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Volume Title: National Income and Its Composition, 1919-1938, Volume II

Volume Author/Editor: Simon Kuznets, assisted by Lillian Epstein and Elizabeth Jenks

Volume Publisher: NBER

Volume URL: <http://www.nber.org/books/kuzn41-3>

Publication Date: 1946

Chapter Title: Basic Data, Sources and Methods: Transportation and Other Public Utilities

Chapter Author: Simon Kuznets, Lillian Epstein, Elizabeth Jenks

Chapter URL: <http://www.nber.org/chapters/c5555>

Chapter pages in book: (p. 657 - 714)

# Transportation and Other Public Utilities

## TABLES P 1—P 21

Whenever two entries are made for 1934 the first is comparable with those for preceding years in that the *Statistics of Income* data used are based on the old industrial classification; the second is comparable with those for succeeding years in that the *Statistics of Income* data used are based on the new industrial classification.

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.



P 1 Gross Income by Minor Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER	MFD. GAS	ELEC. LIGHT & POWER, & MFD. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS	PIPE LINES	STREET RWY.	TELE- PHONE	TELE- GRAPH	COM- MUNICA- TION (7 + 8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1919	619	326	945	5,470		790			
1920	758	366	1,125	6,577	103	910	556	153	709
1921	835	405	1,240	5,884	116	916	609	136	746
1922	936	418	1,355	5,896	128	925	665	138	803
1923	1,130	443	1,573	6,653	131	954	721	144	866
1924	1,217	445	1,663	6,272	146	957	779	146	925
1925	1,365	448	1,813	6,481	164	972	865	162	1,028
1926	1,516	490	2,007	6,745	173	996	950	165	1,116
1927	1,680	509	2,189	6,479	195	992	1,023	170	1,194
1928	1,809	509	2,318	6,441	222	977	1,109	177	1,286
1929	1,969	505	2,475	6,600	251	989	1,210	188	1,398
1930	2,026	491	2,517	5,565	237	905	1,239	169	1,409
1931	2,015	461	2,476	4,426	222	791	1,200	142	1,343
1932	1,854	437	2,291	3,302	211	652	1,061	110	1,171
1933	1,788	403	2,192	3,256	217	600	967	109	1,076
1934	1,861	406	2,268	3,447	199	629	979	126	1,106
1935	1,938	402	2,340	3,639	197	634	1,033	130	1,164
1936	2,066	406	2,473	4,267	219	678	1,117	143	1,261
1937	2,198	409	2,608	4,398	248	685	1,180	146	1,326
1938	2,185	412	2,598	3,783	228	650	1,181	133	1,315

P 2 Net Income Originating by Major Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER, & MFD. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS	OTHER TRANSP. *	COMMUNICA- TION	TOTAL	TOTAL, ADJ.
	(1)	(2)	(3)	(4)	(5)	(6)
1919	424	3,938	1,182	417	5,963	5,958
1920	495	4,845	1,492	514	7,348	7,418
1921	524	3,815	1,215	532	6,087	6,337
1922	620	3,823	1,192	578	6,215	6,209
1923	778	4,438	1,239	637	7,094	7,057
1924	879	4,266	1,255	678	7,080	7,094
1925	1,070	4,487	1,259	747	7,564	7,600
1926	1,153	4,667	1,262	804	7,888	7,905
1927	1,253	4,465	1,229	841	7,790	7,829
1928	1,399	4,482	1,262	901	8,045	8,030
1929	1,563	4,653	1,305	988	8,511	8,505
1930	1,638	3,870	1,167	948	7,625	7,744
1931	1,533	2,973	987	871	6,366	6,452
1932	1,304	2,089	752	719	4,867	4,911
1933	1,187	2,121	757	654	4,720	4,709
1934	1,181	2,231	777	685	4,876	4,802
1934	1,114	2,231	803	685	4,833	4,764
1935	1,185	2,410	848	705	5,149	5,165
1936	1,271	2,810	977	784	5,843	5,834
1937	1,370	2,927	1,071	842	6,212	6,141
1938	1,316	2,415	957	823	5,513	5,529

\* Pipe lines, street railways, and water transportation.

P 3 Net Income Originating by Minor Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER (1)	MFD. GAS (2)	PIPE LINES (3)	STREET RWY. (4)	WATER TRANSP. (5)	TELE- PHONE (6)	TELE- GRAPH (7)
1919	325	99.2	66.0	527	588	325	92.0
1920	381	113	92.3	629	771	397	117
1921	410	113	69.0	610	535	433	99.8
1922	502	117	97.4	625	469	472	106
1923	635	143	106	648	485	524	113
1924	730	149	112	627	515	565	112
1925	817	252	133	618	507	622	125
1926	944	209	128	602	531	668	136
1927	1,032	221	150	585	494	700	140
1928	1,204	194	175	567	519	757	144
1929	1,379	184	204	566	534	840	148
1930	1,452	186	176	523	468	822	126
1931	1,378	154	169	442	375	762	109
1932	1,145	159	134	338	280	645	74.0
1933	1,029	158	148	302	306	577	76.4
1934	1,012	169	129	315	332	601	83.6
1934	980	133	129	324	349	601	83.6
1935	1,041	143	126	324	398	619	86.0
1936	1,111	160	143	344	488	688	95.9
1937	1,188	181	162	344	563	744	98.3
1938	1,142	173	134	338	484	739	83.9

## P 4 Total Payments by Type (millions of dollars)

	PENSIONS & COMP.									
	WAGES <sup>1</sup> (1)	SAL- ARIES <sup>1</sup> (2)	WAGES & SAL- ARIES <sup>2</sup> (3)	FOR INJURY <sup>3</sup> (4)	EMPL. COMP. (5)	ENTREP. WITHDR. <sup>4</sup> (6)	DIVI- DENDS (7)	INTER- EST (8)	PROP. INCOME (9)	PAY. TO INDI- VIDUALS (10)
1919	2,468	675	1,415	58.8	4,607	10.8	530	679	1,210	5,828
1920	3,216	864	1,866	78.9	6,026	8.9	486	714	1,201	7,287
1921	2,270	818	1,665	52.5	4,807	7.2	455	751	1,207	6,021
1922	2,117	886	1,619	55.9	4,680	7.7	566	784	1,350	5,988
1923	2,478	870	1,755	66.1	5,166	7.8	687	835	1,478	6,647
1924	2,290	871	1,871	67.1	5,100	5.8	707	893	1,601	6,707
1925	2,825	877	1,889	79.3	5,170	5.9	816	926	1,742	6,919
1926	2,408	893	2,000	85.5	5,882	5.7	866	945	1,811	7,199
1927	2,346	899	2,006	86.8	5,839	5.1	1,038	965	2,008	7,847
1928	2,264	891	2,070	81.5	5,308	5.2	1,047	983	2,081	7,344
1929	2,381	895	2,177	84.9	5,489	5.7	1,287	970	2,257	7,752
1930	1,997	852	2,189	88.7	5,078	5.7	1,426	990	2,416	7,495
1931	1,588	749	1,897	79.9	4,310	4.2	1,284	1,023	2,257	6,572
1932	1,122	564	1,545	70.7	3,802	3.0	974	1,065	2,039	5,845
1933	1,059	501	1,410	69.4	3,040	2.5	880	1,038	1,869	4,912
1934	1,164	524	1,508	74.2	3,272	2.6	833	984	1,818	5,093
1934	1,164	524	1,508	74.2	3,272	2.6	818	954	1,742	5,048
1935	1,269	562	1,593	82.7	3,508	2.9	932	923	1,855	5,366
1936	1,469	586	1,739	81.7	3,877	3.0	865	882	1,747	5,627
1937	1,588	628	1,940	123	4,280	3.2	948	854	1,803	6,087
1938	1,853	607	1,877	99.7	3,987	2.9	849	812	1,661	5,601

<sup>1</sup> Steam railroads, Pullman, and railway express.

<sup>2</sup> Other transportation, electric light and power and manufactured gas, and communication.

<sup>3</sup> Steam railroads, Pullman, and railway express, and communication.

<sup>4</sup> Electric light and power, and water transportation.

## P 5 Net Income Originating (millions of dollars)

	ENTREPRENEURIAL					NET				
	INDI- VIDUALS	Net savings	Net income	NET SAVINGS Corp.	NET Total	NET INCOME	NET SAVINGS, ADJUSTED Entrep. Corp.,	NET Total	NET ADJ.	NET INCOME
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1919	5,828	8.2	19.0	126	134	5,963	8.2	121	129	5,958
1920	7,287	5.4	14.4	105	111	7,348	5.4	175	181	7,418
1921	6,021	-1.6	5.6	67.6	66.0	6,087	-1.6	317	316	6,337
1922	5,988	-0.5	7.2	227	226	6,215	-0.5	221	220	6,209
1923	6,647	0.1	7.4	447	447	7,094	0.1	410	410	7,057
1924	6,707	0.6	6.4	372	372	7,080	0.6	386	386	7,094
1925	6,919	1.1	6.9	644	645	7,564	1.1	680	681	7,600
1926	7,199	1.3	7.0	687	688	7,888	1.3	704	705	7,905
1927	7,847	0.2	5.2	442	442	7,790	0.2	481	481	7,829
1928	7,344	1.2	6.4	699	700	8,045	1.2	684	685	8,030
1929	7,752	2.0	7.8	756	758	8,511	1.9	751	753	8,505
1930	7,495	-1.8	3.9	131	129	7,625	-1.6	250	249	7,744
1931	6,572	-2.6	1.6	-203	-205	6,366	-1.8	-118	-120	6,452
1932	5,345	-2.8	0.7	-475	-477	4,867	-2.1	-431	-433	4,911
1933	4,912	-0.4	2.1	-190	-191	4,720	0.4	-203	-202	4,709
1934	5,093	0.4	3.0	-217	-217	4,876	0.3	-291	-291	4,802
1934	5,048	1.5	4.0	-215	-214	4,833	1.5	-285	-284	4,764
1935	5,366	0.8	3.7	-218	-217	5,149	2.7	-203	-200	5,165
1936	5,627	3.8	6.8	211	215	5,843	3.6	203	206	5,834
1937	6,087	4.5	7.7	120	125	6,212	4.3	50.6	54.9	6,141
1938	5,601	0.4	3.3	-89.1	-88.7	5,513	0.4	-72.8	-72.5	5,529

\* Water transportation, and electric light and power.

P 6 Wages and Salaries by Major Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER, & MFD. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS		OTHER TRANSP.*	COMMUNI- CATION	TOTAL
	(1)	Wages (2)	Salaries (3)			
1919	217	2,463	675	891	307	4,553
1920	260	3,216	864	1,201	404	5,947
1921	263	2,270	818	999	402	4,754
1922	274	2,117	836	919	426	4,574
1923	345	2,473	870	939	471	5,099
1924	399	2,290	871	968	503	5,033
1925	415	2,325	877	947	527	5,091
1926	464	2,403	893	969	567	5,297
1927	479	2,346	899	940	585	5,252
1928	508	2,264	891	936	625	5,227
1929	533	2,331	895	942	701	5,404
1930	552	1,997	852	877	709	4,989
1931	506	1,583	749	756	635	4,230
1932	424	1,122	564	591	529	3,231
1933	392	1,059	501	559	457	2,970
1934	424	1,164	524	599	484	3,198
1935	442	1,269	562	656	494	3,425
1936	480	1,469	586	724	534	3,796
1937	536	1,588	628	801	602	4,157
1938	531	1,353	607	738	607	3,837

\* Pipe lines, street railways, and water transportation.



P 7 Wages and Salaries by Minor Industrial Divisions  
(millions of dollars)

	ELEC.						
	LIGHT & POWER (1)	MFD. GAS (2)	PIPE LINES (3)	STREET RWY. (4)	WATER TRANSP. (5)	TELE- PHONE (6)	TELE- GRAPH (7)
1919	140	77.2	26.9	368	495	236	70.6
1920	176	84.2	33.8	464	703	309	94.5
1921	185	78.1	31.7	498	529	322	80.0
1922	194	80.0	33.8	433	451	347	78.3
1923	252	93.7	37.8	439	462	385	86.0
1924	297	101	33.7	440	494	417	86.4
1925	310	105	37.5	433	475	434	92.4
1926	355	108	41.3	433	494	461	105
1927	307	112	49.0	420	471	483	102
1928	400	107	48.2	406	481	520	104
1929	432	100	50.1	411	480	585	116
1930	453	98.9	43.9	382	451	591	118
1931	422	83.8	39.5	335	380	531	103
1932	350	74.1	30.6	270	290	453	75.8
1933	317	75.5	30.2	227	301	390	67.1
1934	344	79.4	35.2	238	326	407	76.9
1935	361	81.3	37.6	236	382	418	76.4
1936	395	85.4	41.5	241	441	451	83.1
1937	446	90.4	48.8	242	510	511	90.4
1938	441	90.1	46.1	236	455	524	82.8

P 8 Pensions and Compensation for Injury, and Total Employee  
Compensation (millions of dollars)

	PENSIONS AND COMPENSATION FOR INJURY				EMPLOYEE COMPENSATION					
	Steam rr., Pull., & rwy. express (1)	Tele- phone (2)	Tele- graph (3)	Com- mun. (4)	Total (5)	Elec. light & power, & mfd. gas (6)	Steam rr., Pull., & rwy. express (7)	Other transp.* (8)	Com- mun. (9)	Total (10)
1919	49.0	3.1	1.6	4.7	58.8	217	3,187	891	311	4,607
1920	72.7	4.2	2.0	6.2	78.9	260	4,154	1,201	410	6,026
1921	46.3	4.1	2.1	6.2	52.5	263	3,135	999	408	4,807
1922	48.9	4.8	2.2	7.0	55.9	274	3,003	919	433	4,630
1923	59.0	4.7	2.4	7.1	66.1	345	3,402	939	478	5,166
1924	60.0	4.6	2.5	7.1	67.1	399	3,221	968	510	5,100
1925	71.6	5.1	2.7	7.8	79.3	415	3,273	947	534	5,170
1926	77.1	5.7	2.7	8.4	85.5	464	3,374	969	575	5,382
1927	78.1	6.0	2.7	8.7	86.8	479	3,324	940	594	5,339
1928	72.1	6.8	2.7	9.5	81.5	508	3,228	936	634	5,308
1929	74.3	7.6	3.0	10.6	84.9	533	3,301	942	712	5,489
1930	72.6	7.8	3.2	11.0	83.7	552	2,922	877	720	5,073
1931	67.3	9.1	3.5	12.6	79.9	506	2,400	756	647	4,310
1932	59.0	8.6	3.1	11.7	70.7	424	1,745	591	541	3,302
1933	58.2	8.4	2.8	11.2	69.4	392	1,618	559	468	3,040
1934	61.5	9.8	2.8	12.6	74.2	424	1,750	599	497	3,272
1935	69.2	10.6	2.9	13.5	82.7	442	1,900	656	508	3,508
1936	67.2	11.4	3.1	14.5	81.7	480	2,123	724	549	3,877
1937	107	12.8	3.2	16.0	123	536	2,324	801	618	4,280
1938	83.0	13.4	3.3	16.7	99.7	531	2,043	738	624	3,937

\* Pipe lines, street railways, and water transportation.

TRANSPORTATION & OTHER PUBLIC UTILITIES

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P 9 Dividends by Major Industrial Divisions (millions of dollars)

	ELEC. LIGHT & POWER, & MED. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS	OTHER TRANSP.*	COMMUNI- CATION	TOTAL
	(1)	(2)	(3)	(4)	(5)
1919	110	256	112	51.0	530
1920	108	236	91.5	51.0	486
1921	109	208	79.8	58.3	455
1922	145	225	125	70.7	566
1923	194	252	109	80.7	637
1924	233	277	104	91.7	707
1925	280	294	138	102	816
1926	294	337	122	111	866
1927	331	436	146	124	1,038
1928	395	366	156	129	1,047
1929	514	438	189	144	1,287
1930	604	441	211	169	1,426
1931	609	257	181	186	1,234
1932	520	76.8	186	190	974
1933	432	76.0	133	188	830
1934	397	126	122	188	833
1934	370	126	133	188	818
1935	395	127	223	186	932
1936	400	146	150	167	865
1937	454	165	160	167	948
1938	436	83.7	152	176	849

\* Pipe lines, street railways, and water transportation.

P 10 Dividends by Minor Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER	MFD. GAS	PIPE LINES	STREET RWY.	WATER TRANSP.	TELE- PHONE	TELE- GRAPH
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1919	68.2	42.0	31.4	35.5	45.8	40.9	10.1
1920	71.3	36.9	30.8	32.3	28.4	40.9	10.1
1921	83.7	25.6	34.7	27.1	18.1	48.4	9.9
1922	123	22.3	60.2	47.0	18.2	60.2	9.8
1923	161	33.4	43.8	47.2	18.7	71.4	9.3
1924	185	48.2	44.5	46.9	13.5	82.3	9.4
1925	230	50.4	72.7	47.7	18.2	93.3	9.5
1926	246	48.0	55.1	46.9	20.4	99.9	11.8
1927	284	46.7	80.2	46.8	19.4	111	12.8
1928	356	38.7	87.5	46.4	22.2	116	13.2
1929	448	66.3	112	48.7	28.6	123	20.8
1930	536	67.9	142	39.1	30.2	147	22.0
1931	532	76.9	133	28.5	19.7	176	10.0
1932	432	87.5	156	17.9	12.4	187	3.1
1933	372	60.7	110	15.2	8.0	188	0.3
1934	328	68.8	91.0	19.2	11.9	187	0.5
1934	328	42.1	91.0	19.2	23.7	187	0.5
1935	331	64.0	144	21.6	56.5	181	4.3
1936	344	56.4	78.5	31.4	40.1	167	0.3
1937	395	59.5	81.9	38.0	41.0	165	2.2
1938	377	59.0	85.8	36.2	30.2	177	-0.8

## TRANSPORTATION &amp; OTHER PUBLIC UTILITIES

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## P 11 Interest by Major Industrial Divisions (millions of dollars)

	ELEC. LIGHT & POWER, & MFD. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS	OTHER TRANSP.*	COMMUNI- CATION	TOTAL
	(1)	(2)	(3)	(4)	(5)
1919	92.8	436	121	28.9	679
1920	100	461	120	32.3	714
1921	111	476	127	35.7	751
1922	129	488	137	29.0	784
1923	157	500	146	31.8	835
1924	193	525	141	33.4	893
1925	217	536	131	41.0	926
1926	253	527	123	41.3	945
1927	277	528	117	41.5	965
1928	307	527	112	36.5	983
1929	318	509	109	33.2	970
1930	339	518	102	29.5	990
1931	370	517	102	32.9	1,023
1932	404	510	105	46.3	1,065
1933	407	476	103	50.7	1,038
1934	386	447	99.7	51.3	984
1934	344	447	111	51.3	954
1935	347	416	111	47.7	923
1936	332	397	110	42.2	882
1937	311	393	107	42.6	854
1938	312	350	106	42.9	812

\* Pipe lines, street railways, and water transportation.

## P 12 Interest by Minor Industrial Divisions (millions of dollars)

	ELEC. LIGHT & POWER	MFD. GAS	PIPE LINES	STREET RWY.	WATER TRANSP.	TELE- PHONE	TELE- GRAPH
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1919	78.3	14.5	0.1	111	9.8	30.5	—1.6
1920	85.1	15.7	0.1	110	9.5	33.8	—1.5
1921	93.0	18.5	0.1	117	10.2	35.6	0.1
1922	114	15.1	0.3	127	9.8	29.0	..*
1923	142	15.0	0.4	135	10.1	31.6	0.2
1924	177	16.6	0.4	131	9.2	32.9	0.4
1925	195	21.7	0.4	123	7.7	40.3	0.7
1926	227	26.1	0.3	114	7.9	40.4	0.9
1927	249	28.3	0.4	109	7.9	39.9	1.6
1928	271	35.8	0.5	105	6.7	34.6	1.9
1929	280	37.5	0.5	103	6.1	31.1	2.1
1930	293	46.6	0.3	95.7	6.5	26.3	3.2
1931	321	49.0	2.1	92.3	8.4	29.3	3.6
1932	343	60.7	2.8	91.1	11.0	42.5	3.9
1933	343	64.5	3.8	87.7	12.4	46.5	4.2
1934	327	59.1	2.9	85.0	11.8	46.7	4.5
1934	295	49.0	2.9	93.7	14.8	46.7	4.5
1935	299	48.8	3.7	92.4	15.2	42.7	5.0
1936	285	46.6	3.3	92.3	15.1	37.2	4.9
1937	266	44.4	2.7	89.2	15.2	37.9	4.7
1938	268	43.7	1.9	88.9	15.9	38.5	4.4

\* — \$45,000.

TRANSPORTATION & OTHER PUBLIC UTILITIES

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P 13 Property Income by Major Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER, & MFD. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS	OTHER TRANSP.*	COMMUNI- CATION	TOTAL
	(1)	(2)	(3)	(4)	(5)
1919	203	692	234	80.0	1,210
1920	208	697	211	83.3	1,201
1921	220	685	207	94.0	1,207
1922	274	714	262	99.0	1,350
1923	351	753	256	112	1,473
1924	427	802	246	125	1,601
1925	497	831	270	143	1,742
1926	547	864	245	153	1,811
1927	608	905	264	165	2,003
1928	702	894	268	166	2,031
1929	832	948	299	177	2,257
1930	944	960	314	198	2,416
1931	979	774	284	219	2,257
1932	924	586	291	237	2,039
1933	840	552	237	239	1,869
1934	783	573	221	239	1,818
1934	715	573	245	239	1,773
1935	743	544	334	233	1,855
1936	732	543	260	209	1,747
1937	765	559	267	210	1,803
1938	748	434	259	219	1,661

\* Pipe lines, street railways, and water transportation.

P 14 Property Income by Minor Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER	MFD. GAS	PIPE LINES	STREET RWY.	WATER TRANSP.	TELE- PHONE	TELE- GRAPH
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1919	146	56.5	31.6	147	55.6	71.5	8.5
1920	156	52.5	30.9	143	37.9	74.7	8.6
1921	176	44.1	34.8	144	28.3	84.0	10.0
1922	237	37.4	60.4	174	28.0	89.2	9.8
1923	303	48.4	44.2	183	28.8	103	9.5
1924	363	64.8	44.9	178	22.7	115	9.8
1925	425	72.1	73.1	171	25.9	133	10.1
1926	473	74.2	55.4	161	28.3	140	12.7
1927	533	75.0	80.6	156	27.3	151	14.4
1928	627	74.4	88.0	151	28.9	150	15.1
1929	728	103	113	151	34.7	154	22.9
1930	829	114	142	134	36.7	173	25.2
1931	853	125	135	120	28.0	205	13.6
1932	776	148	159	109	23.5	230	7.0
1933	715	125	113	102	20.4	234	4.5
1934	655	127	93.9	104	23.7	234	5.1
1934	624	91.1	93.9	112	38.4	234	5.1
1935	630	112	148	114	71.7	224	9.3
1936	629	102	81.8	123	55.2	204	5.2
1937	661	103	84.6	127	56.2	203	6.9
1938	646	102	87.7	125	46.1	215	3.6

P 15 Total Payments to Individuals by Major Industrial Divisions (millions of dollars)

	ELEC. LIGHT & POWER, & MFD. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS	OTHER TRANSP.*	COMMUNI- CATION	TOTAL
	(1)	(2)	(3)	(4)	(5)
1919	423	3,880	1,133	391	5,828
1920	473	4,851	1,418	493	7,237
1921	487	3,820	1,210	502	6,021
1922	551	3,717	1,186	532	5,988
1923	700	4,156	1,199	590	6,647
1924	829	4,023	1,218	635	6,707
1925	914	4,105	1,220	678	6,919
1926	1,014	4,238	1,218	728	7,199
1927	1,090	4,289	1,208	760	7,347
1928	1,211	4,123	1,209	800	7,344
1929	1,366	4,250	1,246	889	7,752
1930	1,497	3,882	1,196	919	7,495
1931	1,487	3,174	1,043	867	6,572
1932	1,349	2,332	885	778	5,345
1933	1,234	2,171	798	708	4,912
1934	1,208	2,324	823	737	5,093
1934	1,139	2,324	847	737	5,048
1935	1,186	2,444	992	742	5,366
1936	1,214	2,667	987	759	5,627
1937	1,303	2,883	1,072	828	6,087
1938	1,281	2,477	999	843	5,601

\* Pipe lines, street railways, and water transportation.



P 16 Entrepreneurial Withdrawals and Total Payments to  
Individuals by Minor Industrial Divisions (millions of dollars)

	ENTREPRENEURIAL WITHDRAWALS		TOTAL PAYMENTS TO INDIVIDUALS						
	Elec. light & power	Water transp.	Elec. light & power	Mfd. gas	Pipe lines	Street rwy.	Water transp.	TELE- PHONE	Tele- graph
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1919	3.2	7.6	289	133	58.5	515	558	311	80.7
1920	3.4	5.5	336	136	64.7	607	746	388	105
1921	3.4	3.8	365	122	66.5	582	561	410	92.0
1922	3.2	4.5	434	117	94.2	608	484	441	90.2
1923	2.8	4.5	558	142	82.0	622	495	492	97.9
1924	2.6	3.2	663	166	78.6	619	519	537	98.7
1925	2.3	3.6	737	177	110	604	505	573	105
1926	1.9	3.8	831	183	96.7	595	526	607	121
1927	1.5	3.6	902	187	129	576	502	641	119
1928	1.4	3.8	1,030	181	136	558	514	678	122
1929	1.2	4.6	1,162	204	163	563	519	747	142
1930	1.0	4.6	1,284	213	186	517	492	772	146
1931	0.9	3.3	1,277	209	174	456	412	746	120
1932	0.7	2.3	1,126	222	189	379	316	692	86.0
1933	0.6	1.8	1,033	200	144	330	324	633	74.4
1934	0.6	2.0	1,001	207	129	342	352	652	84.8
1934	0.6	1.9	969	170	129	351	366	652	84.8
1935	0.7	2.2	992	194	186	350	456	653	88.6
1936	0.7	2.3	1,026	188	123	364	499	667	91.4
1937	0.8	2.5	1,108	194	133	369	568	727	100
1938	0.8	2.1	1,088	192	133	361	504	754	89.6

P 17 Net Savings by Major Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER, & MFD. GAS	STEAM RR., PULLMAN, & RWY. EXPRESS	OTHER TRANSP.*	COMMUNI- CATION	TOTAL
	(1)	(2)	(3)	(4)	(5)
1919	1.3	58.1	49.3	25.7	134
1920	22.1	-6.5	74.1	21.4	111
1921	36.4	-5.2	4.5	30.3	66.0
1922	68.5	106	5.3	46.8	226
1923	78.1	282	40.2	46.7	447
1924	50.0	242	37.4	42.8	372
1925	155	382	38.7	68.8	645
1926	139	428	44.2	75.8	688
1927	163	176	21.5	81.2	442
1928	187	359	53.4	100	700
1929	196	403	59.5	98.9	758
1930	140	-11.6	-28.9	29.6	129
1931	46.4	-200	-55.7	4.5	-205
1932	-44.5	-242	-132	-58.5	-477
1933	-46.2	-49.7	-41.3	-53.9	-191
1934	-26.8	-93.1	-45.8	-51.6	-217
1934	-25.8	-93.1	-44.0	-51.6	-214
1935	-1.8	-34.1	-144	-37.2	-217
1936	57.1	143	-9.9	25.0	215
1937	67.6	44.3	-0.9	14.4	125
1938	35.4	-61.8	-42.0	-20.4	-88.7

\* Pipe lines, street railways, and water transportation.

P 18 Net Savings by Minor Industrial Divisions  
(millions of dollars)

	ELEC. LIGHT & POWER	MFD. GAS	PIPE LINES	STREET RWY.	WATER TRANSP.	TELE- PHONE	TELE- GRAPH
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1919	35.7	-34.4	7.5	11.7	30.0	14.4	11.3
1920	45.2	-23.1	27.6	22.1	24.4	8.9	12.5
1921	44.9	-8.5	2.5	28.4	-26.4	22.6	7.7
1922	68.1	0.4	3.2	16.9	-14.8	30.6	16.2
1923	76.7	1.4	24.0	26.6	-10.4	31.6	15.1
1924	66.9	-17.0	33.7	8.0	-4.2	28.7	14.2
1925	80.3	75.1	23.1	13.9	1.7	48.9	19.9
1926	113	26.7	31.9	7.3	4.9	60.8	15.0
1927	129	34.7	20.7	9.2	-8.3	59.6	21.6
1928	174	12.6	39.4	9.1	4.9	78.9	21.7
1929	217	-20.3	41.4	2.9	15.2	93.0	6.0
1930	167	-27.1	-9.8	5.3	-24.4	50.3	-20.7
1931	101	-55.2	-4.9	-14.7	-36.1	15.6	-11.1
1932	18.5	-62.9	-55.7	-40.7	-36.5	-46.5	-12.0
1933	-4.1	-42.0	4.8	-28.3	-17.8	-55.8	1.9
1934	10.9	-37.7	0.2	-26.6	-19.5	-50.4	-1.2
1934	10.9	-36.7	0.2	-26.6	-17.6	-50.4	-1.2
1935	49.1	-50.8	-60.1	-26.1	-58.1	-34.6	-2.6
1936	85.5	-28.4	20.6	-20.1	-10.4	20.5	4.5
1937	79.9	-12.3	29.1	-25.1	-4.9	16.6	-2.2
1938	54.5	-19.1	1.0	-23.1	-19.9	-14.7	-5.7

## P 19 Employees, by Major Industrial Divisions, and Total Entrepreneurs (thousands)

	E M P L O Y E E S						ENTRE- TOTAL PRENEURS <sup>2</sup>
	ELEC. LIGHT & POWER, & MFD. GAS	Wage earners	Salaried em- ployees	OTHER TRANSP. <sup>1</sup>	COMMUNI- CATION	(6)	
1919	170	1,707	421	606	356	3,262	2.5
1920	175	1,804	457	683	381	3,502	2.4
1921	176	1,436	423	605	364	3,006	2.3
1922	193	1,373	441	634	381	3,024	2.2
1923	242	1,600	453	631	413	3,341	2.0
1924	259	1,500	446	615	423	3,245	1.7
1925	268	1,495	443	593	441	3,241	1.5
1926	296	1,528	447	599	453	3,325	1.3
1927	308	1,486	440	583	458	3,278	1.0
1928	320	1,412	425	570	477	3,206	1.0
1929	336	1,418	422	560	532	3,269	0.9
1930	342	1,254	399	526	519	3,043	0.8
1931	313	1,048	353	461	448	2,626	0.8
1932	273	859	292	400	402	2,228	0.7
1933	263	816	264	405	376	2,126	0.6
1934	278	853	267	419	374	2,192	0.7
1935	280	845	264	424	368	2,183	0.6
1936	296	920	270	438	377	2,303	0.6
1937	308	966	282	457	401	2,415	0.6
1938	298	795	263	415	386	2,158	0.6

<sup>1</sup> Pipe lines, street railways, and water transportation.<sup>2</sup> Water transportation, and electric light and power.

## P 20 Employees by Minor Industrial Divisions (thousands)

	ELEC. LIGHT & POWER	MFD. GAS	PIPE LINES	STREET RWY.	WATER TRANSP.	TELE- PHONE	TELE- GRAPH
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1919	108	62.6	18.6	294	293	279	76.3
1920	119	56.9	17.1	303	362	304	77.0
1921	123	52.8	19.9	279	305	291	73.0
1922	136	57.5	22.6	291	320	312	69.9
1923	177	65.0	24.3	291	315	339	74.0
1924	192	67.9	21.7	280	313	347	76.5
1925	198	70.0	23.7	270	299	360	81.7
1926	224	72.1	26.0	265	308	367	85.8
1927	234	74.2	30.2	254	298	375	83.5
1928	250	69.9	29.1	245	296	391	85.7
1929	271	64.6	26.4	241	291	436	96.1
1930	279	62.9	24.6	224	277	425	93.8
1931	259	53.7	22.7	200	238	367	81.1
1932	225	48.0	17.7	173	208	334	68.3
1933	213	49.4	20.5	157	228	311	65.4
1934	227	51.0	22.6	159	237	303	70.8
1935	229	50.7	23.3	152	248	299	68.8
1936	244	52.1	25.2	149	264	304	72.8
1937	256	51.9	26.4	145	286	325	75.4
1938	247	50.5	23.6	137	254	318	67.8

TRANSPORTATION AND OTHER PUBLIC UTILITIES

P 21 Comparison of Various Income Account Items for Steam Railroads Reported in *Statistics of Income (SI)* and *Statistics of Railways in the United States (SR)* (millions of dollars)

	GROSS INCOME		TOTAL EXPENSES		NET PROFIT		(7)		DIVIDENDS PAID		DIVIDENDS RECEIVED		NET DIVIDENDS PAID		NET DIVIDENDS RECEIVED		CORPORATE SAVINGS		NET PROFIT EXCL. DIVIDENDS RECEIVED		
	SI (1)	SR (2)	SI (4)	SR (5)	SI (7)	SR (8)	SI (9)	SR (10)	SI (11)	SR (12)	SI (13)	SR (14)	SI (15)	SR (16)	SI (17)	SR (18)	SI (19)	SR (20)	SI (21)	SR (22)	
																					—
1926	7,138	6,770	368	6,351	5,982	369	787	788	-1.0	347	362	144	35.5	203	327	-124	643	752	439	425	14.6
1927	7,162	6,500	661	6,530	5,865	665	631	634	-3.8	474	444	173	36.0	301	408	-107	458	599	156	190	-33.6
1928	7,261	6,480	781	6,502	5,725	776	759	755	4.5	452	401	157	44.6	294	356	-61.7	602	710	307	354	-46.3
1929	7,285	6,666	619	6,382	5,793	589	902	872	30.1	502	440	214	41.6	287	399	-111	637	830	399	431	-31.9
1930	6,073	5,640	433	5,644	5,158	485	429	482	-52.6	540	489	203	57.7	337	491	-94.4	226	424	-111	-7.3	-104
1931	4,851	4,483	368	4,905	4,377	528	-54.2	106	-160	324	310	113	53.4	211	257	-46.1	-167	52.9	-378	-204	-174
1932	3,679	3,359	320	3,942	3,479	463	-263	-120	-143	90.3	114	72.9	43.9	17.3	70.7	-53.4	-395	-164	-354	-235	-118
1933	3,587	3,322	265	3,805	3,254	551	-217	68.6	-285	83.5	118	66.9	42.4	16.6	75.9	-59.4	-284	26.2	-300	-49.7	-851
1934	3,731	3,497	234	3,945	3,421	524	-214	76.2	-290	144	170	76.4	44.4	68.2	126	-57.8	-290	31.7	-358	-94.2	-264
1935	3,859	3,676	182	3,994	3,544	450	-135	132	-268	132	165	73.0	38.2	59.5	127	-68.2	-268	94.6	-267	-35.1	-434
1936	4,497	4,301	196	4,512	3,985	526	-14.8	315	-330	178	188	78.9	29.2	99.6	159	-59.5	-93.7	286	-193	127	-320
1937	4,617	4,417	200	4,668	4,188	479	-50.7	228	-279	178	185	70.6	23.1	108	162	-54.0	-121	305	-229	43.0	-272
1938	3,776			3,740			35.2			99.5	15.9			85.7				19.4			-64.3

Wages are separated from salaries for the most important division in this group, steam railroads, on the basis of our grouping of the various categories of workers in *Wage Statistics of Class I Steam Railways* (Interstate Commerce Commission). This grouping is shown in detail in General Note A.

For another industrial division, pipe lines, the basic data, reported by the Interstate Commerce Commission, must be adjusted for incompleteness of coverage. Since this adjustment percentage must be assumed to be the same for the various types of income originating in the industry, it is described in General Note B.

## GENERAL NOTE A

## Grouping of

*Wage Statistics of Class I Steam Railways in the United States (ICC)*

## SALARIED EMPLOYEES

1932 AND EARLIER YEARS	1933 AND LATER YEARS
<i>Executives, Officials, and Staff Assistants *</i>	
Executives, general officers, & assistants	Same *
Division officers, assistants, & staff assistants	Same *
<i>Professional, Clerical, and General</i>	
Architectural, chemical, & engineering assistants (A) *	
Architectural, chemical, & engineering assistants (B) *	
Subprofessional engineering & laboratory assistants	
Professional & subprofessional legal assistants	Professional & subprofessional assistants
Supervisory or chief clerks (major departments)	Same
Chief clerks (minor departments) & assistant chief clerks & supervisory cashiers	Same
Clerks & clerical specialists (A)	Same
Clerks (B)	
Clerks (C)	Clerks (B and C)
Mechanical device operators (office)	Same
Stenographers & secretaries (A)	Same
Stenographers & typists (B)	Same
Storekeepers, sales agents, & buyers	Same
Ticket agents & assistant ticket agents	Same
Traveling auditors or accountants	Same
Telephone switchboard operators & office assistants	Same
Messengers & office boys	Same
Elevator operators & other office attendants	Same
Lieutenants & sergeants of police	Same
Patrolmen	
Supervising traffic agents	

\* Principal officers.

SALARIED EMPLOYEES (cont.)

1932 AND EARLIER YEARS

1933 AND LATER YEARS

*Professional, Clerical, and General (concl.)*

Traffic agents, advertising & development agents  
 Fire-prevention, smoke, & time-service inspectors, &  
 office-building superintendents  
 Claim agents & claim investigators  
 Real estate & tax agents & investigators  
 Examiners, instructors, & special investigators

Traffic & various other  
 agents, inspectors, & in-  
 vestigators  
 Claim agents or investiga-  
 tors  
 Freight-claim agents or in-  
 vestigators  
 Chief claim agents or in-  
 vestigators

*Maintenance of Way and Structures*

Roadmasters & general foremen  
 Assistant general foremen  
 Supervising maintenance of way inspectors & scale  
 inspectors  
 Maintenance of way inspectors

Roadmasters, general fore-  
 men, & assistants  
 Maintenance of way &  
 scale inspectors

General foremen & supervising inspectors (signal,  
 telegraph, & electrical transmission)  
 Assistant general foremen (signal, telegraph, & elec-  
 trical transmission) & signal & telegraph inspectors

General & assistant general  
 foremen, & inspectors  
 (signal, telegraph, & elec-  
 trical transmission)

*Maintenance of Equipment and Stores*

General foremen (M. E.)  
 Assistant general foremen & department foremen  
 (M. E.)

General, assistant general,  
 & department foremen

General foremen (stores)  
 Assistant general foremen (stores)

General & assistant general  
 foremen (stores)

Equipment, shop, & electrical inspectors (M. E.)  
 Material & supplies inspectors

Equipment, shop, electri-  
 cal, material, & supplies  
 inspectors

*Transportation (other than Train, Engine, and  
 Yard)*

Chief train dispatchers, train dispatchers, & train  
 directors

Chief train dispatchers  
 Train dispatchers  
 Train directors



## SALARIED EMPLOYEES (concl.)

1932 AND EARLIER YEARS	1933 AND LATER YEARS
<i>Transportation (other than Train, Engine, and Yard)</i> (concl.)	
Station agents (supervisory—major stations—non-telegraphers)	Same
Station agents (supervisory—smaller stations—non-telegraphers)	
Station agents (non-supervisory—smaller stations—non-telegraphers)	Station agents (smaller stations—non-telegraphers)
Station agents (telegraphers & telephoners)	Same
Chief telegraphers & telephoners or wire chiefs	Same
Clerk-telegraphers & clerk-telephoners	Same
Telegraphers, telephoners, & towermen	Same
Station masters & assistants	Same
Supervising baggage agents	Same
Baggage agents & assistants	Same
General foremen (freight stations, warehouses, grain elevators, & docks)	Same
Assistant general foremen (freight stations, warehouses, grain elevators, & docks)	Same
Stewards, restaurant & lodging-house managers, & dining-car supervisors	Same
Deck officers (ferryboats & towing vessels)	
Engine room officers (ferryboats & towing vessels)	
Transportation & dining service inspectors	Same
Parlor & sleeping car conductors	Same

*Transportation (Yardmasters, Switch Tenders, and Hostlers)*

Yardmasters &amp; assistants

Yardmasters  
Assistant yardmasters

## WAGE EARNERS

*Professional, Clerical, and General*

Watchmen (without police authority)

Patrolmen &amp; watchmen

Misc. trades workers (other than plumbers)

Same

Motor-vehicle &amp; motor-car operators

Same

Teamsters &amp; stablemen

Same

Janitors &amp; cleaners

Same

*Maintenance of Way and Structures*

Bridge &amp; building gang foremen (skilled labor)

Same

Bridge &amp; building carpenters

Same

Bridge &amp; building iron workers

Same

Bridge &amp; building painters

Same

Masons, bricklayers, plasterers, &amp; plumbers

Same

Skilled trades helpers

Regular apprentices

Helpers &amp; apprentices

Portable steam equipment operators

Same

Portable steam equipment operator helpers

Same

Pumping equipment operators

Same

Gang foremen (extra gang &amp; work-train laborers)

Same

## WAGE EARNERS (cont.)

1932 AND EARLIER YEARS	1933 AND LATER YEARS
<i>Maintenance of Way and Structures (concl.)</i>	
Gang foremen (bridge & building, signal & telegraph laborers)	Same
Gang or section foremen	Same
Laborers (extra gang & work-train)	Extra gang men
Track & roadway section laborers	Section men
Maintenance of way laborers (other than track & roadway) & gardeners & farmers	Same
Gang foremen (signal & telegraph skilled-trades labor)	Same
Signalmen & signal maintainers	Same
Linemen & groundmen	Same
Assistant signalmen & assistant signal maintainers	Same
Signalmen & signal maintainer helpers	Same
<i>Maintenance of Equipment and Stores</i>	
Gang foremen & gang leaders (skilled labor)	Same
Blacksmiths	Same
Boilermakers	Same
Carmen (A)	
Carmen (B)	
	Carmen (A and B)
Carmen (C)	
Carmen (D)	
	Carmen (C and D)
Electrical workers (A)	Same
Electrical workers (B)	Same
Electrical workers (C)	Same
Machinists	Same
Molders	Same
Sheet-metal workers	Same
Skilled trades helpers	Same
Helper apprentices	Same
Regular apprentices	Same
Gang foremen laborers (shops, engine houses, power plants, & stores)	
	Gang foremen (shops, engine houses, & power plants)
	Gang foremen (stores and ice, reclamation, & timber-treating plants)
	Same
Coach cleaners	
Laborers (shops, engine houses, power plants & stores)	
Common laborers (shops, engine houses, power plants, & stores)	
	Classified laborers (shops, engine houses, & power plants)
	General laborers (shops, engine houses, & power plants)

## WAGE EARNERS (cont.)

1932 AND EARLIER YEARS	1933 AND LATER YEARS
<i>Maintenance of Equipment and Stores (concl.)</i>	General laborers (stores & ice, reclamation, & timber-treating plants)
Stationary engineers (steam)	Same
Stationary firemen & oilers (steam & electrical plants)	
Coal passers & water tenders (steam station boiler rooms)	Stationary firemen, oilers, coal passers, & water tenders
<i>Transportation (other than Train, Engine, and Yard)</i>	
Baggage, parcel room, & station attendants	Same
Gang foremen (freight-station, warehouse, grain elevator, & dock labor)	Same
Callers, loaders, scalers, sealers, & perishable-freight inspectors	Same
Truckers (stations, warehouses, & platforms)	Same
Laborers (coal & ore docks & grain elevators)	Same
Common laborers (stations, warehouses, platforms, & grain elevators)	Same
Chefs & first cooks (dining cars & restaurants)	
Second & third cooks (dining cars & restaurants)	Chefs & cooks (restaurants or dining cars)
Waiters & lodging-house attendants	
Camp & crew cooks & kitchen helpers	Waiters, camp cooks, kitchen helpers, etc.
Barge, lighter & gasoline launch officers & workers	
Deck & engine-room workers (ferryboats & towing vessels)	
Deck & engine-room officers & workers (steamers)	
Floating equipment shore workers & attendants	Officers, workers, & attendants on barges, launches, ferryboats, towing vessels, & steamers, & shore workers
Train attendants	Same
Bridge operators & helpers	Same
Crossing & bridge flagmen & gatemen	Same
Foremen (laundry) & laundry workers	Same
<i>Transportation (Yardmasters, Switch Tenders, and Hostlers)</i>	
Switch tenders	Same
Outside hostlers	Same
Inside hostlers	Same
Outside hostler helpers	Same
<i>Transportation (Train and Engine)</i>	
Road passenger conductors	Same
Assistant road passenger conductors & ticket collectors	Same

WAGE EARNERS (concl.)

1932 AND EARLIER YEARS	1933 AND LATER YEARS
<i>Transportation (Train and Engine) (concl.)</i>	
Road freight conductors (through freight)	Same
Road freight conductors (local & way freight)	Same
Road passenger baggagemen	Same
Road passenger brakemen & flagmen	Same
Road freight brakemen & flagmen (through freight)	Same
Road freight brakemen & flagmen (local & way freight)	Same
Yard conductors & yard foremen	Same
Yard brakemen & yard helpers	Same
Road passenger engineers & motormen	Same
Road freight engineers & motormen (through freight)	Same
Road freight engineers & motormen (local & way freight)	Same
Yard engineers & motormen	Same
Road passenger firemen & helpers	Same
Road freight firemen & helpers (through freight)	Same
Road freight firemen & helpers (local & way freight)	Same
Yard firemen & helpers	Same

GENERAL NOTE B

Derivation of the

Raising Ratio for Statistics on the Pipe Line Industry (ICC)

From the *Report on Pipe Lines*, Part I, 72d Cong., 2d Sess., House Report 2192, it appears that:

a) The ICC *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies* cover 80.92 per cent of the total oil line mileage of the country.

b) Of the companies reporting to the ICC, five are gasoline line companies with 2,738 miles of trunk lines. The Bureau of Foreign and Domestic Commerce, National Income Division, finds that these five companies have no gathering line mileage.

c) The House Report covers 105,738 miles of oil lines and 3,874 miles of gasoline lines. On the basis of the total oil mileage as of May 1, 1932 (111,660), the Bureau of Foreign and Domestic Commerce, National Income Division, estimates that the House Report covers 94.7 per cent of all oil line mileage. The gasoline line mileage coverage is regarded as complete.

From the above data the total gasoline and oil line mileage is found to be 115,534, of which 80.6 per cent is covered by the ICC Report and 94.9 per cent by the House Report.

After studying the companies that were not covered by the ICC, but were covered by the House, the Bureau of Foreign and Domestic Commerce, National Income Division, found that 65.2 per cent of the mileage of these companies belonged to companies that should more properly be included under petroleum refining. It is assumed that this is true also of the mileage not covered by the ICC. The computation yielding the percentage by which the ICC data are raised is then as follows:

$$(100.0\% \div 80.6\%) \times (100.0\% - 65.2\%) = 8.4\%.$$

TABLE P 1

## Gross Income by Minor Industrial Divisions

*Col. 1 Electric light and power:* for 1917, 1922, 1927, 1932, and 1937, from the *Census of Central Electric Light and Power Stations*. Interpolation between 1917 and 1922, 1922 and 1927, is by the *Electric World* series of revenue from total sales (published in the *Survey of Current Business*). Interpolation between 1927 and 1932, 1932 and 1937, and extrapolation for 1938 are by the Edison Electric Institute series on total revenue from ultimate consumers, as given in their Statistical Bulletin 6.

*Col. 2 Manufactured gas:* for 1919, 1921, 1923, 1925, 1927, 1929, and 1931, from the *Biennial Census of Manufactures* (excluding the value of product of municipal plants). Interpolation for the intercensal years before 1929 is by the revenue from gas sales, reported in the American Gas Association Statistical Bulletin 9. Interpolation between 1929 and 1931 and extrapolation of the 1931 figure for 1932-38 are by the revenue from sales to consumers, reported in the American Gas Association Statistical Bulletin 36.

*Col. 3 Electric light and power, and manufactured gas:* sum of col. 1 and 2.

*Col. 4 Steam railroads, Pullman, and railway express:* operating revenue of steam railroads, from *Statistics of Railways*; of railway express and the Pullman Company, from the *Preliminary Abstract of Statistics of Common Carriers*.

*Col. 5 Pipe lines:* gross revenue for interstate pipe lines alone, from ICC *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies*.

*Col. 6 Street railways:* estimates of operating revenues as prepared by the American Transit Association.

*Col. 7 Telephone:* gross operating revenue for 1917, 1922, 1927, 1932, and 1937, from the *Census of Telephones*. Interpolation and extrapolation are by the operating revenues of the American Telephone and Telegraph Company reported in *Bell Telephone Securities*.

*Col. 8 Telegraph:* reported for 1920–33 by the Interstate Commerce Commission and for 1934–38 by the Federal Communications Commission in *Selected Financial and Operating Data from Annual Reports of Telegraph, Cable and Radiotelegraph Carriers*. Radio communication is included for 1934–38 alone.

*Col. 9 Communication:* sum of col. 7 and 8.

TABLE P 2

Net Income Originating by Major Industrial Divisions

Sum for each industry of total payments and net savings in Tables P 15 and P 17, respectively.

*Col. 5 Total:* sum of col. 1–4.

TABLE P 3

Net Income Originating by Minor Industrial Divisions

Sum for each industry of total payments and net savings in Tables P 16 and P 18, respectively.

TABLE P 4

Total Payments by Type

*Col. 1 Wages:* see Table P 6, col. 2.

*Col. 2 Salaries:* see Table P 6, col. 3.

*Col. 3 Wages and salaries:* see Table P 6, col. 1, 4, and 5.

*Col. 4 Pensions and compensation for injury:* see Table P 8, col. 5.

*Col. 5 Employee compensation:* sum of col. 1–4.

*Col. 6 Entrepreneurial withdrawals:* see Table P 16, col. 1 and 2.

*Col. 7 Dividends:* see Table P 9, col. 5.

*Col. 8 Interest:* see Table P 11, col. 5.

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

*Col. 10 Payments to individuals:* sum of col. 5, 6, and 9.

TABLE P 5

Net Income Originating

*Col. 1 Total payments to individuals:* see Table P 4, col. 10.

*Col. 2 Entrepreneurial net savings:*

a) *Electric light and power:* total entrepreneurial net income is assumed to be withdrawn and savings are assumed to be zero.

b) *Water transportation:* difference between entrepreneurial withdrawals (see the notes to Table P 16, col. 2) and net income (col. 3, below).

*Col. 3 Entrepreneurial net income:* sum of entrepreneurial net income in (a) the electric light and power industry and (b) water transportation.

a) *Electric light and power:* see the notes to Table P 16, col. 1.

b) *Water transportation:* product of corporate data and the ratio of unincorporated to incorporated tonnage. Statutory net income before taxes, total long term interest payments, and officers' compensation make up the corporate figure. To it is applied the ratio of tonnage operated by unincorporated firms to that operated by incorporated, derived for 1916 and 1926 from the *Census of Transportation by Water*, and interpolated for intercensal years along a straight line. The ratio is assumed to decline slightly, from 0.104 in 1926 to 0.100 in 1929, thus continuing the 1916-26 decline. After 1929 the ratio is held constant at the level for that year.

Statutory net income is from *Statistics of Income*. Long term interest is described in the notes to Table P 12, col. 5. Officers' compensation, 1929-37, is from the special tabulation of *Statistics of Income* data. Officers' compensation, 1919-28, is estimated on the basis of the 1928 ratio of officers' compensation in water transportation to officers' compensation in all transportation and public utility corporations. Officers' compensation in transportation and other public utility corporations is reported in *Statistics of Income* for 1919-24 and 1928. For the years between 1924 and 1928 it is interpolated by compiled receipts, also reported in *Statistics of Income*.

*Col. 4 Corporate net savings:* see the notes to Table P 17.

Col. 5 *Total net savings*: sum of col. 2 and 4.

Col. 6 *Net income originating*: sum of col. 1 and 5.

TABLE P 6

## Wages and Salaries by Major Industrial Divisions

Col. 1 *Electric light and power, and manufactured gas*: see Table P 7, col. 1 and 2.

Col. 2 and 3 *Steam railroads, Pullman, and railway express*: included with the wages paid by steam railroads and the Pullman Company are estimates of gratuities received by their employees. Railway express commissions are included with salaries.

a) *Steam railroads*: wages and salaries for all roads and switching and terminal companies, 1932-38, are from *Statistics of Railways*. Those for 1931 were received by letter from the Interstate Commerce Commission. Number and wages and salaries of employees of Class I roads, 1919-30, are from *Statistics of Railways*, as are the number of employees of Class II and III roads, 1922-30. The compensation of the latter, 1922-30, is estimated by multiplying their number of employees by the average annual pay of Class I road employees. Wages and salaries for all roads in 1919, 1920, and 1921 are the Class I figure raised by the ratio of operating expenses of all roads, excluding switching and terminal companies, to those of Class I roads. Total pay and number of employees of Class I switching and terminal companies, 1920-30, are from *Statistics of Railways*; pay of other switching and terminal companies, 1922-30, is estimated by multiplying their number of employees by the average pay in Class I switching and terminal companies. Total pay for all switching and terminal companies in 1920 and 1921 is estimated by raising the Class I figure by the ratio of total locomotives operated to those of Class I switching and terminal companies. The 1919 estimate is obtained by applying to railroad salaries and wages in 1919 the ratio of switching and terminal company salaries and wages to those of railroads in 1916.

The number and pay of Class I road employees is reported in detail by the Interstate Commerce Commission in *Wage Statistics of Class I Steam Railways*. Our grouping of the ICC data into wages and salaries forms the basis for the separation of the total pay of all



railroads and switching and terminal companies into wages and salaries. Since the ICC listing of employees is revised somewhat after 1932, the wage and salary division for 1933-38 is not strictly comparable with that for the earlier years.

Gratuities are based on the gross revenue from dining and buffet car service and hotel and restaurant service on Class I railroads and switching and terminal companies as recorded in *Statistics of Railways* and the *Preliminary Abstract of Statistics of Common Carriers*. In 1920, 1921, 1924, 1927, and 1931-38 gratuities are estimated to be 10 per cent of gross revenue; in all other years in the period, 15 per cent.

b) *Pullman Company*: wages and salaries were obtained by letter from the Interstate Commerce Commission. Gratuities paid to porters are estimated by multiplying the average tip by the number of passengers tipping. The number of berth and chair passengers carried, 1919-21, was obtained by letter from the Interstate Commerce Commission. For later years it is reported in the *Preliminary Abstract of Statistics of Common Carriers*. From questionnaire returns from local porters' unions are computed the average tip and the percentage of berth and chair passengers tipping, 1929-32. For 1933-38 the 1932 figures are used. For the years before 1929 the average 1929 tips are used but the percentage of passengers tipping is assumed to decrease in years of depression and to increase in years of prosperity, the percentages ranging from 46 to 68. These percentages were suggested by the questionnaire returns for 1929-32.

c) *Railway express*: wages and salaries and commissions, 1925-38, are reported in the *Preliminary Abstract of Statistics of Common Carriers*. Data for 1921-24 were obtained by letter from the Interstate Commerce Commission. The combined item, wages and salaries, commissions and expenses, is reported for 1919 and 1920 in *Statistics of Express Companies*. The 1921 ratio of wages, salaries, and commissions to it is applied to obtain wages, salaries, and commissions for 1919 and 1920.

*Col. 4 Other transportation*: see Table P 7, col. 3-5.

*Col. 5 Communication*: see Table P 7, col. 6 and 7.

*Col. 6 Total*: sum of col. 1-5.

TABLE P 7

## Wages and Salaries by Minor Industrial Divisions

*Col. 1 Electric light and power:* for 1917, 1922, 1927, 1932 (incomplete), and 1937, from the *Census of Central Electric Light and Power Stations*. The estimates for intercensal years and the total for 1932 are the product of the number of employees (see the notes to Table P 20) and the average pay. Interpolation between the 1917 and 1922 average pay figures is by those for New York (*Labor Market Bulletin* and the N. Y. Department of Labor Special Bulletin 171) and Pennsylvania (*Report on Productive Industries, Public Utilities and Miscellaneous Statistics*). Interpolation between the 1922 Census figure and the 1929 estimate is by an index of the average pay in New York, Pennsylvania, Wisconsin (*Wisconsin Labor Market*) and Illinois (*Illinois Labor Bulletin*). The averages for the four states are weighted by the amount of current generated in each Census year. The 1929 average pay is extrapolated from 1932 by an index derived by dividing the BLS payrolls index by its employment index. The same index is used in interpolating between 1929 and 1937 and extrapolating for 1938.

*Col. 2 Manufactured gas:* the *Biennial Census of Manufactures* reports wages and salaries and the number of employees in all and in commercial plants for the odd years 1919–29. The 1931 Census reports wages and the number of wage earners in all and in commercial plants. The 1933 Census reports wages and salaries and the number of employees in all plants. The number of wage earners in commercial plants and their pay in 1933 are based on their ratios to the totals in 1931; the number of salaried employees in commercial plants and their pay are based on their ratios to the totals in 1929. The 1933 pay figure reported excludes the pay of employees engaged in the distribution of gas although their number is reported. Their pay is estimated on the assumption that they receive the same average annual compensation as the other employees, and is added to the figure reported to yield total pay in 1933. The number of salaried employees and their pay in 1931 are derived from the ratios to wage earners and wages, respectively, in 1929 and 1933, interpolated along a straight line and applied to the number of wage earners and wages reported in 1931.

Estimates of total pay for intercensal years are the product of the number of employees (see the notes to Table P 20) and the average pay. From state data an index for interpolating between the Census figures on average pay for the years before 1929 was computed. For 1919-21 Pennsylvania and New York data are used; for 1921-23 Wisconsin data are added; and for 1923-29, Illinois data also. The sources of the state materials are those cited for col. 1. By weighting the index for each state by the number of its employees in 1929, as recorded in the Census, a single index is obtained. Interpolation of the average pay for the years between 1929 and 1931, 1931 and 1933, and extrapolation for the years since 1933 are by the BLS index of average pay in the electric light and power and manufactured gas industry.

*Col. 3 Pipe lines:* compensation of employees of companies reporting to the Interstate Commerce Commission, 1925-38, is from *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies*, as are total operating expenses and miles of pipe line operated, 1920-32. Two-year moving totals of the net change in mileage operated are computed, the totals being centered at the earlier year. From the regression line of the ratio of compensation to operating expenses on the two-year moving total of net change in mileage operated the ratio of compensation to operating expenses is derived for 1921-24. The 1920 ratio is assumed to be the same as the 1921. The application of these ratios to total operating expenses yields total compensation, 1920-24. Total compensation in 1919 is obtained by applying to the 1920 estimate the percentage change from 1919 to 1920 in wages and salaries in petroleum refining. The figures for interstate companies are raised by the adjustment factor described in General Note B.

*Col. 4 Street railways:* for commercial railways, excluding bus operations, for 1917, 1922, 1927, 1932, and 1937, from the *Census of Electric Railways*. The 1937 figure is adjusted to include pay of employees of companies engaged in part year operations. Interpolation between and extrapolation of the Census data are by estimates of compensation prepared by the American Transit Association and obtained by letter.

*Col. 5 Water transportation:* for 1929-38 the sum of estimates for inland, lake, and foreign and coastwise transportation and for stevedores and longshoremen. Except for stevedores and longshore-

men, the estimates are essentially those of the Bureau of Foreign and Domestic Commerce, National Income Division, as described in *National Income in the United States, 1929-35* (pp. 262-4). The estimates for stevedores and longshoremen also are based on Bureau of Foreign and Domestic Commerce sources and methods. Their compensation is the product of the number (see the notes to Table P 20) and the average pay. The latter is derived from partial data for 1929-32 on wages and overtime pay and the number of employees as obtained by the National Income Division from the United States Shipping Board. It is extrapolated through 1935 by the union scale of wages in 9 ports as indicated by data in the *Monthly Labor Review*, April 1936. On the advice of persons in the Bureau of Labor Statistics, the average wage for 1936-38 is assumed to be the same as for 1935.

For 1919-28 total compensation is the sum of estimates for vessel employees, shore employees, and longshoremen. All three are the product of the number employed (see the notes to Table P 20) and the average annual pay.

The average annual pay of vessel employees is an extrapolation of the 1929 figure. *Merchant Marine Statistics* records monthly wage rates of various classes of employees on vessels, 1923-29. These are extrapolated to 1919 by similar data, not quite as detailed, in the *Annual Report of the Bureau of Navigation*. A weighted average of these data is obtained with the number reported in the 1930 *Census of Population*, Vol. V, Ch. 7, as weights. The 1929 average pay figure is extrapolated to 1919 by the resulting index. Subsistence cost as estimated by the Bureau of Foreign and Domestic Commerce for 1929 is reduced to a per capita figure and extrapolated by the BLS index of wholesale prices of food products. Total subsistence cost is the product of per capita cost and the number of employees. The 1929 ratio of gratuities to wages and salaries is assumed to hold for the entire period; its application to wages and salaries yields total gratuities. The total wage and salary bill of vessel employees is the sum of cash payments, subsistence cost, and gratuities.

The average annual pay of shore employees, 1919-28, is obtained by applying to the average pay of vessel employees the ratio of the average pay of shore employees to that of vessel employees for 1929-34.

The 1929 average pay of longshoremen is extrapolated to 1919 by an index derived from union wage rates for freight handlers published by the Bureau of Labor Statistics for 1919-27 in the bulletins, *Union Scales of Wages and Hours of Labor*, and for 1928-35 in the *Monthly Labor Review*, April 1936.

*Col. 6 Telephone:* wages and salaries reported for 1917, 1922, 1927, 1932, and 1937 in the *Census of Telephones* are adjusted by the difference between the Bell System figures reported in the Census and those obtained by letter from the American Telephone and Telegraph Company. Intercensal year interpolation is by data for the Bell System. The 1938 estimate is extrapolated from 1937 by total compensation reported in *Selected Financial and Operating Data from Annual Reports of Telephone Carriers*.

*Col. 7 Telegraph:* wages and salaries and the number of telegraph and wireless employees in 1917, 1922, 1927, and 1932 (telegraph only) are reported in the *Census of Telegraphs*. The 1932 estimates for wireless companies are based on the ratio to telegraph company figures in 1927. Interpolation and extrapolation of the pay figures for intercensal years and for 1933 are by the Western Union Telegraph Company wages and salaries. The latter were obtained directly from the company by letter. For 1927-33 the final estimate of wages and salaries is an average of the one outlined above and another based on the number of employees (see the notes to Table P 20) and the average annual pay. Average pay, taken for 1927 and 1932 from the Census, is interpolated for the intervening years and extrapolated for 1933 by the average pay of Western Union Telegraph Company employees. Total wages and salaries, 1934-38, are reported by the Federal Communications Commission in *Selected Financial and Operating Data from Annual Reports of Telegraph, Cable and Radiotelegraph Carriers*.

#### TABLE P 8

#### Pensions and Compensation for Injury, and Total Employee Compensation

##### PENSIONS, ETC.

*Col. 1 Steam railroads, Pullman, and railway express:*

a) *Steam railroads:* the items covered are relief, pensions, and compensation for injury. Relief payments are reported for Class I

steam railroads in *Statistics of Railways*. For Class I switching and terminal companies for 1921 and later years they are reported in the *Preliminary Abstract of Statistics of Common Carriers*. The figures for 1919 and 1920 are assumed to be the same as for 1921. The relief payments of Class I railroads and switching and terminal companies are presumed to cover all relief payments of railroads. The references for relief apply also to pensions paid by Class I railroads and switching and terminal companies for all years except 1931-35 and 1937-38. For 1931-34 the estimates prepared by Murray W. Latimer for Industrial Relations Counselors, Inc. are used. For 1935 pensions reported are raised by the difference between the *Statistics of Railways* figure and Mr. Latimer's estimate for 1934. For 1937 and 1938 the pensions reported by the Railroad Retirement Board are included with those reported in *Statistics of Railways*. Class I pensions are raised to cover pensions for all steam railroads by the ratio of all wages and salaries to wages and salaries of Class I railroads. Compensation for injury on Class I railroads and switching and terminal companies is from the sources cited in the description of the relief figures. Figures for Class I companies are raised to the total by the ratio of total wages and salaries to those of Class I companies. Compensation for injury by switching and terminal companies in 1919 and 1920 is estimated by applying to the comparable item for railroads the ratio of wages and salaries of switching and terminal companies to railroad wages and salaries.

b) *Pullman Company*: for 1931-34 Mr. Latimer's estimates are used. The 1931 figure is extrapolated to 1919 by pensions of Class I steam railroads. Pensions in 1935 are assumed to be the same as in 1934, and were obtained for 1936-38 from the Interstate Commerce Commission.

c) *Railway express*: pensions and compensation for injury in 1919 and 1920 are reported in *Statistics of Express Companies*, and for all later years, in the *Preliminary Abstract of Statistics of Common Carriers*. For 1931-34, however, Mr. Latimer's estimates of pensions are substituted for those reported.

Col. 2 *Telephone*: pensions and benefits paid by the American Telephone and Telegraph Company were obtained by letter. For 1919-36 they are assumed to be the total for the industry. For 1937 and 1938 pensions paid by other companies reporting to the Federal Communications Commission are included.

*Col. 3 Telegraph:* totals for 1937 and 1938 are reported by the Federal Communications Commission in *Selected Financial and Operating Data from Annual Reports of Telegraph, Cable and Radiotelegraph Carriers*. They are estimated for 1919-36 on the basis of the ratio to wages and salaries, computed for 1937, and extrapolated for the earlier years by the corresponding ratio for the Western Union Telegraph Company. Their data were obtained by letter.

*Col. 4 Communication:* sum of col. 2 and 3.

*Col. 5 Total:* sum of col. 1 and 4.

#### EMPLOYEE COMPENSATION

*Col. 6 Electric light and power, and manufactured gas:* see Table P 6, col. 1.

*Col. 7 Steam railroads, Pullman, and railway express:* see col. 2 and 3, Table P 6, and col. 1, above.

*Col. 8 Other transportation:* see Table P 6, col. 4.

*Col. 9 Communication:* see col. 5, Table P 6, and col. 4, above.

*Col. 10 Total:* sum of col. 6-9.

#### TABLE P 9

##### Dividends by Major Industrial Divisions

Dividends are net originating in the industry and are the difference between total dividends paid and dividends received.

*Col. 1 Electric light and power, and manufactured gas:* see Table P 10, col. 1 and 2.

*Col. 2 Steam railroads, Pullman, and railway express:*

a) *Steam railroads:* dividend appropriations (including stock), dividend receipts, and stock dividends, from *Statistics of Railways*. Stock dividends are subtracted since only cash dividends are included in income originating.

b) *Pullman Company:* from the *Preliminary Abstract of Statistics of Common Carriers*.

c) *Railway express:* for 1919 and 1920, from *Statistics of Express Companies*; for other years, from the *Preliminary Abstract of Statistics of Common Carriers*.

*Col. 3 Other transportation:* see Table P 10, col. 3-5.

*Col. 4 Communication:* see Table P 10, col. 6 and 7.

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

TABLE P 10

## Dividends by Minor Industrial Divisions

Dividends are net originating in the industry and are the difference between total dividends paid and dividends received.

*Col. 1 Electric light and power:* total dividends paid in 1917, 1922, 1927, 1932, and 1937, from the *Census of Central Electric Light and Power Stations*. Interpolation between Census years and extrapolation for 1938 are by dividend payments of the corporate sample for the industry.

Dividends received in 1917 and 1922 are assumed to be the same proportion of total investment income as for electric railways. In 1927 and 1932 they are assumed to be equal to total 'non-operating income' as reported in the Census. The ratio of dividends received to total dividends paid is computed for Census years and interpolated for intervening years along a straight line. The application of this ratio to dividends paid yields dividends received. The 1932 figure for dividends received is extrapolated through 1937 by that item, as indicated by *Statistics of Income* data in the tabulation by minor industrial divisions. The 1938 figure is assumed to be the same proportion of dividends paid as in 1937.

*Col. 2 Manufactured gas:* from the capital stock tax returns reported in *Statistics of Income* the par value of stocks with par value plus the fair value of no par value stock is obtained for December 31, 1921, 1923, and 1924. By applying to these capital stock figures the dividend rate derived for a corporate sample for the industry total dividends paid in 1921, 1923, and 1924 are computed. Dividends paid, 1926-37, are from the special tabulation of *Statistics of Income* data. Extrapolation for 1919, 1920, and 1938, and interpolation between 1921 and 1923, 1924 and 1926, are by dividend payments of the corporate sample for the industry.

Dividends received, 1926-37, are from the same source as dividends paid, and for 1938 are assumed to be the same proportion of dividends paid as in 1937. For this item, however, the 1934 figure comparable with those for the earlier years is estimated by applying to the 1933 figure the percentage change from 1933 to 1934 in dividend receipts of all transportation and public utility corporations filing unconsolidated returns in those years (see *Sta-*



*Statistics of Income* for 1934, Part 2). For 1922–25 dividends received are based on the ratio to total dividends paid. This ratio, computed for 1926 from *Statistics of Income* data, is extrapolated by the corresponding ratio for the total transportation and public utilities group as derived from *Statistics of Income*. The 1919–21 estimates are extrapolated from 1922 by the dividend receipts of all corporations (*Statistics of Income*).

*Col. 3 Pipe lines*: total dividends paid by companies in interstate commerce, 1920–38, are from *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies* (Interstate Commerce Commission). The comparable 1919 estimate is based on the percentage change from 1919 to 1920 in dividends of corporations in the industry reporting in *Moody's Industrials*. Dividends paid by interstate pipe lines are raised (see General Note B) to obtain total dividends for the industry.

Dividends received by interstate pipe line companies, 1929–36, were obtained by the Bureau of Foreign and Domestic Commerce, National Income Division, from a special tabulation of ICC data; for 1937–38 they are given in *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies*. They are raised similarly to dividends paid to yield total dividends received. For 1922–28 dividends received are based on the ratio to dividends paid. This ratio, computed for 1929 from the ICC data, is extrapolated by the corresponding ratio for all transportation and public utility corporations as derived from *Statistics of Income*. Extrapolation of dividends received for 1919–21 is by dividend receipts of all corporations as reported in *Statistics of Income*.

*Col. 4 Street railways*: basic figures for dividends paid in 1917, 1922, 1927, 1932, and 1937 are from the *Census of Electric Railways*. For 1917, 1922, and 1937 they are the sum of dividends paid by operating and by lessor companies as reported. For 1927 and 1932 dividends are reported for companies exclusively street railways and for lessor companies. The data for the operating companies are raised to include all operating companies on the basis of the ratio of dividends paid by all operating companies to those of companies exclusively street railways. This ratio, computed from Census data for 1922, is extrapolated by the ratio of gross revenue of all operating companies to that of companies exclusively street railways (computed for 1922, 1927, and 1932 from the Census). The resulting

dividend figures for 1927 and 1932, combined with dividends paid by lessor companies, yield total dividends paid in those years. Interpolation between Census years and extrapolation for 1938 are by the dividend payments of the corporate sample for the industry.

Dividends received also are reported for all Census years except 1937. For 1927 and 1932 they are for companies exclusively street railways and are raised by the ratio to dividends paid. This ratio, computed from Census data for 1922, is extrapolated for 1927 and 1932 by the ratio for companies exclusively street railways (computed for 1922, 1927, and 1932 from the Census).

The ratio of total dividends received to total dividends paid is interpolated along a straight line for the years before 1932. For the years after 1932 the 1932 ratio is used. Total dividends received are obtained by multiplying estimated dividends paid by this ratio. *Col. 5 Water transportation*: sources and methods are those cited for col. 2.

*Col. 6 Telephone*: total dividends paid in 1917 and 1922, from the *Census of Telephones*. Interpolation between these years is by the dividend payments of the Bell System as reported in *Bell Telephone Securities*. For 1923-34 the method is as follows: the ratio of dividends of companies other than Bell to dividends of Bell companies is derived for 1922 and extrapolated by the ratio of the operating revenue of the other companies to the operating revenue of the Bell System. The latter ratio for 1927 and 1932 is computed from the Census; for the other years it is interpolated and extrapolated along a straight line. By applying the ratio of dividends for other companies to Bell System dividends, as reported in *Bell Telephone Securities*, dividends for other companies are obtained which, added to Bell dividends, yield total dividends. For 1935-38 dividends paid are the sum of those for the Bell System, obtained by letter from the American Telephone and Telegraph Company, and those for other companies, reported in *Selected Financial and Operating Data from Annual Reports of Telephone Carriers*. The latter are not complete but since the gross revenue of companies reporting is almost 97 per cent of the 1937 total, we regarded the reported dividend figure as a total.

Dividends received in 1917 and 1922 are reported in the *Census of Telephones*. Interpolation for 1920 and 1921, and extrapolation from 1922 through 1933, are by the non-operating revenue of the

Bell companies as reported in *Bell Telephone Securities*. Extrapolation for 1934-37 is by dividends received by the American Telephone and Telegraph Company. Dividends received, reported for 1938 in *Selected Financial and Operating Data from Annual Reports of Telephone Carriers*, are considered complete. The 1919 estimate of dividends received is obtained by applying to 1919 dividends paid the ratio to dividends paid. This ratio, computed for 1917 from the Census and for 1920 from estimates outlined above, is interpolated along a straight line for the intervening years.

*Col. 7 Telegraph*: total dividends paid in 1917, 1922, 1927, and 1937, from the *Census of Telegraphs*. Interpolation between 1917 and 1922 is by dividend payments of the Western Union Telegraph Company, obtained by letter. Interpolation between 1922 and 1927 is by the dividends of companies reporting to the Interstate Commerce Commission. For 1922-38 these dividend figures are reported in *Selected Financial and Operating Data from Annual Reports of Telegraph, Cable and Radiotelegraph Carriers*. For 1927-38 they are combined with those of the Commercial Cable Company, obtained by letter, and form the basis for the interpolation between the 1927 and 1937 Census figures. For 1938 the Federal Communications Commission figures for telegraph and wireless companies are considered complete.

Dividends received in 1917, 1922, 1927, and 1937 are from the Census. Interpolation between 1917 and 1922 is by dividends received by the Western Union Telegraph Company, obtained by letter. Interpolation between 1922 and 1927 is by the interest and dividend receipts of the Western Union Telegraph Company as published. For 1928-36 dividends received are interpolated by the dividends received by companies reporting to the Interstate Commerce Commission, obtained by the Bureau of Foreign and Domestic Commerce, National Income Division. The 1938 figure published by the Federal Communications Commission is assumed to be complete.

TABLE P 11

## Interest by Major Industrial Divisions

Interest is net originating in the industry and is the difference between interest paid and received. For some industrial divisions

interest received covers receipts on government obligations alone.

*Col. 1 Electric light and power, and manufactured gas:* see Table P 12, col. 1 and 2.

*Col. 2 Steam railroads, Pullman, and railway express:*

*a) Steam railroads:* interest paid and received in 1921 and later years, from *Statistics of Railways*. For 1919 and 1920 the reported Class I railroad figures are raised by the ratio of interest for all roads to that for Class I roads. This ratio, computed from the above source for 1916 and 1921, is interpolated for the intervening years along a straight line. The 1929-38 figures are corrected to allow for defaulted interest as estimated from data for Class I railroads in *Statistics of Railways*.

*b) Pullman Company:* interest paid and received in all years, from the *Preliminary Abstract of Statistics of Common Carriers*.

*c) Railway express:* interest paid and received in 1919 and 1920, from *Statistics of Express Companies*; for all other years, from the *Preliminary Abstract of Statistics of Common Carriers*.

*Col. 3 Other transportation:* see Table P 12, col. 3-5.

*Col. 4 Communication:* see Table P 12, col. 6 and 7.

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

TABLE P 12

### Interest by Minor Industrial Divisions

Interest is net originating in the industry and is the difference between interest paid and received. For some industrial divisions interest received covers receipts on government obligations alone.

*Col. 1 Electric light and power:* for 1917 the *Census of Central Electric Light and Power Stations* reports long and short term debt and total interest payments. Interest payments on long term debt are assumed to be in the same proportion to total interest as long term debt is to total debt outstanding. The 1922 and 1927 Censuses report long term debt outstanding; long term interest payments are estimated by applying to the outstanding debt average interest rates derived from a corporate sample for the industry. Total long term interest, 1930-35, is derived from the special tabulation of *Statistics of Income* data which shows long term debt outstanding on December 31, 1930-35, for the companies that report balance sheet items. The 1929 debt is assumed to be the same percentage of

the long term debt of all transportation and public utility companies as the 1930. The 1934 debt figure, comparable with that reported for 1933, is extrapolated from 1933 by the debt of companies in the electric light and power and gas industries included in the Standard Statistics Company sample and published in their August 14, 1936 *Composite of Financial Statements*. The same index is used in estimating the 1933 figure comparable with 1934 and later years. The debt figures thus obtained for 1929-35 are raised to total long term debt by the ratio of compiled receipts of all public utility companies to compiled receipts of companies reporting assets and liabilities. This ratio is computed from *Statistics of Income* for all transportation and public utility corporations for all years except 1929 and 1930, for which the 1931 ratio is used. The year-end debt figures are averaged to yield the average outstanding during the year. To it is applied the average interest rate of the corporate sample for the industry to obtain total long term interest payments. Interpolation between the estimates of long term interest for 1917 and 1922, 1922 and 1927, 1927 and 1930 is by the long term interest payments of the corporate sample for the industry. Estimates for 1936-38 are extrapolated from 1935 by the corporate sample for the industry.

Interest received in 1917 and 1922 is estimated by applying to the Census figure on income from investments the ratio of interest received to total income from investments in the electric railway industry. The ratio of interest received to interest paid is computed for 1917 and 1922 from Census data and extrapolated for 1927 and 1932 by the corresponding ratio in the electric railway industry. It is interpolated along a straight line for intercensal years and applied to estimated total interest paid to yield interest received. The 1932 figure is extrapolated through 1937 by the item as reported in the special tabulation of *Statistics of Income* data. The ratio of interest received to interest paid in 1938 is assumed to be the same as in 1937.

*Col. 2 Manufactured gas:* total interest paid in 1924 is estimated on the basis of the book value of long term debt on December 31, 1923 and 1924, reported in the capital stock tax returns in *Statistics of Income*. The figure reported is raised to the total by the ratio of the fair value of the stock of all companies to the fair value of the stock of companies submitting statements of assets and liabilities.

To the average for the year (average of the year-end figures) is applied the interest rate of the corporate sample for the industry to estimate long term interest paid in 1924. The 1930-33 estimates are made by a procedure similar to that used in estimating long term interest for the electric light and power industry. Interpolation between 1924 and 1930 and extrapolation from 1924 to 1919 are by the interest payments of the corporate sample for the industry. The 1934-35 estimates of interest paid are the product of the long term debt outstanding and the average interest rate. Long term debt as of December 31, reported in the special tabulation of *Statistics of Income* data, is raised to allow for corporations not reporting. The raising ratio is that of the compiled receipts of all transportation and other public utility corporations to those of corporations submitting balance sheet data. The 1934 debt figure comparable with 1933 is extrapolated by the debt of gas companies as recorded in the American Gas Association Statistical Bulletin 26. The same index is used in estimating the 1933 figure comparable with 1934 and later years. Average debt outstanding during the year is estimated by averaging year-end figures. The average interest rate is computed from the corporate sample for the industry. The 1936-38 estimates of interest paid are extrapolated from 1935 by the corporate sample for the industry.

Interest received on government obligations in 1926-37 is reported in the special tabulation of *Statistics of Income* data. The 1938 estimate is made on the assumption that the ratio of interest received to interest paid is the same as in 1937. Extrapolation from 1926 to 1922 is by interest received by the total transportation and public utility group, and from 1922 to 1919, by interest received by all corporations as reported in *Statistics of Income*.

Col. 3 *Pipe lines*: total interest paid by companies reporting to the Interstate Commerce Commission, 1934-38, from *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies*. For 1929-33 it is obtained, by the Bureau of Foreign and Domestic Commerce, National Income Division, from the special tabulation of ICC data. For 1919-28 it is an extrapolation of the 1929 figure by an estimate based on long term debt outstanding and an estimated interest rate. For 1923 and later years long term debt outstanding is given in the ICC report. For earlier years it is esti-

mated on the basis of reports for pipe line corporations in *Moody's Industrials*, as is the interest rate.

Interest received, 1929-38, is from the tabulation of ICC data obtained by the National Income Division. For earlier years it is estimated on the basis of the 1929 relation to interest paid. Both interest received and paid are raised to include companies not covered by the Interstate Commerce Commission (see General Note B).

*Col. 4 Street railways:* total interest paid on long term debt in 1917, 1922, and 1927, from the *Census of Electric Railways*. The 1917 and 1922 figures are the sum of interest payments by operating companies, excluding municipal, and lessor companies. In 1927 the figure reported for operating companies is for those exclusively street railways. This is raised to the total for all operating companies by the ratio of total interest payments to those of companies exclusively street railways. This ratio, computed from the Census for 1922, is extrapolated to 1927 by the ratio of total gross revenue to that of companies exclusively street railways (Census for 1922 and 1927).

The 1930-35 figures for long term interest are the product of the estimated long term debt and the estimated interest rate. Funded debt on December 31, 1930-35 is from the special tabulation of *Statistics of Income* data. For 1929 it is estimated by applying to funded debt for the entire transportation and public utility group, as reported in *Statistics of Income*, the 1930 ratio of electric railway debt to the total. The debt figures reported are raised to allow for corporations not reporting. The raising ratio is that of the compiled receipts of all transportation and other public utility corporations to those of corporations submitting balance sheet data. Funded debt in 1934, comparable with that reported in 1933, is estimated by the change from 1933 to 1934 in sample data for the industry collected by the Bureau of Foreign and Domestic Commerce, National Income Division. The 1933 figure comparable with that reported for 1934 is estimated by the same method. Year-end figures are averaged to yield the debt outstanding during the year. To it is applied the interest rate derived for Census years from data for operating companies and interpolated for the intervening years by the corporate sample for the industry. The estimates of interest paid in 1918-21, 1923-26, 1928-29, and 1936-38

are interpolated and extrapolated by the corporate sample for the industry.

For 1917, 1922, 1927, and 1932 the Census reports interest paid and received by operating companies. The ratio of interest received to interest paid is derived, interpolated along a straight line for intercensal years, and applied to the estimated interest paid in each year to yield the estimated interest received. For 1933-38 the 1932 ratio is used.

*Col. 5 Water transportation:* from the capital stock tax returns published in *Statistics of Income* we obtain long term debt as of December 31, 1921, 1923, and 1924. The figures for 1923 and 1924 are raised to the total by the ratio of the fair value of the stock of all companies to the fair value of the stock of companies submitting statements of assets and liabilities. The long term debt series for December 31, 1929-35, and long term interest, 1936-38, are derived from the same source material and by the same method as the series for street railways, described above. Extrapolation of long term debt for 1918, 1919, and 1920, and interpolation for 1922 and 1925-28 are by the corporate sample for the industry. To the average for the year (average of the year-end figures) is applied the interest rate of the corporate sample for the industry. From the resulting estimate of long term interest paid is subtracted interest received from government obligations (for the latter see the notes to col. 2).

*Col. 6 Telephone:* total interest paid on long term debt in 1917, 1922, and 1937, from the *Census of Telephones*. Interpolation between 1917 and 1922, 1922 and 1937, and extrapolation for 1938 are by interest payments of the Bell System. The American Telephone and Telegraph Company data, used as index, are reported in *Moody's Public Utilities* through 1922; since then they are derived from information given in *Bell Telephone Securities*.

Interest received in 1917, 1922, and 1937 is from the Census. Interpolation between 1917 and 1922, 1922 and 1937, and extrapolation for 1938 are by the Bell System non-operating revenue, 1917-33, and their interest revenues and miscellaneous earnings, 1933-38.

*Col. 7 Telegraph:* total interest paid, long term debt, and total debt in 1917, 1922, and 1927, from the *Census of Telegraphs*. Total long term interest for these years is derived by applying, to total



interest paid, the ratio of long term to total debt. Interpolation between 1917 and 1922 is by long term interest paid by the Western Union Telegraph Company, obtained by letter. The 1923-37 estimates are the product of the estimated long term debt and the average interest rate. For 1923-37 the debt reported in *Selected Financial and Operating Data from Annual Reports of Telegraph, Cable and Radiotelegraph Carriers* plus that of the Commercial Cable Company for 1928-33, when that company did not report to the Commission, is considered the total. The interest rate is computed from the Census for 1922, 1927, and 1937 and is interpolated by the rate on Western Union Telegraph Company long term debt. Long term interest paid in 1938 is reported by the Federal Communications Commission.

Interest received in 1917, 1922, 1927, and 1937 is from the Census. Interpolation between 1917 and 1922 is by Western Union Telegraph Company interest receipts, obtained by letter. For 1923-37 interest received is computed from total interest paid and the ratio of the former to the latter. For 1922, 1927, and 1937 this ratio is derived from Census data. For the other years it is interpolated along a straight line. Interest receipts in 1938 are from the Federal Communications Commission report.

TABLE P 13

Property Income by Major Industrial Divisions

Sum for each industrial division of dividends (Table P 9) and interest (Table P 11).

TABLE P 14

Property Income by Minor Industrial Divisions

Sum for each industrial division of dividends (Table P 10) and interest (Table P 12).

TABLE P 15

Total Payments to Individuals by Major Industrial Divisions

Sum for each industrial division of wages and salaries (Table P 6), pensions and compensation for injury (Table P 8), property income (Table P 13), and entrepreneurial withdrawals (Table P 16).

TABLE P 16

Entrepreneurial Withdrawals and Total Payments to Individuals  
by Minor Industrial Divisions

## ENTREPRENEURIAL WITHDRAWALS

*Col. 1 Electric light and power:* the labor income of entrepreneurs is the product of their number (see the notes to Table P 19) and average employee compensation (see the notes to Tables P 7 and P 20). To it is added the net income item derived, from the *Census of Central Electric Light and Power Stations* for all Census years except 1937, as the difference between total revenues and total expenses. For 1937 the item added is 'authorized cash distributions' as reported, since savings are assumed to be zero. The Census data are for 1917, 1922, 1927, 1932, and 1937 and are interpolated along a straight line for the intervening years except 1933-36; for those years interpolation is by corporate net income.

*Col. 2 Water transportation:* withdrawals, 1919-33, are estimated by applying, to the sum of compensation of corporate officers and dividends paid, the ratio of tonnage operated by unincorporated firms to corporate tonnage. The ratio and the series on officers' compensation are described in the notes to Table P 5, col. 3; dividends, in the notes to Table P 10, col. 5. Withdrawals, 1934-37, are extrapolated from 1933 by the compensation of corporate officers as reported in *Statistics of Income*. The 1938 estimate is extrapolated from 1937 by total salary payments.

## TOTAL PAYMENTS TO INDIVIDUALS

*Col. 3-9 Total:* sum for each industrial division of wages and salaries (Table P 7), pensions and compensation for injury (Table P 8), property income (Table P 14), and entrepreneurial withdrawals (col. 1 and 2, above).

TABLE P 17

## Net Savings by Major Industrial Divisions

*Col. 1 Electric light and power, and manufactured gas:* see Table P 18, col. 1 and 2.

*Col. 2 Steam railroads, Pullman, and railway express:* difference

between net income and total dividends paid (see the notes to Table P 9, col. 2). Net income is obtained as follows:

a) *Steam railroads*: net income of steam railroads, considered as a system, is reported for all years except 1919 and 1920 in *Statistics of Railways*. For these two years estimates are interpolated between 1917 and 1921 by the net income of Class I operating roads, of Class I non-operating roads, and of switching and terminal companies, also reported in *Statistics of Railways*. The 1919 figure covers corporate income alone, government income being excluded. For 1929 and later years net income is adjusted for interest defaults on the basis of data for Class I railroads reported in *Statistics of Railways*. For earlier years interest defaults are considered negligible.

b) *Pullman Company*: from the *Preliminary Abstract of Statistics of Common Carriers*.

c) *Railway express*: for 1919 and 1920, from *Statistics of Express Companies*; for later years, from the *Preliminary Abstract of Statistics of Common Carriers*.

Col. 3 *Other transportation*: see Table P 18, col. 3-5.

Col. 4 *Communication*: see Table P 18, col. 6 and 7.

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

TABLE P 18

Net Savings by Minor Industrial Divisions

Sum of savings of entrepreneurs and of corporations. Non-corporate enterprises are found in only two of the industries under consideration—electric light and power and water transportation. Entrepreneurial savings in these industries are described in the notes to Table P 5, col. 2. Corporate savings are the difference between net income and total dividends paid (see the notes to Table P 10). The method by which net income is estimated is indicated below for each industrial division.

Col. 1 *Electric light and power*: net income in 1917, 1922, 1927, 1932, and 1937 is from the *Census of Central Electric Light and Power Stations*, as are total revenues and total expenses of unincorporated firms. The difference between the last two items represents entrepreneurial net income which, when subtracted from the net income for the industry as a whole, leaves corporate net income.

Interpolation between Census years and extrapolation for 1938 are by the net income of the corporate sample for the industry.

*Col. 2 Manufactured gas:* net profits after taxes, 1926-37, are reported in the special tabulation of *Statistics of Income* data. For the years before 1926, they are estimated as the sum of statutory net income after taxes (*Statistics of Income*) and dividends and interest received on tax-exempt obligations (see the notes to Tables P 10 and P 12). Corporate savings for 1938 are extrapolated from 1937 by the corporate sample for the industry.

*Col. 3 Pipe lines:* net income in 1920 and later years for companies engaged in interstate commerce, from *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies* (Interstate Commerce Commission). The 1919 estimate is an extrapolation of the 1920 figure by the corporate sample for the industry. The data for interstate companies are raised by the factor described in General Note B.

*Col. 4 Street railways:* net income (excluding that of state and municipal railways) in 1917, 1922, 1927, 1932, and 1937, from the *Census of Electric Railways*. Interpolation between 1917 and 1922, 1922 and 1927, is by the corporate sample for the industry. Interpolation for 1928-31 is by the net income reported for street railways in the special tabulation of *Statistics of Income* data. For 1932 and later years corporate savings are estimated directly. Interpolation for 1933-36 and extrapolation for 1938 are by the corporate savings of street railways reporting to the Interstate Commerce Commission.

*Col. 5 Water transportation:* sources and methods are those indicated for col. 2.

*Col. 6 Telephone:* net income in 1917 and 1922, from the *Census of Telephones*. Interpolation for intervening years is by the net income of the Bell System as reported in *Bell Telephone Securities*. For the years after 1922 net income is obtained by adding to the net income of the Bell System, as given in *Bell Telephone Securities*, the estimated net income of non-Bell companies. The latter is derived by applying to the net income of the Bell System the ratio of net income of non-Bell companies to that of the Bell System. This ratio, computed from Census data for 1922, is extrapolated for the other years by the ratio of the operating revenue of non-Bell companies to that of the Bell System. Operating revenues

in 1922, 1927, 1932, and 1937 are from the Census. Interpolation of the ratio for intervening years is along a straight line. The 1938 net income reported by the Federal Communications Commission is assumed to be complete.

*Col. 7 Telegraph:* net income in 1917, 1922, and 1927, from the *Census of Telegraphs*. Interpolation between 1917 and 1922 is by the net income of the Western Union Telegraph Company, obtained by letter. Interpolation between 1922 and 1927 is by the net income of corporations reporting to the Interstate Commerce Commission. For 1934-38 the Federal Communications Commission reports the net income of telegraph and wireless companies and the figures are considered complete. Since for 1928-33 they cover telegraph companies alone, net income of wireless companies is interpolated by the net income of telegraph companies.

TABLE P. 19

## Employees by Major Industrial Divisions, and Total Entrepreneurs

## EMPLOYEES

*Col. 1 Electric light and power, and manufactured gas:* see Table P 20, col. 1 and 2.

*Col. 2 and 3 Steam railroads, Pullman, and railway express:*

a) *Steam railroads:* the number of employees on all steam railroads, switching and terminal companies is reported annually since 1922 in *Statistics of Railways*. For 1920 and 1921 the number on Class I roads and switching and terminal companies is reported, and for 1919 the number on Class I roads alone. The number on all railroads for 1919-21 is obtained by applying to the figures for Class I roads the ratio of all employees to those on Class I roads. This ratio, derived from data reported for 1916 and 1922, is interpolated along a straight line for the intervening years. The estimates for all switching and terminal companies in 1920 and 1921 are obtained by applying to the Class I switching and terminal figure the ratio of locomotives used by all switching and terminal companies to those used by Class I switching and terminal companies. Total employees in 1919 are estimated by raising the figure for all railroads to include employees in switching and terminal

companies. The ratio of employees on all railroads and switching and terminal companies to those on railroads alone is computed from data reported for 1916 and 1920 and interpolated for intervening years along a straight line. Employees are divided into wage earners and salaried employees by the method used to divide total pay into wages and salaries (see the notes to Table P 6, col. 2 and 3 and General Note A).

b) *Pullman Company*: the average number of employees, 1936-38, and the number of employees as of December 31 for all other years, from the *Preliminary Abstract of Statistics of Common Carriers*. For the years before 1936 the number of employees at year-ends are averaged.

c) *Railway express*: the average number of employees, 1934-38, and the number of employees as of December 31, 1925-33, from the *Preliminary Abstract of Statistics of Common Carriers*. For 1925-33 the number of employees at year-ends are averaged; for 1922-24, it is obtained by letter from the Interstate Commerce Commission; and for 1919-21, by dividing total wages and salaries paid by the average wage and salary. Average wage and salary figures are computed for 1922 from the ICC data and are extrapolated to 1919 by the steam railroad average wage and salary.

Col. 4 *Other transportation*: see Table P 20, col. 3-5.

Col. 5 *Communication*: see Table P 20, col. 6 and 7.

Col. 6 *Total*: sum of col. 1-5.

#### ENTREPRENEURS

Col. 7 *Total*: non-corporate enterprises are found in (a) electric light and power and (b) water transportation.

a) *Electric light and power*: the number of entrepreneurs is estimated by adding individual owners and unincorporated firm members. It is assumed that each unincorporated firm has two members. For 1917, 1922, 1927, 1932, and 1937 the number of individual owners and unincorporated firms is from the *Census of Central Electric Light and Power Stations*. Intercensal year estimates of entrepreneurs are interpolated along a straight line. The number of entrepreneurs is assumed to be the same in 1938 as in 1937.

b) *Water transportation*: for 1910 and 1930 the number of owners, from the occupation statistics of the *Census of Population*.

For 1919 and 1920 the number is assumed to be the same as in 1910 and interpolation between 1920 and 1930 is along a straight line. Extrapolation of the 1930 figure through 1934 is by the number of officers reported in the ICC special analysis, obtained by the Bureau of Foreign and Domestic Commerce, National Income Division. From 1935 through 1937 the extrapolation is by the number of salaried employees. The 1938 figure is assumed to be the same as the 1937.

TABLE P 20

## Employees by Minor Industrial Divisions

*Col. 1 Electric light and power:* for 1917, 1922, 1927, 1932, and 1937, from the *Census of Central Electric Light and Power Stations*. Interpolation for 1919–21, 1923–26, is by a weighted average of employment indexes for electric light and power in New York (*Labor Market Bulletin* and N. Y. Department of Labor Special Bulletin 171), Ohio (BLS Bulletin 553), and Pennsylvania (*Report on Productive Industries, Public Utilities and Miscellaneous Statistics*) for the first period, and Wisconsin (derived from *Wisconsin Labor Market* data on month to month changes in employment), and Illinois (1929 *Annual Report of the Department of Labor*), in addition, for the second. The weights are the kilowatt hours generated as reported in the Census, used for the 5 years centering at the Census year. The 1929–38 estimates are interpolated between and extrapolated from the 1932 and 1937 Census figures by the BLS employment index. The interpolation for 1928 is by the kilowatt hours generated in 1927–29 as reported in the National Electric Light Association Bulletin 7.

*Col. 2 Manufactured gas:* the number employed at commercial plants in 1919, 1921, 1923, 1925, 1927, and 1929, from the *Biennial Census of Manufactures*; for 1933 it is derived from the number employed in all plants as there reported. For the derivation of the 1931 estimates see the notes to Table P 7, col. 2. Interpolation for intercensal years and extrapolation for 1934–38 are by estimates prepared by the American Gas Association. The interpolating series for the years before 1929 is from the Association's Statistical Bulletin 9, and for 1930 and 1932, from Bulletin 17. The extrapo-

lating series for 1934-37 is from Bulletin 32, and that for 1938, from Bulletin 36.

*Col. 3 Pipe lines:* for 1925-31 the number of employees as of December 31 in companies reporting to the Interstate Commerce Commission, from *Selected Financial and Operating Data from Annual Reports of Pipe Line Companies*. For 1932-38 this source reports the average for the year. Annual figures, 1926-31, are averages of year-end figures. The total for 1926 and later years is obtained by raising the figures for interstate companies by the factor described in General Note B. For 1919-25 the number is estimated by dividing the total compensation by the average pay. The average pay is computed for 1926 and extrapolated by the average pay in the petroleum refining industry.

*Col. 4 Street railways:* the number of employees in 1917, 1922, 1927, 1932, and 1937, from the *Census of Electric Railways* (excluding municipal and state railways). Interpolation for intercensal years and extrapolation for 1938 are by the American Transit Association estimates of the number of employees, obtained by letter.

*Col. 5 Water transportation:* the number of employees other than stevedores and longshoremen, 1929-38, is estimated by the procedure described in *National Income in the United States, 1929-35* (Bureau of Foreign and Domestic Commerce, pp. 262-4). The number of stevedores, 1929-38, is based on the number of man-years required for bulk and general cargo. The estimate of man-years, excluding inland traffic, 1929-32, was supplied by the United States Shipping Board, Division of Marine Development. The 1932 man-year figures for bulk and general cargo are extrapolated through 1938 by the tonnage of bulk and general cargo, excluding inland traffic. These estimates of man-years for 1929 and later years are raised to include inland transportation by the ratio of the tonnage of inland transportation to that of other water transportation. All the data on tonnage carried are from the *Annual Report of the Chief of Engineers of the United States Army, Part II*.

The number of employees for the years before 1929 is the sum of vessel employees, shore employees, and stevedores. Vessel employees are reported for 1916 and 1926 in the 1926 *Census of Transportation by Water*, and are for both freight and passenger vessels. Interpolation between 1916 and 1926, 1926 and 1929, is by tonnage



cleared as recorded in the *Survey of Current Business*. The 1929 ratio of land to vessel employees is applied to vessel employees to yield land employees, 1919–28. The number of stevedores and longshoremen, 1919–28, is extrapolated from 1929 by a preliminary series. The 1920 and 1930 figures in this series are the number of stevedores and longshoremen reported in the 1930 *Census of Population*, Vol. V, Ch. 1. Total tonnage of water-borne commerce, 1920–30 (*Annual Report of the Chief of Engineers*, Part II), is extrapolated for 1919 by the value of imports and exports by sea and of freight through the Sault Ste. Marie Canal, as reported in the *Statistical Abstract*. Average tonnage per stevedore is computed for 1920 and 1930, interpolated for 1921–29, and extrapolated for 1919 along a straight line. Total tonnage divided by the tonnage per man yields the preliminary estimate of stevedores, by which the final 1929 figure is extrapolated to 1919.

*Col. 6 Telephone*: the number of employees in 1917, 1922, 1927, 1932, and 1937, from the *Census of Telephones*. Interpolation between 1917 and 1922, 1922 and 1927, is by the number of employees of the Bell System (*Moody's Public Utilities* and the *Statistical Abstract*). Interpolation between 1927 and 1932, 1932 and 1937, and extrapolation for 1938 are by data reported by the Interstate Commerce Commission for 1927–33 and by the Federal Communications Commission for 1934–38 in *Selected Financial and Operating Data from Annual Reports of Telephone Carriers*.

*Col. 7 Telegraph*: the number of telegraph and wireless employees in 1917, 1922, and 1927 is from the *Census of Telegraphs*, as is that of telegraph in 1932. The 1932 estimate of wireless employees is based on the ratio to telegraph employees in 1927. Interpolation between 1917 and 1922, 1922 and 1927, is by Western Union Telegraph Company employment figures, obtained by letter. The Interstate Commerce Commission and the Federal Communications Commission report employment data in *Selected Financial and Operating Data from Annual Reports of Telegraph, Cable and Radiotelegraph Carriers*. These, together with Commercial Cable Company data, obtained by letter, provide an index by which interpolation between 1927 and 1932 and extrapolation for 1933 are made. The 1934–38 employment figures reported by the Federal Communications Commission are assumed to be complete.

TABLE P 21

Comparison of Various Income Account Items  
for Steam Railroads Reported in  
*Statistics of Income* and  
*Statistics of Railways in the United States*

*Col. 1, 4, 7, 10, and 12:* from the special tabulation of *Statistics of Income* data. Gross income is the item reported as compiled receipts; total expense is total statutory deductions plus total tax; and net profit is compiled net profit less total tax.

*Col. 2, 5, 8, 11, and 13:* from Statement 34 of *Statistics of Railways*. Expenses and net profit were adjusted for defaulted interest for 1929 and later years (see the notes to Table P 11, col. 2). Gross income is the sum of railway operating revenues and other income; total expense is the sum of railway operating expenses, railway tax accruals, uncollectible railway revenues, equipment and joint facility rents, miscellaneous deductions from income, fixed charges and contingent charges; net profit is the reported net income item.

*Col. 14:* difference between col. 10 and 12.

*Col. 15:* difference between col. 11 and 13.

*Col. 17:* difference between col. 7 and 12.

*Col. 18:* difference between col. 8 and 13.

*Col. 19:* difference between col. 17 and 14.

*Col. 20:* difference between col. 18 and 15.

