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CHAPTER IX

THE VALUES OF CORPORATIONS TO THEIR OWNERS

What are the great corporation-dominated industries of the United States worth to their owners? This is a question upon which heretofore, very little light has been thrown. There are, of course, numerous index numbers of the prices of bonds and of stocks, but a single bond represents a varying fraction in the total value of the industry, and a share of stock is an even more fluctuating unit, for the number of shares of stock issued by a given corporation varies from time to time and the fraction of the business of the industry done by that corporation changes from day to day. Manifestly, therefore, movements in index numbers of stock prices or bond prices throw little light on fluctuations in the value of the industry as a whole.

The Process of Valuing Corporate-Controlled Industries.

Some attempts have been made to estimate the value of the property used in industry by estimating the value of each unit, piece-meal, and afterward adding together all such estimates. Such a process is, however, necessarily futile, for most of the property used by the industries dominated by corporations has little value except when taken in conjunction with other dissimilar units. No one, for example, wishes to buy a railroad roundhouse except for use in conjunction with the railway. The roadbed, aside from its function of carrying railway traffic, is, in many cases, merely a nuisance, having negative rather than positive value.

The genuine market value of industries of the type specified lies in the market prices of their securities. These securities are actually bought and sold from day to day, and each share, for the moment, represents a definite fraction of the value of the whole enterprise. If, then, we add together the values at a given instant of time of all of the shares of all the enterprises in the given industry, we have a figure which possesses precise significance. Whether or not the *absolute* quantities thus arrived at have much meaning, there can be little doubt but that the *changes* in these totals from time to time have very great significance.

The process used in calculating the values presented in Table

XLIV is as follows: In each industry, an estimate has been made of the total par value of the funded debt, the total par value of the preferred stock, and the total number of shares of common stock in the hands of individuals. For a large number of sample corporations in the industry, both the price of each type of security and the number of shares outstanding at the end of the year have been ascertained. In this way, it has been possible to make an estimate of the average price per unit of each class of security in the given industry. These average prices per unit have, then, been multiplied by the estimated number of units outstanding in order to approximate the total value of the securities of a given class at the close of a year. In a number of industries, these results have been tested by ascertaining the ratio of the market price of the given class of securities to the total amount of dividends or interest, as the case may be, paid on the given class of securities. The entire value of the corporate property in each industry has been estimated by adding together the respective values of the funded debt, the preferred stock, and the common stock. In the case of the manufacturing and mining industries, in which a small fraction of the property of the industry still remains in the hands of private entrepreneurs, the total value of the corporate holdings has been increased by a specified ratio in order to estimate the total value of the entire property rights of the owners of the industry. The ratio used in making this adjustment has been determined on the basis of the number of employees working for corporations and for individual entrepreneurs, as shown by the reports of the Bureau of the Census.

Causes for Fluctuations in Values of Industries.

Since the estimates in Table XLIV are based upon sample data, they are of course subject to a considerable margin of error, but it is believed that they are sufficiently accurate to reveal fairly completely the important changes which have taken place in the values of the various industries to their owners. The figures indicate that these values fluctuate widely from year to year. A considerable part of this fluctuation is ascribable to the fact that the purchasing power of the dollar shifted so materially during the 18 years under consideration; but this factor must not be thought of as explaining all of the oscillations. The value of an enterprise always looks to the future rather than to the past; hence the question of whether it is worth much or little to its owners depends primarily upon general anticipations concerning the future income

TABLE XLIV

TOTAL MARKET VALUE AT CLOSE OF YEAR OF THE PROPERTY RIGHTS OF INDIVIDUAL SECURITY OWNERS IN INDUSTRIES DOMINATED BY CORPORATIONS[a]

(MILLIONS OF CURRENT DOLLARS)

December 31	Mines, Quarries and Oil Wells	Factories	Railroads[b]	Pullman	Express	Street Railways	Electric Light and Power	Telephones	Telegraphs
1908	$2,343	$15,403	$16,447	$166	$165	$3,133	$1,641	$ 709	$ 228
1909	2,520	19,585	17,237	185	239	3,361	1,725	759	242
1910	2,544	19,559	17,216	186	193	3,377	1,969	774	231
1911	3,712	21,457	17,096	187	172	3,563	2,345	834	225
1912	4,307	22,876	17,991	193	143	3,682	2,503	931	218
1913	4,387	21,700	16,617	179	101	3,610	2,246	908	192
1914	5,416	22,761	15,364	178	79	3,649	2,376	1,006	188
1915	7,054	31,050	17,712	195	104	3,772	2,692	1,042	229
1916	8,357	32,953	17,165	191	106	3,831	3,359	1,136	219
1917	6,070	29,019	14,256	133	[c]	3,091	2,665	1,022	195
1918	6,507	35,250	15,550	137	[c]	3,137	2,782	1,063	221
1919	7,148	41,494	13,762	132	[c]	2,620	2,629	1,141	217
1920	4,510	36,124	13,519	122	[c]	2,332	2,679	1,177	223
1921	5,848	36,171	13,717	141	[c]	2,516	3,457	1,604	243
1922	7,027	38,579	15,596	163	[c]	3,136	3,958	1,809	309
1923	6,492	38,080	16,446	142	[c]	3,035	[d]	2,025	314
1924	8,468	45,416	17,715	166	29	3,442	[d]	2,332	357
1925	9,500	51,900	20,053	99	28	3,484	[d]	2,691	392

[a] The totals in this table are the sums of the aggregate market values of funded debt, preferred stock and common stock as recorded in Tables LIII, LIV, LV, and LXXXI.

[b] Includes switching and terminal companies. Based on *Statistics of Railways*, published by the Interstate Commerce Commission.

[c] Information not available.

[d] Because of the extremely rapid changes occurring in this industry reasonably dependable estimates cannot well be made until the data for the 1927 Census become available.

derivable from the ownership of the property in the industry. Market value is, then, necessarily largely dependent upon subjective factors. A change in public sentiment from pessimism to optimism may, for example, increase the value of the manufacturing industry hundreds of millions of dollars in a single day.

As just stated, market values are arrived at on the basis of subjective values, and subjective values, in turn, are in part the result of discounting anticipated future income at a given subjective interest rate. When in general, subjective interest rates are low, the value of the industry is large, and *vice versa*.

The market value of an industry is also affected materially by the action of government. No matter how perfect the physical plant, or how effectively it is operated, the industry may be practically valueless to its owners because of the fact that government is taking most of the net earnings by taxation or is, by rate regulation, preventing the owners from securing any considerable amount of net income. To sum up, then, we may say that the values in Table XLIV are affected by:

1. Prevailing interest rates.
2. Actual volume of physical activity.
3. Optimism or pessimism concerning the future outlook.
4. Public policies as to taxation and rate regulation.

Table XLIV shows that, in 1925, the factories of the United States were worth far more than the steam and electric railways, mines, quarries, and oil wells, and the telephone, telegraph, and electric light and power plants combined. The steam railways had, in turn, a value about double as great as that of all the mines, quarries, and oil wells. The telephone and telegraph equipment of the country was worth nearly as much as the street railways.

Only the Pullman and express, of all the industries covered by the entries in this table, failed to show an increase in current-dollar value between 1908 and 1925. The increases in the nominal value of the other industries have little significance because they fail to take account of the changing value of the dollar. In Table XLV the nominal figures have been deflated in order to eliminate as far as possible the effect of the changing value of gold.

Industries Valued in Terms of Direct Goods.

It is not easy to devise a wholly satisfactory means of deflating the value of an industry. The property used in the operation of the various industries dealt with in Table XLV is of such a complex nature that it is not feasible to find units which are comparable from year to year, and hence there is little chance of constructing index numbers on the basis of articles actually representing the physical wealth of each industry or of all industries combined. Since this method is not practicable, recourse has been had to a procedure which has its advantages and disadvantages. This procedure is to ascertain the comparative physical quantities of direct or consumers' goods which could have been obtained by the owners of the industries in question, at the various dates, had they sold

their securities at the market prices prevailing and used the money thus obtained to buy direct goods. This concept is definite and specific.

Changes in the Real Value of Industries.

Table XLV and Charts 32a and 32b show that, during the period 1909 to 1915 inclusive, of the 9 industries included in the table, the aggregate values were increasing in the case of manufacturing, mining, electric light and power, and telephone corporations. The value of the Pullman and street railway industries was almost stationary, while the telegraph and the express industries began declining in value in 1910 and the railroad industry started downward in 1913. In the case of manufacturing, the up-grade movement was terminated before 1916, but the value of the mining industry continued to rise until the following year. From the beginning of 1917 until the end of 1920, the purchasing power of the combined value of all the securities fell off sharply in every one of the industries for which records are available; in other words, the total value of the securities failed to keep pace with the rise in the value of consumers' goods. This decline is doubtless ascribable in part to the high interest rates prevailing during this period, for, other things being equal, the higher the interest rates, the lower the value of securities. This relationship obtains because securities represent anticipated income discounted at some given interest rate, and the interest rate used in the discounting process is likely to be similar to the one prevailing at the time when the discount is calculated. Another reason, probably accounting in part for the decline in real value of corporations between 1917 and 1920 was that securit holders were doubtless skeptical that the income of the corporations in the future would increase sufficiently to offset the increase in the price level. A third factor which doubtless played an important rôle was custom. People were accustomed to thinking of corporate income in terms of past experience and did not immediately revise their views. More important still, custom frequently congealed into law and thus, in many cases, prevented price increases—a most notable example being found in the rates charged by railways and public utility corporations. For these three, and perhaps for other reasons, the aggregate value of each of the 9 industries covered continued to fall until the general price level turned downward in 1920. By that time, the factories of the United States had a real value to their owners of only about two-thirds as much and both

TABLE XLV

COMMAND OVER DIRECT OR CONSUMERS' GOODS, AT 1913 PRICES, GIVEN TO INDIVIDUAL SECURITY OWNERS BY THE TOTAL MARKET VALUE OF THEIR PROPERTY RIGHTS IN INDUSTRIES DOMINATED BY CORPORATIONS[a]

(MILLIONS OF DOLLARS HAVING THE PURCHASING POWER OF 1913)

December 31	Mines, Quarries and Oil Wells	Factories	Railroads[b]	Pullman	Express	Street Railways	Electric Light and Power	Telephones	Telegraphs
1908	$2,502	$16,445	$17,560	$176	$176	$3,345	$1,752	$ 756	$241
1909	2,612	20,300	17,866	191	248	3,484	1,788	784	250
1910	2,622	20,160	17,744	192	199	3,480	2,029	798	238
1911	3,798	21,956	17,493	192	176	3,646	2,400	849	231
1912	4,340	23,049	18,127	194	144	3,709	2,522	939	220
1913	4,341	21,469	16,440	177	99	3,571	2,221	897	190
1914	5,408	22,730	15,343	177	79	3,644	2,373	995	188
1915	6,892	30,334	17,303	190	102	3,685	2,630	1,006	223
1916	7,405	29,199	15,209	171	94	3,394	2,977	990	195
1917	4,768	22,796	11,198	107	[c]	2,428	2,093	772	156
1918	4,351	23,566	10,396	95	[c]	2,097	1,860	672	153
1919	4,150	24,091	7,990	80	[c]	1,521	1,526	628	131
1920	2,533	20,286	7,591	70	[c]	1,309	1,504	637	128
1921	3,650	22,579	8,562	87	[c]	1,571	2,158	974	151
1922	4,382	24,058	9,726	101	[c]	1,955	2,468	1,108	191
1923	4,022	23,673	10,190	88	[c]	1,881	[d]	1,224	194
1924	5,226	28,030	10,933	103	13	2,124	[d]	1,407	220
1925	5,729	31,301	12,094	60	14	2,101	[d]	1,586	236

[a] The totals in this table are the sums of the purchasing power in 1913 dollars of the market values of funded debt, preferrred stock and common stock, as recorded in Tables LIX, LX, LXI, and LXXX.

[b] Includes switching and terminal companies.

[c] Information not available.

[d] Because of the extremely rapid changes occurring in this industry reasonably dependable estimates cannot well be made until the data for the 1927 Census become available.

steam and electric railways were worth less than half as much as at the beginning of 1916, and the owners of the Pullman Company had suffered nearly as large a percentage of loss as that last mentioned. The decline in the value of all mining corporations was considerably more than half of their 1917 value. The owners of the telephone industry suffered a smaller loss than most of the others, but, even in their case, the command over consumers' goods was one-third less at the beginning of 1920 than it was at the beginning of 1916.

Between the beginning of 1921 and the end of 1925, the pur-

chasing power represented by the total value of the securities increased markedly in the case of all but two of the industries covered by Table XLV. At the close of 1925, however, the manufacturing and telephone industries, and presumably the private electric light and power industry, were the only ones worth as much to their owners as they had been at some time during the pre-war period. The increase in value in 1925 over that of 1916 was very slight in the case of manufacturing but amounted to approximately 60 per cent in the case of the telephone industry. The telegraph industry was worth somewhat more at the close of 1925 than at the beginning of 1916, but not quite as much as at the beginning of 1910. We have, then, the strange situation in which, although the income of the country as measured in dollars of constant purchasing power had risen materially above the pre-war level, the value of the great corporate industries still remained, at the end of 1925, below the pre-war level in the case of steam and electric railways and the telegraph, Pullman, and express businesses.

Forces Causing the Value of an Industry to Change.

If the price level never changed, if interest rates always remained constant, and if government never stepped in to regulate the prices charged for the output of the industry, it would presumably be true that the total value of the industry to its owners would vary with the demand for its products and the prospective ability of the industry to meet such demand. In general, under such circumstances, we would expect that, when the physical plant of an industry increased, the value of the industry would also increase.

Under existing conditions, an increase in the size of the physical plant normally requires an increase in investment. The industry may draw the excess funds for this additional investment from:

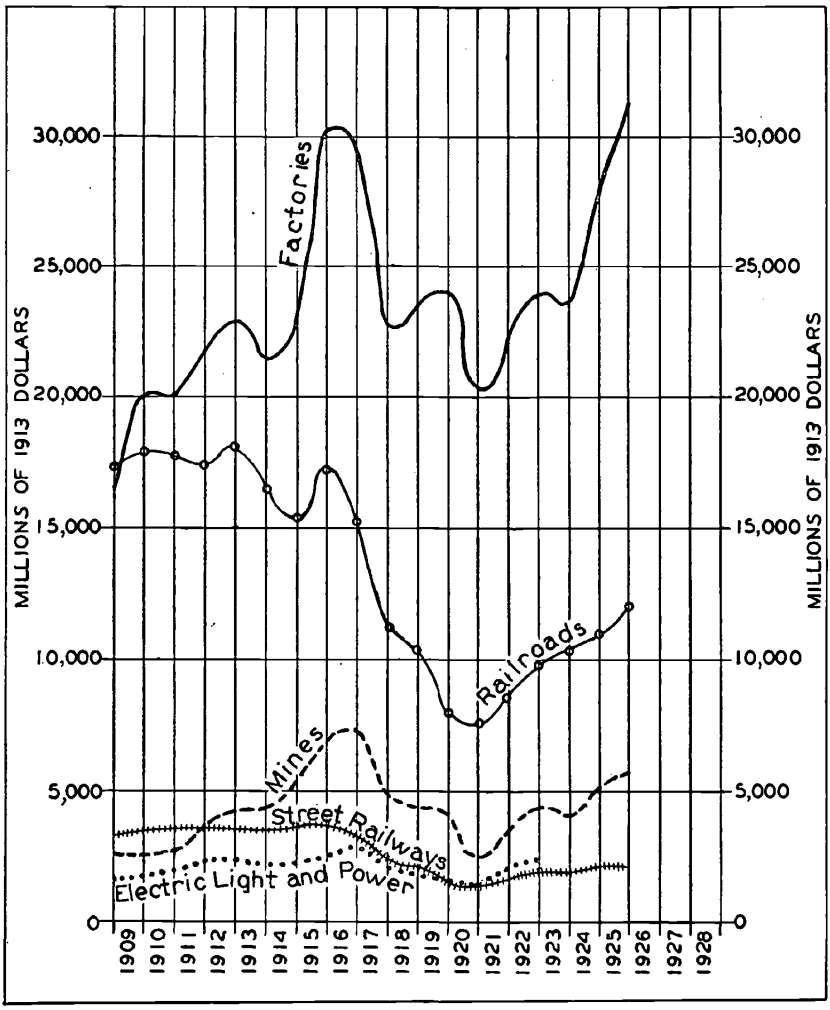
1. Savings within the industry.
2. New money invested by outsiders.

Estimation of Positive and Negative "New Money."

New money may be temporarily secured by borrowing from banks, but such loans are not as a rule continued indefinitely. In order to secure funds for permanent investment, it is ordinarily necessary for the industry, if under corporate control, to sell to the investing public issues of short-term notes, bonds, or preferred or common stocks. Receipts thus obtained account for most of the

CHART 32a

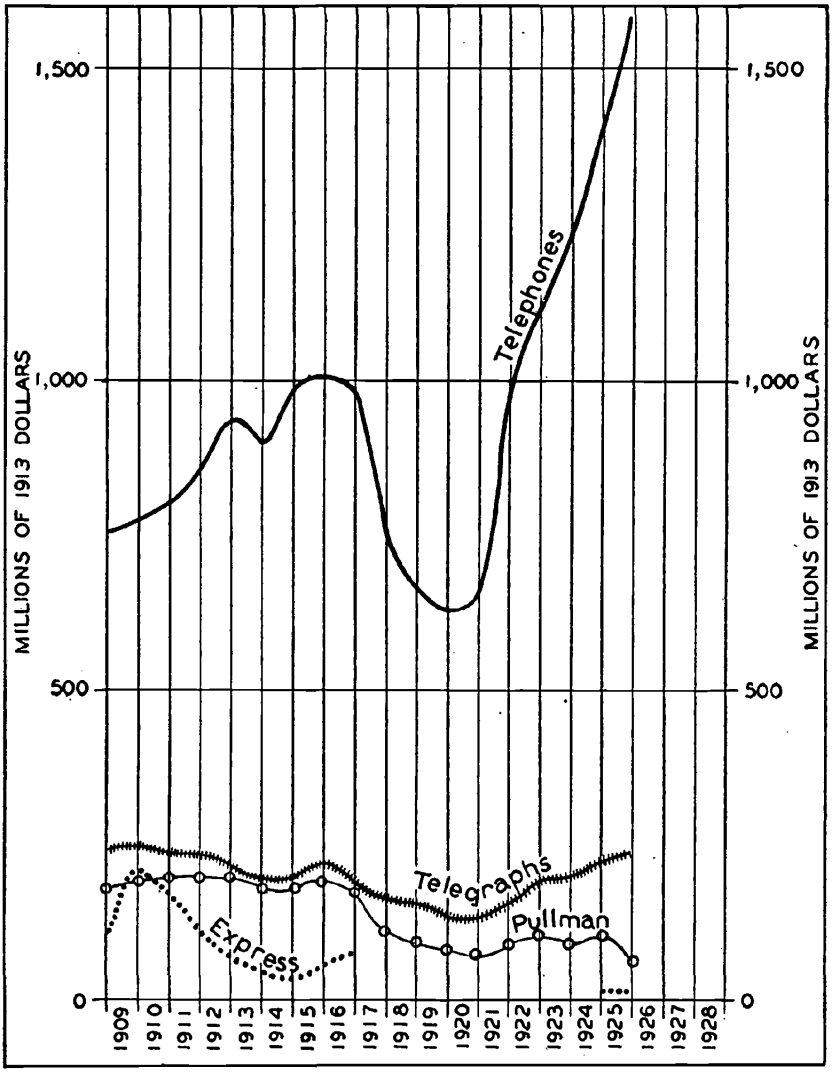
COMMAND OVER DIRECT OR CONSUMERS' GOODS, AT 1913 PRICES, GIVEN TO INDIVIDUAL SECURITY OWNERS BY THE TOTAL MARKET VALUE OF THEIR PROPERTY RIGHTS IN INDUSTRIES DOMINATED BY CORPORATIONS[a]



[a] For data, see Table XLV.

CHART 32b

COMMAND OVER DIRECT OR CONSUMERS' GOODS, AT 1913 PRICES, GIVEN TO INDIVIDUAL SECURITY OWNERS BY THE TOTAL MARKET VALUE OF THEIR PROPERTY RIGHTS IN INDUSTRIES DOMINATED BY CORPORATIONS[a]



[a] For data, see Table XLV.

positive entries of new money used in the calculation of the figures in Table XLVI.

If the profits within an industry are large, it is frequently possible for the corporations in the field to use part of their corporate savings to pay off some of their funded debt or even to retire part of their preferred stock. This process is evidently the reverse of that employed when new money is secured. For the purposes of our study, we shall designate amounts thus removed from the industry as "negative new money."

Table XLVI represents the results of an effort to estimate, on the basis of a large number of sample corporations, the "net amount of new money" invested in these corporations during each of the years 1909 to 1925, inclusive. When the amounts invested were larger than the amounts withdrawn from the industry, the sums recorded in the table are positive. When withdrawals exceeded investments, the entries are negative.

Making these estimates proved to be an extremely laborious task. Most corporations are constantly engaged either in retiring certain securities or issuing new ones. Especially for the earlier years, it is extremely difficult to ascertain the terms upon which new securities were issued or old ones retired. The difficulties are still further accentuated by the fact that, in many instances, corporations are consolidated, securities of one being issued to replace the securities of another. Furthermore, securities are often exchanged for property the value of which cannot be estimated with any degree of accuracy. For the reasons just mentioned, it was necessary to study each security of the sample corporations with meticulous care. Poor's *Manuals*, Moody's *Manuals* and *Rating Books*, the records prepared by the Standard Statistics Company, and the files of *The Commercial and Financial Chronicle*, were all ransacked for information. All estimates have been verified by some worker other than the one making the original computations.

While, in the case of many individual securities, the estimates must of necessity be rough, it is believed that the number of corporations studied is large enough in the case of mines, factories, and electric light and power corporations to make the samples reasonably representative of the industry as a whole. An attempt has been made to secure complete data for the telegraph, Pullman, and express industries. The telephone industry is, of course, dominated by the American Telephone and Telegraph Company. The figures for steam railroads are computed from approximately complete

TABLE XLVI

ESTIMATED NET NEW MONEY[a] INVESTED BY INDIVIDUAL SECURITY OWNERS IN INDUSTRIES DOMINATED BY CORPORATIONS[b]

(MILLIONS OF CURRENT DOLLARS)

Year	Mines, Quarries and Oil Wells	Factories	Railroads[c]	Pullman	Express	Street Railways	Electric Light and Power	Telephones	Telegraphs
1909	$112	$1,584	$330	0	0	$148	$114	$ 4	$ —2
1910	384	1,111	432	0	16	162	285	32	0
1911	580	1,930	472	0	[d]	161	181	62	0
1912	301	268	377	0	[d]	155	119	77	—8
1913	119	1,002	335	0	—12	120	32	50	0
1914	137	951	—456	0	[e]	205	150	39	0
1915	198	1,610	—522	0	—6	184	149	8	—1
1916	168	503	65	0	—5	177	184	96	0
1917	133	1,428	364	0	0	163	279	11	0
1918	379	2,084	—193	0	[f]	44	180	21	0
1919	180	1,869	42	0	[f]	30	178	129	0
1920	143	627	698	0	[f]	14	453	36	17
1921	91	1,914	—116	0	[f]	1	553	192	22
1922	79	352	62	15	0	4	387	81	3
1923	146	248	583	0	0	57	[g]	182	[d]
1924	153	—145	473	0	0	62	[g]	207	[d]
1925	126	508	—40	0	0	38	[g]	198	[d]

[a] For definition of this term, see text.

[b] The totals in this table are the sums of the new money invested in funded debt, preferred stock, and common stock, as recorded in Tables LVI, LVII, LVIII, and LXXXI.

[c] Includes switching and terminal companies. Based upon *Statistics of Railways* published by the Interstate Commerce Commission.

[d] Positive figure of less than $500,000.

[e] Negative figure of less than $500,000.

[f] Information not available.

[g] Because of the extremely rapid changes occurring in this industry, reasonably dependable estimates cannot well be made until the data for the 1927 Census become available.

data appearing in the various issues of *Statistics of Railways*, published by the United States Interstate Commerce Commission. It is believed, therefore, that the figures for various fields of transportation are reasonably accurate except in the instances given in the footnotes to Table XLVI, and, in so far as the sample corporations are representative, the chances are that the errors in the manufacturing and mining industries are not serious. The sample corporations have necessarily been chosen from among those large enough to have their reports in such Manuals as Moody's and Poor's, and

hence it is possible that they may not be representative of smaller concerns. It is believed, however, that they constitute an adequate sample of the larger corporations.

New Money Measured in Current Dollars.

The supply of new money which corporations have drawn from outside has been extremely variable. As might be expected in the case of a rapidly developing nation like the United States, the general tendency has been to invest far more money than has been withdrawn. Net withdrawals of cash apparently occurred primarily in the railroad, express, and telegraph industries. Throughout the period, the general tendency has been for the manufacturing industry to absorb more investment funds than have mines, quarries, oil wells, and all fields of transportation combined.

Money flowed into the manufacturing industry in large volume during the period 1909 to 1921 inclusive, but, thereafter, the investments in manufacturing became smaller. Investments in the mining industry have, in general, been on a lower level since 1920 than they were before, the lowest point being reached in 1922. *Positive* net investments were made in the railroad industry for each year between 1909 and 1913, inclusive. Since that date, net increases have frequently been followed by net decreases. In street railways, new money flowed in freely during the years 1909 to 1917, inclusive, but remained at a very low level from 1918 to 1922. Since then, the street railways have succeeded in securing a moderate amount of new funds, but not more than one-third as much annually as was customary before the war. The net new money secured by telephone and electric light and power corporations, while variable, has, in general, shown an upward tendency.

New Money Measured in 1913 Dollars.

In Table XLVII the results are given of dividing new money in current dollars by price indices representing the average-for-the-year relative prices of consumers' goods to well-to-do purchasers. From the standpoint of the corporation receiving the new money, this method of deflation is obviously illogical, for it does not picture with any reasonable degree of precision the change taking place in the physical quantity of equipment purchasable by the corporation with the new money received. From the standpoint of the investor, however, the method of deflation followed is thoroughly defensible. The investor is always being compelled to choose between buying

TABLE XLVII

VALUE, IN 1913 DOLLARS, OF THE ESTIMATED NET NEW MONEY[f] INVESTED BY INDIVIDUAL SECURITY OWNERS IN INDUSTRIES DOMINATED BY CORPORATIONS[a]

(MILLIONS OF 1913 DOLLARS)

Year	Mines, Quarries and Oil Wells	Factories	Railroads[b]	Pullman	Express	Street Railways	Electric Light and Power	Telephones	Telegraphs
1909	$119	$1,680	$349	$0	$ 0	$156	$120	$ 4	$—2
1910	397	1,151	447	0	17	167	295	33	0
1911	600	1,997	489	0	[c]	167	187	64	0
1912	307	274	385	0	[c]	158	122	79	—9
1913	119	1,002	335	0	—12	120	32	50	0
1914	137	947	—454	0	[d]	204	150	39	0
1915	198	1,609	—521	0	—6	184	149	8	[d]
1916	158	473	61	0	—5	167	173	89	0
1917	111	1,188	303	0	0	136	232	9	0
1918	274	1,506	—140	0	[e]	32	130	15	0
1919	114	1,182	27	0	[e]	19	113	78	0
1920	79	347	387	0	[e]	8	251	19	10
1921	54	1,144	—69	0	[e]	[c]	330	112	13
1922	50	221	39	9	0	2	243	50	2
1923	91	154	363	0	0	36	[g]	111	[c]
1924	95	—90	295	0	0	38	[g]	127	[c]
1925	77	310	—24	0	0	23	[g]	118	

[a] The totals in this table are the sums of the purchasing power in 1913 dollars of new money invested in funded debt, preferred stock, and common stock as recorded in Tables LXII, LXIII, LXIV, and LXXX.

[b] Includes switching and terminal companies.

[c] Positive figure of less than $500,000.

[d] Negative figure of less than $500,000.

[e] Information not available.

[f] For definition of this term, see text

[g] Because of the extremely rapid changes occurring in this industry reasonably dependable estimates cannot well be made until the data for the 1927 Census become available.

securities and purchasing consumers' goods. The quantities entered in Table XLVII represent, then, the relative amounts of direct or consumers' goods which investors have sacrificed or foregone in the various years in order to finance the needs of the corporations in the fields covered. Even in terms of 1913 dollars, the tendency to invest new money was downward in mining and manufacturing industries between 1918 and 1925. In street railways, the declining tendency began in 1915. Since 1913, investors have shown an increasing tendency to put money into private electric light and power plants, and, since approximately the same date, the trend has also

been upward in the case of the telephone corporations. New investments in the railroad industry were steadily large only during the period 1909 to 1913, and thereafter were highly irregular.

Gains Above New Money in the Values of Industries.

The fact that a business enterprise has changed in value during a given interval of time tells us nothing whatever about whether this change in value has resulted in a gain or loss to the owner. If, for example, an enterprise is worth $10,000 at the beginning of the year and $12,000 at the end of the year, although its value has increased $2000, the owner may still have lost money, for he may have invested in the meantime $3,000 in new money. Similarly, the value of the enterprise might decline from $10,000 to $9,000, but if, in the meantime, the owner had withdrawn $2,000 in cash, the enterprise would still be netting him a gain. What is true of a single enterprise is equally true of an industry as a whole. Table XLVIII represents the facts for the 9 industries data for which are available in a reasonably accurate form.

In arriving at the quantities presented in Table XLVIII, it has been necessary to proceed as follows: The value of the industry has been calculated for the beginning and end of each year and both amounts have been reduced to dollars of constant purchasing power by dividing by the price indices for January 1 and December 31 respectively. Similarly, the new money invested during the year has been converted to terms of the same kind of dollars by dividing by the average-for-the-year price index. The net value of new money invested has then been added to the value of the industry at the beginning of the year, and the sum thus obtained has been subtracted from the value of the industry at the end of the year. The remainder represents the net gain or loss to the owners of the industry arising from changes in the value of the industry, all quantities being expressed in terms of 1913 dollars. The results of calculations of this type are recorded in Table XLVIII.

Gains and losses incurred through fluctuations in the value of the securities have varied tremendously from year to year. In 1915, for example, the owners of the mining industry profited by more than 1⅓ billions of constant dollars, while in 1917 they lost nearly 3 billions of the same dollars. On the other hand, in the manufacturing industry, the owners gained more than 7 billions of the same dollars. Similar wild fluctuations may be observed in the other fields. Certain years are characterized by losses in nearly all

TABLE XLVIII

GAINS,[c] ABOVE NEW MONEY INVESTED, IN VALUE TO INDIVIDUALS, IN TERMS OF 1913 DOLLARS, OF THEIR PROPERTY RIGHTS IN INDUSTRIES DOMINATED BY CORPORATIONS[a]

(MILLIONS OF 1913 DOLLARS)

Year	Mines, Quarries and Oil Wells	Factories	Railroads[b]	Pullman	Express	Street Railways	Electric Light and Power	Telephones	Telegraphs
1909	$ —10	$ 2,818	$ —43	$ 16	$ 107	$ —18	$ —85	$ 29	$ 11
1910	—421	—1,640	—568	[c]	—59	—171	—54	—13	—12
1911	625	—255	—740	[c]	—59	—1	184	—8	—7
1912	254	1,023	249	2	—39	—95	[c]	14	—3
1913	—128	—3,190	—2,022	—17	—10	—258	—333	—93	—30
1914	1,004	383	—643	[b]	—13	—132	2	58	—3
1915	1,383	7,233	2,482	13	27	—143	108	2	36
1916	381	—1,917	—2,155	—19	24	—458	173	—107	—27
1917	—2,946	—8,936	—4,314	—64	—1	—1,102	—1,116	—232	—39
1918	—741	—855	—663	—12	—7	—362	—363	—118	—3
1919	—336	—754	—2,432	—15	[d]	—595	—447	—121	—22
1920	—1,811	—4,716	—785	—10	[c]	—219	—271	—20	—13
1921	1,133	1,291	1,040	17	[c]	261	326	209	10
1922	726	1,397	1,124	4	[c]	382	248	23	38
1923	—479	—592	102	—13	[c]	—110	[f]	6	3
1924	1,177	4,832	448	15	[c]	205	[f]	151	26
1925	452	3,183	1,185	—43	[c]	—46	[f]	185	16

[a] Derived from figures presented in Tables LXV, LXVII, and LXIX.

[b] Includes switching and terminal companies. Based upon *Statistics of Railways*, published by the Interstate Commerce Commission.

[c] Positive figure of less than $500,000.

[d] Negative figure of less than $500,000.

[e] For definition of this term, see text.

[f] Because of the extremely rapid changes occurring in this industry, reasonably dependable estimates cannot well be made until the data for the 1927 Census become available.

industries. Among such years are 1910, 1911, 1913, 1917, 1918, 1919, and 1920. In other years, the owners of nearly all industries gained. This was noticeably true in 1921, 1922, and 1924, and to a very considerable extent in 1925. Strangely enough, we see that the years in which owners have profited most from changes in values of their securities have been years characterized by depression rather than by boom. This means that, in such years, security values have either risen while prices of consumers' goods have been falling, or that, if both have fallen, the prices of consumers' goods have fallen the more.

TABLE XLIX

GAINS,[c] ABOVE NEW MONEY INVESTED, IN VALUE TO INDIVIDUALS, IN TERMS OF CURRENT DOLLARS, OF THEIR PROPERTY RIGHTS IN INDUSTRIES DOMINATED BY CORPORATIONS[a]

(MILLIONS OF CURRENT DOLLARS)

Year	Mines, Quarries and Oil Wells	Factories	Railroads[b]	Pullman	Express	Street Railways	Electric Light and Power	Telephones	Telegraphs
1909	$ —9	$ 2,658	$ —41	$ 15	$ 101	$ —17	$ —80	$ 28	$ 10
1910	—407	—1,583	—549	[c]	—57	—165	—52	—13	—11
1911	604	—246	—715	[c]	—57	—1	178	—7	—7
1912	248	1,001	243	2	—38	—93	[c]	14	—3
1913	—128	—3,190	—2,022	—17	—10	—258	—333	—93	—30
1914	1,008	385	—646	[b]	—13	—132	2	58	—3
1915	1,384	7,239	2,484	13	27	—143	108	2	36
1916	405	—2,040	—2,294	—20	25	—487	184	—116	—29
1917	—3,538	—10,734	—5,182	—76	—1	—1,324	—1,341	—287	—46
1918	—1,025	—1,184	—918	—17	—10	—501	—502	—171	—4
1919	—531	—1,192	—3,846	—23	[d]	—941	—707	—202	—34
1920	—3,271	—8,515	—1,418	—17	1	—396	—489	—38	—23
1921	1,897	2,161	1,741	29	[c]	436	545	358	16
1922	1,157	2,227	1,791	7	[c]	609	395	38	61
1923	—770	—952	163	—21	[c]	—177	[f]	10	5
1924	1,889	7,751	719	24	[c]	329	[f]	248	42
1925	741	5,216	1,943	—70	[c]	—75	[f]	310	26

[a] Derived from figures presented in Tables LXVI, LXVIII, and LXX.

[b] Includes switching and terminal companies.

[c] Positive figure of less than $500,000.

[d] Negative figure of less than $500,000.

[e] For definition of this term, see text.

[f] Because of the extremely rapid changes occurring in this industry, reasonably dependable estimates cannot well be made until the data for the 1927 Census become available.

For convenience in some of the computations that follow, and in order to facilitate comparison with other figures, the quantities presented in Table XLVIII have been multiplied by index numbers representing the prices of direct goods used by the wealthier classes of families and the results have been entered in Table XLIX. These entries show the gains above new money invested which have accrued to all the owners of the 9 industries covered, when such gains are expressed in terms of gold dollars.

In Table L, there are heterogeneous figures representing the estimated amount of net gains, in terms of 1913 dollars, which in-

TABLE L

ROUGH ESTIMATE OF NET GAINS[g] TO INDIVIDUALS, IN TERMS OF 1913 DOLLARS,[h] ARISING FROM INCREASES IN THE VALUE OF THEIR PROPERTY RIGHTS IN VARIOUS INDUSTRIES

(MILLIONS OF 1913 DOLLARS)[b]

Year	Agriculture[a]	Construction[b]	Transportation by Water[c]	Power Laundries[b]	Banking[d]	Mercantile[c]	Unclassified[b]	Miscellaneous[f]
1909	$ —1,827	$278	$10	$2	$101	$292	$583	$ —565
1910	1,206	253	37	4	120	475	714	1,199
1911	1,012	180	14	3	111	211	520	441
1912	3,027	239	36	4	94	238	522	—272
1913	—708	69	32	3	55	174	348	529
1914	2,795	86	—1	3	61	138	335	2,036
1915	3,743	114	37	3	69	181	396	32
1916	—4,922	167	99	4	116	247	622	—5,929
1917	—2,998	66	22	4	127	259	712	—6,546
1918	—1,710	24	33	4	140	141	599	—8,177
1919	—930	37	8	5	213	176	764	—2,993
1920	1,097	3	1	3	122	27	470	5,214
1921	—2,396	3	—33	2	73	34	330	12,381
1922	170	72	—12	4	91	206	544	941
1923	—645	152	1	4	100	403	583	—477
1924	—2,013	67	1	4	128	152	550	1,758
1925	—3,243	67	4	5	177	229	768	—1,612

[a] Based upon *Census of Agriculture* and various reports of the U. S. Department of Agriculture.

[b] Based upon ratios of savings to income in mercantile and banking industries.

[c] Based upon *Statistics of Income* published by the U. S. Bureau of Internal Revenue and upon reports of a number of sample corporations.

[d] Based upon reports of the Comptroller of the Currency.

[e] Based upon *Statistics of Income*, published by the U. S. Bureau of Internal Revenue.

[f] Based upon a crude estimate of changing realty values.

[g] For definition of this term, see text.

[h] "1913 Dollars" is an abbreviation for the phrase "dollars having purchasing power equivalent to that which they had in 1913."

dividuals have secured because of their property holdings in various industries not covered in Table XLVIII. The figures for agriculture, while not precisely accurate, are believed to represent general tendencies. The relative dependability of these figures is due to the fact that the United States Department of Agriculture collects annually a large amount of data concerning the value of farm land, crops, and live stock, and, on the basis of these figures, it is possible to approximate the total value of the property represented

TABLE LI

ROUGH ESTIMATE OF NET GAINS TO INDIVIDUALS, IN TERMS OF CURRENT DOLLARS, ARISING FROM INCREASES IN THE VALUE OF THEIR PROPERTY RIGHTS IN VARIOUS INDUSTRIES

(MILLIONS OF CURRENT DOLLARS)[a]

Year	Agriculture	Construction	Transportation by Water	Power Laundries	Banking	Mercantile	Unclassified	Miscellaneous
1909	$ —1,768	$261	$10	$2	$ 96	$273	$548	$ —533
1910	1,199	244	36	3	116	457	690	1,158
1911	985	174	13	3	107	203	503	426
1912	2,987	234	35	4	92	233	512	—266
1913	—708	69	32	3	55	174	348	529
1914	2,818	86	—1	3	61	139	338	2,045
1915	3,685	114	37	3	69	180	402	32
1916	—5,453	178	105	5	124	263	678	—6,311
1917	—4,223	80	27	5	153	317	899	—7,863
1918	—2,758	34	46	5	194	201	897	—11,316
1919	—1,716	61	13	8	336	289	1,326	—4,733
1920	2,195	6	2	6	221	51	931	9,414
1921	—3,731	4	—56	4	123	57	575	20,723
1922	252	114	—19	6	145	324	884	1,499
1923	—937	243	2	7	160	643	963	—766
1924	—2,952	108	2	6	206	244	910	2,821
1925	—5,150	110	7	8	289	374	1,297	—2,642

[a] Computed from corresponding items in Table L by multiplying by the appropriate price indices recorded in Table VII.

by the farms of the United States and the equipment thereon. The values originally expressed in terms of dollars current in the given year have been converted to dollars of 1913 purchasing power by dividing by indices representing the relative values of those consumers' goods purchased by the farmers of the United States.

Since the Comptroller of the Currency gives annually figures covering most of the banks of the United States, it is believed that the data for the banking industry are not widely in error, although attention should be called to the fact that many private banks do not report to the Comptroller of the Currency, and hence their assets are excluded from these totals. Unfortunately, the data for the industries other than agriculture and banking are calculated from data so fragmentary and on the basis of so many hypotheses, that they are here presented merely for what they are worth.

TABLE LII

ESTIMATED TOTAL INCOME[e] OF THE PEOPLE OF THE CONTINENTAL UNITED STATES INCLUDING INCREASES IN THE TOTAL VALUE OF PRIVATE PROPERTY

YEAR	INCOME IN 1913 DOLLARS				INCOME IN CURRENT DOLLARS			
	Gains in Purchasing Power of Property Values[a] (Millions)	Entire Realized Income[b] (Millions)	Total Income		Gains in Purchasing Power of Property Values[c] (Millions)	Entire Realized Income[d] (Millions)	Total Income	
			Of All People (Millions)	Per Capita			Of All People (Millions)	Per Capita
1909	$ 1,700	$31,300	$33,000	$365	$ 1,553	$29,605	$31,158	$344
1910	1,071	32,380	33,450	362	1,066	31,430	32,496	352
1911	2,230	32,920	35,150	375	2,162	31,858	34,020	363
1912	5,294	34,656	39,950	419	5,205	33,977	39,182	411
1913	−5,578	35,756	30,178	311	−5,578	35,723	30,145	310
1914	6,109	35,250	41,358	418	6,150	35,647	41,798	422
1915	15,714	36,636	52,351	521	15,672	37,205	52,877	527
1916	−13,699	39,559	25,860	254	−14,781	43,288	28,506	280
1917	−27,104	40,242	13,138	127	−33,135	51,331	18,196	176
1918	−12,071	40,150	28,079	269	−17,028	60,408	43,380	416
1919	−7,442	38,017	30,575	291	−11,891	65,949	54,058	515
1920	−908	37,573	36,666	345	−1,340	73,999	72,659	683
1921	14,681	36,710	51,392	474	24,884	63,371	88,254	814
1922	5,958	40,565	46,523	424	9,490	65,925	75,416	687
1923	−1,021	45,164	44,141	396	−1,518	74,337	72,819	653
1924	7,945	46,758	54,703	482	13,056	77,135	90,191	795
1925	1,969	48,412	50,381	437	3,438	81,931	85,369	741

[a] Derived from Tables XLVIII and L.
[b] See Table IX.
[c] Derived from Tables XLIX and LI.
[d] See Table VIII.
[e] For definition of this term, see text.

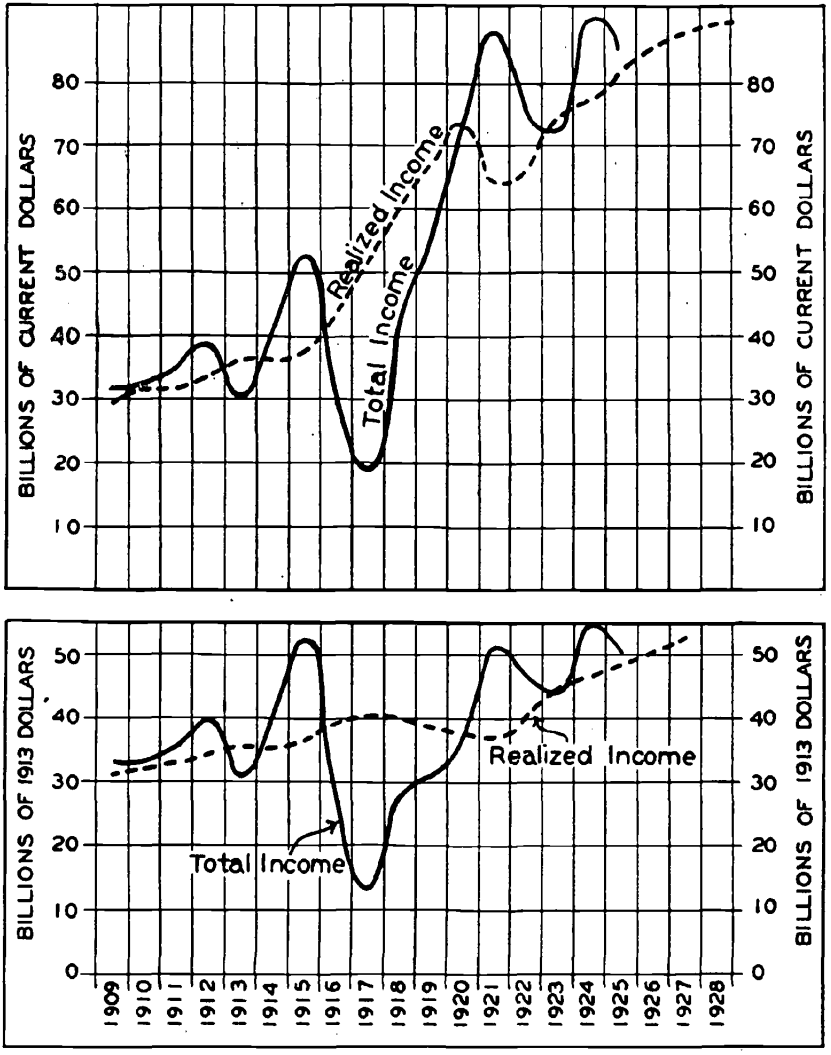
The same inaccuracies appearing in Table L are found, to an extent perhaps even greater, in Table LI. In this table, the amounts expressed in dollars of constant purchasing power have been converted into dollars current in the various years, and hence an additional error may have arisen from defects in the index numbers used in the multiplying process.

The Total Income of the Inhabitants.

The purpose of Tables L and LI is to arrive at some estimate of the total income of the people of the Continental United States,

CHART 33

COMPARISON OF TOTAL INCOME, INCLUDING INCREASES IN THE TOTAL VALUE OF PRIVATE PROPERTY, AND ENTIRE REALIZED INCOME OF THE PEOPLE OF THE CONTINENTAL UNITED STATES[a]



[a] For data, see Table LII.

since no estimate of the income of individuals is complete which fails to take into consideration year-to-year changes in the value of the property which they own. In Table LII, we find estimates of the total income of the people of the United States expressed both in terms of dollars of constant purchasing power and in terms of the dollars current in the various years. The results are more easily comprehended from the graphs in Chart 33.

They show that, while the entire realized income pursues a relatively stable course, the total income, because of the extreme changes occurring in the value of property used in the business enterprises of the United States, fluctuates violently, showing very large cyclical oscillations. Presumably, over any considerable period of time, if the estimates are correct, the figures for total income should tend, on the average, to lie above the figures for entire realized income, the difference between the trends of the two graphs representing total business savings. Actually, however, the depression in total income covering the years 1916, 1917, 1918, and 1919 as shown in Chart 33 is so great that it practically offsets all of the gains in other years. This leads one to question the validity of the calculations. The appearance of the graphs makes it seem not impossible that the losses in the years 1916 to 1919 have been estimated at too high a figure. It will be seen that, in general, peaks in total income tend to be reached during or immediately after periods of depression rather than in boom years. Were the figures in Table LII based upon dependable data, the results appearing in that table and in Chart 33 would necessarily be considered of the very highest significance. Because, however, of the possibility of large errors in the figures, we are not justified in attaching much importance to these findings.