

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Monetary Statistics of the United States: Estimates, Sources, Methods

Volume Author/Editor: Milton Friedman and Anna Jacobson Schwartz

Volume Publisher: NBER

Volume ISBN: 0-870-14210-0

Volume URL: <http://www.nber.org/books/frie70-1>

Publication Date: 1970

Chapter Title: Deposits at Mutual Savings Banks: Call Date and Monthly Estimates

Chapter Author: Milton Friedman, Anna Jacobson Schwartz

Chapter URL: <http://www.nber.org/chapters/c5295>

Chapter pages in book: (p. 531 - 561)

DEPOSITS AT MUTUAL SAVINGS BANKS: CALL DATE AND MONTHLY ESTIMATES

THIS CHAPTER describes our estimates of deposits at mutual savings banks beginning 1907. We also constructed such estimates for 1867-75. For the intervening period, 1875-1906, estimates made by other investigators are available. Details of the construction of the estimates covering the forty-year period before 1907 are given in Chapter 11.

Mutual savings banks were in operation in eighteen states for part or all of the period 1907-46. Most of these states were in New England and the East, a few, in the Middle West and along the Pacific coast. We compiled deposit data for mutual savings banks in all eighteen states, making no distinction between demand and time deposits although small amounts of demand deposits were sometimes reported. Our series therefore represents total deposits less amounts due to banks. Our primary sources were the reports of the respective state banking departments. We checked these against the annual reports of the U.S. Comptroller of the Currency and for more recent dates, against FDIC data.

Our monthly estimates of deposits at mutual savings banks were constructed in two sections: 1907-23, when call date figures are available for a group of ten states and annual figures for the remaining states; and 1924-46, when there are available monthly figures for New York, call date figures for a group of states, and annual figures for the remaining states.

For 1907-23 we interpolated missing call date figures for the six New England states by Method R_3 and then interpolated them to the end of month by Method L. For the remaining states we interpolated

monthly figures by Method L between closest reported figures—at call dates for four of the other states and annually for the rest. The final aggregate series required seasonal adjustment.

For 1924–46 we interpolated missing call date figures for nine states (six New England states and three eastern states excluding New York and Pennsylvania) by Method R₃. The resulting call date series was seasonally corrected and interpolated to end of month by Method R₂, using the deseasonalized monthly New York series as the related series. For the remaining states deposits were interpolated to end of month by Method L between closest report dates. The aggregate of deposits at all mutual savings banks, 1924–46, required further seasonal adjustment.

1. Problems of Compilation

Our sources included published and unpublished returns by state banking departments; the sections on mutual savings banks in the annual reports of the U.S. Comptroller of the Currency; and, since 1945, *Assets and Liabilities of Operating Insured Banks* of the FDIC. All demand and time deposits reported, excluding interbank deposits and postal savings redeposited in mutual savings banks, were included in our figures. The call date and annual data reported create problems because of (a) conflicts between alternative sources with respect to the number of mutual savings banks in operation or the amounts on deposit; (b) the occasional mingling of deposit items with miscellaneous liabilities; and (c) the combination of mutual savings bank with certain commercial bank—most often stock savings bank—returns. Our solutions to these problems are noted in the source notes by states in the appendix to this chapter.

The one monthly series available covers all mutual savings banks in New York State beginning January 1924. Beginning January 1935, the series represented 100 per cent coverage. For earlier years the monthly figures included some estimates. Names of banks from which reports had not been received were known. Deposits at these banks as of the latest report date were used by the compiler of the series, the Savings Bank Association of the State of New York, to get total deposits. Except at mid- and end-of-year the monthly series included only deposits in regular accounts. A small amount of deposits, of minor importance, was held in club, school-savings, and Christmas accounts in mutual savings

banks. The level of the monthly series is not much affected by the exclusion of these deposits, but a characteristic seasonality imparted by these accounts is missing. At June and December dates, however, the figures included total deposits.¹

2. Mutual Savings Bank Report Dates

The report dates of nonnational commercial banks, by states, 1907-46, tended to coincide with national and member bank call dates. This is not true for mutual savings banks, however, except for mid- and end-of-year dates. Because there was some concentration of report dates other than June and December, at end of month, we adopted the end of month as the average date of reporting. Dates falling between the sixteenth of a given month and the fifteenth of the following month were treated as the end of the given month. In monthly interpolation we treated all months as of equal duration.

For twelve states in 1907 and six states in 1908 no figure was reported at the annual bench mark. We estimated deposits at the benchmark dates by interpolation by Method L between the closest report dates for each of these states. In the same way we estimated missing June bench-mark figures for Pennsylvania in 1917 and 1919.

Except in selected years before 1914 annual bench marks were end of June dates. The bench marks in the exceptional years are as follows:

<i>Year</i>	<i>End of Month Bench Mark</i>
1907	May
1909	April
1911	May
1912	May
1913	May

¹ Beginning 1934, the original compiler of the series used December figures for total deposits. From 1936 on, except in 1941 and 1946, the June figure of the monthly series has agreed with the figure of total deposits reported by the Superintendent of the New York State Banking Department. This may be an indication that there were only "regular" deposits at mutuals at June dates and negligible amounts of club and Christmas savings, or else that "nonregular" deposits have not been consistently excluded in the compilation of the monthly series. We might have used the published monthly figures to interpolate between the June and December figures of total deposits, but the variation between the latter and the monthly figures for those dates was too small, except at June 1941 and 1946, for the resulting monthly estimates to be substantially different from the published series.

3. Mutual Savings Bank Deposits, by States

To estimate missing call date figures, we tried to classify the states with mutual savings banks into homogeneous groups. Within each group we proposed to estimate the missing figures from deposit data for the other states by Method R_3 . In order to select groups and to estimate the relevant parameters, we calculated values of ν for each state with inter-June observations, taking the June bench-mark figures as the values of Y_0 and Y_2 . We then computed coefficients of correlation of the ν 's for random pairs of states, and standard deviations of the ν 's for all states with a minimum of twenty-five inter-June observations over the whole period.

As the following tabulation shows, the correlation results suggested a geographical pattern in the behavior of deposits. The average correlation was $+ .43$ for pairs of states in New England and the East. The corresponding average for Midwestern and Pacific states was $+ .23$. Evidently there is not much relationship between the movements of deposits at mutual savings banks in the latter group of states.

<i>Pairs</i>	<i>n</i> ^a	<i>r</i> ^b
New England and East		
N.J., Maine	35	.550
Maine, Vt.	25	.353
N.J., Md.	36	.341
Conn., Maine	25	.595
Midwest and Pacific		
Minn., Wis.	25	.244
Ohio, Minn.	8	.054
Wis., Ore.	8	.410
Ind., Wis.	8	.147

^a There may be more intra-annual observations for an individual state than are listed here as the number of observations on which the correlations were based. The size of n was obviously limited by the number of comparable dates for the pairs of states shown.

^b The correlation coefficient for Connecticut and Pennsylvania (seasonally adjusted data) is $+ .279$ with $n = 58$. We did not use this result. See below.

The standard deviations of the v 's by states also suggest that the New England and Eastern states are different from the rest. The standard deviations are markedly higher for the Midwestern and Pacific states.

SIZE OF STANDARD DEVIATION OF v , BY STATES

	1907-23		1907-46	
	<i>Average Deposits (millions of dollars)</i>	<i>Standard Deviation</i>	<i>Average Deposits (millions of dollars)</i>	<i>Standard Deviation</i>
Eastern				
Md.	103	.25	175	.81
N.Y.	1,945	.96	3,912	.97
Penna.	231	1.72 (.80) ^a	433	1.44 (.78) ^a
N.J.	115	3.82	283	.87
New England				
Mass.	966	.50	1,675	.60
Maine	95	.65	121	.59
Conn.	330	.67	570	.61
Vt.	40	1.29	67	1.34
Midwestern				
Ind.			20	1.68
Minn.			57	1.93
Wis.			5	2.38
Pacific				
Wash.			57	2.22

^a Seasonally adjusted data.

There is some tendency for the standard deviations to be high when average deposits are low, and conversely, but the relation is extremely weak. Both before and after 1924 the standard deviations seem sufficiently homogeneous for the New England states to justify treating them as equal to one another. This is also true for the Eastern states after 1924 and for New England and Eastern states combined. However, before 1924 the standard deviations for the Eastern states vary so widely that we decided there was no satisfactory way of combining them with the other states. Accordingly, before 1924 we used Method R₃ for the New England states only, thereafter for New England plus the Eastern states.

These results were based on data before seasonal adjustment. In general, mutual savings bank deposits exhibit only mild seasonal movements. For some states, however, the seasonal movements may be sufficiently pronounced to change the results if seasonally adjusted instead of original figures are used. For example, original data for Pennsylvania yield results that differ from those for other New England and Eastern states: correlations with other states are low in this group and the standard deviation is relatively high. Seasonally adjusted data, however, improve the correlation results and bring the standard deviation within the range for other Eastern states.

It may be that the low correlation results for the Midwestern and Pacific states—the observations on which these results are based are relatively small in number, even if they are for the largest number of comparable dates available for the pairs of states involved—would be raised if the data were corrected for seasonal. However, the small number of observations renders seasonal correction of the data for individual states hardly feasible. Seasonal movements present in these figures may be offsetting in the aggregates we constructed. At any rate, the seasonal corrections necessary in our final series, as described below, were slight in amplitude.

4. Scheme of Interpolation at Call Dates and Ends of Month

On the basis of the foregoing findings we divided the total period into two parts, 1907–23 and 1924–46. The steps by which we constructed final monthly series during each subperiod may be summarized as follows.

Subperiod 1907–23

1. We interpolated missing inter-June call date figures in the group of New England states only, by Method R_3 , using an average of the correlation coefficients (+.45) for the two pairs of states from this region shown in the tabulation in the preceding section, and assuming the standard deviation of the v 's to be the same in all states. Deposits in these states represented just over 40 per cent of total mutual savings deposits.

2. The estimates or reported observations at each call date for the New England states were then summed and monthly estimates were

interpolated by Method L between the call dates (Table 38, column 1).

3. For nine other states (excluding New York and Pennsylvania) with mutual savings banks in operation for part or all of the period, we interpolated by Method L between closest reported figures to obtain end-of-month figures (Table 38, column 2). Deposits in those states approximated 9 per cent of total mutual savings deposits.

4. End-of-month estimates for Pennsylvania were interpolated by Method L between quarterly or three-times-yearly call date figures (Table 38, column 3).

5. For New York State, we interpolated monthly figures by Method L between the semiannual (or occasionally three-times-yearly) reported figures (Table 38, column 4). Deposits in New York averaged somewhat less than one-half of total mutual savings bank deposits.²

6. The aggregate of the separate components of our mutual savings bank deposit series was deseasonalized (Table 38, column 5).

Subperiod 1924-46

1. We interpolated missing inter-June call date figures in the combined group of New England and Eastern states (excluding New York and Pennsylvania) by Method R_3 , using an average of the correlation coefficients (+.43) for the first three pairs of states from this region shown in the tabulation in the preceding section.³ The estimates or reported observations at each call date for the group of states were then summed.

2. The resulting series was deseasonalized. Test values of u were computed for each call date between preceding and following call dates and correlated with corresponding values of v computed from the deseasonalized monthly New York series. The correlation coefficient was .77. Accordingly, monthly figures for the combined group of New England and Eastern states (excluding New York and Pennsylvania) were therefore interpolated between call dates by Method R_2 (Table 39, column 1).

² We investigated the possibility of transforming the semiannual New York data, 1907-23, into a quarterly series on the basis of unpublished quarterly series on amounts deposited and withdrawn and net change in amounts deposited at five New York City savings banks (in the files of the National Bureau). The exclusion of interest compounded on deposits from the potential interpolator made it impossible to use the data directly. It did not seem worthwhile to invest effort in determining the rate at which interest was paid during this period by the five banks and adjusting the series for interest payments before we could test the closeness of the relationship between the quarterly and semiannual series.

³ The correlation coefficient for the fourth pair of states shown (New England) was computed after the interpolation for 1924-46 was completed. Had we included it, the average r would have been raised to +.45.

TABLE 38

*Deposits at Mutual Savings Banks by Groups of States,
at End of Month, May 1907 - November 1923*
(millions of dollars)

End of Month	All New England States (1)	Other States		New York State (4)	All States, Seasonally Adjusted (5)
		Excluding New York & Pennsylvania (2)	Pennsylvania (3)		
1907					
May	1,214	256	158	1,389	3,019
June	1,218	257	157	1,394	3,011
July	1,221	256	157	1,392	3,017
Aug.	1,224	257	157	1,390	3,027
Sept.	1,226	257	156	1,387	3,030
Oct.	1,222	257	156	1,385	3,023
Nov.	1,223	257	156	1,383	3,021
Dec.	1,223	255	156	1,380	3,017
1908					
Jan.	1,223	255	157	1,380	3,021
Feb.	1,223	255	157	1,380	3,021
Mar.	1,223	254	158	1,379	3,018
Apr.	1,223	254	159	1,379	3,018
May	1,224	254	159	1,379	3,019
June	1,226	253	159	1,378	3,000
July	1,226	253	158	1,381	3,010
Aug.	1,227	254	158	1,384	3,024
Sept.	1,228	255	158	1,387	3,032
Oct.	1,229	257	157	1,390	3,036
Nov.	1,233	258	157	1,393	3,044
Dec.	1,238	259	159	1,396	3,055
1909					
Jan.	1,243	261	160	1,399	3,068
Feb.	1,247	263	162	1,401	3,079
Mar.	1,252	265	163	1,403	3,086
Apr.	1,256	266	165	1,406	3,096
May	1,264	267	165	1,425	3,124
June	1,271	268	165	1,445	3,133
July	1,274	269	165	1,451	3,149
Aug.	1,276	270	165	1,458	3,168
Sept.	1,278	270	165	1,464	3,181
Oct.	1,284	272	165	1,471	3,195
Nov.	1,288	273	166	1,477	3,208
Dec.	1,293	274	168	1,483	3,221

(continued)

TABLE 38 (continued)

End of Month	All New England States (1)	Other States		New York State (4)	All States, Seasonally Adjusted (5)
		Excluding New York & Pennsylvania (2)	Pennsylvania (3)		
1910					
Jan.	1,297	276	169	1,491	3,239
Feb.	1,302	278	170	1,498	3,253
Mar.	1,306	279	171	1,505	3,265
Apr.	1,310	281	172	1,512	3,280
May	1,315	283	173	1,520	3,295
June	1,319	285	175	1,527	3,290
July	1,322	285	175	1,530	3,302
Aug.	1,326	285	175	1,532	3,318
Sept.	1,329	286	175	1,535	3,328
Oct.	1,337	286	175	1,538	3,339
Nov.	1,341	286	176	1,540	3,347
Dec.	1,345	286	178	1,543	3,356
1911					
Jan.	1,350	288	179	1,547	3,370
Feb.	1,354	290	180	1,550	3,381
Mar.	1,358	291	182	1,554	3,389
Apr.	1,362	293	183	1,558	3,400
May	1,367	295	185	1,561	3,411
June	1,372	295	185	1,594	3,429
July	1,376	295	185	1,598	3,444
Aug.	1,380	295	185	1,603	3,463
Sept.	1,384	296	185	1,607	3,474
Oct.	1,383	296	185	1,611	3,479
Nov.	1,389	296	186	1,615	3,490
Dec.	1,394	297	187	1,619	3,501
1912					
Jan.	1,399	299	189	1,622	3,516
Feb.	1,405	300	190	1,625	3,527
Mar.	1,410	302	191	1,628	3,535
Apr.	1,415	304	193	1,631	3,546
May	1,421	305	195	1,633	3,557
June	1,444	306	195	1,661	3,587
July	1,442	307	195	1,665	3,598
Aug.	1,440	308	195	1,670	3,613
Sept.	1,439	308	195	1,675	3,621
Oct.	1,445	309	195	1,680	3,633
Nov.	1,450	310	197	1,685	3,645
Dec.	1,456	311	198	1,689	3,658

(continued)

Derivation of Estimates

TABLE 38 (continued)

End of Month	All New England States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1913					
Jan.	1,461	313	200	1,692	3,674
Feb.	1,467	316	201	1,694	3,685
Mar.	1,472	318	203	1,696	3,693
Apr.	1,478	321	205	1,698	3,704
May	1,483	323	206	1,700	3,716
June	1,497	323	207	1,725	3,732
July	1,493	323	207	1,727	3,739
Aug.	1,489	323	207	1,730	3,749
Sept.	1,496	323	207	1,733	3,763
Oct.	1,495	323	207	1,736	3,766
Nov.	1,502	323	209	1,739	3,776
Dec.	1,508	323	210	1,742	3,786
1914					
Jan.	1,514	325	211	1,747	3,805
Feb.	1,518	327	212	1,752	3,817
Mar.	1,523	329	213	1,757	3,826
Apr.	1,527	331	215	1,763	3,839
May	1,531	332	216	1,768	3,851
June	1,535	334	217	1,773	3,841
July	1,538	333	217	1,773	3,849
Aug.	1,536	331	216	1,773	3,856
Sept.	1,537	330	216	1,772	3,859
Oct.	1,538	328	215	1,772	3,858
Nov.	1,541	327	216	1,772	3,860
Dec.	1,544	326	217	1,772	3,862
1915					
Jan.	1,550	327	218	1,772	3,875
Feb.	1,553	328	219	1,772	3,879
Mar.	1,556	329	220	1,773	3,881
Apr.	1,559	330	220	1,773	3,886
May	1,562	331	221	1,774	3,891
June	1,565	332	222	1,774	3,873
July	1,571	332	222	1,782	3,895
Aug.	1,578	332	222	1,789	3,921
Sept.	1,585	332	222	1,797	3,940
Oct.	1,586	332	222	1,804	3,949
Nov.	1,595	333	223	1,812	3,967
Dec.	1,605	333	225	1,819	3,986

(continued)

TABLE 38 (continued)

End of Month	All New England States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1916					
Jan.	1,614	335	227	1,830	4,013
Feb.	1,623	336	229	1,841	4,037
Mar.	1,632	338	231	1,851	4,057
Apr.	1,641	340	233	1,862	4,080
May	1,651	342	235	1,873	4,104
June	1,660	344	237	1,883	4,103
July	1,669	347	238	1,895	4,136
Aug.	1,678	350	239	1,907	4,173
Sept.	1,687	353	239	1,918	4,203
Oct.	1,699	356	240	1,930	4,230
Nov.	1,705	359	241	1,942	4,251
Dec.	1,711	363	246	1,954	4,277
1917					
Jan.	1,717	362	249	1,960	4,292
Feb.	1,723	361	253	1,966	4,299
Mar.	1,729	361	255	1,973	4,309
Apr.	1,735	361	253	1,979	4,320
May	1,741	361	252	1,985	4,331
June	1,747	361	251	1,991	4,342
July	1,749	362	250	1,991	4,347
Aug.	1,750	363	248	1,990	4,356
Sept.	1,752	370	247	1,989	4,367
Oct.	1,747	371	246	1,988	4,361
Nov.	1,746	372	244	1,987	4,359
Dec.	1,745	373	246	1,987	4,359
1918					
Jan.	1,744	373	248	1,987	4,358
Feb.	1,743	374	250	1,988	4,352
Mar.	1,742	374	254	1,989	4,351
Apr.	1,741	375	253	1,990	4,350
May	1,741	375	249	1,991	4,347
June	1,740	375	246	1,992	4,344
July	1,747	378	247	2,000	4,368
Aug.	1,755	381	248	2,008	4,397
Sept.	1,763	384	249	2,017	4,422
Oct.	1,767	387	256	2,025	4,444
Nov.	1,777	391	261	2,034	4,471
Dec.	1,787	395	266	2,042	4,498

(continued)

TABLE 38 (continued)

End of Month	All New England States (1)	Other States		New York State (4)	All States, Seasonally Adjusted (5)
		Excluding New York & Pennsylvania (2)	Pennsylvania (3)		
1919					
Jan.	1,796	400	268	2,065	4,534
Feb.	1,806	404	270	2,088	4,564
Mar.	1,816	409	273	2,111	4,599
Apr.	1,826	414	275	2,133	4,639
May	1,836	418	277	2,156	4,678
June	1,846	422	278	2,179	4,715
July	1,857	425	279	2,194	4,750
Aug.	1,867	429	280	2,208	4,789
Sept.	1,878	433	280	2,223	4,823
Oct.	1,892	436	282	2,238	4,858
Nov.	1,906	440	283	2,253	4,892
Dec.	1,920	444	285	2,267	4,926
1920					
Jan.	1,934	448	286	2,289	4,963
Feb.	1,948	451	288	2,311	4,994
Mar.	1,962	454	289	2,333	5,029
Apr.	1,977	457	291	2,355	5,069
May	1,991	460	291	2,377	5,108
June	2,005	463	290	2,398	5,146
July	2,013	460	291	2,421	5,180
Aug.	2,022	458	291	2,443	5,220
Sept.	2,031	470	292	2,465	5,269
Oct.	2,030	473	296	2,488	5,297
Nov.	2,033	475	300	2,510	5,330
Dec.	2,036	478	305	2,533	5,362
1921					
Jan.	2,046	479	306	2,552	5,388
Feb.	2,055	480	307	2,571	5,408
Mar.	2,064	480	308	2,590	5,433
Apr.	2,065	481	307	2,610	5,452
May	2,066	482	306	2,629	5,472
June	2,067	482	305	2,648	5,492
July	2,068	481	304	2,656	5,504
Aug.	2,068	481	302	2,664	5,521
Sept.	2,069	480	301	2,672	5,533
Oct.	2,070	480	304	2,680	5,545
Nov.	2,073	479	306	2,688	5,558
Dec.	2,077	479	309	2,696	5,572

(continued)

TABLE 38 (concluded)

End of Month	All New England States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1922					
Jan.	2,091	481	309	2,712	5,599
Feb.	2,105	482	310	2,728	5,619
Mar.	2,119	484	310	2,744	5,646
Apr.	2,117	485	309	2,760	5,659
May	2,114	485	308	2,775	5,671
June	2,111	485	307	2,791	5,683
July	2,124	488	306	2,808	5,720
Aug.	2,136	492	305	2,825	5,763
Sept.	2,148	495	304	2,842	5,801
Oct.	2,176	498	304	2,859	5,849
Nov.	2,186	502	310	2,876	5,885
Dec.	2,195	505	315	2,892	5,919
1923					
Jan.	2,219	509	317	2,918	5,968
Feb.	2,242	513	319	2,943	6,011
Mar.	2,266	516	322	2,968	6,060
Apr.	2,281	519	322	2,994	6,103
May	2,296	522	322	3,019	6,146
June	2,311	524	322	3,044	6,189
July	2,322	527	322	3,061	6,226
Aug.	2,334	530	322	3,077	6,270
Sept.	2,346	532	322	3,094	6,307
Oct.	2,350	535	327	3,111	6,335
Nov.	2,364	538	331	3,127	6,373

Source, by Column

1. Sums of reported and estimated figures for Conn., Me., Mass., N. H., R. I., Vt. See text, Chap. 15, Appendix, for sources and adjustments to reported figures. Missing call date figures interpolated by Method R₃ ($r = .45$, standard deviations assumed same for all six states); monthly estimates interpolated by Method L between call dates.

2. Sums of reported and estimated figures for Del., Ind., Md., Minn., N. J., Ohio, Wash. (beginning Sept. 1917), W. Va. (included through Mar. 1922), and Wis. See text for sources and adjustments to reported figures. Missing monthly estimates interpolated by Method L.

3. 4. See text for sources and adjustments to reported figures. Missing monthly estimates interpolated by Method L between the closest call dates for which there were reported figures.

5. Sum of cols., 1, 2, 3, and 4, corrected for seasonal variation.

Derivation of Estimates

TABLE 39

*Deposits at Mutual Savings Banks by Groups of States,
at End of Month, December 1923 - December 1946*

(millions of dollars)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1923					
Dec.	2,755	175	335	3,138	6,403
1924					
Jan.	2,765	176	337	3,162	6,440
Feb.	2,772	177	338	3,173	6,460
Mar.	2,785	178	339	3,204	6,506
Apr.	2,791	179	339	3,198	6,507
May	2,804	179	338	3,212	6,534
June	2,824	180	338	3,248	6,589
July	2,837	181	337	3,270	6,625
Aug.	2,845	182	337	3,274	6,638
Sept.	2,860	184	337	3,302	6,682
Oct.	2,866	185	343	3,332	6,726
Nov.	2,886	186	347	3,358	6,778
Dec.	2,909	187	352	3,391	6,839
1925					
Jan.	2,921	188	353	3,402	6,864
Feb.	2,934	190	354	3,418	6,896
Mar.	2,947	191	356	3,431	6,924
Apr.	2,960	192	356	3,455	6,963
May	2,969	193	356	3,468	6,987
June	2,986	195	356	3,503	7,040
July	2,998	196	356	3,506	7,056
Aug.	3,012	198	356	3,517	7,083
Sept.	3,014	199	356	3,488	7,057
Oct.	3,027	201	362	3,554	7,143
Nov.	3,045	202	367	3,577	7,191
Dec.	3,064	204	372	3,600	7,240

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1926					
Jan.	3,066	206	373	3,587	7,232
Feb.	3,084	207	374	3,625	7,290
Mar.	3,095	209	375	3,639	7,317
Apr.	3,105	210	375	3,654	7,345
May	3,117	211	376	3,672	7,376
June	3,135	212	376	3,708	7,431
July	3,147	214	377	3,726	7,464
Aug.	3,159	216	377	3,744	7,496
Sept.	3,176	217	378	3,777	7,549
Oct.	3,183	219	384	3,805	7,591
Nov.	3,216	221	389	3,868	7,694
Dec.	3,227	223	394	3,857	7,701
1927					
Jan.	3,241	224	396	3,882	7,743
Feb.	3,255	226	398	3,905	7,783
Mar.	3,272	227	400	3,940	7,839
Apr.	3,286	228	400	3,949	7,864
May	3,305	230	401	3,978	7,914
June	3,325	231	402	4,004	7,961
July	3,343	232	402	4,029	8,006
Aug.	3,361	234	402	4,051	8,047
Sept.	3,383	235	402	4,090	8,110
Oct.	3,410	237	408	4,114	8,168
Nov.	3,441	239	415	4,147	8,242
Dec.	3,467	241	422	4,160	8,289
1928					
Jan.	3,484	242	424	4,185	8,336
Feb.	3,500	244	427	4,204	8,375
Mar.	3,518	245	427	4,214	8,404
Apr.	3,540	247	427	4,245	8,459

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1928					
May	3,558	248	427	4,257	8,490
June	3,574	249	427	4,267	8,517
July	3,586	251	429	4,287	8,553
Aug.	3,601	253	430	4,316	8,600
Sept.	3,618	255	431	4,352	8,656
Oct.	3,634	256	437	4,376	8,702
Nov.	3,650	258	442	4,387	8,738
Dec.	3,669	260	448	4,402	8,778
1929					
Jan.	3,669	260	448	4,401	8,778
Feb.	3,675	261	449	4,423	8,808
Mar.	3,677	262	449	4,426	8,813
Apr.	3,686	262	447	4,421	8,816
May	3,697	263	446	4,422	8,828
June	3,709	263	445	4,428	8,845
July	3,713	263	444	4,438	8,858
Aug.	3,715	263	444	4,444	8,866
Sept.	3,720	262	443	4,457	8,882
Oct.	3,730	262	446	4,403	8,842
Nov.	3,723	263	450	4,386	8,822
Dec.	3,721	263	454	4,382	8,820
1930					
Jan.	3,732	264	458	4,407	8,861
Feb.	3,744	265	461	4,436	8,907
Mar.	3,757	266	464	4,469	8,956
Apr.	3,770	367	464	4,489	8,990
May	3,784	267	464	4,510	9,025
June	3,797	267	465	4,530	9,059
July	3,811	267	466	4,577	9,121
Aug.	3,821	267	467	4,609	9,164

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1930					
Sept.	3,836	266	469	4,662	9,233
Oct.	3,848	266	480	4,691	9,285
Nov.	3,849	268	490	4,723	9,330
Dec.	3,859	270	500	4,786	9,416
1931					
Jan.	3,879	271	506	4,878	9,534
Feb.	3,887	272	512	4,928	9,598
Mar.	3,893	273	517	4,973	9,655
Apr.	3,914	274	520	5,039	9,747
May	3,931	275	523	5,088	9,816
June	3,942	276	526	5,120	9,864
July	3,944	274	528	5,154	9,900
Aug.	3,948	272	530	5,194	9,944
Sept.	3,951	270	532	5,231	9,984
Oct.	3,962	268	525	5,254	10,009
Nov.	3,959	267	518	5,276	10,020
Dec.	3,943	265	511	5,251	9,970
1932					
Jan.	3,894	264	510	5,230	9,897
Feb.	3,891	262	509	5,242	9,905
Mar.	3,896	261	508	5,277	9,942
Apr.	3,885	259	508	5,273	9,924
May	3,870	258	507	5,259	9,894
June	3,862	256	506	5,266	9,890
July	3,851	255	505	5,264	9,874
Aug.	3,838	254	503	5,259	9,854
Sept.	3,832	252	502	5,277	9,863
Oct.	3,819	252	507	5,282	9,860
Nov.	3,827	251	512	5,286	9,876
Dec.	3,837	250	517	5,296	9,901

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1933					
Jan.	3,831	247	514	5,306	9,899
Feb.	3,813	244	511	5,269	9,837
Mar.	3,787	241	508	5,204	9,740
Apr.	3,772	237	505	5,174	9,688
May	3,752	234	502	5,128	9,616
June	3,741	231	499	5,115	9,586
July	3,736	231	498	5,095	9,561
Aug.	3,731	231	497	5,074	9,534
Sept.	3,732	232	496	5,074	9,534
Oct.	3,730	232	495	5,059	9,516
Nov.	3,738	232	501	5,049	9,520
Dec.	3,748	232	506	5,046	9,532
1934					
Jan.	3,750	234	508	5,057	9,549
Feb.	3,754	236	510	5,076	9,575
Mar.	3,755	238	510	5,107	9,610
Apr.	3,766	239	510	5,107	9,622
May	3,776	240	510	5,105	9,631
June	3,776	241	511	5,120	9,648
July	3,780	242	510	5,124	9,657
Aug.	3,768	243	510	5,069	9,590
Sept.	3,790	245	510	5,140	9,684
Oct.	3,788	246	510	5,138	9,681
Nov.	3,794	247	517	5,140	9,698
Dec.	3,797	249	523	5,135	9,704
1935					
Jan.	3,805	250	524	5,132	9,710
Feb.	3,817	251	525	5,147	9,740
Mar.	3,817	252	525	5,169	9,763
Apr.	3,823	253	525	5,168	9,769

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1935					
May	3,828	254	525	5,168	9,775
June	3,836	254	525	5,172	9,787
July	3,840	255	526	5,171	9,793
Aug.	3,844	257	527	5,168	9,796
Sept.	3,851	258	527	5,174	9,810
Oct.	3,859	259	528	5,171	9,817
Nov.	3,866	260	535	5,175	9,836
Dec.	3,870	261	542	5,168	9,841
1936					
Jan.	3,876	262	544	5,167	9,849
Feb.	3,884	263	546	5,177	9,870
Mar.	3,894	264	547	5,188	9,893
Apr.	3,900	265	548	5,185	9,897
May	3,906	265	549	5,181	9,901
June	3,916	266	550	5,196	9,928
July	3,924	267	551	5,207	9,949
Aug.	3,929	269	552	5,213	9,963
Sept.	3,934	270	553	5,218	9,976
Oct.	3,942	271	555	5,220	9,988
Nov.	3,946	272	561	5,222	10,002
Dec.	3,950	273	570	5,225	10,018
1937					
Jan.	3,963	274	572	5,234	10,042
Feb.	3,976	274	573	5,248	10,072
Mar.	3,990	274	574	5,262	10,099
Apr.	3,998	274	574	5,261	10,106
May	4,005	274	574	5,261	10,113
June	4,009	273	574	5,248	10,104
July	4,018	274	574	5,278	10,143
Aug.	4,020	274	574	5,286	10,154

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1937					
Sept.	4,020	275	574	5,286	10,154
Oct.	4,006	276	577	5,266	10,125
Nov.	4,003	276	580	5,271	10,130
Dec.	3,998	276	583	5,271	10,129
1938					
Jan.	3,998	277	584	5,279	10,138
Feb.	4,000	277	585	5,297	10,159
Mar.	4,001	278	584	5,313	10,176
Apr.	3,998	278	582	5,314	10,172
May	3,997	278	581	5,323	10,179
June	3,991	277	580	5,316	10,165
July	3,993	278	579	5,340	10,191
Aug.	3,991	278	579	5,348	10,196
Sept.	3,989	279	578	5,357	10,202
Oct.	3,991	279	583	5,374	10,227
Nov.	3,987	280	587	5,381	10,235
Dec.	3,982	281	592	5,383	10,238
1939					
Jan.	3,991	281	593	5,406	10,271
Feb.	4,002	281	595	5,431	10,309
Mar.	4,010	281	596	5,462	10,350
Apr.	4,014	281	595	5,474	10,364
May	4,017	282	595	5,487	10,380
June	4,019	282	594	5,493	10,387
July	4,022	283	593	5,530	10,428
Aug.	4,020	284	592	5,546	10,441
Sept.	4,015	285	591	5,551	10,441
Oct.	4,024	285	595	5,563	10,467
Nov.	4,018	286	599	5,569	10,472
Dec.	4,014	287	603	5,577	10,481

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1940					
Jan.	4,020	288	607	5,605	10,520
Feb.	4,026	289	611	5,632	10,558
Mar.	4,033	290	614	5,659	10,596
Apr.	4,038	291	613	5,671	10,612
May	4,037	291	611	5,661	10,601
June	4,035	292	610	5,647	10,584
July	4,033	292	612	5,642	10,579
Aug.	4,032	293	613	5,646	10,585
Sept.	4,033	294	615	5,651	10,593
Oct.	4,038	295	617	5,646	10,595
Nov.	4,037	295	618	5,662	10,613
Dec.	4,034	296	620	5,665	10,615
1941					
Jan.	4,043	296	620	5,653	10,613
Feb.	4,055	297	620	5,652	10,624
Mar.	4,065	297	621	5,644	10,627
Apr.	4,064	297	621	5,638	10,620
May	4,060	298	621	5,621	10,599
June	4,061	298	621	5,626	10,606
July	4,053	298	620	5,586	10,557
Aug.	4,052	298	620	5,572	10,542
Sept.	4,048	299	619	5,550	10,516
Oct.	4,041	300	622	5,565	10,528
Nov.	4,044	300	624	5,563	10,531
Dec.	4,040	301	626	5,533	10,500
1942					
Jan.	4,011	301	621	5,422	10,354
Feb.	4,007	300	616	5,401	10,325
Mar.	4,002	300	610	5,376	10,288
Apr.	4,006	300	610	5,384	10,301

(continued)

TABLE 39 (continued)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1942					
May	4,010	301	611	5,390	10,311
June	4,021	301	611	5,421	10,354
July	4,034	304	615	5,422	10,376
Aug.	4,053	308	620	5,443	10,424
Sept.	4,067	312	624	5,444	10,446
Oct.	4,086	315	629	5,470	10,500
Nov.	4,106	319	633	5,514	10,572
Dec.	4,125	322	637	5,552	10,637
1943					
Jan.	4,149	326	642	5,583	10,700
Feb.	4,175	330	646	5,622	10,773
Mar.	4,197	334	651	5,646	10,828
Apr.	4,224	338	655	5,688	10,905
May	4,254	342	660	5,743	10,998
June	4,286	345	664	5,807	11,103
July	4,320	351	670	5,879	11,219
Aug.	4,351	356	676	5,942	11,325
Sept.	4,364	362	682	5,943	11,351
Oct.	4,406	367	685	5,994	11,452
Nov.	4,441	373	700	6,075	11,589
Dec.	4,474	379	711	6,149	11,713
1944					
Jan.	4,510	384	718	6,209	11,821
Feb.	4,542	390	724	6,258	11,914
Mar.	4,573	396	734	6,303	12,006
Apr.	4,614	401	738	6,396	12,149
May	4,654	406	746	6,483	12,288
June	4,693	411	753	6,570	12,427
July	4,732	419	764	6,636	12,551
Aug.	4,779	427	775	6,729	12,710

(continued)

TABLE 39 (concluded)

End of Month	All New England & Selected Eastern States (1)	Other States Excluding New York & Pennsylvania (2)	Pennsylvania (3)	New York State (4)	All States, Seasonally Adjusted (5)
1944					
Sept.	4,820	435	786	6,803	12,844
Oct.	4,874	442	797	6,911	13,024
Nov.	4,920	450	808	7,006	13,184
Dec.	4,966	458	818	7,094	13,337
1945					
Jan.	5,016	465	829	7,190	13,501
Feb.	5,068	473	838	7,295	13,674
Mar.	5,117	480	844	7,386	13,827
Apr.	5,179	487	855	7,515	14,036
May	5,230	495	862	7,601	14,188
June	5,288	502	870	7,714	14,374
July	5,343	510	880	7,806	14,539
Aug.	5,403	518	891	7,917	14,729
Sept.	5,455	525	901	7,995	14,876
Oct.	5,500	532	911	8,094	15,037
Nov.	5,550	540	921	8,177	15,188
Dec.	5,600	547	932	8,262	15,341
1946					
Jan.	5,650	552	939	8,343	15,484
Feb.	5,699	557	945	8,419	15,620
Mar.	5,743	562	952	8,477	15,735
Apr.	5,798	567	959	8,577	15,902
May	5,849	572	967	8,660	16,048
June	5,905	577	973	8,766	16,241
July	5,939	581	978	8,843	16,341
Aug.	5,969	585	983	8,902	16,438
Sept.	5,985	588	988	8,910	16,472
Oct.	6,026	592	994	8,976	16,589
Nov.	6,050	595	1,001	9,049	16,695
Dec.	6,078	599	1,007	9,135	16,819

3. For six other states (excluding New York and Pennsylvania) with mutual savings banks in operation for part or all of the period, end-of-month figures were interpolated by Method L between closest reported figures (Table 39, column 2).

4. For Pennsylvania, end-of-month estimates were interpolated by Method L between quarterly and three-times-yearly call date figures, as described for 1907-23 (Table 39, column 3).

5. The monthly series for New York, shown with seasonal corrections in Table 39, column 4, is described in section 1 of this chapter.

6. The aggregate of the separate components of our mutual savings bank deposit series required further seasonal correction (Table 39, column 5).

5. Federal Reserve Estimates, 1947 to Date

Beginning January 1947 we use the published monthly last-Wednesday Federal Reserve series of deposits at mutual savings banks, in seasonally adjusted form, as a continuation of our series (see Chart 9).⁴ We aver-

⁴ For the original data for 1947 see *Federal Reserve Bulletin*, Mar. 1948, p. 303, and June 1948, p. 683; for 1948-60 see *Supplement to Banking and Monetary Statistics*, Section 1, Board of Governors of the Federal Reserve System, Oct. 1962, pp. 15, 17, 19; thereafter, *Federal Reserve Bulletin*, monthly issues, table showing consolidated condition statement for banks and the monetary system, since Jan. 1968 given on p. A-17 or

Notes to Table 39

Source, by Column

1. Sums of reported and estimated figures for the six New England and for three Eastern states (Del., Md., and N.J.). See text, Chap. 15, for sources and adjustments to reported figures. Missing call date figures were interpolated by Method R_3 ($r = 0.43$, standard deviations assumed the same for all states). Monthly estimates were interpolated by Method R_2 , using deseasonalized New York series in col. 4 as related series and a value of b of 0.367.

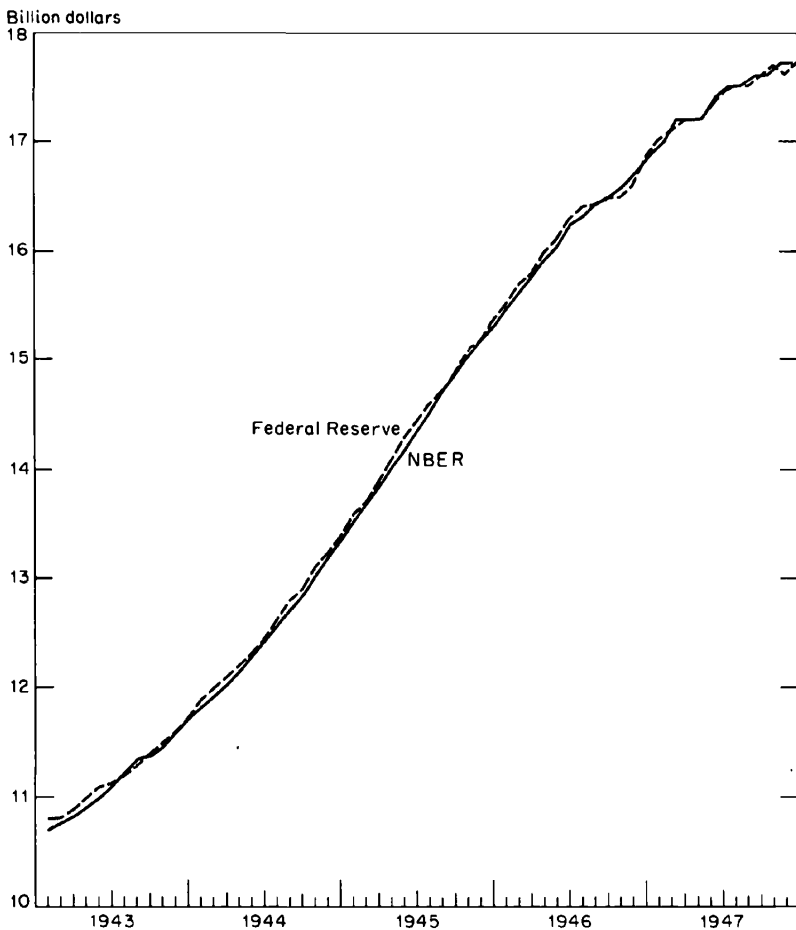
2. Sums of reported and estimated figures for Ind., Minn., Ohio, Ore. (beginning Jan. 1932), Wash., and Wis. See text, Chap. 15, for sources and adjustments to reported figures. Missing monthly estimates were interpolated by Method L between the closest dates for which there were reported figures.

3, 4. See text for description of these series.

5. Sum of cols. 1, 2, 3, and 4, corrected for seasonal variation.

CHART 9

Two Estimates of Mutual Savings Bank Deposits, 1943-47



SOURCE: *Federal Reserve Bulletin*, monthly issues beginning Feb. 1944 and Table 39, col. 5.

age pairs of the last Wednesday of the month to get figures centered at midmonth.

A-18. A very mild seasonal movement characterizes the series. The factors we computed are as follows:

Jan.	100.0	July	100.2
Feb.	100.0	Aug.	100.0
Mar.	100.2	Sept.	100.1
Apr.	100.1	Oct.	99.9
May	100.1	Nov.	99.2
June	100.3	Dec.	99.9

The Federal Reserve basic data for mutual savings banks for the half year January–June 1947 differ from ours in that they represent gross deposits including amounts due to banks and postal savings redeposited in mutual savings banks.⁵ These items are excluded from the Federal Reserve estimates from June 30, 1947, to June 30, 1961.⁶ While the items are relatively minor in amount, on an arithmetic scale the difference between the level of our series and that of the Federal Reserve is perceptible. Difference in the relative movements of the series is less marked. We do not believe that the discontinuity between the two series is appreciable enough to impair the validity of our decision to join them.

6. Reliability of the Estimates

We summarize the character of our series in Table 40. It provides information on two aspects of our procedure. First, it shows the percentage distribution of deposits at mutual savings banks among four classes of states for each of the two periods, 1907–23 and 1924–46 (column 5). Second, it presents a summary of the different constitution of the final series in the two periods (totals in columns 2, 3, and 4).

The percentages in column 5 invite no special comment. In the later period they show a slight increase in the concentration of mutual savings bank deposits in New York State and a corresponding decline elsewhere outside Pennsylvania. The most striking feature of Table 40, however, is the difference between the two periods in percentage of final monthly series obtained from direct reports. For the early period, only 19 per cent of the final series represents directly reported data; for the later

⁵ The Federal Reserve monthly mutual savings bank deposit series may be compared at June dates with the annual series in *All-Bank Statistics, United States, 1896–1955*, Board of Governors of the Federal Reserve System, Washington, D.C., 1959, p. 48. The level of the monthly series is higher than that of the annual gross deposits series; therefore, it is possible that the monthly series includes liabilities other than deposits. The June 1947 monthly figure equals the sum of "other time," interbank, and government time deposits, given in *All-Bank Statistics* in the June 1947 breakdown. The monthly June figures, 1948–55, agree with the annual "other time" deposit figures.

⁶ Through Dec. 1960 the Federal Reserve mutual savings deposit figure at June and December dates agreed with the figure for total time deposits excluding interbank time deposits given in annual reports of the FDIC for total mutual savings banks. For dates after 1960 it is not possible to determine the coverage of the Federal Reserve figure from the breakdowns given in the FDIC reports. The Federal Reserve monthly figures are described as follows in a footnote: "Beginning with June 1961 includes amounts now reported by insured mutual savings banks as demand deposits previously reported as time deposits or other liabilities" (*Federal Reserve Bulletin*, Aug. 1962, p. 1009). The change

TABLE 40

Reported and Interpolated Deposits at Mutual Savings Banks in Various States as Percentages of Aggregate Mutual Savings Bank Deposits, 1907-1946

States With Mutual Savings Banks	Per Cent of Total Mutual Savings Bank Deposits			
	Reported (1)	Interpolated		Total Cols. 1+2+3 (4)
		By Method L (2)	By Method R (3)	
1907-23				
New York	9.4	37.6	—	47.0
Pennsylvania	1.1 ^a	3.9	—	5.0
New England	7.0	25.0	7.0	39.0
Other States	1.4	7.6	—	9.0
Total	18.9	74.1	7.0	100.0
1924-46				
New York	53.0	—	—	53.0
Pennsylvania	1.8 ^a	4.2	—	6.0
New England and Selected Eastern States	8.7	—	29.3	38.0
Other States	0.5	2.5	—	3.0
Total	64.0	6.7	29.3	100.0

^aThe percentage of reported deposits includes a correction by Method L of under 1 per cent of the average of mutual savings bank deposits in Pennsylvania.

period the percentage is 64. The difference is almost wholly accounted for by the availability of a monthly series for New York beginning 1924.

Nearly all of the interpolation required to obtain the final series for the early period was accomplished by Method L; only a small percentage by Method R. For the later period, when 36 per cent of the final series was interpolated, we relied mostly on Method R.

in the reporting was enforced by an amendment of July 14, 1960, to the Federal Deposit Insurance Act, which authorized deductions of 16% per cent of demand deposits and 1 per cent of time and savings deposits from the base on which the deposit insurance assessment was levied.

The error involved in interpolation by Method L clearly depends on the variability of a series between dates for which there are direct reports. Our examination of data for frequent report dates suggests that mutual savings deposits show little variability. We suspect that the true values of total mutual savings deposits seldom deviate more than 1 per cent from a straight-line trend between reported figures.

For this reason we believe that our monthly series for 1907–23 may be viewed with confidence despite the extensive use of interpolation by Method L. Our series for 1924–46 has of course a much smaller margin of error. It ranks high in reliability among the series we have constructed.

Appendix to Chapter 15

SOURCES OF MUTUAL SAVINGS BANK DEPOSIT DATA

Connecticut: Report of the Bank Commissioner of the State of Connecticut (Fall call dates); Connecticut Bank Department, *Quarterly Bulletin*, Nos. 5, 7, 10–14 (monthly dates, 1914–15; possibly preliminary data—October dates in this source do not agree with Bank Commissioner's Report); unpublished data, examined in the Office of the Director of Bank Examinations, Connecticut Banking Department (Dec. 31, 1921 and 1922; quarterly dates, 1923–45); *Annual Report* of the U.S. Comptroller of the Currency (June dates).

Delaware: Delaware Insurance Department, *Banks and Banking* (estimates shown for mutual savings banks deposits, June 1909, combined with deposits of other banks in this source); *Annual Report* of the Comptroller of the Currency and of the State Bank Commissioner of Delaware.

Indiana: Auditor of Indiana, *Report of the Bank Department* (in the *Indiana Year Book*), 1917–20; *Annual Report* of the Department of Banking of Indiana; *Annual Report* of the Department of Financial Institutions of Indiana; *Annual Report* of the U.S. Comptroller of the Currency.

Maine: *Annual Report* of the Bank Commissioner, Banking Department, Maine (call dates), and unpublished data, 1920–46, from the Bank Commissioner's Office (quarterly dates); *Annual Report* of the U.S. Comptroller of the Currency.

Maryland: Annual Report of the Bank Commissioner, Banking Department, Maryland (December dates); unpublished June data, 1910, 1913-16, and 1934, obtained from the Federal Reserve Board; *Annual Report* of the U.S. Comptroller of the Currency (other June dates).

Massachusetts: Annual Report of the Commissioner of Banks of Massachusetts; also mimeographed "Comparative Statement of Condition of All Savings Banks," issued by the Commissioner of Banks; *Annual Report* of the U.S. Comptroller of the Currency.

Minnesota: Annual Report of Minnesota Banking Department; *Abstract of Reports of Condition of Minnesota Banks* (available to us beginning 1917); *Annual Report* of the U.S. Comptroller of the Currency. At report dates other than June 1917-28, estimated deposits at stock savings banks were deducted from published figures for mutual and stock savings banks combined.

New Hampshire: Annual Report of the New Hampshire Bank Commissioner; *Annual Report* of the Comptroller of the Currency, 1909, 1911-13, 1915, 1944-46. Deposits at guaranty savings banks were deducted from reported figures for mutual and guaranty savings banks combined.

New Jersey: Annual Report of the Commissioner of Banking and Insurance of New Jersey; unpublished data, 1927-46, from the State of New Jersey Department of Banking and Insurance; *Annual Report* of the Comptroller of the Currency (June figures through 1941). At mid-year dates, 1907-08 and 1919-20, estimated amounts of deposits at the Paterson Savings Institution, a stock savings bank, were deducted. The state reports present December data for all savings banks combined, but also include returns from individual banks. By subtracting the figures for the Paterson Savings Institution from the state report aggregate for all savings banks, it was possible to obtain December figures for deposits at mutual savings banks.

Unpublished state figures for mutual savings banks only are available for all call dates beginning 1927. For June dates, 1942-46, this was the source of our figures. At December dates, 1941-44, the Comptroller's figures are slightly larger than the state report figures; in December 1946, \$100,000 smaller. We used the Comptroller's figures in cases of disagreement.

Beginning December 1936, figures for two associations—institutions possessing the characteristics of both a savings bank and a building and

loan association, in that all of the deposits are invested in bonds and mortgages and each depositor has the privilege of making a mortgage loan—must be added to the savings bank aggregate in the state reports. (The Comptroller includes these associations in mutual savings bank data throughout the period.)

New York: Annual Report, Part II, of New York State Superintendent of Banks and of U.S. Comptroller of the Currency; FDIC, *Assets and Liabilities of Operating Insured Banks*, 1945–46. The State report figure for July 1, 1914, is not in agreement with the Comptroller's figures for June 30, 1914. We used the former. Monthly figures for dates other than June and December, beginning January 1924, were obtained from *Survey of Current Business Supplement*, 1932, pp. 76–77; 1936, p. 47; 1938, p. 56; 1940, p. 52; 1942, p. 65; 1947, p. 75, and deseasonalized by us.

Ohio: Annual Report of U.S. Comptroller of the Currency and FDIC, *Assets and Liabilities of Operating Insured Banks*, June 1946. The State Division of Banks publishes abstracts of the condition of mutual savings and commercial banks combined.

Oregon: Annual Report of the Oregon Banking Department and U.S. Comptroller of the Currency. The first Oregon mutual savings bank was chartered October 1931.

Pennsylvania: Annual Report of Commissioner of Banking of Pennsylvania and of U.S. Comptroller of the Currency; unpublished data, 1918–46, from Pennsylvania Department of Banking. Figures exclude deposits at a stock savings bank, from unpublished Federal Reserve data at mid-year dates, from *Annual Report* of U.S. Comptroller of the Currency at December dates, 1936–46, and from interpolation by Method L at other dates.

Rhode Island: Annual Report of: the Bank Commissioner; the Chief of Division of Banking and Insurance, Division of Banking, Department of Taxation and Regulation; and the Banking Bureau, Department of Business Regulation, State of Rhode Island. *Annual Report* of the U.S. Comptroller of the Currency. In 1918–19 the Comptroller properly classified subscriptions to United States Liberty Loan bonds as deposits—shown as “other liabilities” in the State reports. In 1925 the Comptroller includes an item, “reserved for depositors’ interest” in deposits. Because this classification does not seem defensible, we followed the state report in this instance.

Vermont: Annual Report of the Commissioner of Banking and Insurance of Vermont and of U.S. Comptroller of the Currency; unpublished data received from the Commissioner's Office (1920-46); and FDIC, *Assets and Liabilities of Operating Insured Banks*. State report for June 1907 shows two totals for mutual savings deposits, and discrepancy cannot now be correctly explained; we accepted the version selected by the Federal Reserve Board. Comptroller's data, June 1914 and 1935, are preliminary figures; state report figures for these years are final. FDIC figures were used, June 1941 and 1943.

Washington: Annual Report of the State Banking Supervisor, Division of Banks, Washington, and of U.S. Comptroller of the Currency; and FDIC, *Assets and Liabilities of Operating Insured Banks*. The first Washington mutual savings bank was formed on September 12, 1917.

West Virginia: Annual Report of Bank Commissioner of West Virginia and of U.S. Comptroller of the Currency. The latter source, 1918 and 1921, disagrees with the state report, but according to the Federal Reserve Board, U.S. Comptroller figures agreed with reports on file for these years submitted and signed by the cashier of the single mutual savings bank trust company in April 1922.

Wisconsin: Annual Report of Wisconsin Commissioner of Banking (Fall dates) and of U.S. Comptroller of the Currency (midyear dates). Quarterly reports available for all Wisconsin banks combined do not segregate mutual savings banks returns.