	146.2	875.3	136.1	185.2	68.8	68.4	335.1	81.1	47.7	87.4	59.7	171.3
June	2,300.9	147.9	913.3	135.8	187.2	69.5	67.1	334.5	80.8	48.5	87.2	58.5	170.5
July	2,288.9	151.1	894.8	136.4	187.1	71.6	66.7	333.9	81.0	49.1	88.8	58.8	169.6
August	2,283.1	150.2	880.9	136.8	189.3	72.0	65.6	341.2	80.0	48.3	89.9	58.3	170.5
September	2,300.5	151.0	888.7	138.6	187.4	72.1	67.6	339.7	80.1	51.0	88.9	61.7	173.8
October	2,326.0	155.0	895.9	139.4	187.4	71.8	68.5	343.0	82.5	54.0	88.8	64.8	174.9
November	2,373.0	157.4	922.5	139.8	188.5	74.1	68.6	342.5	85.3	56.3	91.0	67.7	179.3
December	2,399.2	155.1	944.9	138.7	186.3	73.5	69.3	347.2	86.3	55.2	91.3	69.0	182.3
1928—January	2,426.4	155.9	957.9	141.7	188.9	73.8	70.7	352.1	86.1	53.3	92.1	68.8	185.2
February	2,368.1	151.0	924.4	138.5	188.1	72.4	70.0	345.8	85.0	53.1	92.4	69.3	178.2
March	2,365.0	151.2	931.6	138.6	186.0	70.6	69.4	345.7	82.8	53.9	92.4	67.1	175.8
Government deposits:													
1927—February	28.1	2.9	5.2	2.1	1.7	2.6	2.2	3.7	1.5	1.2	1.6	1.2	2.4
March	21.8	1.4	10.4	1.2	.9	1.2	1.2	1.3	.8	.8	.7	.7	1.2
April	29.6	2.3	7.8	2.3	1.5	2.5	3.0	2.4	1.7	1.1	1.4	1.4	2.3
May	25.4	1.3	4.7	2.3	1.6	3.4	2.1	2.2	1.6	1.1	1.6	1.7	1.8
June	20.7	1.2	5.9	1.4	1.2	1.8	1.4	2.2	1.0	.9	.8	1.1	1.8
July	17.4	.8	2.4	.9	.9	2.3	1.4	2.1	1.1	1.2	1.7	1.0	1.6
August	17.9	1.0	2.0	1.2	1.1	2.2	1.6	2.6	1.1	1.1	1.3	1.2	1.6
September	20.3	1.4	4.2	1.6	1.3	2.1	.9	2.4	1.0	1.3	.9	1.1	2.1
October	20.4	1.1	5.4	1.3	.9	2.4	1.6	1.7	1.2	1.0	.9	1.3	1.7
November	12.8	.9	2.9	1.2	.9	1.3	.8	.9	.9	.7	.7	1.0	.8
December	10.0	.8	2.2	.6	.7	1.0	.7	.8	.6	.6	.6	.5	.8
1928—January	19.4	1.9	2.6	1.4	1.4	1.8	1.5	1.9	1.0	1.3	1.3	1.4	2.0
February	25.6	2.0	6.8	1.3	2.2	2.3	1.9	2.3	1.4	1.2	1.4	1.0	1.8
March	23.0	2.0	5.9	1.6	1.9	2.0	1.5	2.2	1.2	1.0	1.1	1.2	1.5
All other deposits:													
1927—February	26.1	1.7	12.5	.5	1.4	.3	.6	1.4	1.1	.3	.7	.2	5.2
March	23.0	.7	11.3	.7	1.8	.4	.4	1.8	.6	.4	.4	.3	4.1
April	23.2	.6	11.3	.8	1.9	.4	.4	2.0	.6	.4	.4	.2	4.2
May	39.0	.6	28.2	.6	1.6	.3	.6	1.6	.5	.3	.3	.2	4.2
June	33.9	.7	22.7	.6	1.9	.3	.3	1.8	.6	.3	.4	.2	4.1
July	33.1	.7	21.7	.7	1.6	.4	.3	1.8	.6	.3	.3	.4	4.2
August	30.5	.8	19.3	.6	1.7	.3	.3	1.7	.5	.3	.4	.2	4.4
September	30.1	1.0	18.2	.7	1.8	.4	.3	1.8	.5	.3	.4	.2	4.3
October	34.4	1.1	20.0	.9	1.8	.5	.7	2.0	1.1	.6	.8	.3	4.5
November	44.2	3.4	20.9	1.4	3.4	1.3	1.0	2.3	1.7	.8	2.6	.5	4.8
December	26.8	.9	12.1	.8	1.9	.7	.4	2.0	1.0	.6	1.3	.3	4.9
1928—January	26.6	.6	13.9	.7	1.8	.5	.3	1.8	.6	.4	1.0	.3	4.7
February	25.8	1.2	11.5	.6	1.9	.4	.6	1.7	1.0	.2	1.2	.2	5.0
March	23.7	.5	11.3	.6	1.6	.3	.3	1.8	.5	.4	.9	.2	5.2

FEDERAL RESERVE BANKS—RESOURCES AND LIABILITIES AT THE END OF EACH MONTH

[In millions of dollars]

	1927												1928	
	Janu- ary	Feb- ruary	March	April	May	June	July	Aug- ust	Sep- tem- ber	Octo- ber	No- vem- ber	De- cem- ber	Janu- ary	Feb- ruary
RESOURCES														
Total gold reserves.....	2,957	2,976	3,010	3,029	2,982	2,998	3,002	2,998	2,964	2,922	2,805	2,733	2,797	2,808
Reserves other than gold.....	160	154	157	157	156	158	149	148	131	131	135	134	169	166
Total reserves.....	3,117	3,130	3,168	3,187	3,138	3,156	3,152	3,146	3,095	3,054	2,940	2,867	2,966	2,974
Nonreserve cash.....	70	63	60	56	51	52	51	48	42	52	58	77	85	70
Federal reserve notes of other Federal reserve banks.....	19	16	16	18	13	17	19	17	18	22	20	24	20	17
Bills discounted.....	425	470	451	477	459	443	442	401	437	412	477	582	423	493
Bills bought:														
Outright.....	272	230	185	197	159	181	153	118	174	266	288	310	333	303
Under resale agreement.....	49	67	54	41	69	30	19	67	76	76	66	82	46	41
Total bills bought.....	321	296	239	238	228	211	172	185	250	342	355	392	379	344
United States securities:														
Bought outright.....	303	305	317	322	336	367	385	470	487	519	544	560	431	399
Under resale agreement.....	1.2	10.8	31.0	4.5	7.5	3.1	7.5	2.9	19.5	2.9	4.1	56.6	6.1	8.5
Total United States securities.....	304	316	348	327	343	370	392	473	506	522	548	617	437	408
Other securities.....	2.5	2.0	2.5	1.8	1.8	1.3	1.3	.3	.8	.6	.9	.9	.5	1.0
Total bills and securities.....	1,053	1,084	1,040	1,044	1,032	1,025	1,008	1,059	1,194	1,276	1,381	1,591	1,240	1,245
Gold held abroad.....					60	23								
Due from foreign banks.....	.7	.7	.7	.7	.7	28.8	48.7	12.2	.8	.6	.6	.6	.6	.6
Uncollected items ¹	513	580	599	600	547	631	550	586	641	595	672	714	577	598
Bank premises.....	58	58	58	59	59	59	59	59	60	60	60	58	59	59
All other resources.....	12	14	13	13	14	14	15	18	13	14	14	15	10	11
Total resources.....	4,842	4,946	4,955	4,976	4,914	5,006	4,903	4,945	5,065	5,072	5,145	5,346	4,957	4,975
LIABILITIES														
Federal reserve notes in actual circula- tion.....	1,704	1,727	1,724	1,744	1,748	1,721	1,688	1,676	1,736	1,734	1,717	1,790	1,581	1,588
Deposits:														
Member bank—reserve account.....	2,218	2,229	2,237	2,257	2,197	2,249	2,277	2,299	2,293	2,324	2,379	2,487	2,391	2,375
Government.....	36.6	43.3	37.9	22.8	32.2	30.7	25.1	12.7	27.4	21.2	2.1	18.4	19.9	27.9
Foreign bank.....	3.8	5.4	5.3	4.6	4.5	6.4	4.7	5.5	5.1	9.5	4.8	4.6	4.6	6
Other deposits.....	19	18	15	17	29	27	23	24	24	31	28	21	19	17
Total deposits.....	2,278	2,296	2,296	2,302	2,262	2,313	2,330	2,341	2,349	2,386	2,413	2,531	2,435	2,426
Deferred availability items.....	496	557	567	560	533	603	514	555	605	576	638	651	563	580
Capital paid in.....	126	127	128	129	129	129	130	131	131	131	132	132	134	137
Surplus.....	229	229	229	229	229	229	229	229	229	229	229	233	233	233
All other liabilities.....	10.0	10.9	12.1	12.8	13.8	11.3	11.8	13.2	14.5	16.1	17.5	8.2	10.4	11.6
Total liabilities.....	4,842	4,946	4,955	4,976	4,914	5,006	4,903	4,945	5,065	5,072	5,145	5,346	4,957	4,975
Contingent liability on bills purchased for foreign correspondents.....	94	93	148	147	160	146	151	166	188	189	186	229	237	239

¹ Exclusive of Federal reserve notes of other Federal reserve banks, which are shown separately.

FEDERAL RESERVE BANKS—AVERAGE DAILY RESERVES AND DEMAND LIABILITIES IN MARCH AND FEBRUARY, 1928
[In thousands of dollars]

Federal reserve bank	Total cash reserves		Total deposits		Federal reserve notes in circulation		Reserve percentages	
	March	February	March	February	March	February	March	February
Boston.....	174,812	186,086	153,675	154,128	121,056	123,124	63.6	67.1
New York.....	1,026,295	1,045,300	948,778	942,739	349,408	350,921	79.1	80.8
Philadelphia.....	182,678	170,774	140,742	140,367	127,469	124,984	68.1	64.4
Cleveland.....	273,731	279,495	189,480	192,224	194,176	195,782	71.3	72.0
Richmond.....	93,538	89,458	72,942	75,069	62,508	66,738	69.1	63.1
Atlanta.....	175,653	169,171	71,203	72,537	142,976	141,445	82.0	79.1
Chicago.....	448,509	450,875	349,665	349,723	239,140	233,784	76.2	77.3
St. Louis.....	79,400	77,680	84,549	87,461	52,712	52,976	57.8	55.3
Minneapolis.....	83,171	80,891	55,308	54,608	56,340	55,998	74.5	73.1
Kansas City.....	103,302	103,487	94,366	95,010	58,447	60,680	67.6	66.5
Dallas.....	70,656	71,619	68,536	70,597	36,305	38,658	67.4	65.6
San Francisco.....	228,980	246,932	182,470	185,019	151,078	151,953	68.6	73.3
Total.....	2,940,725	2,971,768	2,411,714	2,419,482	1,591,615	1,597,043	73.5	74.0

FEDERAL RESERVE BANKS—RESOURCES AND LIABILITIES, BY WEEKS

RESOURCES

[In thousands of dollars]

	Total	Federal Reserve Bank											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Gold with Federal reserve agents:													
Mar. 7.....	1,345,440	86,648	298,887	91,723	160,062	47,502	138,054	226,629	25,720	52,358	51,664	30,933	135,260
Mar. 14.....	1,369,178	84,482	298,813	98,826	159,128	45,966	142,600	226,629	26,802	51,874	51,736	30,471	151,851
Mar. 21.....	1,393,893	82,025	328,813	106,555	160,026	44,656	142,575	226,566	28,732	52,874	50,906	29,865	140,300
Mar. 28.....	1,331,263	80,254	248,722	102,548	161,549	47,003	135,451	226,508	35,424	52,140	50,107	29,021	162,536
Gold redemption fund with United States Treasury:													
Mar. 7.....	49,778	6,704	11,640	7,721	4,153	1,488	1,947	4,460	2,968	1,969	2,008	1,152	3,568
Mar. 14.....	58,576	8,151	14,974	10,341	5,823	1,946	1,877	3,282	3,333	2,059	2,528	1,325	2,937
Mar. 21.....	48,560	4,797	13,494	6,042	3,585	2,266	1,879	5,176	3,134	769	2,968	1,268	3,182
Mar. 28.....	50,652	5,869	11,918	8,954	3,465	1,446	2,082	4,140	3,997	1,219	3,390	1,509	2,663
Gold held exclusively against Federal reserve notes:													
Mar. 7.....	1,395,218	93,352	310,527	99,444	164,215	48,990	140,001	231,089	28,688	54,327	53,672	32,085	138,828
Mar. 14.....	1,427,754	92,633	313,787	109,167	164,951	47,912	144,477	229,911	30,135	53,933	54,264	31,796	151,858
Mar. 21.....	1,442,453	86,822	342,307	112,597	163,611	46,922	144,454	231,742	31,866	53,643	53,874	31,133	143,482
Mar. 28.....	1,381,915	86,123	260,640	111,502	165,014	48,449	137,533	230,648	39,421	53,359	53,497	30,530	166,199
Gold settlement fund with Federal Reserve Board:													
Mar. 7.....	767,300	42,910	291,717	46,221	50,110	26,132	10,371	150,083	25,797	23,919	37,739	20,796	41,505
Mar. 14.....	735,014	40,626	297,027	30,436	51,182	22,248	7,476	157,038	23,204	17,945	35,200	19,779	32,853
Mar. 21.....	684,561	52,744	276,797	39,212	39,844	23,499	6,675	120,652	19,740	15,790	32,279	20,134	37,195
Mar. 28.....	714,989	36,286	290,510	42,270	52,410	24,965	6,896	137,907	18,433	17,837	34,021	20,101	33,353
Gold and gold certificates held by banks:													
Mar. 7.....	649,700	26,500	416,001	25,971	46,123	9,712	8,795	54,746	11,614	5,187	7,052	8,408	29,591
Mar. 14.....	625,649	26,524	391,597	25,465	44,937	9,902	8,926	54,849	11,784	5,135	6,942	8,574	31,014
Mar. 21.....	648,757	24,823	416,013	26,151	44,700	9,964	9,328	54,133	12,353	5,008	6,768	8,663	30,853
Mar. 28.....	663,059	23,869	432,382	25,110	45,423	10,067	9,853	53,176	12,026	4,852	6,802	8,747	30,752
Total gold reserves:													
Mar. 7.....	2,812,218	162,762	1,018,245	171,636	260,448	84,834	159,167	435,918	66,099	83,433	98,463	61,289	209,924
Mar. 14.....	2,788,417	159,783	1,002,411	165,068	261,070	80,062	160,879	441,798	65,123	77,013	96,406	60,149	218,655
Mar. 21.....	2,775,771	164,389	1,035,117	177,960	248,155	80,385	160,457	406,527	63,959	74,441	92,921	59,930	211,530
Mar. 28.....	2,759,963	146,278	983,532	178,882	262,847	83,481	154,282	421,731	69,880	76,048	94,320	59,378	229,304
Reserves other than gold:													
Mar. 7.....	163,442	15,201	31,767	8,772	13,853	10,793	15,139	20,163	14,493	4,661	7,147	10,021	11,432
Mar. 14.....	168,300	15,476	34,843	8,141	14,854	10,635	15,039	20,597	14,825	4,461	7,357	10,071	12,001
Mar. 21.....	170,060	15,392	34,766	8,709	15,382	11,151	15,547	20,787	14,541	4,201	7,573	10,216	11,795
Mar. 28.....	170,544	15,550	34,725	8,488	14,019	11,450	16,065	21,297	14,559	3,885	7,796	10,541	12,149
Total reserves:													
Mar. 7.....	2,975,660	177,963	1,050,012	180,408	274,301	95,627	174,306	456,081	80,592	88,094	105,610	71,310	221,356
Mar. 14.....	2,956,717	175,259	1,037,254	173,209	275,924	90,697	175,918	462,395	79,948	81,474	103,763	70,220	230,656
Mar. 21.....	2,945,831	179,781	1,069,883	186,669	263,537	91,536	176,004	427,314	78,500	78,642	100,494	70,146	223,325
Mar. 28.....	2,930,507	161,828	1,018,257	187,370	276,866	94,931	170,367	443,028	84,439	79,933	102,116	69,919	241,453

FEDERAL RESERVE BANKS—RESOURCES AND LIABILITIES, BY WEEKS—Continued

RESOURCES—Continued

[In thousands of dollars]

	Total	Federal Reserve Bank											
		Boston	New York	Phila- delphia	Cleve- land	Rich- mond	Atlanta	Chicago	St. Louis	Minne- apolis	Kansas City	Dallas	San Fran- cisco
Nonreserve cash:													
Mar. 7.....	70,084	6,585	21,626	2,377	5,077	6,966	4,245	7,958	4,214	1,245	2,270	3,155	4,366
Mar. 14.....	70,013	6,422	22,174	2,369	5,597	6,347	4,347	7,360	4,373	1,408	2,158	3,406	4,052
Mar. 21.....	68,045	6,104	21,426	2,400	5,663	6,069	4,350	6,924	4,168	1,069	2,203	3,142	4,525
Mar. 28.....	67,786	5,499	21,393	2,329	4,918	5,786	4,819	7,060	4,129	1,443	2,356	3,652	4,402
Bills discounted:													
Secured by U. S. Govern- ment obligations—													
Mar. 7.....	289,784	22,781	85,029	27,876	28,725	6,886	4,257	40,263	10,268	236	2,184	1,490	59,789
Mar. 14.....	285,255	22,933	82,837	35,081	31,300	6,730	2,605	35,908	10,123	482	4,505	539	52,212
Mar. 21.....	285,371	23,864	55,250	30,432	30,955	7,448	3,972	63,203	12,240	4,090	5,198	367	48,352
Mar. 28.....	322,034	24,279	113,422	29,484	29,945	6,498	2,422	51,959	12,924	2,533	4,868	807	42,893
Other bills discounted—													
Mar. 7.....	192,324	22,957	39,359	14,485	24,895	17,489	22,610	20,694	14,508	1,355	5,660	1,952	6,360
Mar. 14.....	187,041	25,249	28,199	16,281	19,888	21,115	20,209	15,150	15,646	1,386	6,557	3,215	14,146
Mar. 21.....	191,607	22,149	27,152	15,192	25,901	19,810	18,361	20,554	16,450	1,351	6,794	2,786	15,107
Mar. 28.....	202,062	34,293	40,596	13,396	23,051	19,114	20,930	22,001	10,841	1,309	6,961	3,508	6,062
Total bills discounted:													
Mar. 7.....	482,108	45,738	124,388	42,361	53,620	24,375	26,867	60,957	24,776	1,591	7,844	3,442	66,149
Mar. 14.....	472,296	48,182	111,036	51,362	51,188	27,845	22,814	51,058	25,769	1,868	11,062	3,754	66,358
Mar. 21.....	476,978	46,013	82,402	45,624	56,856	27,258	22,333	83,757	28,690	5,441	11,992	3,153	63,459
Mar. 28.....	524,096	58,572	154,018	42,880	52,996	25,612	23,352	73,960	23,765	3,842	11,829	4,315	48,955
Bills bought in open market:													
Mar. 7.....	338,495	42,183	93,240	32,306	30,154	14,726	10,247	41,508	10,762	10,131	12,290	14,106	26,842
Mar. 14.....	343,326	46,953	100,815	30,596	28,691	14,929	9,803	39,914	9,671	10,648	12,098	13,677	25,531
Mar. 21.....	332,728	43,641	92,589	27,504	29,333	13,842	9,754	38,672	8,120	13,767	12,388	13,344	29,674
Mar. 28.....	346,103	49,243	104,034	24,408	30,905	12,851	15,223	39,033	6,372	13,244	11,694	12,860	26,236
U. S. Government securities:													
Bonds—													
Mar. 7.....	57,047	708	3,384	585	754	1,153	80	19,977	7,125	4,519	10,890	7,819	53
Mar. 14.....	58,807	708	4,384	585	755	1,153	19	20,297	7,125	4,519	11,390	7,819	53
Mar. 21.....	57,330	767	1,384	585	755	1,153	62	21,517	7,125	4,519	11,590	7,819	54
Mar. 28.....	55,711	707	1,384	585	505	1,153	47	19,927	7,125	4,519	11,890	7,815	54
Treasury notes—													
Mar. 7.....	205,633	11,246	38,678	17,892	37,201	3,890	5,058	22,911	16,916	8,691	10,786	10,197	22,167
Mar. 14.....	193,421	10,319	35,492	17,028	36,200	3,570	4,777	20,967	16,305	8,228	9,972	9,428	21,135
Mar. 21.....	171,767	8,579	29,502	15,403	34,420	2,968	5,243	17,300	15,156	7,356	8,441	8,204	19,195
Mar. 28.....	163,612	8,202	26,847	14,683	33,586	2,700	4,957	17,259	14,648	6,970	7,763	7,661	18,336
Certificates of indebted- ness—													
Mar. 7.....	140,032	9,845	33,856	16,386	11,784	3,405	4,788	20,107	7,878	4,925	9,093	7,001	10,964
Mar. 14.....	148,659	10,482	36,047	16,980	12,472	3,626	4,974	21,845	8,299	5,243	9,652	7,366	11,673
Mar. 21.....	156,164	11,386	39,069	17,802	12,912	3,929	3,478	22,914	7,495	5,684	10,425	8,418	12,652
Mar. 28.....	166,509	12,300	41,783	18,538	13,765	4,203	3,720	24,560	8,015	6,079	11,118	8,898	13,530
Total U. S. Government securi- ties:													
Mar. 7.....	402,712	21,799	75,918	34,863	49,739	8,448	9,926	62,995	31,919	18,135	30,769	25,017	33,184
Mar. 14.....	400,887	21,509	75,923	34,593	49,427	8,349	9,770	63,109	31,729	17,990	31,014	24,613	32,861
Mar. 21.....	385,261	20,732	69,955	33,790	48,087	8,050	8,783	61,731	29,776	17,559	30,456	24,441	31,961
Mar. 28.....	385,832	21,209	70,014	33,806	47,856	8,056	8,724	61,746	29,788	17,568	30,771	24,374	31,920
Other securities:													
Mar. 7.....	1,000									1,000			
Mar. 14.....	1,000									1,000			
Mar. 21.....	500									500			
Mar. 28.....	900									900			
Total bills and securities:													
Mar. 7.....	1,224,315	109,720	293,546	109,530	133,513	47,549	47,040	165,460	67,457	30,857	50,903	42,565	126,175
Mar. 14.....	1,217,509	116,644	287,774	116,551	129,306	51,123	42,387	154,081	67,169	31,506	54,174	42,044	124,750
Mar. 21.....	1,195,467	110,386	244,946	106,913	134,276	49,250	40,870	184,160	66,586	37,267	54,836	40,938	125,034
Mar. 28.....	1,257,021	129,024	328,066	101,094	131,757	46,519	47,299	174,739	59,925	35,644	54,294	41,549	107,111
Due from foreign banks:													
Mar. 7.....	569	37	217	46	51	25	21	68	21	13	18	17	35
Mar. 14.....	570	37	218	46	51	25	21	68	21	13	18	17	35
Mar. 21.....	569	37	217	46	51	25	21	68	21	13	18	17	35
Mar. 28.....	570	37	218	46	51	25	21	68	21	13	18	17	35
Uncollected items:													
Mar. 7.....	609,762	58,923	150,962	52,238	52,432	49,490	25,972	73,543	30,050	12,100	40,732	28,288	35,032
Mar. 14.....	744,469	71,436	204,314	61,844	68,717	58,377	29,491	90,545	34,239	13,736	39,278	29,677	42,815
Mar. 21.....	676,209	63,740	182,144	57,406	64,757	53,787	27,824	82,277	29,489	12,750	36,080	26,855	39,100
Mar. 28.....	595,975	59,356	154,175	50,997	50,723	49,260	24,130	71,130	28,397	10,896	34,058	21,938	34,915
Bank premises:													
Mar. 7.....	59,078	3,824	16,522	1,756	6,865	3,061	2,829	8,646	3,891	2,202	4,308	1,800	3,374
Mar. 14.....	59,265	3,824	16,543	1,756	6,865	3,147	2,829	8,726	3,891	2,202	4,308	1,800	3,374
Mar. 21.....	59,264	3,824	16,543	1,756	6,865	3,148	2,829	8,720	3,892	2,202	4,308	1,803	3,374
Mar. 28.....	59,266	3,824	16,543	1,756	6,865	3,148	2,829	8,720	3,891	2,202	4,308	1,806	3,374

FEDERAL RESERVE BANKS—RESOURCES AND LIABILITIES, BY WEEKS—Continued

RESOURCES—Continued

[In thousands of dollars]

	Total	Federal Reserve Bank											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
All other resources:													
Mar. 7.....	11,548	83	3,141	281	1,177	401	1,431	1,359	773	1,009	520	557	816
Mar. 14.....	12,159	89	3,551	294	1,194	409	1,395	1,328	775	1,301	511	564	748
Mar. 21.....	9,222	84	1,387	113	1,095	398	1,340	1,307	718	973	486	576	745
Mar. 28.....	9,826	86	1,743	117	1,121	406	1,485	1,283	725	970	540	578	772
Total resources:													
Mar. 7.....	4,951,016	357,135	1,536,026	346,636	473,416	203,119	255,844	713,115	186,998	135,520	204,361	147,692	391,154
Mar. 14.....	5,060,702	373,711	1,571,828	356,069	487,654	210,125	256,388	724,503	190,416	131,640	204,210	147,728	406,430
Mar. 21.....	4,954,607	363,956	1,536,546	355,308	476,246	204,213	253,238	710,770	183,374	132,916	198,425	143,477	396,138
Mar. 28.....	4,920,951	359,654	1,540,395	343,709	478,301	200,075	250,950	706,028	181,527	131,101	197,690	139,459	392,062

LIABILITIES

Federal reserve notes in circulation:													
Mar. 7.....	1,591,370	120,933	346,519	123,569	195,829	62,788	143,426	238,772	52,886	56,950	59,186	37,175	153,337
Mar. 14.....	1,574,114	119,223	342,668	125,495	194,174	62,151	142,001	235,178	52,585	56,011	58,396	35,958	150,274
Mar. 21.....	1,565,424	119,021	343,352	124,043	189,137	60,692	142,291	236,246	52,194	56,067	58,119	35,812	148,430
Mar. 28.....	1,567,052	119,161	341,906	126,110	192,035	60,266	141,451	238,153	52,115	55,654	56,986	34,755	148,460
Deposits:													
Member bank—reserve account—													
Mar. 7.....	2,361,464	147,517	934,620	136,924	185,586	71,855	70,535	347,110	83,953	54,397	92,759	68,483	167,725
Mar. 14.....	2,362,424	155,337	919,622	136,429	184,436	69,964	69,538	348,290	84,931	51,734	94,440	67,792	179,911
Mar. 21.....	2,322,237	153,564	902,604	140,047	183,446	69,887	68,016	340,607	82,000	53,125	91,335	64,520	173,086
Mar. 28.....	2,357,143	150,186	943,494	132,836	185,833	69,072	67,643	339,488	81,486	52,598	93,055	65,993	175,459
Government—													
Mar. 7.....	25,037	2,160	7,515	1,411	1,950	978	1,774	2,352	1,679	1,619	1,541	848	1,210
Mar. 14.....	18,975	28	12,990	340	647	417	901	371	979	448	421	661	772
Mar. 21.....	14,863	227	10,559	39	360	586	216	1,012	58	932	289	297	288
Mar. 28.....	24,757	3,012	2,432	1,263	3,560	2,845	3,348	378	1,100	1,524	1,475	2,359	1,461
Foreign bank—													
Mar. 7.....	6,116	323	3,027	409	447	219	181	598	185	116	155	151	305
Mar. 14.....	4,305	323	1,216	409	447	219	181	598	185	116	155	151	305
Mar. 21.....	4,502	338	1,271	427	468	229	189	626	194	122	162	158	318
Mar. 28.....	5,007	338	1,774	428	468	230	189	626	194	121	162	158	319
Other deposits:													
Mar. 7.....	18,121	81	8,983	102	951	115	176	1,145	353	393	686	65	5,071
Mar. 14.....	17,222	91	8,370	168	1,165	155	84	1,108	267	270	900	31	4,613
Mar. 21.....	18,102	84	9,099	191	1,171	72	72	1,122	270	255	724	28	5,014
Mar. 28.....	17,308	98	8,380	67	1,203	87	75	1,317	346	277	728	28	4,702
Total deposits:													
Mar. 7.....	2,410,738	150,081	954,145	138,846	188,934	73,167	72,066	351,205	86,170	56,525	95,141	69,547	174,311
Mar. 14.....	2,402,926	155,779	942,198	137,346	186,695	70,755	70,704	350,367	86,362	52,568	95,916	68,635	185,601
Mar. 21.....	2,359,704	154,213	923,533	140,704	185,445	70,774	68,493	343,367	82,522	54,434	92,510	65,003	178,706
Mar. 28.....	2,404,215	153,634	956,080	134,594	191,064	72,234	71,255	341,809	83,126	54,520	95,420	68,538	181,941
Deferred availability items:													
Mar. 7.....	566,760	58,202	127,006	48,355	48,980	47,714	24,169	68,775	31,419	11,150	36,227	27,765	36,998
Mar. 14.....	701,004	70,718	178,242	57,308	67,033	57,782	28,089	84,532	34,905	12,144	36,080	29,901	44,270
Mar. 21.....	646,319	62,583	160,903	54,572	61,901	53,283	26,855	76,654	32,087	11,459	33,963	29,426	42,633
Mar. 28.....	566,358	58,526	133,556	46,967	55,352	48,123	22,577	71,997	29,685	9,988	31,429	22,910	35,248
Capital paid in:													
Mar. 7.....	136,605	9,468	42,367	13,641	14,217	6,249	5,166	19,104	5,340	3,027	4,246	4,304	9,476
Mar. 14.....	136,456	9,468	42,381	13,690	14,224	6,251	5,166	19,118	5,340	3,027	4,249	4,301	9,241
Mar. 21.....	136,642	9,586	42,413	13,700	14,224	6,251	5,166	19,122	5,340	3,021	4,252	4,313	9,254
Mar. 28.....	136,150	9,586	42,468	13,700	14,223	6,251	5,166	18,581	5,340	3,024	4,245	4,311	9,255
Surplus:													
Mar. 7.....	233,319	17,893	63,007	21,662	24,021	12,324	9,996	32,778	10,397	7,039	9,046	8,527	16,629
Mar. 14.....	233,319	17,893	63,007	21,662	24,021	12,324	9,996	32,778	10,397	7,039	9,046	8,527	16,629
Mar. 21.....	233,319	17,893	63,007	21,662	24,021	12,324	9,996	32,778	10,397	7,039	9,046	8,527	16,629
Mar. 28.....	233,319	17,893	63,007	21,662	24,021	12,324	9,996	32,778	10,397	7,039	9,046	8,527	16,629
All other liabilities:													
Mar. 7.....	12,224	558	2,982	563	1,435	877	421	2,481	786	829	515	374	403
Mar. 14.....	12,883	630	3,332	568	1,507	862	432	2,530	827	851	523	406	415
Mar. 21.....	13,199	660	3,338	627	1,518	889	437	2,603	834	876	535	396	486
Mar. 28.....	13,857	854	3,378	676	1,606	877	505	2,710	864	876	564	418	529
Total liabilities:													
Mar. 7.....	4,951,016	357,135	1,536,026	346,636	473,416	203,119	255,844	713,115	186,998	135,520	204,361	147,692	391,154
Mar. 14.....	5,060,702	373,711	1,571,828	356,069	487,654	210,125	256,388	724,503	190,416	131,640	204,210	147,728	406,430
Mar. 21.....	4,954,607	363,956	1,536,546	355,308	476,246	204,213	253,238	710,770	183,374	132,916	198,425	143,477	396,138
Mar. 28.....	4,920,951	359,654	1,540,395	343,709	478,301	200,075	250,950	706,028	181,527	131,101	197,690	139,459	392,062

FEDERAL RESERVE BANKS—RESOURCES AND LIABILITIES, BY WEEKS—Continued

LIABILITIES—Continued

[In thousands of dollars]

	Total	Federal Reserve Bank											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
MEMORANDA													
Ratio of total reserves to Federal reserve note and deposit liabilities combined (per cent):													
Mar. 7.....	74.4	65.7	80.7	68.7	71.3	70.3	80.7	77.3	58.0	77.6	68.4	66.8	67.6
Mar. 14.....	74.3	63.7	80.7	65.9	72.4	68.2	82.7	79.0	57.5	75.0	67.2	67.1	68.7
Mar. 21.....	75.1	65.8	84.4	70.5	70.4	69.6	83.5	73.7	58.3	71.2	66.7	69.6	68.3
Mar. 28.....	73.8	59.3	78.4	71.9	72.3	71.6	80.1	76.4	62.4	72.6	67.0	67.7	73.1
Contingent liability on bills purchased for foreign correspondents:													
Mar. 7.....	238,553	17,911	67,082	22,688	24,837	12,180	10,030	33,196	10,269	6,448	8,597	8,359	16,956
Mar. 14.....	239,660	17,911	68,189	22,688	24,837	12,180	10,030	33,196	10,269	6,448	8,597	8,359	16,956
Mar. 21.....	243,975	18,280	68,975	23,155	25,348	12,429	10,237	33,879	10,481	6,581	8,774	8,531	17,305
Mar. 28.....	243,009	18,280	68,008	23,155	25,348	12,430	10,237	33,879	10,481	6,581	8,774	8,531	17,305
Own Federal reserve notes held by Federal reserve bank:													
Mar. 7.....	397,750	25,232	124,049	36,153	33,246	21,298	30,788	43,151	6,449	5,035	7,905	8,177	56,267
Mar. 14.....	396,684	24,776	123,547	32,331	30,966	20,399	32,228	43,714	6,972	5,730	7,767	8,933	59,321
Mar. 21.....	400,104	23,121	119,993	35,512	34,901	21,087	31,343	44,384	7,993	5,629	7,214	8,473	60,454
Mar. 28.....	387,208	21,210	119,833	31,638	29,826	20,221	31,169	43,126	8,064	5,528	7,848	8,685	60,060

FEDERAL RESERVE NOTES—FEDERAL RESERVE AGENTS' ACCOUNTS, BY WEEKS

[In thousands of dollars]

	Total	Federal Reserve Bank											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Federal reserve notes received from comptroller:													
Mar. 7.....	2,866,160	232,935	755,928	187,017	271,055	110,290	235,804	449,623	76,545	81,024	106,101	66,734	293,104
Mar. 14.....	2,850,263	230,769	751,575	183,196	267,120	108,754	236,369	447,692	76,507	80,540	105,173	66,273	296,295
Mar. 21.....	2,840,840	228,312	748,705	181,855	266,018	107,845	234,544	443,530	77,897	80,540	104,343	65,667	301,524
Mar. 28.....	2,823,560	226,541	747,099	177,848	262,841	106,691	234,820	439,979	78,349	79,806	103,544	64,822	301,220
Federal reserve notes held by Federal reserve agent:													
Mar. 7.....	877,040	86,770	285,360	27,295	41,980	26,204	61,590	167,700	17,210	19,039	39,010	21,382	83,500
Mar. 14.....	879,465	86,770	285,360	25,370	41,980	26,204	62,140	168,800	16,950	18,799	39,010	21,382	86,700
Mar. 21.....	875,450	86,170	285,360	22,300	41,980	26,204	60,910	162,900	17,710	18,824	39,010	21,382	92,700
Mar. 28.....	869,300	86,170	285,360	20,100	40,980	26,204	62,200	158,700	18,170	18,624	38,710	21,382	92,700
Federal reserve notes issued to Federal reserve bank:													
Mar. 7.....	1,989,120	146,165	470,568	159,722	229,075	84,086	174,214	281,923	59,335	61,985	67,091	45,352	209,604
Mar. 14.....	1,970,798	143,999	466,215	157,826	225,140	82,550	174,229	278,892	59,557	61,741	66,163	44,891	209,595
Mar. 21.....	1,965,390	142,142	463,345	159,555	224,038	81,641	173,634	280,630	60,187	61,716	65,333	44,285	208,884
Mar. 28.....	1,954,260	140,371	461,739	157,748	221,861	80,487	172,620	281,279	60,179	61,182	64,834	43,440	208,520
Collateral held as security for Federal reserve notes issued to Federal reserve bank:													
Gold and gold certificates—													
Mar. 7.....	414,841	35,300	205,150	-----	42,600	31,021	20,000	-----	9,300	14,167	-----	17,303	40,000
Mar. 14.....	414,840	35,300	205,150	-----	42,600	31,020	20,000	-----	9,300	14,167	-----	17,303	40,000
Mar. 21.....	414,140	35,300	205,150	-----	42,600	31,020	20,000	-----	8,600	14,167	-----	17,303	40,000
Mar. 28.....	414,140	35,300	205,150	-----	42,600	31,020	20,000	-----	8,600	14,167	-----	17,303	40,000
Gold redemption fund—													
Mar. 7.....	90,736	13,348	18,737	10,941	12,462	2,481	7,054	1,629	1,920	1,191	2,804	3,630	14,539
Mar. 14.....	88,454	11,182	18,663	12,119	11,528	3,946	6,400	1,629	1,002	707	3,876	3,168	14,234
Mar. 21.....	91,366	18,725	18,663	8,778	12,426	2,636	4,575	1,566	2,632	1,707	3,046	2,562	14,050
Mar. 28.....	99,152	16,954	18,572	9,771	13,949	6,483	8,951	1,508	1,324	973	4,247	2,718	13,702
Gold fund—													
Mar. 7.....	839,863	38,000	75,000	80,782	105,000	14,000	111,000	225,000	14,500	37,000	48,860	10,000	80,721
Mar. 14.....	865,884	38,000	75,000	86,707	105,000	11,000	116,200	225,000	16,500	37,000	47,860	10,000	97,617
Mar. 21.....	888,387	28,000	105,000	97,777	105,000	11,000	118,000	225,000	17,500	37,000	47,860	10,000	86,250
Mar. 28.....	817,971	28,000	25,000	92,777	105,000	9,500	106,500	225,000	25,500	37,000	45,860	9,000	108,834
Eligible paper—													
Mar. 7.....	792,404	87,921	199,044	68,668	82,971	38,705	36,386	102,333	34,990	11,499	19,903	17,181	92,803
Mar. 14.....	778,352	95,135	192,576	71,890	78,537	38,961	31,756	90,821	34,809	12,270	22,922	16,992	91,683
Mar. 21.....	780,579	89,654	160,750	66,041	84,811	37,771	31,201	122,277	36,170	18,963	24,079	15,949	92,913
Mar. 28.....	839,382	107,815	241,559	60,989	82,618	35,708	37,482	112,849	29,237	16,866	23,237	16,673	74,449
Total collateral:													
Mar. 7.....	2,137,844	174,569	497,931	160,391	243,033	86,207	174,440	328,962	60,710	63,857	71,567	48,114	228,063
Mar. 14.....	2,147,530	179,617	491,389	170,716	237,665	84,927	174,356	317,450	61,611	64,144	74,658	47,463	243,534
Mar. 21.....	2,174,472	171,679	489,563	172,596	244,837	82,427	173,776	348,843	64,902	71,837	74,985	45,814	233,213
Mar. 28.....	2,170,645	188,069	490,281	163,537	244,167	82,711	172,933	339,357	64,661	69,006	73,344	45,594	236,985

MATURITY DISTRIBUTION OF BILLS AND CERTIFICATES OF INDEBTEDNESS HELD BY FEDERAL RESERVE BANKS

[In thousands of dollars]

	Total	Within 15 days	16 to 30 days	31 to 60 days	61 to 90 days	91 days to 6 months	Over 6 months
Bills discounted:							
Mar. 7.....	482, 108	405, 499	18, 266	31, 045	20, 479	4, 530	2, 289
Mar. 14.....	472, 296	399, 259	18, 104	31, 442	15, 152	5, 619	2, 720
Mar. 21.....	476, 978	400, 932	17, 721	32, 557	16, 911	5, 748	3, 059
Mar. 28.....	524, 928	442, 096	18, 829	32, 801	20, 294	5, 698	3, 546
Bills bought in open market:							
Mar. 7.....	338, 495	124, 030	91, 920	92, 079	27, 230	3, 236	-----
Mar. 14.....	343, 326	142, 960	89, 780	75, 281	30, 661	4, 644	-----
Mar. 21.....	332, 728	151, 818	79, 257	64, 963	31, 771	4, 919	-----
Mar. 28.....	346, 103	167, 981	77, 976	58, 788	35, 457	5, 901	-----
Certificates of indebtedness:							
Mar. 7.....	140, 032	14, 630	-----	-----	-----	83, 582	41, 820
Mar. 14.....	148, 659	10, 732	-----	-----	-----	107, 893	30, 034
Mar. 21.....	156, 164	460	-----	-----	5, 820	-----	149, 884
Mar. 28.....	166, 509	509	-----	-----	1, 892	-----	164, 108

GOLD SETTLEMENT FUND—INTERBANK TRANSACTIONS FROM FEBRUARY 16 TO MARCH 21, 1928, INCLUSIVE

[In thousands of dollars]

Federal reserve bank	Transfers for Government account		Transit clearing		Federal reserve note clearing		Changes in ownership of gold through transfers and clearings		Balance in fund at close of period
	Debits	Credits	Debits	Credits	Debits	Credits	Decrease	Increase	
Boston.....	24, 200	-----	1, 196, 932	1, 217, 253	5, 720	3, 462	6, 137	-----	52, 744
New York.....	7, 200	168, 700	4, 162, 878	4, 083, 844	10, 089	18, 392	-----	90, 769	276, 797
Philadelphia.....	26, 500	2, 000	913, 630	960, 478	6, 857	4, 968	-----	20, 459	39, 212
Cleveland.....	27, 000	-----	925, 721	946, 524	9, 571	4, 114	11, 654	-----	39, 844
Richmond.....	19, 000	-----	855, 454	869, 432	2, 824	3, 973	3, 873	-----	23, 499
Atlanta.....	14, 000	-----	399, 997	416, 837	3, 662	4, 843	-----	4, 021	6, 674
Chicago.....	34, 500	3, 000	1, 736, 069	1, 734, 260	8, 710	7, 071	34, 948	-----	120, 652
St. Louis.....	2, 000	3, 500	683, 395	675, 110	2, 282	3, 443	5, 624	-----	19, 741
Minneapolis.....	2, 000	2, 700	215, 646	212, 398	1, 861	1, 357	3, 052	-----	15, 790
Kansas City.....	2, 000	1, 000	527, 165	520, 154	2, 514	2, 741	7, 784	-----	32, 280
Dallas.....	3, 000	500	399, 321	396, 920	1, 740	1, 836	4, 805	-----	20, 134
San Francisco.....	21, 000	1, 000	641, 730	624, 728	3, 008	2, 638	37, 372	-----	37, 195
Total 5 weeks ending—									
Mar. 21, 1928.....	182, 400	182, 400	12, 657, 938	12, 657, 938	58, 838	58, 838	115, 249	115, 249	684, 562
Feb. 15, 1928.....	26, 500	26, 500	12, 616, 160	12, 616, 160	71, 014	71, 014	-----	-----	763, 846
Mar. 23, 1927.....	193, 500	193, 500	11, 758, 216	11, 758, 216	54, 253	54, 253	-----	-----	608, 962
Feb. 16, 1927.....	14, 500	14, 500	11, 175, 318	11, 175, 318	70, 646	70, 646	-----	-----	616, 853

FEDERAL RESERVE BANKS—HOLDINGS OF BILLS DISCOUNTED, BY STATES IN WHICH BORROWING BANKS ARE LOCATED

[End of month figures. In thousands of dollars]

State	1927											1928	
	February	March	April	May	June	July	August	September	October	November	December	January	February
United States.....	469,558	451,183	476,647	459,086	443,450	442,158	400,524	437,425	411,525	477,025	581,503	423,310	492,568
New England:													
Maine.....	1,969	1,781	1,155	1,319	2,300	733	951	2,394	1,808	1,473	909	752	718
New Hampshire.....	1,779	1,644	1,225	2,113	2,231	1,366	927	875	730	636	805	1,112	1,305
Vermont.....	1,370	1,530	1,248	1,041	1,375	1,078	884	783	1,128	649	558	534	698
Massachusetts.....	33,330	40,281	16,966	45,293	35,360	33,511	28,760	25,520	20,388	33,404	24,314	33,751	49,918
Rhode Island.....	93	394	30	4,263	487	1,304	2,047	1,772	787	552	304	102	396
Connecticut.....	4,004	5,088	3,443	3,005	4,354	3,343	4,439	2,530	2,504	3,096	3,083	2,196	3,260
Middle Atlantic:													
New York.....	120,431	53,083	127,888	72,497	73,559	76,794	84,443	104,472	83,170	129,769	266,687	103,025	69,063
New Jersey.....	22,226	24,434	25,012	24,989	25,548	30,156	24,924	25,258	22,225	22,140	19,150	19,923	19,642
Pennsylvania.....	48,122	80,587	57,341	77,521	66,089	49,741	45,242	51,733	46,622	57,920	104,217	59,006	83,277
East North Central:													
Ohio.....	15,860	17,136	17,458	15,633	20,777	21,992	13,485	21,483	24,403	15,868	15,535	12,783	34,405
Indiana.....	7,890	4,302	3,522	4,055	4,975	5,189	3,321	3,545	3,577	1,686	3,115	3,587	6,209
Illinois.....	29,492	51,134	24,408	26,334	18,996	19,662	9,712	17,639	25,266	23,797	14,203	15,356	18,645
Michigan.....	31,267	20,585	11,122	14,864	24,644	18,445	13,751	10,691	21,582	27,696	27,331	17,884	23,093
Wisconsin.....	7,103	9,228	9,030	8,980	11,008	7,513	4,679	3,944	4,132	3,320	6,658	2,735	12,932
West North Central:													
Minnesota.....	2,669	3,772	3,754	3,471	876	1,547	3,461	1,416	1,033	2,375	722	2,408	2,895
Iowa.....	6,532	5,303	6,280	5,810	3,463	3,509	2,913	2,888	4,555	6,870	4,023	4,586	3,772
Missouri.....	9,621	17,137	17,232	23,104	27,646	17,141	17,850	16,947	9,913	11,837	11,475	16,228	20,277
North Dakota.....	826	791	1,082	1,199	1,171	1,554	1,761	830	427	312	319	472	369
South Dakota.....	929	953	1,037	1,095	1,262	1,479	1,283	794	570	695	640	619	508
Nebraska.....	3,252	2,434	7,467	6,745	2,289	1,674	1,310	1,697	5,167	9,119	4,705	4,182	2,940
Kansas.....	1,312	1,493	2,078	2,927	2,314	1,794	1,338	1,417	3,639	2,980	1,246	1,199	1,061
South Atlantic:													
Delaware.....	644	857	813	949	836	646	532	317	711	783	474	620	719
Maryland.....	5,126	2,545	3,163	4,342	8,629	2,742	1,477	5,150	5,547	7,098	5,498	11,744	5,315
District of Columbia.....	438	1,070	1,020	704	81	485	115	1,315	1,465	500	920	320	320
Virginia.....	6,269	5,167	6,491	7,349	5,278	5,002	7,520	11,267	11,289	5,877	11,894	9,297	11,868
West Virginia.....	2,317	2,134	2,984	2,954	3,441	2,281	2,455	3,227	2,497	1,631	5,363	3,367	2,710
North Carolina.....	4,586	5,758	6,484	7,447	6,338	6,802	7,856	6,977	5,293	2,429	1,998	4,738	7,602
South Carolina.....	4,576	4,612	4,242	2,636	2,030	2,800	2,607	1,529	1,323	1,671	1,425	2,172	2,610
Georgia.....	4,461	5,332	5,374	5,505	6,571	5,882	6,457	5,467	4,722	6,575	3,582	4,013	5,229
Florida.....	4,982	3,448	2,441	1,955	1,817	2,504	3,445	4,142	4,406	3,502	2,619	1,799	1,946
East South Central:													
Kentucky.....	3,112	2,500	4,231	2,283	7,799	8,199	6,593	9,575	9,667	6,911	6,663	2,177	3,587
Tennessee.....	5,537	3,057	3,033	3,633	2,314	4,028	5,276	6,879	3,914	3,096	2,845	1,842	2,803
Alabama.....	5,507	7,514	8,557	7,139	6,107	6,177	5,310	3,670	2,830	5,380	2,411	4,641	4,961
Mississippi.....	1,573	1,382	1,869	2,520	2,189	3,045	4,028	3,725	1,945	1,563	1,239	1,225	1,639
West South Central:													
Arkansas.....	1,277	1,283	1,185	1,542	1,353	2,343	3,306	4,550	2,332	2,001	210	2,688	12,926
Louisiana.....	10,100	12,146	19,688	13,961	11,125	20,169	12,612	8,736	11,156	21,557	16,620	13,853	1,661
Oklahoma.....	1,095	1,546	1,787	2,094	2,316	1,995	2,583	4,695	2,388	1,245	688	1,325	1,949
Texas.....	2,827	3,130	3,531	5,147	5,481	9,393	12,574	4,767	10,323	6,436	848	4,960	39
Mountain:													
Montana.....	115	165	303	534	604	761	768	393	79	30	21	41	234
Idaho.....	540	604	770	1,184	1,217	1,582	1,328	779	551	351	161	199	199
Wyoming.....	71	48	87	152	192	278	427	230	104	48	48	48	2,561
Colorado.....	1,501	1,325	1,702	2,729	1,503	3,568	1,366	1,388	1,938	1,282	1,018	1,542	124
New Mexico.....	105	146	144	96	170	258	186	200	99	10	10	129	183
Arizona.....	323	175	198	534	240	346	389	325	284	180	190	164	368
Utah.....	753	541	1,938	1,719	995	2,201	1,977	1,171	952	198	168	255	255
Nevada.....													
Pacific:													
Washington.....	2,304	1,782	855	2,116	1,946	3,271	2,421	1,613	2,254	1,788	330	1,543	1,317
Oregon.....	4,957	4,254	2,332	1,850	1,684	1,811	672	492	875	247	393	958	1,948
California.....	44,385	35,572	52,647	29,754	30,470	44,064	38,763	46,218	38,955	38,490	3,978	45,210	60,869

ALL MEMBER BANKS—DEPOSITS, BY SIZE OF CITY, MARCH 7, 1928

[In thousands of dollars]

Federal reserve district or State	Net demands deposits					Time deposits				
	In places having a population of—				Total	In places having a population of—				Total
	Less than 5,000	5,000 to 15,000	15,000 to 100,000	100,000 and over		Less than 5,000	5,000 to 15,000	15,000 to 100,000	100,000 and over	
United States.....	1,689,669	1,148,259	2,362,893	13,902,990	19,103,811	1,948,655	1,315,611	2,518,876	7,271,436	13,054,578
DISTRICT										
Boston.....	46,213	73,341	205,087	1,082,797	1,407,438	74,347	98,681	220,491	594,083	987,602
New York.....	206,629	124,256	318,938	6,352,701	7,002,524	399,524	205,810	543,680	1,790,222	2,939,236
Philadelphia.....	139,773	72,561	151,663	829,877	1,193,874	299,658	151,165	277,979	339,228	1,068,030
Cleveland.....	139,899	129,022	193,451	1,066,574	1,528,946	216,982	167,609	244,908	991,574	1,621,073
Richmond.....	95,009	69,302	172,653	277,234	614,198	154,645	101,630	169,345	176,675	602,295
Atlanta.....	88,127	79,133	207,353	246,435	621,048	66,607	70,469	182,527	146,154	465,757
Chicago.....	195,294	134,002	412,739	1,866,315	2,608,350	254,838	187,378	451,038	1,277,914	2,171,168
St. Louis.....	102,597	73,873	98,151	467,108	741,729	93,947	60,286	89,286	298,300	541,819
Minneapolis.....	104,982	86,154	81,241	189,594	461,971	153,239	112,930	84,180	107,693	458,042
Kansas City.....	213,250	121,326	239,532	324,836	898,944	99,462	64,613	97,927	97,631	359,633
Dallas.....	210,675	107,243	137,085	255,429	710,432	21,105	32,593	57,402	82,719	193,819
San Francisco.....	147,221	78,046	145,000	944,090	1,314,357	114,301	62,447	100,113	1,369,243	1,646,104
STATE										
New England:										
Maine.....	11,105	6,399	26,439	-----	43,943	36,592	28,339	44,257	-----	109,188
New Hampshire.....	8,440	12,041	16,919	-----	37,400	6,606	6,979	7,884	-----	21,469
Vermont.....	6,588	8,284	2,333	-----	17,205	17,946	18,701	2,170	-----	38,817
Massachusetts.....	11,803	34,295	118,154	861,048	1,025,300	7,785	35,198	128,268	381,478	552,729
Rhode Island.....	1,011	-----	3,494	126,270	130,775	6	-----	6,495	184,784	191,285
Connecticut.....	9,594	12,322	47,639	109,205	178,760	8,466	9,464	43,342	42,581	103,843
Middle Atlantic:										
New York.....	153,283	62,398	194,505	6,067,791	6,477,977	293,792	125,998	330,893	1,538,735	2,289,418
New Jersey.....	76,815	80,309	131,230	321,383	609,737	140,411	105,325	220,472	277,820	744,028
Pennsylvania.....	163,315	108,289	206,518	1,200,514	1,678,636	367,076	230,789	373,177	491,270	1,462,312
East North Central:										
Ohio.....	62,099	63,295	94,650	609,529	829,573	77,176	54,449	102,746	793,755	1,028,126
Indiana.....	30,274	27,829	85,736	61,696	205,535	30,182	24,758	93,048	23,633	171,621
Illinois.....	91,846	61,028	154,892	1,310,053	1,617,819	94,794	70,398	118,215	685,425	968,832
Michigan.....	38,070	44,890	93,008	340,585	516,553	87,300	96,485	148,497	489,711	821,993
Wisconsin.....	24,227	23,397	63,926	120,656	232,206	50,506	41,439	70,658	69,313	231,916
West North Central:										
Minnesota.....	36,745	23,936	31,853	189,594	282,128	76,235	36,102	31,267	107,693	251,297
Iowa.....	62,033	22,889	70,780	33,325	189,027	62,618	26,319	84,819	9,832	183,588
Missouri.....	24,374	17,385	36,863	512,480	591,102	16,430	10,491	15,294	235,537	277,752
North Dakota.....	20,476	9,885	6,364	-----	36,725	24,768	10,973	6,463	-----	42,204
South Dakota.....	20,615	12,173	6,248	-----	39,036	17,840	9,638	2,345	-----	29,823
Nebraska.....	32,146	14,029	18,199	68,993	133,367	24,973	8,408	3,690	15,171	52,242
Kansas.....	51,714	35,256	51,894	7,931	146,795	24,091	16,983	15,732	3,158	59,964
South Atlantic:										
Delaware.....	3,330	-----	-----	36,209	39,539	9,795	-----	-----	4,684	14,479
Maryland.....	16,729	6,145	3,620	103,486	129,980	41,125	18,106	12,023	77,536	148,790
District of Columbia.....	-----	-----	-----	82,745	82,745	-----	-----	-----	44,647	44,647
Virginia.....	27,104	15,376	34,162	91,003	167,645	53,631	25,442	41,754	54,492	175,319
West Virginia.....	31,247	9,755	48,437	-----	89,439	36,679	12,466	44,639	-----	93,784
North Carolina.....	16,264	27,894	68,163	-----	112,321	18,987	29,312	43,492	-----	91,791
South Carolina.....	7,473	10,505	26,910	-----	44,888	10,129	16,623	39,208	-----	65,960
Georgia.....	16,618	13,184	45,401	54,848	130,051	11,583	13,435	39,410	42,237	106,665
Florida.....	26,022	22,188	75,324	-----	123,534	17,068	16,637	71,569	-----	105,274
East South Central:										
Kentucky.....	36,526	19,609	23,701	78,406	158,242	32,925	13,369	23,523	52,251	122,068
Tennessee.....	19,707	10,597	36,032	70,652	136,988	21,947	7,993	38,654	53,202	121,796
Alabama.....	25,436	11,018	36,846	45,518	118,818	15,064	12,368	22,130	26,233	75,795
Mississippi.....	4,929	22,339	14,703	-----	41,971	3,049	17,448	14,042	-----	34,539
West South Central:										
Arkansas.....	22,412	12,833	34,826	-----	70,071	15,808	7,359	27,842	-----	51,009
Louisiana.....	5,798	12,739	23,046	117,814	159,397	3,776	8,164	9,051	54,445	75,436
Oklahoma.....	86,223	37,826	122,142	-----	246,191	24,807	15,779	54,807	-----	95,393
Texas.....	196,914	96,237	113,722	255,429	662,302	16,906	28,481	45,810	82,719	173,916
Mountain:										
Montana.....	15,504	22,787	25,189	-----	63,480	10,148	17,598	24,379	-----	52,125
Idaho.....	14,198	11,514	8,773	-----	34,485	6,858	7,892	-----	-----	22,238
Wyoming.....	7,981	13,293	-----	-----	21,274	5,353	9,693	-----	-----	15,046
Colorado.....	30,650	14,456	15,402	81,737	142,245	17,762	11,373	10,391	59,851	99,377
New Mexico.....	8,734	8,147	5,461	-----	22,342	2,112	2,203	3,759	-----	8,074
Arizona.....	3,492	2,956	23,207	-----	29,655	1,975	2,079	11,135	-----	15,189
Utah.....	7,037	3,607	5,149	33,583	49,376	7,230	4,517	1,814	19,638	33,199
Nevada.....	3,951	4,268	-----	-----	8,219	5,043	2,639	-----	-----	7,682
Pacific:										
Washington.....	30,639	14,888	26,887	116,768	189,182	27,542	9,032	24,514	72,382	133,470
Oregon.....	32,399	18,287	2,577	62,884	116,147	19,673	15,119	1,498	64,628	100,918
California.....	55,779	25,482	81,569	730,855	893,685	45,467	24,282	55,808	1,212,595	1,338,152

WEEKLY REPORTING MEMBER BANKS
REPORTING MEMBER BANKS IN LEADING CITIES

PRINCIPAL RESOURCES AND LIABILITIES BY WEEKS

[In thousands of dollars]

	Total	Federal Reserve District											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Loans and investments—total:													
Mar. 7.....	21,682,243	1,521,138	8,249,171	1,214,810	2,146,235	685,479	605,171	3,165,121	723,515	382,205	662,093	436,013	1,891,292
Mar. 14.....	21,864,012	1,554,782	8,368,534	1,216,119	2,142,623	687,037	609,235	3,173,688	723,510	385,682	665,833	436,680	1,900,239
Mar. 21.....	21,924,746	1,582,582	8,307,289	1,222,226	2,174,967	689,707	618,862	3,194,704	724,022	388,230	669,229	446,600	1,906,328
Mar. 28.....	22,021,588	1,582,897	8,428,656	1,226,111	2,180,602	688,403	623,117	3,174,507	719,552	386,144	666,736	444,569	1,900,294
Loans and discounts—total:													
Mar. 7.....	15,153,148	1,052,632	5,773,893	793,475	1,436,453	514,957	485,806	2,264,662	506,897	250,782	440,346	336,391	1,296,854
Mar. 14.....	15,325,701	1,086,909	5,886,738	800,350	1,429,835	515,327	490,368	2,277,222	506,604	253,094	443,485	337,021	1,298,748
Mar. 21.....	15,270,210	1,094,847	5,839,795	804,954	1,432,162	511,942	488,879	2,276,378	504,272	254,237	440,273	337,787	1,284,684
Mar. 28.....	15,409,779	1,096,583	5,981,794	810,370	1,430,846	511,922	494,278	2,275,045	499,380	251,948	439,521	336,509	1,281,533
Secured by U. S. Government obligations—													
Mar. 7.....	138,875	4,702	58,804	8,211	15,369	3,068	5,583	25,038	4,224	2,364	3,582	3,383	4,547
Mar. 14.....	143,630	4,580	62,606	8,851	15,004	3,158	5,463	26,148	4,183	2,179	3,540	3,440	4,478
Mar. 21.....	122,235	5,349	42,432	8,212	15,207	3,298	5,437	24,344	4,126	2,451	3,603	3,494	4,312
Mar. 28.....	143,840	5,459	64,857	8,142	15,151	3,124	5,458	23,876	4,081	2,469	3,581	3,481	4,161
Secured by stocks and bonds—													
Mar. 7.....	6,282,854	392,989	2,695,875	430,806	645,962	161,815	120,661	992,223	201,747	75,526	131,622	87,692	345,936
Mar. 14.....	6,382,688	418,153	2,766,492	436,290	637,967	161,555	122,246	985,787	199,246	76,353	135,031	88,683	354,885
Mar. 21.....	6,334,274	424,539	2,708,411	440,844	641,446	159,753	119,817	996,467	199,156	75,774	135,134	86,448	346,485
Mar. 28.....	6,443,710	424,852	2,812,902	449,960	640,759	159,901	121,750	999,362	196,282	73,749	133,877	85,657	344,659
All other loans and discounts—													
Mar. 7.....	8,731,419	654,941	3,019,214	354,458	775,122	350,074	359,562	1,247,401	300,926	172,892	305,142	245,316	946,371
Mar. 14.....	8,799,383	664,176	3,057,640	355,209	776,864	350,614	362,659	1,265,287	303,175	174,562	304,914	244,898	939,385
Mar. 21.....	8,813,701	664,959	3,088,952	355,898	775,479	348,891	363,625	1,255,567	300,990	176,012	301,536	247,905	933,887
Mar. 28.....	8,822,229	666,272	3,104,035	352,268	774,936	348,897	367,070	1,251,807	299,017	175,730	302,063	247,371	932,763
Investments—total:													
Mar. 7.....	6,523,095	468,506	2,475,278	421,335	709,782	170,522	119,365	900,459	216,618	131,423	221,747	99,622	594,438
Mar. 14.....	6,538,311	467,873	2,481,796	415,769	712,788	171,710	118,867	896,466	216,906	132,588	222,398	99,659	601,491
Mar. 21.....	6,654,536	487,735	2,467,494	417,272	742,905	177,765	129,983	918,326	219,750	133,993	228,956	108,813	621,644
Mar. 28.....	6,611,809	486,314	2,446,862	415,741	749,756	176,481	128,839	899,462	220,172	134,196	227,215	108,060	618,711
United States Government securities—													
Mar. 7.....	2,922,206	170,161	1,188,790	112,922	309,388	72,564	53,735	367,089	83,689	69,348	104,968	70,104	319,448
Mar. 14.....	2,911,590	163,988	1,187,463	107,797	309,682	73,443	54,061	361,852	84,015	69,284	105,290	70,055	324,660
Mar. 21.....	3,016,681	182,555	1,191,352	108,202	323,454	78,233	63,974	383,208	86,149	70,465	109,345	78,492	341,257
Mar. 28.....	2,972,853	182,085	1,172,200	108,652	333,031	78,019	63,466	356,559	85,916	70,218	106,040	77,398	339,269
Other bonds, stocks, and securities—													
Mar. 7.....	3,606,889	298,345	1,286,488	308,413	400,394	97,958	65,630	533,370	132,929	62,075	116,779	29,518	274,990
Mar. 14.....	3,626,721	303,885	1,294,333	307,972	403,106	98,267	64,806	534,614	132,891	63,304	117,108	29,604	276,831
Mar. 21.....	3,637,855	305,180	1,276,142	309,070	419,351	99,532	66,009	535,123	133,601	63,528	119,611	30,321	280,387
Mar. 28.....	3,638,956	304,229	1,274,662	307,089	416,725	98,462	65,373	542,903	134,256	63,978	121,175	30,662	279,442
Reserve balances with Federal reserve bank:													
Mar. 7.....	1,742,905	99,616	814,382	81,394	128,880	42,758	42,544	259,157	48,615	26,957	57,783	34,660	106,159
Mar. 14.....	1,735,951	106,419	797,487	81,209	125,717	42,111	41,684	261,409	50,090	25,075	58,796	35,037	110,917
Mar. 21.....	1,707,746	105,850	781,704	84,162	127,138	41,447	40,465	254,064	47,847	25,778	57,051	31,950	110,290
Mar. 28.....	1,743,475	100,673	821,310	78,987	129,385	41,594	40,328	251,796	47,283	26,157	58,902	34,022	113,038
Cash in vault:													
Mar. 7.....	247,671	18,920	66,236	13,973	30,000	13,069	11,085	39,907	7,277	5,488	11,351	9,199	21,166
Mar. 14.....	248,115	18,967	65,664	14,508	29,730	11,891	11,510	40,077	7,375	5,621	11,885	8,916	21,971
Mar. 21.....	242,261	18,784	63,773	14,674	30,063	11,810	10,985	39,338	7,092	5,500	11,150	8,643	20,449
Mar. 28.....	242,495	18,873	63,745	14,230	28,604	12,138	11,302	39,311	7,038	5,679	11,722	8,781	21,022
Net demand deposits:													
Mar. 7.....	13,637,592	933,047	6,079,431	771,892	1,038,185	371,723	340,086	1,864,841	411,578	235,075	512,141	307,697	771,896
Mar. 14.....	13,793,512	937,396	6,187,725	763,430	1,032,273	373,280	347,806	1,874,351	414,501	235,073	511,296	308,186	808,195
Mar. 21.....	13,448,683	935,785	5,963,586	786,264	1,025,850	365,273	332,894	1,820,169	398,801	229,644	504,284	299,622	786,511
Mar. 28.....	13,509,686	926,507	6,044,862	762,189	1,032,036	365,912	334,166	1,821,726	400,885	230,539	503,391	298,295	789,178
Time deposits:													
Mar. 7.....	6,675,744	493,242	1,586,451	289,666	947,537	247,322	239,596	1,224,269	247,994	133,473	168,076	117,393	980,725
Mar. 14.....	6,700,584	520,419	1,584,036	287,983	953,102	246,274	238,507	1,227,562	248,354	133,433	168,090	117,409	975,415
Mar. 21.....	6,750,524	521,259	1,612,872	287,970	967,502	246,681	239,209	1,236,887	249,115	133,590	168,089	118,343	966,016
Mar. 28.....	6,777,752	531,276	1,643,960	295,140	966,751	247,361	239,062	1,224,381	248,799	133,707	169,062	118,225	960,028
Government deposits:													
Mar. 7.....	10,342	915	3,482	904	1,046	366	531	902	195	67	225	575	1,134
Mar. 14.....	10,343	915	3,482	903	1,056	360	531	902	195	65	225	575	1,134
Mar. 21.....	281,446	21,033	94,436	15,772	20,682	9,585	21,234	32,650	7,159	3,456	7,004	12,098	36,337
Mar. 28.....	280,793	21,033	94,436	15,772	20,682	9,585	21,234	32,650	7,159	2,803	7,004	12,098	36,337

REPORTING MEMBER BANKS IN LEADING CITIES—Continued

PRINCIPAL RESOURCES AND LIABILITIES BY WEEKS—Continued

[In thousands of dollars]

	Total	Federal Reserve District											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Due from banks:													
Mar. 7.....	1,143,386	50,191	136,402	53,475	90,613	54,226	76,089	222,127	53,736	52,539	125,533	63,078	165,377
Mar. 14.....	1,194,120	57,902	148,606	54,061	98,829	52,741	77,811	253,441	53,802	52,316	126,469	60,224	157,918
Mar. 21.....	1,171,857	47,779	158,559	75,056	98,112	50,468	73,893	227,212	52,066	45,889	116,122	55,718	170,983
Mar. 28.....	1,143,175	50,032	157,488	60,540	100,406	51,850	71,325	228,943	50,851	42,649	118,521	53,933	156,637
Due to banks:													
Mar. 7.....	3,630,959	155,443	1,394,906	171,083	251,532	114,352	126,015	551,399	146,776	112,500	247,368	112,217	247,368
Mar. 14.....	3,595,546	153,795	1,424,604	174,318	251,924	109,753	124,461	540,228	138,206	110,170	236,704	104,031	227,352
Mar. 21.....	3,435,444	151,998	1,350,734	175,347	238,035	109,164	119,225	520,176	130,699	107,979	219,754	98,835	213,498
Mar. 28.....	3,435,386	146,752	1,369,713	172,231	231,588	104,351	117,972	520,998	129,890	104,901	217,303	93,957	225,730
Borrowings from Federal reserve bank—total:													
Mar. 7.....	359,854	31,959	101,303	22,603	45,030	13,654	15,419	44,685	16,987	-----	3,104	2,028	63,082
Mar. 14.....	351,895	34,435	88,115	31,731	43,833	17,590	11,441	35,704	17,555	-----	6,400	2,206	62,885
Mar. 21.....	353,201	30,674	60,109	25,497	46,447	16,529	10,594	69,663	20,904	3,500	7,495	1,459	60,330
Mar. 28.....	382,800	40,282	129,227	23,376	41,998	14,108	10,851	53,189	13,761	2,354	7,354	2,226	44,074
Secured by U. S. Government obligations—													
Mar. 7.....	228,967	13,953	73,475	13,961	25,409	2,670	2,807	32,215	6,140	-----	1,100	1,257	55,980
Mar. 14.....	229,976	13,788	69,525	21,145	26,074	3,075	1,308	28,388	6,213	-----	3,400	300	56,760
Mar. 21.....	224,817	13,386	41,975	16,341	22,536	3,560	3,074	57,258	8,343	3,500	4,345	100	50,399
Mar. 28.....	248,413	11,356	98,341	15,920	22,830	2,714	1,504	39,335	7,868	2,300	3,950	350	41,945
All other—													
Mar. 7.....	130,887	18,006	27,828	8,642	19,621	10,984	12,612	12,470	10,847	-----	2,004	771	7,102
Mar. 14.....	121,919	20,647	18,590	10,586	17,759	14,515	10,133	7,316	11,342	-----	3,000	1,906	6,125
Mar. 21.....	128,384	17,288	18,134	9,156	23,911	12,969	7,520	12,405	12,561	-----	3,150	1,359	9,981
Mar. 28.....	134,387	28,926	30,886	7,466	19,168	11,394	9,347	13,854	5,893	54	3,404	1,876	2,129
Number of reporting banks:													
Mar. 7.....	650	36	82	50	71	66	33	92	30	24	65	45	56
Mar. 14.....	649	36	81	50	71	66	33	92	30	24	65	45	56
Mar. 21.....	648	36	80	50	71	66	33	92	30	24	65	45	56
Mar. 28.....	649	36	80	51	71	66	33	92	30	24	65	45	56

REPORTING MEMBER BANKS IN FEDERAL RESERVE BANK CITIES¹

PRINCIPAL RESOURCES AND LIABILITIES, BY WEEKS

[In thousands of dollars]

	Total	City												
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco	
Loans and investments:														
Mar. 7.....	13,777,132	1,015,458	7,066,087	1,041,389	791,554	115,877	92,396	1,978,803	448,143	185,739	184,914	119,359	737,413	
Mar. 14.....	13,940,609	1,049,808	7,184,130	1,041,555	788,421	115,544	97,346	1,981,602	447,821	187,148	185,315	121,343	740,576	
Mar. 21.....	13,920,384	1,077,780	7,110,373	1,044,800	791,089	115,512	101,336	1,992,329	450,430	190,049	184,814	127,276	734,596	
Mar. 28.....	14,017,341	1,078,640	7,230,740	1,042,161	790,175	115,714	104,599	1,978,838	447,105	188,236	183,100	127,475	730,558	
Loans:														
Mar. 7.....	9,966,251	790,642	5,048,966	691,364	618,858	94,052	64,652	1,474,534	320,333	124,304	119,558	91,203	527,785	
Mar. 14.....	10,126,210	826,919	5,160,052	696,945	613,175	93,945	69,678	1,483,929	320,247	125,517	119,740	93,291	522,772	
Mar. 21.....	10,068,783	835,452	5,109,998	699,888	610,478	92,335	67,534	1,482,574	321,576	125,323	117,498	94,759	511,368	
Mar. 28.....	10,211,251	837,963	5,251,137	698,660	612,119	92,685	71,203	1,481,765	317,833	123,485	119,065	95,589	509,747	
On securities—														
Mar. 7.....	4,492,853	283,254	2,382,268	382,870	232,879	23,703	17,535	774,747	145,733	34,248	36,141	21,417	158,058	
Mar. 14.....	4,579,777	309,246	2,454,976	388,637	224,805	23,025	18,157	765,566	142,972	34,673	36,247	21,519	159,954	
Mar. 21.....	4,508,959	316,554	2,375,467	390,213	223,528	23,513	17,160	769,774	143,689	34,870	36,051	21,542	152,598	
Mar. 28.....	4,641,796	318,110	2,503,514	392,777	223,301	24,066	19,333	774,021	140,535	33,282	36,826	21,600	154,411	
All other—														
Mar. 7.....	5,473,398	507,388	2,666,698	308,494	385,979	70,349	47,117	699,787	174,600	90,056	83,417	69,786	369,727	
Mar. 14.....	5,546,433	517,673	2,705,076	308,308	388,370	70,920	51,521	718,363	177,275	90,844	83,493	71,772	362,818	
Mar. 21.....	5,559,824	518,898	2,734,531	309,675	386,950	68,822	50,374	712,800	177,887	90,453	81,447	73,217	354,770	
Mar. 28.....	5,569,455	519,853	2,747,623	305,883	388,818	68,599	51,870	707,744	177,298	90,203	82,239	73,989	355,336	
Investments:														
Mar. 7.....	3,810,881	224,816	2,017,121	350,025	172,696	21,825	27,744	504,269	127,810	61,435	65,356	28,156	209,628	
Mar. 14.....	3,814,399	222,889	2,024,078	344,610	175,246	21,599	27,668	497,673	127,574	61,631	65,575	28,052	217,804	
Mar. 21.....	3,851,601	242,328	2,000,375	344,912	180,611	23,177	33,802	509,755	128,854	64,726	67,316	32,517	223,228	
Mar. 28.....	3,806,090	240,677	1,979,603	343,501	178,056	23,029	33,396	497,073	129,272	64,751	64,035	31,886	220,811	
Reserve with Federal reserve bank:														
Mar. 7.....	1,243,567	76,283	747,254	72,990	41,103	8,114	7,431	183,211	30,491	14,123	17,276	9,807	35,484	
Mar. 14.....	1,233,929	80,624	729,592	73,110	39,193	7,749	6,969	187,178	31,776	12,423	16,890	9,858	38,567	
Mar. 21.....	1,214,094	82,461	717,451	74,113	40,466	7,461	6,453	177,505	30,618	13,037	16,902	9,284	38,343	
Mar. 28.....	1,251,070	78,105	757,352	69,710	42,033	7,239	6,595	177,031	29,921	13,777	18,303	9,563	41,441	
Cash in vault:														
Mar. 7.....	113,234	8,329	51,833	11,351	8,710	801	1,101	17,057	3,545	1,695	2,113	1,366	5,333	
Mar. 14.....	114,998	8,318	52,006	11,813	9,349	747	1,168	16,864	3,569	1,857	2,334	1,291	5,682	
Mar. 21.....	110,788	8,304	49,955	11,884	8,546	745	1,107	16,771	3,290	1,652	2,080	1,310	5,144	
Mar. 28.....	110,567	8,123	50,182	11,567	8,444	839	1,142	16,391	3,310	1,772	2,181	1,278	5,338	
Net demand deposits:														
Mar. 7.....	9,454,374	688,668	5,481,802	681,191	265,206	66,644	53,878	1,283,893	268,589	118,709	167,551	86,031	294,212	
Mar. 14.....	9,554,740	694,355	5,576,679	670,229	263,778	64,326	57,034	1,274,895	269,973	118,609	164,492	87,919	312,451	
Mar. 21.....	9,259,988	697,261	5,358,916	665,465	258,218	63,026	52,712	1,242,045	261,354	114,682	159,077	86,489	300,743	
Mar. 28.....	9,371,910	692,198	5,451,253	657,405	268,614	64,744	54,035	1,245,713	263,580	116,377	159,059	86,705	312,227	
Time deposits:														
Mar. 7.....	3,316,666	258,652	1,061,567	226,048	494,480	33,860	37,296	658,414	140,482	60,305	20,124	21,057	304,381	
Mar. 14.....	3,345,032	285,043	1,060,160	225,042	497,058	33,908	37,273	661,403	140,825	60,234	19,497	20,972	307,917	
Mar. 21.....	3,373,442	288,682	1,084,050	224,950	499,063	33,736	37,358	668,659	140,028	60,523	19,487	20,761	296,145	
Mar. 28.....	3,396,275	293,414	1,114,310	231,920	492,592	34,007	37,311	656,125	140,036	60,567	19,828	20,733	293,432	
Government deposits:														
Mar. 7.....	7,421	877	3,161	870	348	45	125	516	157	26	157	345	794	
Mar. 14.....	7,441	877	3,161	869	369	45	125	516	157	26	157	345	794	
Mar. 21.....	201,259	20,145	84,855	15,345	6,222	1,947	6,176	21,934	6,247	2,009	4,872	7,377	23,230	
Mar. 28.....	200,606	20,145	84,855	15,345	6,222	1,947	6,176	21,934	6,247	2,256	4,872	7,377	23,230	
Dues from banks:														
Mar. 7.....	521,603	35,438	98,845	47,500	20,934	5,820	11,312	139,514	30,587	20,172	31,618	18,038	61,825	
Mar. 14.....	556,497	41,311	100,087	49,112	22,943	5,880	12,033	161,374	31,432	22,420	33,008	17,340	59,557	
Mar. 21.....	563,582	34,610	120,797	49,933	24,722	6,226	11,117	152,123	29,632	18,953	31,030	17,371	67,068	
Mar. 28.....	550,020	35,581	120,342	54,807	23,692	5,543	9,004	150,327	27,857	17,351	31,505	15,114	58,897	
Due to banks:														
Mar. 7.....	2,544,700	144,432	1,326,879	163,919	60,296	30,650	17,755	395,934	82,968	63,671	96,150	32,410	129,636	
Mar. 14.....	2,539,260	142,626	1,357,391	167,261	63,336	28,124	16,802	382,949	78,665	62,055	93,307	30,284	116,460	
Mar. 21.....	2,423,645	141,536	1,283,237	165,698	61,385	28,745	15,423	366,556	75,682	61,835	83,441	29,699	110,408	
Mar. 28.....	2,430,747	136,797	1,303,108	162,016	59,612	26,497	15,128	369,080	74,355	59,755	84,602	27,792	112,005	
Borrowings from Federal reserve bank:														
Mar. 7.....	240,691	30,719	79,625	18,209	17,984	3,328	652	14,807	13,962	.....	1,315	540	59,550
Mar. 14.....	243,904	32,900	66,685	27,772	13,909	5,158	920	19,704	12,763	.....	3,217	1,078	59,798
Mar. 21.....	236,951	29,257	44,300	23,438	17,009	4,497	2,475	37,965	14,913	3,500	3,197	.....	56,400
Mar. 28.....	260,866	37,710	108,079	20,473	10,573	2,675	398	27,825	8,723	1,400	2,660	.....	40,350

¹ Total number of reporting member banks Mar. 23, 213; Boston, 17; New York, 47; Philadelphia, 39; Cleveland, 8; Richmond, 8; Atlanta, 5; Chicago, 43; St. Louis, 12; Minneapolis, 5; Kansas City, 13; Dallas, 7; San Francisco, 9. Changes since Feb. 29: New York City—decrease of 2 banks, 1 in week ending Mar. 4, 1 in week ending Mar. 21; Philadelphia—increase of 1 bank in week ending Mar. 28.

LAND BANKS AND INTERMEDIATE CREDIT BANKS

LOANS OF FEDERAL AND JOINT-STOCK LAND BANKS

[In thousands of dollars]

Date	Net amount of loans outstanding		
	Total	Federal land banks (12 banks)	Joint-stock land banks (54 banks)
1926			
May 31.....	1,632,413	1,038,385	594,028
June 30.....	1,644,105	1,043,955	600,150
July 31.....	1,653,902	1,048,184	605,718
Aug. 31.....	1,664,130	1,053,336	610,794
Sept. 30.....	1,671,856	1,057,217	614,639
Oct. 31.....	1,682,273	1,063,056	619,217
Nov. 30.....	1,692,826	1,068,596	624,230
Dec. 31.....	1,710,295	1,077,819	632,476
1927			
Jan. 31.....	1,724,821	1,085,170	639,651
Feb. 28.....	1,745,404	1,097,642	647,762
Mar. 31.....	1,765,365	1,109,354	656,011
Apr. 30.....	1,732,395	1,117,914	614,481
May 31.....	1,741,275	1,124,055	617,220
June 30.....	1,738,165	1,130,648	607,517
July 31.....	1,742,575	1,134,896	607,679
Aug. 31.....	1,749,393	1,139,502	609,891
Sept. 30.....	1,752,665	1,143,130	609,535
Oct. 31.....	1,757,185	1,147,135	610,050
Nov. 30.....	1,758,834	1,150,943	607,891
Dec. 31.....	1,765,121	1,155,644	609,477
1928			
Jan. 31.....	1,767,515	1,158,717	608,798
Feb. 29.....	1,778,338	1,168,354	609,984

LOANS OF INTERMEDIATE CREDIT BANKS

[In thousands of dollars]

Class of loan	1928					1927
	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31	Mar. 26
Direct loans outstanding on—						
Cotton.....	13,407	12,957	11,732	11,567	11,266	17,121
Tobacco.....	3,414	3,227	3,196	3,080	3,057	6,072
Wheat.....	1,942	1,785	1,578	1,440	1,364	3,269
Canned fruits and vegetables.....	835	788	800	706	630	1,235
Raisins.....	5,766	5,863	5,762	5,588	5,549	5,000
Wool.....	133	131	90	82	43	62
Rice.....	1,571	1,562	1,560	1,540	1,515	1,985
All other.....	811	673	353	263	263	291
Total.....	27,879	26,986	25,071	24,275	23,687	35,035
Re discounts outstanding for—						
Agricultural credit corporations.....	25,014	25,915	26,725	27,690	28,111	24,714
National banks.....	7	7	7	7	7	18
State banks.....	350	367	406	415	418	556
Livestock loan companies.....	21,885	21,898	21,733	21,821	21,877	19,157
Savings banks and trust companies.....	20	20	20	20	20	37
Total.....	47,276	48,207	48,891	49,953	50,433	44,482

BANK DEBITS

DEBITS TO INDIVIDUAL ACCOUNT, BY FEDERAL RESERVE DISTRICTS

[In thousands of dollars]

	Number of centers	February, 1928	January, 1928	February, 1927
New York City.....	1	32,739,886	37,883,574	27,439,403
Outside New York City.....	140	21,756,731	25,006,992	20,781,144
Federal reserve district:				
Boston.....	11	2,399,661	3,126,582	2,400,783
New York.....	7	33,532,207	38,799,064	28,167,635
Philadelphia.....	10	2,042,399	2,458,387	2,028,504
Cleveland.....	13	2,375,108	2,796,099	2,440,874
Richmond.....	7	682,387	780,278	672,295
Atlanta.....	15	1,043,215	1,184,396	1,074,168
Chicago.....	21	5,461,309	6,279,842	5,031,903
St. Louis.....	5	1,154,840	1,307,032	1,104,596
Minneapolis.....	9	604,875	667,275	558,166
Kansas City.....	15	1,166,147	1,304,893	1,094,038
Dallas.....	10	615,235	688,048	594,894
San Francisco.....	18	3,419,234	3,498,670	3,052,691
Total.....	141	54,496,617	62,890,566	48,220,547

PAR COLLECTION SYSTEM¹

MEMBERSHIP, BY FEDERAL RESERVE DISTRICTS

[Number of banks at end of February]

Federal reserve district	Member banks		Nonmember banks			
			On par list		Not on par list	
	1928	1927	1928	1927	1928	1927
United States.....	8,986	9,168	13,101	13,781	3,905	3,833
Boston.....	413	416	247	245	.....	.....
New York.....	934	921	407	408	.....	.....
Philadelphia.....	779	771	501	510	.....	.....
Cleveland.....	834	848	1,030	1,061	10	10
Richmond.....	562	574	648	674	575	611
Atlanta.....	460	475	308	319	1,011	1,039
Chicago.....	1,276	1,323	3,673	3,771	191	177
St. Louis.....	593	606	1,874	1,978	447	424
Minneapolis.....	732	747	733	892	1,136	1,093
Kansas City.....	960	984	2,327	2,498	271	213
Dallas.....	794	817	652	683	205	204
San Francisco.....	649	686	701	742	59	62

¹ Incorporated banks other than mutual savings banks

CONDITION OF ALL BANKS IN THE UNITED STATES

TABLE 1.—ALL BANKS IN THE UNITED STATES¹—PRINCIPAL RESOURCES AND LIABILITIES, ON CALL DATES, BY FEDERAL RESERVE DISTRICTS

[In millions of dollars. Figures are for the dates indicated or nearest dates thereto for which figures are available]

Federal reserve districts and call dates	Total loans and investments			Loans			Investments			Deposits, exclusive of bank deposits			Rediscunts and bills payable		
	All banks	Member	Non-member	All banks	Member	Non-member	All banks	Member	Non-member	All banks	Member	Non-member	All banks	Member	Non-member
All districts:															
1926—Dec. 31	52,272	31,896	20,376	36,599	22,906	13,693	15,672	8,990	6,682	50,009	30,454	19,555	1,084	760	324
1927—Mar. 23	52,667	32,154	20,513	36,504	22,532	13,772	16,363	9,622	6,741	49,777	29,844	19,933	805	546	259
June 30	53,934	32,967	20,967	37,131	23,149	13,982	16,803	9,818	6,985	51,612	31,227	20,385	816	541	275
Oct. 10	54,680	33,451	21,229	37,635	23,492	14,143	17,045	9,959	7,086	52,117	31,247	20,870	804	528	276
Dec. 31	55,850	34,679	21,171	38,395	24,318	14,077	17,455	10,361	7,094	52,872	32,041	20,830	893	663	230
Boston:															
1926—Dec. 31	5,970	2,458	3,512	3,847	1,738	2,109	2,123	720	1,403	5,593	2,285	3,308	91	84	7
1927—Mar. 23	6,003	2,460	3,544	3,834	1,710	2,124	2,169	750	1,420	5,583	2,260	3,322	47	38	9
June 30	6,220	2,557	3,663	3,951	1,765	2,186	2,269	792	1,477	5,810	2,358	3,452	70	60	10
Oct. 10	6,366	2,621	3,745	4,044	1,810	2,234	2,322	811	1,511	5,958	2,425	3,534	45	38	7
Dec. 31	6,402	2,618	3,784	4,057	1,801	2,256	2,345	817	1,528	6,008	2,443	3,565	40	32	8
New York:															
1926—Dec. 31	15,910	9,849	6,061	10,976	7,044	3,932	4,934	2,805	2,129	15,153	9,686	5,467	253	212	41
1927—Mar. 23	16,064	9,743	6,321	10,928	6,748	4,180	5,136	2,995	2,141	15,071	9,661	6,020	176	161	15
June 30	16,851	10,284	6,567	11,546	7,184	4,362	5,305	3,100	2,205	16,233	9,971	6,262	136	113	23
Oct. 10	16,991	10,341	6,650	11,732	7,317	4,416	5,258	3,024	2,234	16,081	9,957	6,495	242	185	57
Dec. 31	17,849	11,294	6,555	12,513	8,136	4,377	5,336	3,158	2,178	16,297	10,006	6,291	328	314	14
Philadelphia:															
1926—Dec. 31	4,038	2,482	1,556	2,551	1,620	931	1,487	862	625	3,602	2,166	1,436	111	75	36
1927—Mar. 23	4,090	2,520	1,569	2,523	1,596	927	1,567	924	642	3,587	2,163	1,424	83	53	30
June 30	4,120	2,536	1,584	2,509	1,609	900	1,611	927	684	3,645	2,186	1,459	93	66	27
Oct. 10	4,206	2,593	1,613	2,573	1,623	950	1,633	970	663	3,713	2,230	1,483	58	39	19
Dec. 31	4,245	2,592	1,653	2,595	1,620	976	1,650	972	678	3,787	2,243	1,543	101	73	29
Cleveland:															
1926—Dec. 31	4,487	3,139	1,348	3,074	2,151	923	1,413	988	425	4,145	2,882	1,263	120	91	29
1927—Mar. 23	4,601	3,243	1,358	3,094	2,170	924	1,507	1,073	434	4,281	3,002	1,279	70	45	25
June 30	4,640	3,274	1,366	3,104	2,186	918	1,536	1,088	448	4,325	3,031	1,294	69	49	20
Oct. 10	4,704	3,333	1,371	3,137	2,208	929	1,568	1,125	443	4,371	3,055	1,316	70	61	9
Dec. 31	4,693	3,303	1,390	3,106	2,168	938	1,587	1,135	452	4,349	3,026	1,324	93	68	25
Richmond:															
1926—Dec. 31	2,398	1,278	1,120	1,868	1,014	854	530	264	266	2,222	1,164	1,058	73	37	36
1927—Mar. 23	2,385	1,290	1,095	1,829	1,009	820	556	281	275	2,194	1,153	1,041	56	27	29
June 30	2,424	1,312	1,112	1,842	1,015	827	582	297	285	2,244	1,193	1,051	67	35	32
Oct. 10	2,472	1,361	1,111	1,860	1,037	824	612	324	287	2,301	1,229	1,069	62	35	27
Dec. 31	2,517	1,367	1,150	1,875	1,033	842	642	334	308	2,371	1,242	1,129	47	31	16
Atlanta:															
1926—Dec. 31	1,792	1,163	629	1,462	931	531	330	232	98	1,741	1,092	649	89	53	36
1927—Mar. 23	1,749	1,159	590	1,404	907	497	345	252	93	1,687	1,074	613	69	47	22
June 30	1,729	1,144	585	1,376	888	488	353	256	97	1,674	1,066	608	69	42	27
Oct. 10	1,748	1,161	587	1,386	901	485	363	260	102	1,701	1,076	625	64	37	27
Dec. 31	1,756	1,167	589	1,371	890	481	385	277	108	1,736	1,104	632	56	34	22
Chicago:															
1926—Dec. 31	7,183	4,552	2,631	5,102	3,398	1,704	2,081	1,154	927	6,970	4,316	2,654	182	108	74
1927—Mar. 23	7,241	4,597	2,644	5,043	3,335	1,708	2,198	1,262	936	6,906	4,316	2,660	133	72	61
June 30	7,415	4,720	2,695	5,174	3,469	1,705	2,241	1,251	990	7,167	4,462	2,705	131	68	63
Oct. 10	7,486	4,757	2,729	5,211	3,495	1,716	2,275	1,262	1,013	7,246	4,504	2,741	89	34	55
Dec. 31	7,567	4,871	2,636	5,183	3,532	1,650	2,324	1,339	985	7,325	4,647	2,679	123	68	55
St. Louis:															
1926—Dec. 31	2,060	1,314	746	1,543	948	595	517	366	151	1,965	1,186	779	67	36	31
1927—Mar. 23	2,066	1,332	734	1,518	934	584	548	398	150	1,979	1,197	782	49	19	30
June 30	2,071	1,337	734	1,517	931	586	554	406	148	1,970	1,187	783	63	38	25
Oct. 10	2,090	1,359	731	1,529	949	580	561	410	151	1,997	1,229	768	57	20	37
Dec. 31	2,104	1,377	727	1,525	954	571	579	423	156	2,047	1,250	797	47	21	26
Minneapolis:															
1926—Dec. 31	1,495	862	633	987	554	433	508	308	200	1,526	847	679	19	5	14
1927—Mar. 23	1,496	862	634	960	541	419	536	321	215	1,504	827	677	17	7	10
June 30	1,485	851	634	948	531	417	537	320	217	1,507	842	665	18	5	13
Oct. 10	1,519	882	637	968	553	415	551	329	222	1,571	885	686	13	3	10
Dec. 31	1,527	897	630	947	547	400	579	350	230	1,560	886	674	12	3	9
Kansas City:															
1926—Dec. 31	1,828	1,136	692	1,374	777	597	454	359	95	1,924	1,148	776	21	7	14
1927—Mar. 23	1,838	1,160	678	1,372	787	585	466	373	93	1,916	1,142	775	22	12	11
June 30	1,832	1,154	678	1,355	776	579	477	378	99	1,916	1,158	758	27	12	15
Oct. 10	1,856	1,168	688	1,359	776	583	497	392	105	1,940	1,166	774	28	15	13
Dec. 31	1,868	1,192	677	1,353	783	570	515	408	107	1,957	1,185	773	22	10	12
Dallas:															
1926—Dec. 31	1,030	808	222	841	652	189	189	156	33	1,053	800	253	15	10	5
1927—Mar. 23	1,075	842	233	866	669	197	209	173	36	1,069	815	254	13	8	5
June 30	1,064	831	233	853	654	199	211	177	34	1,049	800	249	19	12	7
Oct. 10	1,117	877	240	890	689	202	227	188	38	1,134	862	272	13	9	4
Dec. 31	1,137	899	238	892	695	197	245	204	41	1,182	897	285	4	2	2
San Francisco:															
1926—Dec. 31	4,081	2,855	1,226	2,974	2,079	895	1,107	776	331	4,115	2,882	1,233	43	42	1
1927—Mar. 23	4,059	2,946	1,113	2,933	2,126	807	1,126	820	306	4,000	2,914	1,086	70	58	12
June 30	4,083	2,967	1,116	2,956	2,141	815	1,127	826	301	4,072	2,973	1,099	54	41	13
Oct. 10	4,124	2,998	1,126	2,945	2,134	811	1,179	864	315	4,105	2,996	1,109	63	52	11
Dec. 31	4,244	3,102	1,143	2,976	2,159	818	1,267	943	325	4,252	3,113	1,139	20	7	13

¹ Includes all National, State, and private banks in the United States except a certain number of nonreporting private banks not under State supervision.

² Revised figures.

TABLE 2.—ALL BANKS IN THE UNITED STATES¹—PRINCIPAL RESOURCES AND LIABILITIES ON DECEMBER 31 AND OCTOBER 10, 1927,² BY STATES

[In thousands of dollars]

State	Loans and investments						Deposits, exclusive of bank deposits		Rediscounts and bills payable		Number of reporting banks	
	Total		Loans ³		Investments		December	October	December	October	December	October
	December	October	December	October	December	October						
New England:												
Maine.....	411,483	416,619	194,472	198,793	217,011	217,826	389,293	390,009	3,193	4,497	142	143
New Hampshire.....	283,645	283,385	140,032	140,381	143,613	143,004	259,692	258,367	1,285	1,681	123	123
Vermont.....	239,269	237,249	151,551	153,401	87,718	83,848	230,768	223,950	1,468	2,107	105	105
Massachusetts.....	3,995,348	3,984,880	2,726,468	2,720,488	1,268,880	1,264,392	3,728,654	3,715,098	29,697	30,720	444	442
Rhode Island.....	525,113	516,278	276,500	275,193	248,613	241,085	508,521	497,617	303	563	37	37
Connecticut.....	1,224,640	1,201,782	702,529	688,210	522,111	513,572	1,151,485	1,136,294	7,001	5,717	233	232
Middle Atlantic:												
New York.....	15,637,524	14,838,681	11,134,813	10,410,110	4,502,711	4,428,571	14,173,096	14,034,053	302,957	214,335	1,152	1,150
New Jersey.....	2,351,712	2,286,849	1,535,990	1,472,852	815,722	813,997	2,257,378	2,165,270	33,705	35,752	575	572
Pennsylvania.....	5,560,632	5,501,594	3,210,106	3,209,339	2,350,526	2,292,255	4,912,989	4,833,485	137,889	74,579	1,623	1,629
East North Central:												
Ohio.....	2,569,130	2,611,593	1,912,758	1,935,866	656,372	675,727	2,466,975	2,511,444	40,014	41,392	1,059	1,063
Indiana.....	876,353	882,155	659,132	669,866	217,221	212,289	839,958	833,268	44,009	47,087	1,050	1,063
Illinois.....	3,722,589	3,712,360	2,726,476	2,758,177	996,113	954,183	3,578,417	3,519,509	34,736	21,954	1,834	1,837
Michigan.....	1,860,942	1,849,604	909,677	895,513	951,265	954,091	1,816,683	1,804,911	36,832	18,573	748	749
Wisconsin.....	905,921	898,220	618,352	622,487	287,569	275,733	905,044	901,933	9,752	6,335	970	970
West North Central:												
Minnesota.....	922,434	917,644	549,930	562,728	372,504	354,916	895,075	895,416	7,872	7,999	1,163	1,179
Iowa.....	786,805	792,562	678,185	680,326	108,620	112,236	825,439	825,143	10,150	7,482	1,355	1,374
Missouri.....	1,269,820	1,246,584	902,898	894,638	366,922	351,946	1,225,857	1,181,726	22,290	24,287	1,416	1,430
North Dakota.....	127,950	132,770	93,282	101,935	34,688	30,835	144,105	157,132	991	2,117	512	529
South Dakota.....	126,786	125,237	93,316	93,487	33,470	31,750	142,055	144,578	1,621	1,845	415	418
Nebraska.....	410,974	413,848	335,263	339,021	75,711	74,827	421,880	428,857	9,065	7,064	1,012	1,021
Kansas.....	400,574	399,043	303,001	305,153	97,573	93,890	416,499	417,099	5,393	5,389	1,153	1,168
South Atlantic:												
Delaware.....	136,212	135,981	83,158	80,508	53,054	55,473	120,371	118,380	1,179	1,073	49	49
Maryland.....	839,739	804,624	495,135	480,705	344,604	323,919	794,531	750,272	8,998	10,709	243	244
District of Columbia.....	236,472	241,269	176,672	181,635	59,800	59,634	232,115	240,547	2,466	1,144	42	42
Virginia.....	557,361	552,097	471,127	464,606	86,234	87,491	465,255	460,929	18,404	20,048	496	496
West Virginia.....	364,562	364,737	299,928	298,173	64,634	66,564	336,199	342,075	13,267	9,168	335	338
North Carolina.....	408,042	403,758	348,594	352,358	59,448	51,400	413,163	391,462	4,715	18,384	458	465
South Carolina.....	190,228	184,322	144,445	143,548	45,783	40,774	201,495	189,723	1,967	2,898	271	279
Georgia.....	360,602	366,892	295,317	308,461	65,285	58,431	342,081	346,789	9,555	10,145	466	469
Florida.....	378,564	385,100	251,983	258,384	124,581	126,716	385,927	383,285	13,621	16,846	317	322
East South Central:												
Kentucky.....	487,269	484,528	374,064	371,984	113,205	112,544	426,699	422,340	10,788	9,600	602	602
Tennessee.....	400,649	394,203	344,693	340,718	55,956	53,485	411,208	402,401	7,852	9,529	512	512
Alabama.....	289,569	284,803	231,689	231,478	57,880	53,325	298,149	293,235	4,468	5,052	356	356
Mississippi.....	225,090	226,502	172,322	176,770	52,768	49,732	241,924	236,303	5,638	10,753	325	326
West South Central:												
Arkansas.....	199,331	203,914	166,652	173,309	32,679	30,605	212,665	205,328	2,276	9,886	447	453
Louisiana.....	415,498	400,049	338,453	334,472	77,045	65,577	406,038	376,548	21,506	23,167	232	232
Oklahoma.....	380,008	373,966	246,372	245,999	133,638	127,967	419,788	414,109	1,365	6,275	679	693
Texas.....	1,008,660	991,611	794,032	791,973	214,626	199,638	1,038,074	1,000,330	2,666	9,542	1,391	1,416
Mountain:												
Montana.....	140,848	135,510	88,063	86,949	52,785	48,561	160,433	157,196	145	596	205	209
Idaho.....	78,290	75,074	48,615	47,738	29,675	27,336	91,700	86,286	331	1,116	143	144
Wyoming.....	54,609	51,768	38,442	37,059	16,167	14,709	61,229	59,378	60	638	86	87
Colorado.....	264,155	265,204	164,285	166,676	99,370	98,528	289,672	283,591	1,371	3,376	293	297
New Mexico.....	35,426	32,315	22,783	21,494	12,643	10,821	42,493	35,579	12	403	59	59
Arizona.....	67,028	62,398	44,849	42,377	22,179	20,021	81,378	72,767	7,805	1,512	46	46
Utah.....	152,219	144,003	122,521	114,199	29,698	29,804	136,691	124,544	748	2,585	107	107
Nevada.....	35,894	36,278	27,817	28,302	8,077	7,976	39,892	38,416	-----	426	35	35
Pacific:												
Washington.....	423,181	419,778	262,578	265,884	160,603	153,894	439,404	436,228	1,156	2,543	357	357
Oregon.....	260,746	260,563	149,696	161,517	111,050	99,046	275,472	276,620	1,466	1,758	247	251
California.....	3,251,848	3,149,789	2,335,537	2,299,622	916,311	850,167	3,217,638	3,097,048	16,242	53,474	511	536
Total.....	55,849,744	54,679,973	38,394,533	37,634,862	17,455,211	17,045,111	52,871,547	52,116,868	893,290	804,221	26,431	26,656

¹ Includes all national, State, and private banks in the United States except a certain number of nonreporting private banks not under State supervision.

² Figures for State institutions are taken from the table on p. 303 and represent in some cases the condition of banks as of dates other than Dec. 31 and Oct. 10.

³ Includes acceptances of other banks and foreign bills of exchange sold with indorsement by member banks.

⁴ Revised figures.

⁵ Includes bonds borrowed.

⁶ Includes due to banks.

⁷ Includes other liabilities.

TABLE 3.—NATIONAL BANKS—PRINCIPAL RESOURCES AND LIABILITIES ON DECEMBER 31, 1927, AND OCTOBER 10, 1927
[In thousands of dollars]

State	Loans and investments						Deposits, exclusive of bank deposits		Rediscounts and bills payable		Number of reporting banks	
	Total		Loans		Investments		December	October	December	October	December	October
	December	October	December	October	December	October						
New England:												
Maine.....	144,901	146,709	72,426	74,712	72,475	71,997	133,954	135,928	1,394	1,890	57	57
New Hampshire.....	68,065	67,805	40,005	40,354	28,060	27,451	60,285	58,960	1,197	1,593	55	55
Vermont.....	65,557	64,947	37,705	37,685	27,852	27,262	57,326	56,310	882	1,000	46	46
Massachusetts.....	1,206,188	1,218,573	851,207	865,033	354,981	353,540	1,086,419	1,097,256	14,822	19,935	153	153
Rhode Island.....	57,058	56,443	33,537	34,518	23,521	21,925	47,081	45,615	300	563	13	13
Connecticut.....	262,365	261,456	179,821	179,579	82,544	81,877	244,665	240,637	3,030	2,701	65	65
Middle Atlantic:												
New York.....	5,089,707	4,607,861	3,573,247	3,150,248	1,516,460	1,457,613	4,106,886	4,060,983	247,958	69,389	563	560
New Jersey.....	842,528	822,362	524,648	502,438	317,880	319,924	806,978	782,664	18,337	14,653	295	294
Pennsylvania.....	2,573,091	2,587,188	1,516,829	1,547,860	1,056,262	1,039,328	2,230,429	2,222,190	65,322	40,955	867	867
East North Central:												
Ohio.....	717,977	727,181	470,621	476,376	247,356	250,805	669,012	672,266	13,854	14,334	338	338
Indiana.....	352,123	343,521	237,118	232,219	115,005	111,302	329,207	317,640	2,520	3,129	230	231
Illinois.....	1,526,050	1,414,088	1,110,277	1,064,740	415,773	349,348	1,377,896	1,263,672	16,432	8,369	487	489
Michigan.....	434,882	442,962	292,368	295,124	142,514	147,838	433,644	432,200	10,803	7,794	133	133
Wisconsin.....	375,765	370,780	249,623	251,162	126,142	119,618	354,643	352,033	5,627	2,454	156	156
West North Central:												
Minnesota.....	530,078	520,662	329,337	332,903	200,741	187,759	495,863	492,758	920	1,251	281	281
Iowa.....	272,515	277,804	187,368	190,793	85,147	87,011	260,942	263,838	3,512	2,089	281	286
Missouri.....	534,187	506,762	399,818	374,800	134,969	131,962	446,919	422,086	7,723	6,402	136	135
North Dakota.....	74,537	74,254	47,361	49,830	27,176	24,424	79,397	84,545	384	745	141	142
South Dakota.....	58,650	57,882	35,208	35,804	23,442	22,078	61,731	63,011	562	595	97	98
Nebraska.....	174,388	171,286	129,354	130,352	45,034	40,934	154,907	154,239	4,837	2,745	157	154
Kansas.....	194,967	191,277	133,507	132,938	61,460	58,339	199,359	191,646	1,340	2,291	257	258
South Atlantic:												
Delaware.....	22,767	22,683	12,477	12,402	10,290	10,281	19,309	19,241	616	501	19	19
Maryland.....	256,937	259,496	155,646	160,004	101,291	99,492	227,936	230,718	6,495	5,315	84	84
District of Columbia.....	122,195	126,278	90,148	94,344	32,047	31,934	118,477	123,994	1,670	1,017	13	13
Virginia.....	337,512	333,186	276,844	271,261	60,668	61,925	285,885	281,559	10,334	11,978	167	167
West Virginia.....	165,885	167,738	129,747	129,591	36,138	38,147	149,328	154,380	5,830	3,406	120	122
North Carolina.....	157,036	153,920	126,883	129,566	30,153	24,354	151,674	141,238	1,783	7,201	76	76
South Carolina.....	109,249	104,642	80,135	77,497	29,114	27,145	110,692	102,816	1,377	1,102	62	65
Georgia.....	212,756	220,462	166,057	180,913	46,699	39,549	200,668	204,445	2,836	2,364	83	83
Florida.....	197,935	203,173	120,705	123,803	77,230	79,370	193,018	193,205	5,479	6,567	62	63
East South Central:												
Kentucky.....	256,797	254,056	180,453	178,373	76,344	75,683	220,097	215,738	6,101	4,913	141	141
Tennessee.....	206,484	200,038	172,031	168,056	34,453	31,982	190,185	181,378	2,620	4,297	104	104
Alabama.....	186,301	182,038	140,662	139,788	45,639	42,250	181,471	176,752	2,357	2,305	106	106
Mississippi.....	75,671	74,983	54,290	54,635	21,381	20,348	76,958	72,460	1,878	3,714	37	36
West South Central:												
Arkansas.....	77,309	79,358	57,560	60,399	19,749	18,959	77,448	74,960	197	2,171	78	78
Louisiana.....	97,228	94,320	81,639	81,092	15,589	13,228	90,757	86,364	808	3,468	32	32
Oklahoma.....	312,937	306,866	199,523	197,562	113,414	109,304	334,308	332,136	1,003	5,300	341	349
Texas.....	794,675	774,758	612,440	604,959	182,235	169,799	781,388	753,754	1,244	6,229	643	651
Mountain:												
Montana.....	73,801	70,205	47,283	45,438	26,518	24,767	81,623	80,651	41	211	71	74
Idaho.....	44,785	43,055	28,926	28,216	15,859	14,839	51,581	48,053	114	677	52	52
Wyoming.....	32,858	32,421	21,074	21,388	11,784	11,033	35,359	36,144	48	245	29	30
Colorado.....	206,424	207,411	124,717	126,528	81,707	80,883	222,456	220,574	1,057	2,438	124	124
New Mexico.....	26,307	23,537	16,884	15,282	9,423	8,255	30,803	25,754	-----	306	29	29
Arizona.....	22,057	20,864	13,943	13,617	8,114	7,247	27,460	24,275	311	668	15	15
Utah.....	46,796	42,145	34,578	30,073	12,218	12,072	43,135	38,372	19	497	20	20
Nevada.....	15,111	15,685	10,250	10,854	4,861	4,831	15,563	15,262	-----	426	10	10
Pacific:												
Washington.....	256,627	254,218	154,283	156,141	102,344	98,077	265,164	262,673	576	1,342	111	110
Oregon.....	176,886	175,708	93,987	104,100	82,899	71,608	183,230	182,745	818	464	95	95
California.....	1,683,023	1,612,388	1,181,053	1,160,215	501,970	452,173	1,649,306	1,578,129	4,014	32,331	227	239
Total.....	21,729,928	20,987,435	14,835,603	14,375,565	6,894,325	6,611,870	19,652,822	19,268,247	481,382	316,330	7,759	7,798

Table 4.—STATE BANKS¹—PRINCIPAL RESOURCES AND LIABILITIES ON DECEMBER 31 AND OCTOBER 10, 1927,² BY STATES

[In thousands of dollars]

	Loans and investments						Deposits, exclusive of bank deposits		Rediscounts and bills payable		Number of reporting banks	
	Total		Loans		Investments							
	December	October	December	October	December	October	December	October	December	October	December	October
New England:												
Maine.....	266,582	269,910	122,046	124,081	144,536	145,829	255,339	254,081	1,799	2,607	85	86
New Hampshire.....	215,580	215,580	100,027	100,027	115,553	115,553	199,407	199,407	88	88	68	68
Vermont.....	173,712	172,302	113,846	113,846	59,866	56,586	173,442	167,640	586	1,107	59	59
Massachusetts.....	2,783,451	2,764,345	1,869,552	1,853,493	913,899	910,852	2,642,235	2,617,842	14,875	10,785	291	289
Rhode Island.....	468,054	459,826	242,962	240,666	225,092	219,160	461,440	452,002			24	24
Connecticut.....	962,275	940,326	522,708	508,631	439,567	431,695	906,820	895,657	3,971	3,016	168	167
Middle Atlantic:												
New York.....	10,335,065	10,135,465	7,348,814	7,164,507	2,986,251	2,970,958	10,066,210	9,973,070	54,999	82,576	589	590
New Jersey.....	1,509,006	1,464,476	1,011,164	970,403	497,842	494,073	1,450,400	1,382,606	15,368	21,099	280	278
Pennsylvania.....	2,987,241	2,914,124	1,692,977	1,661,197	1,294,264	1,252,927	2,682,560	2,611,295	72,567	33,624	756	762
East North Central:												
Ohio.....	1,848,103	1,881,944	1,439,087	1,457,022	409,016	424,922	1,797,963	1,839,178	26,160	20,014	721	725
Indiana.....	524,230	514,758	422,014	437,647	102,216	100,987	510,751	515,628	41,489	43,958	820	832
Illinois.....	2,196,539	2,298,272	1,616,199	1,693,437	580,340	604,835	2,200,521	2,255,837	18,304	13,585	1,347	1,348
Michigan.....	1,426,060	1,406,642	617,309	600,389	808,751	806,253	1,383,039	1,372,711	26,029	10,779	615	616
Wisconsin.....	530,156	527,440	368,729	371,325	161,427	156,115	550,401	549,900	4,125	3,881	814	814
West North Central:												
Minnesota.....	392,356	396,982	220,593	229,825	171,763	167,157	399,212	402,658	6,952	6,748	882	893
Iowa.....	514,290	514,758	490,817	489,533	23,473	25,225	564,497	561,305	6,638	5,393	1,074	1,084
Missouri.....	735,590	739,822	503,037	519,838	232,553	219,984	778,938	759,640	14,567	17,885	1,280	1,304
North Dakota.....	53,413	58,516	45,901	52,105	7,512	6,411	64,708	72,587	607	1,372	371	387
South Dakota.....	68,136	67,355	58,108	57,683	10,028	9,672	80,324	81,567	1,059	1,250	318	320
Nebraska.....	236,586	242,562	205,909	208,669	30,677	33,893	266,973	274,618	4,228	4,319	855	867
Kansas.....	205,607	207,766	169,494	172,215	36,113	35,551	217,140	225,453	4,053	3,098	896	910
South Atlantic:												
Delaware.....	113,445	113,298	70,681	68,106	42,764	45,192	101,062	99,139	563	572	30	30
Maryland.....	580,730	543,649	337,417	319,222	243,313	224,427	566,595	519,554	2,503	5,394	159	160
District of Columbia.....												
Virginia.....	114,277	114,991	86,524	87,291	27,753	27,700	113,638	116,553	796	127	29	29
West Virginia.....	218,183	218,183	192,617	192,617	25,566	25,566	179,370	179,370	8,070	8,070	329	329
North Carolina.....	198,677	196,999	170,181	168,582	28,496	28,417	186,871	187,695	7,437	5,762	215	216
South Carolina.....	251,006	249,838	221,711	222,792	29,295	27,046	261,489	250,224	2,932	11,183	382	389
Georgia.....	80,979	79,680	64,310	66,051	16,669	13,629	90,803	86,907	590	1,796	209	214
Florida.....	147,846	146,430	129,260	127,548	18,586	18,882	141,413	142,344	6,719	7,781	383	386
Alabama.....	178,629	181,927	131,278	134,581	47,351	47,346	192,909	190,080	8,142	10,279	255	259
East South Central:												
Kentucky.....	230,472	230,472	193,611	193,611	36,861	36,861	206,602	206,602	4,687	4,687	461	461
Tennessee.....	194,165	194,165	172,662	172,662	21,503	21,503	221,023	221,023	5,232	5,232	408	408
Alabama.....	103,268	102,654	91,027	91,579	12,241	11,075	116,678	116,483	2,111	2,747	250	250
Mississippi.....	149,419	151,519	118,032	122,135	31,387	29,384	164,966	163,843	3,760	7,039	288	290
West South Central:												
Arkansas.....	122,022	124,556	109,092	112,910	12,930	11,646	135,217	130,368	2,079	7,715	369	375
Louisiana.....	316,656	305,239	255,200	252,890	61,456	52,349	315,281	290,184	20,698	19,699	200	200
Oklahoma.....	67,071	67,100	46,849	48,437	20,222	18,663	85,480	81,973	362	975	338	344
Texas.....	213,985	216,853	181,592	187,014	32,393	29,839	256,686	246,576	1,422	3,313	748	765
Mountain:												
Montana.....	67,047	65,305	40,780	41,511	26,267	23,794	78,810	76,545	104	385	134	135
Idaho.....	33,505	32,019	19,689	19,522	13,816	12,497	40,119	38,233	217	439	91	92
Wyoming.....	21,751	19,347	17,368	15,671	4,383	3,676	25,870	23,234	12	393	57	57
Colorado.....	57,731	57,793	39,568	40,148	18,163	17,645	67,216	63,017	314	938	169	173
New Mexico.....	9,119	8,778	5,899	5,212	3,220	2,566	11,690	9,825	12	197	30	30
Arizona.....	44,292	41,534	30,227	28,760	14,065	12,774	53,918	48,492	494	844	31	31
Utah.....	105,423	101,858	87,943	84,126	17,480	17,732	93,556	86,172	729	2,088	87	87
Nevada.....	20,783	20,593	17,567	17,448	3,216	3,145	24,329	23,154			25	25
Pacific:												
Washington.....	166,534	165,560	108,275	109,743	58,259	55,817	174,240	173,555	580	1,201	246	247
Oregon.....	83,821	84,854	55,670	57,416	28,151	27,438	92,242	93,875	648	1,294	152	156
California.....	1,559,510	1,532,712	1,145,169	1,134,718	414,341	397,994	1,568,332	1,518,919	12,228	21,143	284	297
Total.....	33,882,378	33,584,953	23,321,492	23,151,712	10,560,886	10,433,241	33,218,725	32,848,621	411,905	418,477	18,672	18,858

¹ Includes all State and private banks in the United States except a certain number of nonreporting private banks not under State supervision.² Or dates nearest thereto for which figures are available.³ Revised figures.⁴ Includes bonds borrowed.⁵ Includes due to banks.⁶ Includes all other liabilities.

NOTE.—All figures in the October columns are as of Oct. 10, except as follows: Maine, Sept. 24; New Hampshire, June 30; Massachusetts savings banks, Oct. 31; Rhode Island, State banks, Sept. 7, savings banks, June 30; Connecticut, savings banks, Sept. 30; New York, State banks, Sept. 30, savings banks, June 30; New Jersey, Sept. 30; Pennsylvania, Oct. 5; Ohio, Sept. 12; Indiana, June 30; Wisconsin, Oct. 3; Minnesota, Nov. 7; Missouri, Aug. 25; Nebraska, Sept. 30; Kansas, Sept. 12; Maryland, June 30; Georgia, Oct. 3; Kentucky, June 30, 1926; Tennessee, Nov. 16; Alabama, Oct. 17; Louisiana, Sept. 28; Colorado, June 30; Utah, Sept. 30.

All figures in the December columns are as of Dec. 31 except as follows: New Hampshire, June 30; Massachusetts, savings banks, Oct. 31; New York, State banks, Nov. 15; Kansas, Dec. 15; Virginia, Oct. 10; Kentucky, June 30, 1926; Tennessee, Nov. 16; Oklahoma, Dec. 27; Colorado, Dec. 10.

FEDERAL RESERVE DISTRICTS

