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# Finance

## TABLES F 1—F 7

Net savings and net income, adjusted, exclude gains and losses from sales of capital assets, 1929–38, and from changes in inventory valuation, 1919–38. Net savings and net income without any specific designation are unadjusted, i.e., include these two types of gain and loss.



**F 1 Net Income Originating by Major Industrial Divisions**  
(millions of dollars)

	BANKING	INSURANCE	REAL ESTATE	TOTAL	TOTAL, ADJ.
	(1)	(2)	(3)	(4)	(5)
1919	868	706	5,324	6,899	6,819
1920	957	727	5,787	7,471	7,418
1921	921	742	6,018	7,682	7,770
1922	923	783	6,551	8,258	8,255
1923	970	776	7,046	8,793	8,809
1924	1,035	865	7,699	9,600	9,608
1925	1,131	1,031	7,576	9,740	9,762
1926	1,180	1,127	7,507	9,815	9,837
1927	1,281	1,287	7,742	10,311	10,312
1928	1,401	1,435	8,033	10,870	10,874
1929	1,389	1,483	8,261	11,134	10,910
1930	1,139	1,326	7,295	9,761	9,740
1931	734	1,160	5,695	7,591	7,894
1932	415	937	4,141	5,493	5,905
1933	290	864	3,678	4,833	5,191
1934	490	1,041	3,503	5,035	5,071
1935	708	1,105	3,917	5,731	5,680
1936	881	1,144	4,086	6,112	5,976
1937	875	1,272	4,503	6,651	6,636
1938	814	1,274	4,462	6,551	6,538

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## F 2 Net Income Originating by Type (millions of dollars)

	WAGES & SALARIES	ENTREP. WITHDR.	DIVI-DENDS	INTEREST	NET RENT TO INDI-VIDUALS*	PROP. INCOME	PAY. TO INDI-VIDUALS	NET SAVINGS	NET INCOME	NET SAVINGS, ADJ.	NET INCOME, ADJ.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1919	1,379	121	335	815	3,966	5,117	6,518	281	6,899	201	6,819
1920	1,651	147	405	882	4,287	5,576	7,375	96.1	7,471	43.1	7,418
1921	1,729	144	410	935	4,470	5,816	7,689	-7.6	7,682	80.4	7,770
1922	1,745	148	472	970	4,806	6,339	8,333	25.6	8,358	22.6	8,255
1923	1,816	172	531	1,121	5,165	6,818	8,868	-14.4	8,793	1.6	8,809
1924	1,973	189	506	1,223	5,631	7,361	9,325	75.5	9,600	83.5	9,608
1925	2,028	211	554	1,396	5,465	7,417	9,057	82.3	9,740	104	9,762
1926	2,241	226	549	1,516	5,141	7,268	9,675	139	9,815	161	9,837
1927	2,434	234	545	1,712	5,078	7,396	10,005	306	10,311	307	10,312
1928	2,637	245	660	1,981	4,941	7,583	10,466	404	10,870	408	10,874
1929	2,856	260	764	2,266	4,917	7,947	11,064	70.4	11,134	-153	10,910
1930	2,650	252	664	2,316	4,265	7,246	10,149	-388	9,761	-409	9,740
1931	2,385	229	593	2,298	3,026	5,918	8,534	-943	7,591	-639	7,894
1932	1,967	195	370	2,028	2,090	4,489	6,852	-1,158	5,493	-747	5,995
1933	1,743	176	204	1,552	2,114	3,870	5,791	-957	4,333	-600	5,191
1934	1,858	191	260	1,478	1,905	3,644	5,693	-658	5,035	-621	5,071
1935	1,952	201	277	1,493	2,143	3,913	6,067	-336	5,731	-386	5,680
1936	2,017	201	270	1,475	2,186	3,983	6,152	-39.6	6,112	-176	5,976
1937	2,120	225	285	1,465	2,579	4,329	6,675	-24.0	6,651	-39.1	6,636
1938	2,149	217	291	1,426	2,575	4,293	6,659	-108	6,551	-121	6,538

\* Including imputed rent on owner-occupied residences.

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F 3 Wages and Salaries by Minor Industrial Divisions (millions of dollars)

	B A N K I N G				Total	I N S U R A N C E			REAL ESTATE	TOTAL	
	Commercial incl. stock savings	Mutual savings	Fed. Res.	Insolvent		Life	Other	Agencies			Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1919	351	13.0	17.1	0.8	382	286	119	129	535	461	1,379
1920	437	15.2	19.5	0.7	472	328	150	162	641	537	1,651
1921	468	17.2	21.3	1.7	508	359	171	150	681	539	1,729
1922	475	17.5	19.5	2.5	515	382	171	151	704	525	1,745
1923	503	18.7	20.3	3.9	546	257	193	239	689	580	1,816
1924	535	20.0	18.7	5.7	579	284	225	263	773	621	1,973
1925	558	21.4	17.2	7.0	604	315	247	292	854	569	2,028
1926	593	22.7	16.8	7.9	640	340	275	311	926	673	2,241
1927	624	23.8	17.0	8.7	674	364	308	320	992	767	2,434
1928	652	25.1	17.3	8.4	703	394	334	331	1,060	873	2,637
1929	676	26.6	17.4	10.9	731	427	353	348	1,130	994	2,856
1930	653	27.9	17.4	14.1	712	431	365	336	1,135	802	2,650
1931	576	28.9	17.1	18.0	640	410	344	307	1,062	683	2,385
1932	484	29.7	17.6	23.3	555	343	298	273	915	496	1,967
1933	395	29.6	19.2	34.4	478	322	270	243	836	428	1,743
1934	413	30.8	20.3	30.4	495	338	274	263	876	486	1,858
1935	422	31.9	20.4	24.6	499	352	286	277	916	535	1,952
1936	446	33.1	19.9	18.2	517	364	308	276	948	550	2,017
1937	472	35.2	18.5	13.8	540	362	336	319	1,017	562	2,120
1938	483	36.5	18.9	12.6	551	367	353	305	1,026	571	2,149

F 4 Dividends and Interest by Major Industrial Divisions  
(millions of dollars)

	D I V I D E N D S				I N T E R E S T				
	BANK-	INSUR-	REAL	TOTAL	INSUR-	REAL ESTATE			TOTAL
	ING	ANCE	ESTATE		ANCE	Corp.	Indiv.	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1919	276	18.5	40.4	335	-13.5	297	531	829	815
1920	297	19.3	88.8	405	-16.9	287	612	899	882
1921	312	23.1	75.0	410	-18.8	278	676	954	935
1922	328	44.6	99.8	472	-19.4	245	744	989	970
1923	325	39.6	167	531	-19.8	278	862	1,141	1,121
1924	326	33.4	146	506	-21.8	271	973	1,245	1,223
1925	342	38.5	173	554	-22.5	294	1,124	1,419	1,396
1926	355	43.0	151	549	-22.6	298	1,241	1,539	1,516
1927	381	54.7	108	545	-23.8	299	1,436	1,736	1,712
1928	438	65.4	155	660	-23.8	420	1,584	2,005	1,981
1929	456	69.7	238	764	-32.0	432	1,865	2,298	2,266
1930	449	61.0	153	664	-24.1	434	1,906	2,341	2,316
1931	410	60.8	122	593	-21.5	450	1,869	2,320	2,298
1932	280	30.9	58.9	370	-20.9	375	1,674	2,049	2,028
1933	157	16.4	30.1	204	-21.2	252	1,320	1,573	1,552
1934	187	22.7	50.5	260	-25.0	235	1,267	1,503	1,478
1935	188	37.9	51.3	277	-26.6	220	1,299	1,519	1,493
1936	193	21.8	55.1	270	-27.5	199	1,304	1,503	1,475
1937	200	21.1	63.7	285	-30.7	199	1,296	1,496	1,465
1938	196	38.8	56.4	291	-30.9	197	1,260	1,457	1,426

F 5 Property Income by Major Industrial Divisions  
(millions of dollars)

	R E A L E S T A T E					Total	TOTAL
	BANK- ING	INSUR- ANCE	Dividends & interest	Net rent to indi- viduals	Individ- uals' net imputed rent		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1919	276	5.0	869	2,452	1,514	4,896	5,117
1920	297	2.4	988	2,375	1,912	5,276	5,576
1921	312	4.4	1,029	2,313	2,157	5,499	5,816
1922	328	25.2	1,089	2,643	2,253	5,986	6,339
1923	325	19.7	1,308	2,827	2,337	6,473	6,818
1924	326	11.6	1,392	2,973	2,658	7,023	7,361
1925	342	16.0	1,592	2,892	2,573	7,058	7,417
1926	355	20.4	1,690	2,735	2,406	6,832	7,208
1927	381	30.9	1,844	2,692	2,385	6,923	7,336
1928	438	41.6	2,161	2,698	2,243	7,102	7,583
1929	456	37.7	2,536	2,580	2,336	7,453	7,947
1930	449	36.9	2,494	1,982	2,282	6,760	7,246
1931	410	39.3	2,442	1,287	1,739	5,469	5,918
1932	280	10.0	2,108	806	1,284	4,199	4,489
1933	157	-4.8	1,603	898	1,216	3,717	3,870
1934	187	-2.3	1,553	857	1,048	3,459	3,644
1935	188	11.3	1,571	1,036	1,107	3,714	3,913
1936	193	-5.7	1,558	1,071	1,115	3,745	3,933
1937	200	-9.7	1,559	1,263	1,315	4,138	4,329
1938	196	7.9	1,514	1,154	1,420	4,089	4,293

F 6 Total Payments to Individuals and Net Savings by Major Industrial Divisions (millions of dollars)

	TOTAL PAYMENTS				NET SAVINGS			
	Bank- ing	Insur- ance	Real estate	Total	Bank- ing	Insur- ance	Real estate	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1919	658	661	5,298	6,618	210	44.3	26.9	281
1920	770	791	5,813	7,375	187	-64.7	-26.8	96.1
1921	820	830	6,038	7,689	100	-87.9	-20.4	-7.6
1922	843	877	6,511	8,233	80.1	-94.3	39.8	25.6
1923	871	881	7,054	8,808	99.3	-105	-8.6	-14.4
1924	905	974	7,645	9,525	129	-108	54.2	75.5
1925	947	1,082	7,628	9,657	184	-50.6	-51.6	82.3
1926	996	1,173	7,505	9,675	184	-46.2	1.7	139
1927	1,056	1,258	7,691	10,005	225	29.4	51.1	306
1928	1,142	1,347	7,976	10,466	259	87.8	57.2	404
1929	1,187	1,428	8,448	11,064	202	55.5	-187	70.4
1930	1,162	1,425	7,562	10,149	-22.7	-98.5	-266	-388
1931	1,050	1,331	6,152	8,534	-316	-170	-456	-943
1932	835	1,121	4,695	6,652	-420	-184	-554	-1,158
1933	636	1,008	4,146	5,791	-346	-143	-468	-957
1934	682	1,065	3,946	5,693	-192	-23.9	-442	-658
1935	687	1,129	4,250	6,067	20.8	-24.2	-332	-336
1936	711	1,144	4,296	6,152	170	0.3	-210	-39.6
1937	741	1,232	4,701	6,675	134	39.7	-198	-24.0
1938	747	1,251	4,660	6,659	66.6	23.2	-198	-108

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F 7 Employees by Minor Industrial Divisions (thousands)

	Commercial incl. stock savings		Mutual savings		BANKING		Insolvent	Total	Life	INSURANCE		REAL ESTATE	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)				(7)	(8)		
1919	288	8.0	13.8	0.5	310	131	0.4	301	131	55.9	113	329	940
1920	323	8.4	14.2	0.4	346	136	1.0	323	136	62.8	124	347	1,017
1921	316	8.7	14.2	1.0	340	144	1.3	342	144	68.2	129	324	1,007
1922	307	8.5	12.4	1.3	329	154	2.1	340	154	66.2	120	309	979
1923	322	9.0	12.8	2.1	346	103	2.9	349	103	74.1	171	341	1,037
1924	335	9.4	11.5	3.5	359	111	4.0	379	111	82.7	185	360	1,099
1925	345	9.9	10.4	4.0	369	119	4.4	401	119	85.2	196	329	1,100
1926	365	10.5	10.2	4.0	390	128	4.1	425	128	92.6	204	392	1,209
1927	379	10.8	10.1	4.4	405	140	4.1	454	140	104	210	447	1,306
1928	388	11.2	10.1	4.1	414	149	5.3	475	149	110	214	508	1,398
1929	396	11.7	10.0	6.8	423	156	8.6	500	156	114	229	576	1,500
1930	373	12.0	9.8	8.6	401	163	11.1	509	163	114	231	542	1,453
1931	320	12.1	9.4	9.4	350	168	17.2	499	168	105	226	495	1,346
1932	272	12.5	9.6	11.1	306	170	15.2	491	170	98.0	222	436	1,234
1933	229	12.9	11.1	9.3	270	173	7.2	476	173	91.4	212	431	1,178
1934	241	13.5	11.7	12.3	281	176	10.5	484	176	94.6	213	456	1,222
1935	232	13.9	11.6	9.3	270	179	10.5	493	179	101	212	476	1,240
1936	236	14.4	11.3	7.2	271	180	6.7	494	180	101	212	506	1,272
1937	246	14.6	10.5	7.2	278	180	6.7	506	180	101	212	534	1,319
1938	247	15.0	10.6	6.7	280	180	6.7	528	180	101	212	498	1,307

This group comprises banking, insurance, and real estate. The banking estimates cover commercial and savings banks, Federal Reserve banks, and insolvent banks, other than private. All other banking is included under miscellaneous industries. The insurance data cover all insurance companies and agencies. The real estate data cover corporations in the field and individuals' real estate holdings.

TABLE F 1

### Net Income Originating by Major Industrial Divisions

Sum for each industry of wages and salaries (Table F 3), entrepreneurial withdrawals (for insurance only) (Table F 2, col. 2), property income (Table F 5), and net savings (Table F 6).

TABLE F 2

### Net Income Originating by Type °

*Col. 1 Wages and salaries:* see Table F 3, col. 11.

*Col. 2 Entrepreneurial withdrawals:* the estimates are for insurance alone. For 1935 this item is the product of the number of proprietors of agencies and the full-time salary of executives, both from the *Census of Business*. This 1935 figure is extrapolated for other years by total commissions and the salaries and expenses of agents of life insurance companies. For the derivation of the latter series see the notes to Table F 3.

*Col. 3 Dividends:* see Table F 4, col. 4.

*Col. 4 Interest:* see Table F 4, col. 9.

*Col. 5 Net rent received by individuals:* see Table F 5, col. 4 and 5.

*Col. 6 Property income:* sum of col. 3-5.

*Col. 7 Total payments:* sum of col. 1, 2, and 6.

*Col. 8 Net savings:* see Table F 6, col. 8.

*Col. 9 Net income originating:* sum of col. 7 and 8.

TABLE F 3

### Wages and Salaries by Minor Industrial Divisions

*Col. 1 Commercial and stock savings banks:* wages and salaries of member banks of the Federal Reserve System are from the

*Federal Reserve Bulletin*, for calendar years 1923-38 and for years ending June 30 before 1923. The 1919-23 calendar year figures are averages of fiscal year data. Wages and salaries of non-member banks for 1935 are from the *Census of Business*. For 1934 and 1936-38 they are derived from data on wages and salaries for banks not members of the Federal Reserve System insured by the Federal Deposit Insurance Corporation (*Annual Report of the Federal Deposit Insurance Corporation*). The latter are raised to the total for non-member banks by the ratio of loans and investments of all banks not in the Federal Reserve System to the loans and investments of non-member banks reporting to the Federal Deposit Insurance Corporation. Adding the estimates for member and non-member banks, 1934-38, gives total wages and salaries for commercial banks. The ratio of wages and salaries to loans and investments is extrapolated for 1919-33 by the corresponding ratio for Federal Reserve member banks. Its application to total loans and investments yields estimates of total wages and salaries. Loans and investments of member banks are from the *Annual Report of the Federal Reserve Board* and those of all commercial and stock savings banks, from the *Annual Report of the Comptroller of the Currency*.

*Col. 2 Mutual savings banks:* total wages and salaries for 1935, from the *Census of Business*; for other years they are estimated by applying to total deposits (*Annual Report of the Comptroller of the Currency*) their ratio to deposits. The ratio is an extrapolation, on the basis of sample state data, of that derived for 1935. For the sample states the salary figures are from the respective state banking departments; the deposits, from the *Annual Report of the Comptroller of the Currency*. The states and years for which salaries are available are: 1919-29: Rhode Island, Ohio, and Massachusetts; 1929-35: Rhode Island, Ohio, Massachusetts, Delaware, New Jersey, New York, Vermont, Washington, Wisconsin, and California; 1935-38, the states listed for 1929-35 except California, and, in addition, Pennsylvania, Minnesota, New Hampshire, Maine, and Indiana.

*Col. 3 Federal Reserve banks:* total wages and salaries, from the *Annual Report of the Federal Reserve Board* and include the reimbursable salaries of fiscal agency departments.

*Col. 4 Insolvent banks, other than private:* from the Comptroller

of the Currency, the Bureau of Foreign and Domestic Commerce, National Income Division, obtained estimates of salaries and wages paid by insolvent national banks, 1929-38, on which estimates for all insolvent banks, other than private, are based. The *Federal Reserve Bulletin*, September 1937, gives the number, deposits, and loans and investments of all suspended banks, by type of bank, 1921-36. For each item five-year totals are taken, the four years preceding and the current one being included. The ratios of salaries to each of these series are computed for insolvent national banks, 1929-36, and applied to the corresponding five-year totals for all insolvent banks. The final figures are averages of the three preliminary estimates thus derived. For the years before 1929 the same procedure is followed, using averages of the ratios for 1929-36. The number of insolvent banks before 1922 is from the *Annual Report of the Comptroller of the Currency*. Deposits are extrapolated from 1922 by liabilities, also from the comptroller's report. Since loans and investments were not reported before 1921, only two preliminary estimates are made for the early years and their average is used as an index to extrapolate for 1919-24 the final total salary for 1925. For 1937 the same procedure is followed since the basic data for only the two preliminary estimates are available. The 1938 estimate is made on the assumption that wages and salaries paid by insolvent banks other than national are the same as in 1937.

*Col. 5 Total banking:* sum of col. 1-4.

*Col. 6 Life insurance companies:* total payrolls for home and branch offices in 1935, from the *Census of Business*. Salaries for home offices are extrapolated for other years by the salaries of employees other than agents. The latter figure is reported for the years since 1929 in the *Life Insurance Year Book* (Spectator Company). This item, reported before 1929 as 'medical fees, salaries and other charges of employees', is corrected to eliminate the non-salary items on the basis of data for companies operating in Connecticut as given in the *Connecticut Insurance Report*, Part II. In this report medical fees and inspection of risks are shown separately from salaries and all other compensation of officers and employees. The ratio of the latter to the sum of the two is applied to the figure in the *Life Insurance Year Book* in the years before 1929 to give the estimated salaries of employees other than agents. The figure

for branch offices is extrapolated by agents' salaries and expenses given for 1929 and later years in the *Life Insurance Year Book*. For the years before 1929 the item reported is 'commissions, salaries and expenses of agents'. Data from the *Connecticut Insurance Report*, Part II, for companies operating in Connecticut provide a basis for the segregation of commissions.

*Col. 7 Insurance companies other than life:* sum of salaries paid by fire and marine, casualty, surety, and miscellaneous companies at home and branch offices for 1935, from the *Census of Business*. The series used to extrapolate this total is the sum of preliminary estimates for fire and marine companies, and for casualty and all other companies.

For fire and marine companies this preliminary figure is obtained by applying to the total fire and marine insurance premiums as reported in the *Fire and Marine Insurance Year Book* (Spectator Company) the ratio of salaries, expenses, etc. of the officers and employees to premiums. This ratio is derived from data for companies operating in New York (*New York Insurance Report*, Part I). The resulting estimate of salaries and expenses of officers and employees is separated into salaries and other expenses on the basis of data in the *Connecticut Insurance Report*, Part I.

The same procedure is followed in deriving the preliminary estimate of salaries of casualty and miscellaneous insurance. Premiums are from the *Casualty, Surety, and Miscellaneous Insurance Year Book* and the ratio of salaries to salaries and expenses is that derived for the sample fire and marine companies mentioned above.

In addition to salaries and wages, loss adjustment expenses are also estimated for both fire and marine and casualty and miscellaneous insurance. The *Fire and Marine Insurance Year Book* shows loss adjustment expense for fire and marine companies, 1932-38. Estimates for 1919-31 are extrapolated from 1932 by a series obtained by applying to total fire premiums the ratio of loss adjustment expense to premiums for companies operating in Connecticut (*Connecticut Insurance Report*, Part I).

Adjustment expense for casualty and miscellaneous insurance companies, 1932-38, is from the *Casualty, Surety, and Miscellaneous Insurance Year Book*. The 1932 figure is extrapolated for all preceding years by a preliminary series estimated by applying, to total casualty and miscellaneous premiums, the ratio of adjust-

ment expense to premiums for companies operating in New York (*New York Insurance Report*, Part III).

*Col. 8 Insurance agencies*: sum of salaries paid to selling and non-selling employees.

a) *Salaries of non-selling employees*: the total payroll of agencies and brokerage offices in 1935 is reported in the *Census of Business*. The salaries of selling employees are based on their percentage to the total as indicated by data for one week reported in the *Census of Business*. These are deducted and the balance is extrapolated for other years by total commissions of all insurance companies. The commissions paid by life insurance companies are recorded separately for 1929 and later years in the *Life Insurance Year Book*. For earlier years see the derivation, above, of the life insurance salary item. For other insurance companies, commissions are the sum of 'agents' compensation and allowances including brokerage' of fire and marine insurance companies and 'total commissions' of casualty and miscellaneous insurance companies. These items, reported in the *New York Insurance Report* (Parts I and III, respectively) for companies operating in New York, are raised by the ratio of total premiums written to the premiums of companies operating in New York.

b) *Salaries of selling employees*: salaries paid by agencies are estimated for 1935 by applying to the total payroll reported in the *Census of Business* the percentage indicated by Census data for one week. The commissions of solicitors in branch offices are given for 1935 in the *Census of Business*. The commissions of solicitors in agencies are estimated on the assumption that their number is the same percentage of selling employees as in branch offices and that their average annual commissions are the same as those of solicitors in branch offices. The sum of the payroll of selling employees and the commissions of solicitors in branch offices and agencies is the basic figure for 1935. It is extrapolated for other years by total commissions paid. For the derivation of the series on commissions see the notes on the salaries of non-selling employees, immediately above.

*Col. 9 Total insurance*: sum of col. 6-8.

*Col. 10 Real estate*: total wages and salaries are obtained by applying to the estimated non-agricultural gross rent received by individuals and corporations in the real estate business the ratio of

salaries and wages to rent. The 1934 ratio, based on data for apartment houses reported in the *Real Estate Record*, April and August 1935, is assumed to apply to all real estate. Office buildings show a higher ratio and small private houses a lower. It is extrapolated back to 1929 and forward to 1935 by the ratio for New York State Housing Projects. The New York data are from the *Annual Report of the State Board of Housing*. For 1921–25 the ratio is based on that for office buildings, derived from data in the *Office Building Experience Exchange Report* (National Association of Building Owners and Managers). For 1926–28 the ratio is interpolated along a straight line; for 1919 and 1920 it is assumed to be the same as in 1921; for 1936–38 it is extrapolated from 1935 by the average of the New York State Board of Housing data and those for office buildings, weighted equally.

The gross rent bill, to which the ratio is applied, is estimated industry by industry, the basic data for most industries being the rent paid by corporations, as reported for 1933–37 in *Statistics of Income*. When the basic data are from other sources the fact is noted. The sources of other items referred to are mentioned in the notes for the specific industry.

*Rent paid by steam railroads*: the 1933 basic figure is extrapolated to 1921, and the 1937 to 1938, by rent paid by steam railroads, considered as a system. From 1921 to 1919 rent paid by Class I railroads, not consolidated, is used as index. The data for both indexes are from *Statistics of Railways*.

*Rent paid by electric railways*: the basic figures are extrapolated by a preliminary series of rent paid, obtained by applying to the operating revenue for the industry the ratio of rent to operating revenue, computed for 1917, 1922, 1927, and 1932 from data in the *Census of Electric Railways*, and interpolated along a straight line. The 1938 figure is assumed to be the same as the 1937.

*Rent paid by telephone and telegraph companies*: the basic figures are extrapolated by a preliminary series of rent paid. Rent paid by telephone companies is reported for 1917 and 1922 in the *Census of Telephones* and interpolated by 'rent and miscellaneous deductions' of the American Telephone and Telegraph Company as given in *Bell Telephone Securities*. The ratio in 1922 of the Census figure to that for the American Telephone and Telegraph Company is computed and extrapolated by the ratio of total operating

revenue to that of the American Telephone and Telegraph Company. The application of this ratio to the American Telephone and Telegraph Company rent series yields the preliminary estimate of rent, 1922-32.

The preliminary telegraph rent series is based on the rent figure reported for 1917, 1922, and 1927 in the *Census of Telegraphs*. The Census data are interpolated for 1918-21 and 1923-26 by the preliminary estimates of the rent of telephone companies. Extrapolation from 1927 through 1932 is by the index of the preliminary telephone rent estimates.

The 1938 estimate for telephone and telegraph companies is extrapolated from 1937 by the 'rent and miscellaneous deductions' series reported for the Bell System in *Bell Telephone Securities*.

*Rent paid by electric light and power companies:* the basic figures are extrapolated by a preliminary series of rent paid, obtained by applying to the estimated operating revenue the ratio of rent to it. This ratio, computed for 1917 and 1922 from data in the *Census of Central Electric Light and Power Stations*, is interpolated and extrapolated by the corresponding ratio for telephone and telegraph companies. Rent paid is assumed to be the same in 1938 as in 1937.

*Rent paid by manufactured gas companies:* the basic figures are extrapolated by a preliminary series of rent paid, obtained by applying to the estimated operating revenue the ratio of rent to it. This ratio, computed from the basic material for 1933-37, is extrapolated by the corresponding ratio for the telephone and telegraph industry. Rent paid is assumed to be the same in 1938 as in 1937.

*Rent paid by water transportation companies:* from the basic figures the ratio of rent to gross income of corporations is computed for 1933-37. This ratio, extrapolated by the ratio of rent to operating revenue of electric railways, is applied to corporate gross income for all years to yield an estimate of rent paid by corporations. Corporate gross income in 1926 and later years is given in *Statistics of Income* and is extrapolated for earlier years by gross revenue as reported to the Interstate Commerce Commission. The estimated rent paid by corporations is raised to the total by the ratio of total tonnage to corporate tonnage. Total rent paid is assumed to be the same in 1938 as in 1937.

*Rent paid by retail trade:* for 1929, from the *Census of Retail Distribution*. For other years it is estimated on the basis of the ratio of rent to sales. The ratio to sales is computed for 1929 from Census data. It is estimated for 1935 by applying to the 1929 ratio the percentage change from 1929 to 1935 in the ratio of rent to sales in leased premises as reported in the 1935 *Census of Business*. For other years the ratio of rent to sales is obtained from the regression line of the absolute change in the percentage of rent to sales on the percentage change in sales. The regression line is fitted to data from various operating expense studies available for two-year periods, thus making it possible to derive figures on the change in the percentage of rent to sales and the percentage change in sales. The studies are those of the Harvard University Bureau of Business Research, Dun and Bradstreet, University of Nebraska College of Business Administration, Federal Trade Commission, University of Colorado Bureau of Business Research, National Stationers' Association, *The Progressive Grocer*, and the National Retail Hardware Association. The percentage change in sales from the preceding year having been computed for the entire period, the corresponding absolute change in the ratio of rent to sales is determined from the regression line and the resulting figures are used to extrapolate the 1929 ratio to 1919 and 1938. The 1919-28 figures thus obtained are applied directly to the sales figures for those years. Ratios obtained by this method for later years are used only in interpolating and extrapolating the 1929 and 1935 ratios originally estimated.

*Rent paid by wholesale trade:* rent paid by wholesalers in 1929 is from the *Census of Wholesale Distribution*. The ratio to sales is computed and extrapolated for all other years by the regression line of the absolute change in the percentage of rent to sales on the percentage change in sales. The sample data to which the regression line is fitted are from Dun and Bradstreet, Harvard University Bureau of Business Research, Cornell University Agricultural Experiment Station, and the Ohio State University Bureau of Business Research. Rent is estimated for all years other than 1929 by multiplying sales by the ratio of rent to sales.

*Rent paid by manufacturing:* from *Statistics of Income* the ratio of rent paid by corporations to corporate gross sales is derived for

1933-37. This ratio, extrapolated for other years by the corresponding ratio for trade, is applied to the estimated total value of product of manufacturing to yield total rent paid in all years.

*Rent paid by mining:* see the notes to manufacturing, above.

*Rent paid by construction:* see the notes to manufacturing, above. Corporate gross sales include, in this case, receipts from other operations.

*Rent paid by life insurance companies:* the rent paid by companies operating in Connecticut, reported in the *Connecticut Insurance Report*, Part II, is raised by the ratio of total premiums to premiums of companies operating in Connecticut to yield total rent paid in all years.

*Rent paid by other industries:* the sum of the estimates for the industries described above is used to extrapolate the basic figures for the other industries. From *Statistics of Income* for 1933-37 we take the rent paid by miscellaneous public utilities, service, finance excluding life insurance companies, and miscellaneous corporations.

The basic figure for personal service, other than corporate, is for 1933. Total receipts of laundries, cleaning and dyeing establishments, barber and beauty shops, hotels, window cleaning and linen supply firms are from the *Census of American Business*; of power laundries, from the *Census of Power Laundries*; of restaurants, from the *Census of Retail Distribution*. The corporate ratio of rent to gross income for the service group is applied to the sum of these gross receipts to yield total rent paid. From the total the corporate figure is subtracted.

The basic figure for rent paid by professional service is from the *Incomes of Physicians* (Committee on the Costs of Medical Care) and the *Practice of Dentistry and the Incomes of Dentists in Twenty States: 1929* (Committee on the Study of Dental Practice of the American Dental Association). The estimated rent bill is assumed to be the same for 1933 as for 1929. The basic figure for rent paid by other non-corporate service is estimated similarly to that for personal service, excluding from the industries grouped in this category, in addition to the personal service industries, cartage and trucking and storage establishments which are already covered in transportation and public utilities. For stockbrokers a basic figure for 1933 is estimated on the assumption that rent paid

bears the same relation to partnership income reported on individual returns in *Statistics of Income* as it does to officers' compensation in the corporate field.

*Residential rent paid:* rent paid is estimated separately for each city with a population of 100,000 or over and for the group as a whole for cities of under 100,000. The *Census of Population, 1920* (Vol. III) and 1930 (Vol. VI) gives the total number of houses and the number rented on January 1, 1920 and April 1, 1930. The total number of houses and the ratio of the number rented to it are estimated for June 30, 1920-29 by straight line interpolation. The April 1930 figures are assumed to apply to June 30, 1930.

The estimates of houses for the years after 1930 are based on data for sample cities in the *Real Property Inventory, 1934* (Bureau of Foreign and Domestic Commerce). For the cities covered in the Inventory, the number of houses is estimated by straight line interpolation between the 1930 Census figure and the January 1, 1934 Inventory figure, and the extrapolation beyond 1934 is by the same annual increment. For the cities not covered in the Inventory the annual increment after 1930 is estimated by applying to the annual increment between 1920 and 1930 an estimated ratio of the former to the latter based on data on the age of structures reported in the Inventory. From this source we obtain data on the number of buildings erected during 1929-33 and 1919-28. These are added for all the Inventory cities of 100,000 or over and the ratio of twice the number erected during 1929-33 to the number erected in the earlier decade is applied to the 1920-30 annual increment for each city with a population of over 100,000 not covered in the Inventory. The same procedure is used for cities of under 100,000, the cities included in the Inventory being used to derive the ratio, which is then applied to the group as a whole.

The ratio of rented to all houses after 1930 is, for cities covered in the Inventory, based on a straight line interpolation between 1930 and January 1, 1934, and a straight line extrapolation from that date. For the cities not covered in the Inventory the ratio is extrapolated from 1930 by the average ratio for all Inventory cities of 100,000 or over. The same procedure is followed in estimating the ratio for cities of under 100,000, the sample data in this case consisting of only those Inventory cities that are under 100,000.

The total number of houses multiplied by the ratio of rented to it yields the estimate of rented houses in each year.

Average rent is based on the 1930 median rent paid as reported in the 1930 *Census of Population*, Vol. VI. This median rent figure for each city with a population of 100,000 or over is adjusted to the average rent paid by the ratio of the average to the median rent. The latter ratio is derived from a special survey of Census data for sample cities made by David L. Wickens in connection with the *Financial Survey of Urban Housing*. For the cities not covered in this special survey the ratio for that city in the survey with the closest median value is used. For the group of cities of under 100,000 the data in Wickens' special survey for all cities of under 100,000 are used to obtain the ratio of average to median rent. The resulting average rent for 1930 is extrapolated for other years by the BLS rent index for the specific city, whenever available. For the other cities, averages of the BLS indexes for cities falling into the same median rent groups are used. For the group of cities of under 100,000 the rent index used is an average of the National Industrial Conference Board rent indexes for cities of under 100,000 in their sample. Total rent paid is estimated by multiplying the number of rented houses by the average annual rent in each year.

*Total rent bill of individuals and corporations in the real estate business:* total rent paid, excluding that paid by agriculture, is the sum of the items listed above. From it the rent received by corporations not in real estate is subtracted. Rent received by all corporations, 1929-37, is reported in *Statistics of Income* and in 1938 is assumed to be the same percentage of total rent paid as in 1937. For 1922-24 *Statistics of Income* has the combined item 'rent and interest received' by corporations; rent receipts are assumed to have the same relation to rent and interest receipts as in 1929. For 1919 and 1920 rent receipts of all corporations are assumed to be the same percentage of total rent receipts as in 1922. Between 1924 and 1929 this percentage is interpolated along a straight line. On the basis of the total rent paid and the ratio of corporate receipts to it, the total rent receipts of corporations are estimated. Individuals' rent receipts are obtained by subtraction. Receipts of corporations in the real estate business in 1929 and later years are from the detailed tabulation of *Statistics of Income* data. For earlier years they are extrapolated by the rent receipts of all corporations.

The gross rent bill for the industry is the sum of rent receipts of individuals and of corporations in real estate.

*Col. 11 Total:* sum of col. 5, 9, and 10.

TABLE F 4

Dividends and Interest by Major Industrial Divisions

*Col. 1 Banking:* total dividends paid are assumed to be net. Available from 1926 through 1937 from the special tabulation of *Statistics of Income* data, they are extrapolated for earlier years and 1938 by a preliminary series, obtained by applying to the capital stock paid in of all banks other than private, as reported in the *Annual Report of the Comptroller of the Currency*, the average dividend rate of member banks. The dividend rate of member banks is based on total dividends paid and capital stock paid in, as reported in various issues of the *Federal Reserve Bulletin* and the *Annual Report of the Federal Reserve Board*, respectively.

*Col. 2 Insurance:* sum of total dividends paid to stockholders by life insurance companies and net dividends paid by insurance companies other than life. Life insurance companies' dividends are reported in the *Life Insurance Year Book* and are considered net. For 1926-37 the dividends of insurance companies other than life are the difference between total dividends paid and dividends received as reported in the special tabulation of *Statistics of Income* data. For earlier years and 1938 total dividends paid are extrapolated from 1926 and 1937, respectively, by the series on dividends paid to stockholders in the *Fire and Marine Insurance Year Book* and the *Casualty, Surety, and Miscellaneous Insurance Year Book*.

Dividends received in 1938 are extrapolated from 1937 by the series on dividends received in the *Fire and Marine Insurance Year Book* and the *Casualty, Surety, and Miscellaneous Insurance Year Book*. They are extrapolated for the years before 1926 by a preliminary series, the sum of estimates of dividends received by fire and marine and by casualty and miscellaneous companies. The procedure is the same for both groups. The *Connecticut Insurance Report*, Parts I and II, gives the total interest and dividend receipts of companies operating in Connecticut. On the basis of sample company data in the report short term interest is deducted. The balance is divided into interest and dividend receipts on the basis

of the ratio of the weight derived for bond holdings to the sum of the weights derived for bond and stock holdings. The weight for bond holdings is the product of the percentage of total security holdings that are bonds (derived from sample company data in the Connecticut report) and the average interest rate on bond and mortgage debt for manufacturing, mining, trade, and steam railroads. The weight for stock holdings is the product of the average dividend rate for these same industries and the percentage that stocks are of the total security holdings of insurance companies as derived from sample company data. The resulting estimates of interest and dividend receipts of companies operating in Connecticut are raised by the ratio of total premiums to premiums of companies doing business in that state to yield the preliminary totals.

*Col. 3 Real estate:* difference between total dividends paid and dividends received. Dividends paid, 1926–37, are from the special tabulation of *Statistics of Income* data; they are extrapolated for earlier years and 1938 by the dividend payments of the corporate sample for the industry. Dividends received, 1926–37, also from the special tabulation, are estimated for 1922–25 by applying to dividends paid the ratio of dividends received to them. This ratio for 1926 is extrapolated by the corresponding ratio for the entire finance group, data for which appear in *Statistics of Income*. For 1919–21 dividends received are assumed to be the same percentage of dividends received by all corporations (reported in *Statistics of Income*) as in 1922. In 1938 dividends received are assumed to be the same percentage of dividends paid as in 1937.

*Col. 4 Total:* sum of col. 1–3.

*Col. 5 Insurance:* since there is no long term debt for insurance companies the net interest payments are negative. Interest receipts of companies other than life are alone considered. Reported for 1926–37 in the special tabulation of *Statistics of Income* data, they are extrapolated for 1919–25 by the preliminary series described in the notes on dividends received (col. 2). The 1938 figure is extrapolated from 1937 by interest received, reported in the *Fire and Marine Insurance Year Book* and the *Casualty, Surety, and Miscellaneous Insurance Year Book*.

*Col. 6 Real estate, corporate:* difference between total interest paid on long term debt and interest received on tax-exempt obligations. Total interest paid in 1930 and later years is estimated by applying

to the par value of long term debt the average interest rate of the corporate sample for the industry. Long term debt outstanding on December 31, 1930-35 is from the special tabulation of *Statistics of Income* data. The figure for December 31, 1929 is assumed to be the same percentage of the long term debt of all finance corporations as in 1930. The figures for 1929-31 are raised by the 1931 ratio of compiled receipts of all corporations to compiled receipts of corporations reporting assets and liabilities. The compiled receipts ratios for 1932-35 are used to raise the reported figures for respective years. The year-end figures are averaged to yield long term debt outstanding during the year; multiplying these averages by the estimated interest rate yields total long term interest, 1930-35. The estimates of long term interest for earlier years and 1936-38 are extrapolated from 1930 and 1935, respectively, by the total long term interest of the corporate sample for the industry.

Interest received, 1926-37, is interest received on tax-exempt obligations as reported in the special tabulation of *Statistics of Income* data. It is assumed to be the same percentage of interest paid in 1938 as in 1937, and is extrapolated to 1922 by the comparable item for the entire finance group. It is assumed that the ratio to total interest receipts on tax-exempt obligations of all corporations is the same in 1919-21 as in 1922. The totals for 1919-21 appear in *Statistics of Income*.

*Col. 7 Real estate, individual:* based on the estimated total of individuals' urban mortgage debt, it is an estimate of total interest payments on mortgages other than those of real estate corporations. The figures for 1929-38 are the estimates of urban dwelling mortgages and other individuals' mortgages prepared by the Bureau of Foreign and Domestic Commerce, National Income Division. They are extrapolated for other years by the mortgage holdings of important lending agencies. Urban mortgage loans of over 90 per cent of life insurance companies are reported in the *Proceedings of the Annual Convention of the Association of Life Insurance Presidents*. These are raised to the total for all life insurance by the ratio of the assets of all companies to those of reporting companies. The urban mortgage loans of banks are based on data in the *Annual Report of the Comptroller of the Currency*. When the data are not classified in sufficient detail the method used is that outlined in *Internal Debts of the United States*, by Evans Clark

(Macmillan, 1933). Banks covered are national, state, loan and trust, stock savings, mutual savings, and private. Mortgage loans of building and loan associations, 1925-38, are from the *Annual Report of the Comptroller of the Currency*. For earlier years they are extrapolated from 1925 by total assets reported for the respective years. For the real estate bonds of title and mortgage guarantee companies we have estimates for 1921 and 1929 from *Internal Debts of the United States*. The sum of the above mentioned items for 1921 and 1929, interpolated for intervening years by the sum of all except title and mortgage guarantee companies, yields the preliminary series by which the 1929 figure for individuals' urban mortgage debt is extrapolated to 1919.

Total interest on individuals' urban mortgages is estimated by multiplying the estimated mortgage debt outstanding by the interest rate. For the years through 1928 the interest rate is assumed to be 6 per cent. For 1929-38 the interest rate is that derived by the Bureau of Foreign and Domestic Commerce, National Income Division.

To the interest on individuals' urban mortgages is added the interest on farm mortgages not paid by farm operators (see the notes to Table A 1, col. 6).

*Col. 8 Real estate, total:* sum of col. 6 and 7.

*Col. 9 Total:* sum of col. 5 and 8.

TABLE F 5

Property Income by Major Industrial Divisions

*Col. 1 Banking:* see Table F 4, col. 1.

*Col. 2 Insurance:* see Table F 4, col. 2 and 5.

*Col. 3 Real estate:* see Table F 4, col. 3 and 8.

*Col. 4 Real estate, net rent received by individuals:* difference between net rent before mortgage interest and the mortgage interest paid by individuals. Net urban rent before mortgage interest is obtained by applying to gross urban rent (see the notes to Table F 3) the ratio of net before interest to gross. The basic ratio of net to gross is for 1934 and is an average of the ratio for office buildings as derived from the *Office Building Experience Exchange Report* (National Association of Building Owners and Managers) and the ratio for apartment houses as derived from data in the *Real Estate*

*Record*, April and August 1935. It is extrapolated for other years by the ratio for office buildings.

From estimated net urban rent before mortgage interest, the estimated mortgage interest on individuals' rented property is subtracted to yield the net urban rent received by individuals. Net mortgage interest on individuals' rented property is estimated by applying to the total urban mortgage interest of individuals the ratio of gross rent received by individuals to the sum of gross rent and gross imputed rent of individuals (see the notes to col. 5). The net rent paid on agricultural property (Table A 1, col. 4) is added to the estimate for urban property to yield total net rent received by individuals.

*Col. 5 Individuals' net imputed rent:* gross imputed rent on owner-occupied dwellings is derived in a fashion similar to that for gross residential rent described in the notes to Table F 3. The number of owner-occupied dwellings is the difference between the total and the number rented. The 1930 *Census of Population*, Vol. VI median value of owner-occupied dwellings is adjusted to the average value by a method similar to that used to adjust the median rent of rented dwellings. Average imputed rent is obtained by applying to the average value the ratio of rent to value as derived from David L. Wickens' materials for the *Financial Survey of Urban Housing*. The basic average imputed rent is for 1929 and is extrapolated for other years by the indexes used to estimate average rent paid. Gross imputed rent is the product of the number of owner-occupied dwellings and the average imputed rent.

Net imputed rent is estimated by applying to gross imputed rent the ratio of net to gross before mortgage interest and subtracting from the result the estimated mortgage interest on owner-occupied dwellings. Mortgage interest (see the notes to Table F 4, col. 7) on owner-occupied dwellings is the difference between total interest on non-farm mortgages and that on rented non-farm property. The ratio of net to gross rent is derived from data reported for office buildings in the *Office Building Experience Exchange Report*. It is assumed that the relation of insurance, taxes, and depreciation and of heating, plumbing, alteration, repairs, and decoration to gross rent paid in office buildings is representative of that for private dwellings. The balance after deduction from gross rent of the expenses listed is the net figure from which the ratio of net to gross is

estimated. As data for this ratio are available only since 1920 the 1919 ratio is assumed to be the same as the 1920.

*Col. 6 Real estate, total:* sum of col. 3-5.

*Col. 7 Total:* sum of col. 1, 2, and 6.

TABLE F 6

Total Payments to Individuals and Net Savings by Major  
Industrial Divisions

## TOTAL PAYMENTS TO INDIVIDUALS

*Col. 1-4:* sum for each industrial division of wages and salaries (Table F 3), property income (Table F 5), and entrepreneurial withdrawals (insurance only) (Table F 2, col. 2).

## NET SAVINGS

*Col. 5 Banking:* corporate savings are the difference between compiled net profits after taxes and total dividends paid (see the notes to Table F 4). Compiled net profits, 1926-37, are from the special tabulation of *Statistics of Income* data. Extrapolation of net savings for 1919-25 and for 1938 is by the difference between net additions to profits and dividends declared for members of the Federal Reserve System (*Federal Reserve Bulletin*). For the years before 1924 the data are reported for years ending June 30. Averages of fiscal years are used for calendar years.

*Col. 6 Insurance:* it is assumed that all the income of entrepreneurs is withdrawn and that there are, therefore, no entrepreneurial net savings. We estimated only corporate savings of insurance companies other than life; they are the difference between compiled net profits after taxes and total dividends paid. Compiled net profits, reported for 1926-37 in the special tabulation of *Statistics of Income* data, are extrapolated for 1938 from 1937 by the corporate sample for the industry. For the years before 1926 they are estimated as the sum of statutory net income after taxes (*Statistics of Income*), interest received on government obligations, and dividends received (see the notes to Table F 4).

*Col. 7 Real estate:* the derivation of corporate savings is the same as for insurance; for the sources and methods see the notes to col. 6.

*Col. 8 Total:* sum of col. 5-7.

TABLE F 7

## Employees by Minor Industrial Divisions

*Col. 1 Commercial and stock savings banks:* the 1934 figure is based on the number of employees in the Federal Deposit Insurance Corporation *Call Report 1* for national, state member, and non-member banks. On the advice of P. T. Campbell of the Federal Deposit Insurance Corporation, part-time employees were equated to full-time by halving them. Employees of non-member banks are estimated on the basis of the number in insured non-member banks. The total in insured non-member banks is raised to the total in all non-member banks by the ratio of the deposits of the latter to the deposits of the former. Deposits of all non-member banks are recorded in the *Federal Reserve Bulletin*. The total is divided into full- and part-time on the basis of the breakdown for insured non-member banks, and the number of part-time is adjusted to the full-time equivalent by halving them.

The 1935 figure is based on *Census of Business* data. The item reported is total employment, full- and part-time, for national, state member, and non-member banks at the end of the year. The average for the year is estimated by interpolating along a straight line between the 1934 and the December 31, 1935 figures. Full-time and the full-time equivalent of part-time employees are assumed to have undergone the same percentage change from 1934 to 1935 as total employment, full- and part-time.

The number of employees in member banks, 1936-38, is from the *Federal Reserve Bulletin*; in insured non-member banks, by letter from the Federal Deposit Insurance Corporation; and in non-member banks not insured they were obtained by dividing wages and salaries paid by those banks by the estimated average salary. It is assumed that the average salary follows the movement of the average salary in insured banks.

The number of employees, 1919-33, is obtained by dividing total salaries paid (see the notes to Table F 3) by the estimated average salary. The average salary, computed for 1934, is extrapolated for other years by the average salary paid by Federal Reserve banks.

*Col. 2 Mutual savings banks:* obtained by dividing the total salary bill (see the notes to Table F 3) by the estimated average salary.

The average salary for December 1935 is derived from *Census of Business* data. It is extrapolated for 1936–38 by the average salary paid by insured mutual savings banks, and for 1919–34 by the average salary paid by Federal Reserve banks.

*Col. 3 Federal Reserve banks:* average number of employees, 1926–38, from the *Annual Report of the Federal Reserve Board*. For earlier years it is obtained by dividing total salaries paid by the estimated average salary. The latter is obtained by averaging pairs of December 31 figures computed from data on number and compensation in the *Annual Report of the Federal Reserve Board*.

*Col. 4 Insolvent banks, other than private:* obtained by dividing the total salary bill (see the notes to Table F 3) by the estimated average salary. The average salary for 1929–38 is estimated by the Bureau of Foreign and Domestic Commerce, National Income Division. For earlier years the 1929 figure is extrapolated by the average salary of active commercial banks.

*Col. 5 Total banking:* sum of col. 1–4.

*Col. 6 Life insurance companies:* the basic figure, for 1935, is derived from data for home and branch offices, full- and part-time, as reported in the 1935 *Census of Business*. The total of full- and part-time employees is adjusted to the full-time equivalent on the basis of the ratio of full-time employment to total full- and part-time employment for one week as reported for all home offices (life and other) and branch offices (life and other) separately. Full-time payroll divided by full-time number gives the average full-time salary, which, divided into the total part-time payroll, yields the estimated full-time equivalent of part-time employment. This procedure is followed for life and other insurance, home and branch offices, separately.

The 1935 figure is extrapolated to 1929 by figures on the employees of 61 companies, prepared by the Association of Life Insurance Presidents. For the years before 1929 the number of employees is obtained by dividing total salaries paid by the estimated average salary. The average salary for 1929 is computed and extrapolated to 1919 by the average salary paid by sample companies in the industry.

*Col. 7 Other insurance companies:* for the derivation of the basic figure for 1935 see the notes to col. 6. The average salary is computed for 1935 and extrapolated for other years by the average

salary for sample companies in the industry. The number of employees is obtained by dividing total salaries by the estimated average salary. No estimate is available of the number engaged in loss adjustment.

*Col. 8 Insurance agencies:* sum of estimates of (a) non-selling employees and (b) selling employees.

a) *Non-selling employees:* for the derivation of the basic figure for 1935 see the notes to col. 6. For other years the procedure is that outlined in the notes to col. 7.

b) *Selling employees:* solicitors are included. The number of direct selling employees in agencies in 1935 is based on *Census of Business* data, and the adjustment for part-time employment is similar to that for life insurance companies. The number of solicitors in branch offices as reported is used; and the number of solicitors in agencies is assumed to be the same percentage of selling employees as in branch offices. The total of employees is extrapolated to 1929 by the number of agents reported for 61 life insurance companies by the Association of Life Insurance Presidents. The number before 1929 is obtained by dividing total salaries by the estimated average salary. The average salary, computed for 1929, is extrapolated for earlier years by the average salary of sample companies in the industry.

*Col. 9 Total insurance:* 1919-35, sum of col. 6-8; 1936-38, the total salary bill (see the notes to Table F 3) is divided by the estimated average salary. The average salary, computed for 1935, is extrapolated for 1936-38 by BLS data on employment and payrolls in insurance companies.

*Col. 10 Real estate:* for 1930, computed from data on the number gainfully occupied reported in the 1930 *Census of Population*, Vol. V, Ch. 7. We include all those covered under real estate and the following classified under domestic and personal service: all professional and clerical pursuits, all skilled trades, charwomen and cleaners, draymen, elevator tenders, firemen, guards, janitors and sextons, laborers, policemen, porters, and 'all other'. The number unemployed is estimated on the basis of Robert R. Nathan's unemployment figures for banking, brokerage, insurance and real estate, and domestic and personal service. The difference between the total gainfully occupied and the estimated unemployed is the number working in April 1930.

This estimate is extrapolated for 1929 and later years by Mr. Nathan's index of employment in banking, brokerage, insurance and real estate, and domestic and personal service. For the years before 1929 a preliminary estimate is made by dividing total salaries paid by a preliminary estimate of the average pay. The average pay is computed for 1929 and extrapolated to 1919 by the average pay of commercial banks and domestic service. The final figure for the number employed in 1920 is based on an estimate of the number gainfully occupied in 1920 and the assumption that the same percentage was unemployed as in 1929. The number gainfully occupied in 1920 is estimated by applying to the number gainfully occupied in 1930 the percentage change from 1920 to 1930 among managers, officials, and agents in real estate, and elevator tenders, janitors, porters, charwomen, and cleaners and laborers in domestic service (1930 *Census of Population*, Vol. V, Ch. 1). The 1929 estimate for gainfully occupied is interpolated between 1920 and 1930 along a straight line. The ratio of employed to gainfully occupied in 1929 is computed and applied to the estimated number gainfully occupied in 1920 to yield the number employed in that year. Final estimates of the number employed in 1919 are extrapolated from 1920 and in 1921-28 are interpolated between 1920 and 1929 by the preliminary series of the number employed.

*Col. 11 Total:* sum of col. 5, 9, and 10.