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

Volume Title: Profits, Losses, and Business Assets, 1929-1934

Volume Author/Editor: Solomon Fabricant

Volume Publisher: NBER

Volume URL: http://www.nber.org/books/fabr35-1

Publication Date: April 1935

Chapter Title: Profits, Losses, and Business Assets, 1929-1934

Chapter Author: Solomon Fabricant

Chapter URL: http://www.nber.org/chapters/c7580

Chapter pages in book: (p. 1 - 6)

### NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

73d Cong., 2d Sess.). A few of the copies which the Na- roughly equivalent to the government price plus the cost of tional Bureau purchased and had bound for its subscribers binding and postage.

copies of NATIONAL INCOME, 1929-32 (Senate Doc. 124, remain. These are now available for fifty cents, a price

### APPENDIX TABLE I RATES OF EARNINGS OF CORPORATIONS IN THE UNITED STATES, 1931 AND 1932 CLASSIFIED BY SIZE OF CORPORATION 1

			м	EASURE OF	EARNING	3 8	
			NET INC	OME PLUS	TOTAL PRO	FITS PLUS	
SIZE (TOTAL NET			COMPENS	SATION OF	COMPENSATION OF		
ASSETS IN			OFFICE	RS AS A	OFFICERS AS A		
THOUSANDS OF	NUM	BER OF	PERCEN	TAGE OF	PERCEN	TAGE OF	
dollars) 19	CORPO	RATIONS	CAPITAI	IZATION	TOTAL (	CAPITAL	
	1931	1932	1931	1932	1931	1932	
Under 50	182,000	206,000	5.5	7.2	5.5	-5.2	
50-100	61,100	58,300	3.9	3.3	4.2	-1.6	
100-250	63,400	<b>59,</b> 500	1.5	3.3	2.3	-1.4	
250-500	31,100	28,400	0.5	-3.2	1.5	-1.3	
500-1,000	19,300	17,600	-0.5	3.6	0.7	-1.7	
1,000-5,000	18,300	16,700	-1.2	-3.2	0.0	-1.5	
5,000-10,000	2,590	2,440	0.7	3.1	0.5	-1.3	
10,000-50,000	2,120	1,950	0.3	-2.1	1.3	-0.4	
50,000 and over	632	618	2.4	0.5	3.0	1.7	
Total	381,000	392,000	1.2	-1.3	2.1	0.3	

<sup>&</sup>lt;sup>1</sup> Corporations that do not report balance sheets, as well as tax-exempt companies, are excluded.

### APPENDIX TABLE II RATES OF EARNINGS OF CORPORATIONS IN THE UNITED STATES, 1929-1932 CLASSIFIED BY INDUSTRY

(in percentage form)

(*	n percen	rage joi	,					
сом	PENSATIO	N OF OF	FICERS	СОМ	RATIO OF TOTAL PROFITS PLUS COMPENSATION OF OFFICERS TO TOTAL CAPITAL <sup>2</sup>			
1929	1930	1931	1932	1929	<b>1</b> 930	1931	1932	
3.6	0.6	-2.3	-2.2	3.8	1.2	-1.3	-1.3	
10.8	4.8	0.9	-1.9	10.3	4.9	1.4	-1.1	
19.6	16.5	8.8	-0.3	16.8	14.4	8.2	0.9	
6.8	4.2	2.6	0.9	5.7	4.2	3.3	2.3	
12.2	6.4	2.1	1.4	11.6	6.3	2.4	0.7	
9.1	7.0	2.8	-6.2	8.2	6.6	3.7	-1.0	
7.4	3.3	-0.1	2.5	7.0	3.8	1.3	0.5	
8.7	4.3	1.1	-1.4	7.8	4.4	2.0	0.2	
10.0	8.7	6.2	4.1	9.5	8.3	6.1	4.3	
	****	4.7	2.3	••••	••••	4.8	2.7	
		14.6	13.9	••••	••••	13.8	13.3	
7.1	-1.8	-2.3	-4.5	7.0	-1.4	-1.9	-3.9	
7.9	0.7	1.1	-3.0	7.8	0.9	-0.9	2.7	
3.8	-3.4	1.4	3.3	4.2	-1.4	0.2	-1.3	
5.4	-1.9	5.9	-8.2	5.4	-1.2	-4.6	-6.6	
8.6	4.9	1.4	-1.7	8.1	5.0	2.0	0.5	
19.0	14.3	7.8	3.2	17.1	13.0	7.5	3.5	
11.2	<b>6.</b> 0	1.8	1.0	10.6	6.0	2.2	1.5	
9.0	4.0	0.0	-4.3	8.6	4.2	0.6	-3.2	
13.0	5.0	0.6	-5.2	12.4	5.1	0.0	-4.1	
10.8	4.8	0.9	1.9	10.3	4.9	1.4	-1.1	
	1929 3.6 10.8 19.6 6.8 12.2 9.1 7.4 8.7 10.0 7.1 7.9 3.8 5.4 8.6 19.0 11.2 9.0 13.0	RATIO OF NET COMPENSATION TO CAPITY 1929 1930 3.6 0.6 10.8 4.8 19.6 16.5 6.8 4.2 12.2 6.4 9.1 7.0 7.4 3.3 8.7 4.3 10.0 8.7 7.1 —1.8 7.9 0.7 3.8 —3.4 5.4 —1.9 8.6 4.9 19.0 14.3 11.2 6.0 9.0 4.0 13.0 5.0	RATIO OF NET INCOME COMPENSATION OF OFF TO CAPITALIZATION 1929 1930 1931 3.6 0.6 —2.3 10.8 4.8 0.9 19.6 16.5 8.8 6.8 4.2 2.6 12.2 6.4 2.1 9.1 7.0 2.8 7.4 3.3 —0.1 8.7 4.3 1.1 10.0 8.7 6.2 4.7 14.6 7.1 —1.8 —2.3 7.9 0.7 —1.1 3.8 —3.4 —1.4 5.4 —1.9 —5.9 8.6 4.9 1.4 19.0 14.3 7.8 11.2 6.0 1.8 9.0 4.0 0.0 13.0 5.0 —0.6	3.6     0.6     -2.3     -2.2       10.8     4.8     0.9     -1.9       19.6     16.5     8.8     -0.3       6.8     4.2     2.6     0.9       12.2     6.4     2.1     -1.4       9.1     7.0     2.8     -6.2       7.4     3.3     -0.1     -2.5       8.7     4.3     1.1     -1.4       10.0     8.7     6.2     4.1         4.7     2.3         4.7     2.3         14.6     13.9       7.1     -1.8     -2.3     -4.5       7.9     0.7     -1.1     -3.0       3.8     -3.4     -1.4     -3.3       5.4     -1.9     -5.9     -8.2       8.6     4.9     1.4     -1.7       19.0     14.3     7.8     3.2       11.2     6.0     1.8     1.0       9.0     4.0     0.0     -4.3       13.0     5.0     -0.6     -5.2	RATIO OF NET INCOME PLUS COMPENSATION OF OFFICERS TO CAPITALIZATION <sup>2</sup> 1929 1930 1931 1932 1929  3.6 0.6 -2.3 -2.2 3.8  10.8 4.8 0.9 -1.9 10.3  19.6 16.5 8.8 -0.3 16.8  6.8 4.2 2.6 0.9 5.7  12.2 6.4 2.1 -1.4 11.6  9.1 7.0 2.8 -6.2 8.2  7.4 3.3 -0.1 -2.5 7.0  8.7 4.3 1.1 -1.4 7.8  10.0 8.7 6.2 4.1 9.5  4.7 2.3  10.0 8.7 6.2 4.1 9.5  14.6 13.9  7.1 -1.8 -2.3 -4.5  7.9 0.7 -1.1 -3.0 7.8  3.8 -3.4 -1.4 -3.3 4.2  5.4 -1.9 -5.9 -8.2  8.6 4.9 1.4 -1.7 8.1  19.0 14.3 7.8 3.2 17.1  11.2 6.0 1.8 1.0 10.6  9.0 4.0 0.0 -4.3 8.6  13.0 5.0 -0.6 -5.2 12.4	RATIO OF NET INCOME PLUS COMPENSATION OF OFFICERS TO CAPITALIZATION <sup>2</sup> 3.6 0.6 -2.3 -2.2 3.8 1.2 10.8 4.8 0.9 -1.9 10.3 4.9 19.6 16.5 8.8 -0.3 16.8 14.4 6.8 4.2 2.6 0.9 5.7 4.2 12.2 6.4 2.1 -1.4 11.6 6.3 9.1 7.0 2.8 -6.2 8.2 6.6 7.4 3.3 -0.1 -2.5 7.0 3.8 8.7 4.3 1.1 -1.4 7.8 4.4  10.0 8.7 6.2 4.1 9.5 8.3 4.7 2.3 14.6 13.9 7.1 -1.8 -2.3 -4.5 7.0 -1.4 7.9 0.7 -1.1 -3.0 7.8 0.9 3.8 -3.4 -1.4 -3.3 4.2 -1.4 5.4 -1.9 -5.9 -8.2 5.4 -1.2 8.6 4.9 1.4 -1.7 8.1 5.0 19.0 14.3 7.8 3.2 17.1 13.0 11.2 6.0 1.8 1.0 10.6 6.0 9.0 4.0 0.0 -4.3 8.6 4.2 13.0 5.0 -0.6 -5.2 12.4 5.1	RATIO OF NET INCOME PLUS COMPENSATION OF OFFICERS TO CAPITALIZATION <sup>2</sup> 1929 1930 1931 1932  3.6 0.6 -2.3 -2.2  10.8 4.8 0.9 -1.9  10.6 16.5 8.8 -0.3  16.8 14.4 8.2  6.8 4.2 2.6 0.9  5.7 4.2 3.3  12.2 6.4 2.1 -1.4  9.1 7.0 2.8 -6.2  7.4 3.3 -0.1 -2.5  8.7 4.3 1.1 -1.4  10.0 8.7 6.2 4.1  4.7 2.3  14.6 13.9  7.1 -1.8 -2.3 -4.5  7.9 0.7 -1.1 -3.0  3.8 -3.4 -1.4 -3.3  4.2 -1.4 0.2  5.4 -1.9 -5.9 -8.2  8.6 4.2 0.6  10.0 1.8 1.0  10.0 1.8 7.8 3.2  17.1 13.0 7.5  11.2 6.0 1.8 1.0  10.0 1.6 6.0 2.2  9.0 4.0 0.0 -4.3  10.0 1929 1930 1931  TO TOTAL CAPITAL  COMPENSATION OF OFFI TO TOTAL CAPITAL C	

<sup>1</sup> Tax-exempt corporations and life insurance companies are excluded. Data for 1933 are not yet available

## MATIGRAL DURING OF COMPANY PERSONNEL INC.

### 1819 Brussway NEW YORK CITY

**BULLETIN 55** 

APRIL 11, 1935

NON-PROFIT MEMBERSHIP CORPORATION FOR IMPARTIAL STUDIES IN ECONOMIC AND SOCIAL SCIENCE

# Profits, Losses and Business Assets, 1929-1934

Copyright 1935, National Bureau of Economic Research, Inc.

National Bureau

of Economic Research

SOLOMON FABRICANT

THE large business losses in 1932, the decline in annual deficits in 1933, and the further improvement in 1934 are already well known. So much have we learned from current financial reports of large corporations. But figures that relate to business profits constitute a peculiarly significant index in an industrial economy. Profits represent, at once, gains of enterprise arising from the conjuncture of past events and decisions, and influences upon current judgments concerning the future. It is well, therefore, to check conclusions derived from samples and estimates by the data on corporate profits issued by the Treasury Department. These comprehensive figures cover all the taxable corporations in the United States, small as well as large.

What was the earnings position of business enterprise as a whole at the bottom of the severest depression of the last half century? How did the net incomes of large and small

### NET EARNINGS OF ALL CORPORATIONS IN THE UNITED STATES, 1929-1933 (in millions of dollars)

	1929	1930	1931	1932	1933*
Net income before payment of income					
taxes <sup>2</sup>	9,130	1,960	-2,850	-5,200	-2,110
Income taxes	1,180	700	390	270	410
Net income after payment of income taxes	7,950	1,260	<b>—3,24</b> 0	<b>—5,47</b> 0	-2,520
*Preliminary estimates.					

<sup>&</sup>lt;sup>1</sup> Tax-exempt corporations and life insurance companies are excluded.

<sup>&</sup>lt;sup>2</sup> The net income given here excludes dividends received from domestic corporations. The duplication arising from profits or losses on intercorporate holdings of securities remains, however. Of this we may take account, but only for the years 1930 to 1932, by reference to the figures on sales of capital assets. (These capital assets consist predominantly of securities, as is indicated by the fact that most of the losses on their sale appear in the accounts of the finance group of corporations.) We assume that sales of capital assets are hiefly intercorporate transfers. The figures, in millions of dollars, follow:

	1930	1931	1932
t income (as above)	1,960	-2,850	5,200
oss on sale of capital assets (net)	290	1,400	1,560
Net income, before deducting loss on sale			
of capital assets	2,250	-1,450	3,640
Sales of securities probably yielded a net			
gested by the figures on capital gains and	losses repo	orted by individu	ials.

companies, of different industrial groups, compare in 1932? How did corporate incomes respond to the complex of factors active in the first and second years of recovery? What effect did the drain upon business resources have upon the assets and condition of business between the end of 1929 and 1932? It is these questions that concern us in the present Bulletin.

There are now available complete and final reports covering profits and balance sheets of all corporations in the United States for 1932 (and earlier years), and preliminary data that make possible reliable estimates of net income of all corporations in 1933. Also, many large companies have already published reports covering 1934 operations. This Bulletin presents these figures, based chiefly on the official Statistics of Income issued by the United States Treasury Department, with emphasis on the course of profits and the condition of business enterprise since 1929.1

### TOTAL CORPORATE PROFITS

The drastic decline in the aggregate net income of all corporations in the United States, from 1929 to 1932, is evident from Table 1. In 1929 corporate earnings constituted almost ten per cent of the national income; in 1932 corporate net income was negative. The partial recovery from 1932 to 1933, although insufficient to take the aggregate 'out of the red,' reduced considerably the drain upon the resources of American business. There are indications (discussed below) that in 1934 this drain had almost, if not quite, ceased.

Here, in terms of dollars and cents, we have the net results-as they affected selling prices, costs and volume of corporate business-of the economic and political factors in ferment during 1933. Three billion dollars measure the extent of improvement in business between the darkest year of depression and the end of the first year of recovery.

If we turn from earnings themselves to rates of earnings we have the figures in Table 2. Besides the rate of earnings

Book values are as of the end of the year.

<sup>\*</sup> The accepted methods of computing depletion charges tend to understate the income of mining companies.

<sup>4</sup> Includes corporations not distributed among the groups shown. The number is relatively small.

<sup>&</sup>lt;sup>1</sup> Figures for earlier years appear in Bulletin 50 of this series.

tion), earnings as a percentage of total capital are also given.2 (The data on capital used here are book values, and are therefore subject to some qualification as measures of invested capital. Year-to-year changes in the true earnings rates are probably more accurately indicated than are the rates themselves.)

TABLE 2 RATES OF EARNINGS ON BOOK VALUE OF CAPITAL

	1929-	1933			
ALL CORPORATION	S IN	THE U	NITED	STATE	ES 1
	1929	1930	1931	1932	1933*
Net income (after taxes) as a percentage of cap- italization <sup>2</sup>	6.6	2.4	0.7	2.9	1.2
Total profits (after taxes) as a percentage of total capital	6.2	2.9	0.7	0.9	0.4

\*Preliminary estimates 1 Tax-exempt corporations and life insurance companies are excluded. Book values of capitalization and total capital are as of the end of the year; for 1933, 1932 values have been used. The terminology employed here is explained in the text, footnote 2.

<sup>2</sup> Since intercorporate duplications in capital (the denominator of the earnings ratio) are not completely eliminated by the filing of consolidated returns, dividends received from other companies have not been subtracted from net income (the numerator of the ratio).

If we attempt to eliminate the duplications mentioned in the previous table (dividends received and losses on sale of corporate securities), we have the following figures for all corporations. The change from the above figures is small because the two corrections made offset each other in part.

Owing to the decline in capitalization between 1929 and 1932 the fall in earnings rates was less rapid than that in net income measured in dollars. Nevertheless the drop from 6.6 per cent in the peak year to a negative value of 2.9 per cent in 1932 is sharp. While considerable improvement took place from 1932 to 1933 net income as a percentage of capitalization was lower in 1933 than it had been in 1931.

The return on total capital is in decided contrast to net income alone. Total profits (including interest on long-

on stockholders' equity (net income relative to capitalizaterm debt) were negative in only one year, 1932. In 1933 they were again positive.

> All these figures, of course, relate to the total of all corporations in the United States. But not all companies made profits in 1929; nor did all companies suffer losses in 1932. We turn, next, to an examination of earnings as they varied with size of corporation.

#### PROFITS BY SIZE OF CORPORATION

How did large-scale corporate business compare with smaller enterprise in the worst years of the depression? Complete and reliable data concerning profits in 1932 are now available for the first time. These materials, compiled by the Treasury Department also for 1931, can be made to throw light on the relative earnings position of large and small companies. We may compare corporations of different sizes in respect of earnings on total capital as well as on stockholders' equity, and in respect of the return to management and capital combined as well as to capital alone. (The latter comparison is necessary if we are to take into account the influence of income taxation on the reporting of net income. Net income tends to be understated, and compensation of officers overstated, especially by small concerns.) The rates of earnings appear in Table 3; the ratios showing returns that include officers' compensation are given in Appendix Table I (p. 12).

<sup>2</sup> The terminology used by Ralph C. Epstein in Industrial Profits in the United States (National Bureau of Economic Research, 1934), pp. 595-600, has been used throughout this Bulletin, except that all profits figures are after deduction of income taxes, unless they are described otherwise. 'Net income' is net earnings after payment of all business expenses and fixed charges including Federal income taxes. 'Total profits' are the sum of 'net income' and estimated interest on bonds and mortgages payable. 'Capitalization' is book value of stockholders' equity. 'Total capital' is the sum of stockholders' equity and bonds and mortgages payable.

TABLE 3 RATES OF EARNINGS OF CORPORATIONS IN THE UNITED STATES, 1931 AND 1932 CLASSIFIED BY SIZE OF CORPORATION 2

SIZE (TOTAL NET			М	EASURE OF	EARNING	s	
ASSETS IN			NET IN	COME AS A	TOTAL PROFITS AS A		
THOUSANDS OF	NUMB	NUMBER OF		NTAGE OF	PERCENT	AGE OF	
DOLLARS)	CORPOR	CORPORATIONS		ALIZATION	TOTAL CAPITAL		
	1931	1932	1931	1932	1931	1932	
Under 50	182,000	206,000	-21.7	-33.0	-18.2	-27.1	
50-100	61,100	58,300	9.1	-14.0	6.5	-10.2	
100-250	63,400	59,500	— 6.5	- 9.9	<b> 4.1</b>	<b>— 6.5</b>	
250-500	31,100	28,400	<b>— 4.6</b>	<b>- 7.4</b>	_ 2.5	- 4.5	
500-1,000	19,300	17,600	3.9	<b>—</b> 6.3	<b>— 2</b> .0	<b>— 3.9</b>	
1,000-5,000	18,300	16,700	— 3.0	4.7	- 1.4	- 2.8	
5,000-10,000	2,590	2,440	1.8	4.0	- 0.3	<b>— 2.0</b>	
10,000-50,000	2,120	1,950	— 0.5	- 2.7	0.7	- 0.9	
50,000 and over	632	618	2.2	0.3	2.8	1.6	
Total	381,000	392,000	- 0.6	<b>— 2.8</b>	0.7	- 0.9	

1 Corporations that do not report balance sheets, as well as tax-exempt companies, are excluded. See footnote 2 in the text for a definition of the measures of earnings used here.

prosperity and depression large corporations as a whole were quite as low. Finally, another possibility should be mennot losing money. The rate of earnings in each size group tioned: corporations with widely held securities (that is, declined from 1931 to 1932, regardless of the measure used, but the group of largest companies (632 in 1931, and 618 in 1932) still remained above the zero mark, even in the low year, 1932.

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

Of interest is the relationship between size of company and earnings rates, a relationship holding in both years: the smaller the corporation, the lower the rate of earnings. According to Appendix Table I the addition of officers' compensation to net income in 1931 raised the ratio of earnings of the smallest concerns above that of the other groups; but this was no longer true in 1932.

We must bear in mind certain qualifications in interpreting these figures. First, it is natural to expect a shift of unprofitable companies to smaller size-groups as their net assets dwindle; for this reason alone the rates of earnings in these classes tend to be lower. But it is doubtful whether this factor is of great importance. More serious is the second possibility, that small concerns show more or less fictitious deficits on their balance sheets, owing for example to the practice of accruing compensation of officers (for tax purposes), and balancing these accruals by loans from officers and by other means. The net worth figures, therefore, would understate stockholders' equity, and result in an overstatement of rates of loss. The data available do not segregate loans by officers and stockholders from other 'miscellaneous' liabilities, but even if the total of miscellaneous liabilities is added to net worth, the ranking of the rates of earnings is unchanged (although their level is of course modified). Third, deficits may accumulate as a result of several years of losses, wiping out most of stockholders' equity; yet concerns may continue in existence, operating with borrowed capital. In such instances, the rate of loss on capitalization is very large.8 Since more small business enterprises operate on a narrow equity than do large concerns, the former tend to report these greater rates of loss. But the changes that would be made in Table 3, were we to omit accumulated deficits from capitalization, would not be sufficient to alter the relative ranks of size-groups, nor would the levels of the earnings rates be greatly modified. Fourth, the capital figures are as of the end of the year. The earnings rates of companies with large losses are therefore somewhat exaggerated. If the average amount of

<sup>3</sup> See R. C. Epstein, op. cit., p. 463; also pp. 572-5.

It This would also be true if we were to subtract such sources of income and loss as dividends received from other companies and loss on sale of capital assets. If we do so, to approximate the return from 'operations', the average net income of large companies with assets exceeding 50 million dollars is transformed into a slight loss (-0.4 per cent on capitalization). Net profits (including interest on fixed indebtedness) remain positive, however. accounts to be revised upwards.

Even at the bottom of the trough of the last wave of capital during the year were used the rates would not be large companies) may, in times of depression, resort to various bookkeeping expedients to maintain an apparent continuity of earnings. The indistinct borderline between charges to capital and charges to current operations makes the use of such expedients possible. But some uniformity of accounting procedure is enforced by the income tax regu-

> On the whole, therefore, the following conclusion seems justified: In 1932, at the low point of the depression, very large corporations were, in the aggregate, still making profits. In that year rates of earnings appeared to be definitely related to size of concern; the smaller the company, the larger (on the average) was the rate of loss.

> These facts, it should be stressed, are true of a year of depression. We cannot assume that the same relative earnings positions of large and small concerns existed in 1929. Indeed, to the extent that the great losses, relative to capitalization, suffered by small companies in 1932 were a consequence of operating on a narrow equity, the reverse may easily be true. However, no statistical basis for judgment as broad as that at our disposal for 1931 and 1932 is available for earlier years.

### PROFITS BY INDUSTRIAL DIVISION

We turn now to another principle of classification, that based on industry. Earnings rates by industrial groups for the years 1929-33, inclusive, appear in Table 4. (Supplementary data including return to management as well as to capital appear in Appendix Table II.) Rates of return on capitalization for 1929, 1932 and 1933, are charted in Figure 1.

The identity of the industrial groups that gained most in the upturn from 1932 to 1933 is a striking feature of the chart and table. Only four industries-mining, public utilities and transportation, tobacco products, and finance and real estate—declined in this period in respect of earnings rates. The first two fell only fractionally, however, and final data for 1933 may reveal no declines whatever.5 The tobacco products group remained at a high level even after the decline in its earnings. All other industries either increased their rates of earnings in 1933, or decreased their

Among corporations manufacturing textiles and leather and leather products, especially, the rises were phenomenal. In both these industries the rates of return on stockholders' equity in 1933 were higher than in 1929. This, as would

<sup>5</sup> Corporations with fiscal years ending in 1934 and therefore with greater net profits will be included. Further, more stringent requirements as to depreciation charges may cause some income

TABLE 4 RATES OF EARNINGS OF CORPORATIONS IN THE UNITED STATES, 1929-1933 CLASSIFIED BY INDUSTRY 1

(in percentage form)

	RATIO OF NET INCOME TO CAPITALIZATION 2					RAT	RATIO OF TOTAL PROFITS TO TOTAL CAPITAL <sup>2</sup>			
	1020				1022#	10.20	1930	1931	1932	1933*
INDUSTRIAL GROUP	1929	1930	1931	1932	1933*	1929				1.9
Mining and quarrying <sup>3</sup>	2.9	0.0	2.8	-2.8	2.9	3.2	0.6	-1.8	-1.8	
Manufacturing	8.6	2.7	1.0	3.6	0.7	8.3	3.0	-0.3	-2.6	1.2
Construction	7.8	5.7	0 <b>.9</b>	<del> 7.8</del>	-4.6	7.4	5.6	0.3	5.2	-2.6
Public utilities and transportation	6.5	4.0	2.3	0.7	0.6	5.6	4.1	3.1	2.2	2.1
Trade	5.1	-0.5	-4.4	<b>7.2</b>	-0.3	5.2	0.0	-3.3	5.9	0.4
Service	4.3	2.0	-2.2	-10.0	-7.6	4.6	3.0	0.2	-3.2	1.8
Finance and real estate	5.8	1.8	-1.5	-3.8	5.2	5.7	2.6	0.2	-1.5	-2.6
Grand total4	6.6	2.4	0.7	-2.9	1.2	6.2	2.9	0.7	-0.9	0.4
MANUFACTURING SUBGROUP										
Foods, beverages and tobacco products	8.1	6.6	4.2	2.3	5.4	7.8	6.5	4.4	2.7	5.4
Foods and beverages		••••	2.5	0.3	5.2	••••	••••	2.9	1.0	5.3
Tobacco products			13.5	13.1	6.5	••••		12.8	12.6	6.4
Textiles and products	3.0	-6.0	-6.4	-8.0	3.1	3.1	5.3	-5.7	-7.2	3.2
Leather and products	3.9	-3.2	-5.0	-6.6	4.4	4.0	-2.9	-4.5	-6.1	4.4
Rubber products	2.5	-4.5	-2.5	-4.2	1.1	3.2	-2.2	-0.6	-2.0	2.1
Forest products	2.5	-4.6	-8.3	10.3	-3.1	2.7	-3.6	-6.8	-8.4	-2.1
Paper, pulp and products	6.5	2.9	-0.5	-3.4	0.6	6.3	3.3	0.4	-1.9	1.4
Printing and publishing	12.1	8.0	2.4	-1.4	0 <b>.9</b>	11.1	7.6	2.9	0.4	1.5
Chemicals and allied products	10.3	5.2	1.1	0.4	1.7	9.8	5.2	1.6	0.9	2.1
Stone, clay and glass products	6.4	1.8	2.0	-6.1	-1.4	6.3	2.2	-1.2	4.7	-0.6
Metals and products	11.1	3.4	-2.0	-6.4	-1.6	10.7	3.6	-1.3	5.2	-0.9
Total manufacturing	8.6	2.7	-1.0	-3.6	0.7	8.3	3.0	-0.3	-2.6	1.2

\*Preliminary estimates.

<sup>1</sup> Tax-exempt corporations and life insurance companies are excluded.

3 The accepted methods of computing depletion charges tend to understate the income of mining companies.

4 Includes corporations not distributed among the groups shown. The number is relatively small.

be expected, is partly the result of a decline in net worth really prosperous condition in 1929. Nevertheless, the rise from 1932 of over 10 points (measured in percentages of capitalization) is substantial. Companies engaged in trade and in the manufacture of forest products also showed large favorable changes, but in the form of decreases in rate of loss, not sufficient to lead to a net profit.

Of the four industries still making profits in 1932 two suffered declines. The durable goods industries (lumber, stone, metals and construction) remained below the zero line, although their earnings positions, relative to the pre- ly, compensation of officers in 1933 is not yet available. ceding year, were enhanced.

the red'. Of the major industrial groups only manufacthe group of trading corporations was close to the zero line.6

6 Since the 1933 figures are preliminary estimates slight differences are of doubtful significance.

In terms of earnings on total capital (including bonded due to previous losses as well as to failures and voluntary debt and mortgages) the picture is much the same. The liquidations. Further, neither of these industries was in a relative position of the public utility group is of course improved. If we add compensation of officers to earnings (see Appendix Table II), to approximate a measure of return to both capital and management as well as to correct for under-reporting of profits by small concerns (which are more numerous in certain industries), relative positions are again changed somewhat. This is especially true of construction, trade, printing and publishing, and other industries in which small concerns predominate and in which the personal element is relatively important. Unfortunate-

The figures for narrower industrial groupings than those In 1933, but three manufacturing industries were 'in given in Table 3 are not published in complete form. It is possible only to record the presence or absence of a statuturing and public utilities showed a profit, however, while tory net income or deficit (net income as defined here, before taxes, less tax-exempt interest and dividends received) for certain minor groups for the period 1929-32. Net deficits for each of these four years were reported for the following groups:

Coal mining: bituminous, lignite, and peat

Woolen and worsted goods

Finishing and tanning leather, and miscellaneous leather products

Radios: complete or parts

Aerial transportation

Amusements: theatres, legitimate, vaudeville, etc.

Joint-stock land banks

Net incomes were reported for each year, 1929-32, inclusive, for the following groups:

Food products: bakery and confectionery products

Mill products: bran, flour, feed, etc.

Beverages: soft drinks, cereal beverages, wines, distilling Other food products: artificial ice, butter substitutes, cereals, coffee, etc.

Tobacco products

Chemicals proper: acids, compounds, etc.

Allied chemical substances: drugs, oils, paints, etc.

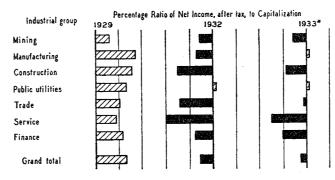
Electric light and power companies Gas companies, artificial and natural

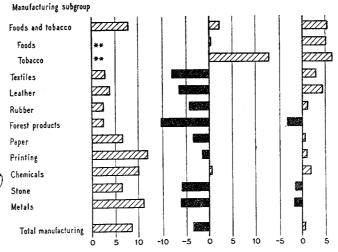
Telephone and telegraph companies

Water companies

Because of possible shifts in classification, it is not advisable to attempt to add together the data for different years.

### Figure 1 RATES OF EARNINGS OF CORPORATIONS IN THE UNITED STATES





<sup>\*</sup>Preliminary estimates

All that can be shown here is the continuous presence or absence of a deficit. The possibility of one good year making up for three or four bad years must, however, be remembered.

Among the public utilities, steam railways appear in an unfavorable position, in contrast to other subgroups. Information published by the Interstate Commerce Commission indicates that the net income of Class I steam railways was negative in 1932 and close to zero (on the negative side) in 1933.

#### TABLE 5

### RATES OF EARNINGS OF CORPORATIONS IN THE UNITED STATES, 1933 AND 1934

### BASED ON PUBLISHED REPORTS OF 840 COMPANIES 1 CLASSIFIED BY INDUSTRY

. 1	PERCENTAGE COVERAGE <sup>2</sup>	TO CAPITAI	F NET INCOME TALIZATION, <sup>3</sup> ENTAGE FORM		
INDUSTRIAL GROUP		1933	1934		
Mining	8.4	1.1	4.4		
Manufacturing	27.0	3.2	4.6		
Trade	8.4	10.5	11.5		
Service	12.3	-0.4	2.7		
MANUFACTURING SUBGROUP					
Foods	35.4	5.6	6.2		
Tobacco products	59.5	9.7	11.7		
Textiles and products	18.9	3.7	0.5		
Leather products	27.8	6.9	8.0		
Rubber products	43.7	3.6	3.6		
Paper and pulp	10.9	1.0	4.4		
Chemicals and allied produc	ts 13.3	6.3	8.1		
Metals and products	38.0	0.5	2.4		
1 Compiled by the National City	Bank				

<sup>2</sup> The net worth of corporations in the sample, at the beginning of 1933, as a percentage of the net worth of all corporations in the same industrial group.

8 Book values are as of the beginning of the year.

Data concerning earnings of all corporations during 1934 are not yet available. We may, however, turn to current compilations of the reports of large companies, recognizing that they form a selected group, and that their earnings rates throw light not on the levels of rates of return of all corporations but on the direction of movement of these rates. The earnings rates are presented in Table 5, together with a measure of the degree to which each industry is covered. The industrial groups given have been made to correspond, as far as possible, to those in Table 4.

The net incomes of all groups rose from 1933 to 1934, with but two exceptions. The published statements of textile companies revealed a severe decline in income, a decided contrast to the movement from 1932 to 1933. Rubber manufacturers experienced no appreciable change in profits. The earnings of certain industrial divisions not represented here, notably the public utilities, decreased between 1933 and 1934.

While the sample in Table 5 is of limited value in indicating earnings of all corporations in the United States,

<sup>2</sup> Book values are as of the end of the year; for 1933, 1932 values have been used. Statistics of Income for 1932 confirms the fact, indicated in the 1931 volume, that the capital of corporations not reporting balance sheets is of small magnitude; no estimate of it was therefore deemed necessary: hence the slight differences between the rates shown here for 1929 and 1930 and those published in Bulletin No. 50. The figures for 1931-33 refer only to corporations reporting balance sheets.

<sup>\*\*</sup> Not available.

of 1933 were barely surpassed in 1934.

#### PROFITS BY SIZE AND BY INDUSTRY

We may now combine the two principles of classification previously used, and contrast earnings of large and of small concerns within the same industry. The necessary information is available only for 1931 and 1932 and for one earnings ratio, that of net income (before tax, in this case) to capitalization. The figures for 1932, the low point, are summarized in Table 6.7

With some exceptions, the average rate of earnings generally improves as the size of company increases. Indeed, in several industries in which the composite rate of return is negative that for large companies is positive. (The period covered, it must be repeated, was one of severe depression.)

In the comparison of small companies as a group with large companies as a group, such as was made in Table 3.

7 It is unnecessary to give the figures for 1931 since they, together with other financial and operating ratios by size groups, have been analyzed in detail by W. L. Crum: The Effect of Size on Corporate Earnings and Condition (Harvard University, Business Research Studies, No. 8, June 1934).

it is possible to state with confidence that 1934 was a more we were not concerned with variation in average size of profitable year than 1933. Certainly, 1934 was less un- corporation from industry to industry. But if we wish profitable than 1933. But the rate of improvement be- to concentrate, as in Table 6, on the relation of size to tween 1933 and 1934 was not as great as that between profitability with the effects of industrial differences elim-1932 and 1933. A definite slowing up is revealed by the inated, it is pertinent to inquire whether the industrial annual data. This fact is confirmed by reference to avail- groups are homogeneous. That is, do the broad classificaable quarterly statistics of profits. The last two quarters tions used here, by confining comparisons to the companies within groups, make differences in rates of return due to size alone stand out? For many purposes the homogeneity of these groups may probably be questioned. On the other hand, there is sharp contrast in the character of large- and small-scale enterprise. Different personal elements are involved; operations of large companies are more extensive and include more different kinds of business than those of small firms. Small concerns are articulated in the economic system differently than are large companies. In short, 'industry' and size are definitely related. Any narrow definition of 'industry' leaves no room for both small and large companies in the same industrial group. On the whole, therefore, while the industrial groupings available for use here are wide, they aid in eliminating at least some forces acting alike on large and small companies within the same group. Yet the contrast in earnings rates of large companies to those of small concerns persists to a considerable degree. It may be doubted, therefore, whether the element of heterogeneity involved in the wide industrial groups used here vitiates our conclusion. Size of concern appears to have been related, on the average, to rate of return on stockholders' equity, at least in the depression year 1932. (This was true also in 1931.)

TABLE 6 NET INCOME, BEFORE TAX, AS A PERCENTAGE OF CAPITALIZATION, 1932 CORPORATIONS CLASSIFIED BY SIZE AND INDUSTRY (size is measured by total net assets, in thousands of dollars)

INDUSTRIAL GROUP Mining and quarrying Manufacturing Construction	UNDER 50 52.0 35.5 43.3	50- 100 10.3 16.1 19.0	100- 250 — 6.2 —11.3 —12.8	250- 500 4.0 8.6 9.2	500- 1,000 3.4 6.6 6.3	1,000- 5,000 —1.9 —5.5 —0.8	5,000- 10,000 —1.8 —3.8 	10,000- 50,000 —1.5 —3.9	50,000 AND OVER —2.8 0.0	CLASSES GROUPED <sup>1</sup>  2.0	1,000 AND UNDER — 6.0 —11.0 —15.6	OVER 1,000 2.2 2.1 0.7	TOTAL 2.7 3.3 7.4
Public utilities and transportation	18.8	<b></b> 7.7	<b></b> 3.1	2.2	5.7	0.6	0.0	1.6	1.1	••••	<b>—</b> 6.1	1.1	1.0
Trade	<del>-30.0</del>	14.2	11.1	8.4	<b>—</b> 6.5	5.0	-1.8	0.9	3.3	••••	<del></del> 13.0	-1.3	<b>—</b> 6.9
Service	-40.5	-24.4	<b>—</b> 8.5	<b>—</b> 5.9	— 6.6	-8.4	-8.6	****		8.2	12.8	-8.3	9.8
Finance and real estate	<del>-31.1</del>	8.6	7.7	<b>—</b> 5.8	5.8	-4.5	5.5	-2.6	1.1	••••	<del> 7.8</del>	2.0	<b>— 3.2</b>
Grand total <sup>2</sup>	32.8	13.8	<b>— 9.</b> 7	<b>—</b> 7.1	<b>—</b> 6.1	-4.6	<b>—3.8</b>	2.4	0.5	••••	-10.4	1.2	— 2.6
MANUFACTURING SUBGROUP													
Foods and beverages	20.1	<b>—</b> 9.2	6.9	2.7	- 1.0	-0.5	0.1	-0.7	. 5.8		<b>—</b> 5.4	2.1	0.8
Tobacco products	25. <b>4</b>	4.8	<b>— 1.1</b>	<b>— 3.0</b>	<b>— 4.7</b>	4.0	••		•	16.5	<b>—</b> 4.3	15.6	15.1
Textiles and products	50.2	-21.6	13.3	<b>—</b> 8.9	<del> 7.6</del>	5.6	8.2		••••	5.2	13.4	-5.9	7.9
Leather and products	-45.2	19.8	-11.6	-13.1	10.5	<del>-7.6</del>	-8.6			3.3	14.5	-2.9	— 6.2
Rubber products	-37.3	7.0	13.2	4.9					•	4.0			<b>— 4.2</b>
Forest products	-53.9	-26.9	19.1	-17.2	-12.3			•		6.9	-18.4	6.9	-10.2
Paper, pulp and products	28.2	10.7	<del></del> 7.0	<b>— 4.7</b>	<b>—</b> 2.3	4.4	1.5	••••		-2.7	5.4	-3.0	<b>— 3.3</b>
Printing and publishing	-26.1	-13.1	<b>—</b> 6.2	<b>— 2.0</b>	— 1.3	0.1	5.6			1.0	<b>— 7.2</b>	1.5	<del></del> 1.0
Chemicals and allied products	24.6	— 8.6	<b>— 5.4</b>	1.7	0.2	2.5	2.0	0.3	0.7		<b>— 3.8</b>	0.8	0.6
Stone, clay and glass products	35.1	-15.0	-12.1	-11.0	<b>—</b> 7.6	6.9	-5.5	••••		-2.7	11.8	-4.3	<b>— 5.9</b>
Metals and products	-40.1	-18.2	14.4	12.2	9.7	9.7	6.9	<del></del> 7.5	-3.5		13.7	-5.4	6.3
Total manufacturing <sup>2</sup>	35.5	—16.1	11.3	8.6	— 6.6	<b>—5.5</b>	3.8	3.9	0.0	••••	11.0	-2.1	<b>— 3.3</b>

<sup>2</sup> Classes grouped to conceal data reported and identity of corporation.

#### DIVIDEND PAYMENTS AND CORPORATE SAVINGS

The decline in profits and the appearance of losses did not, of course, affect dividend payments immediately. The natural lag, and the fact that not all companies suffered losses, helped to sustain the stream of dividend payments even though the reservoir from which they flowed was not replenished, in the aggregate. In an effort to take care of holders of common stock as well as those of preferred stock, even concerns that suffered losses continued to declare and pay dividends. The savings of the preceding years of prosperity were drawn upon.

The figures for the recent period appear in Table 7.

### TABLE 7 DIVIDEND PAYMENTS AND ANNUAL CORPORATE SAVINGS IN THE UNITED STATES 1929-1933

### (in millions of dollars)

YEAR	NET INCOME BEFORE		ANNUAL
	PAYMENT OF DIVIDENDS	NET CASH	CORPORATE SAVINGS
	BUT AFTER PAYMENT OF	DIVIDENDS	(UNDISTRIBUTED
	INCOME TAXES <sup>1</sup>	PAID <sup>2</sup>	NET INCOME)3
1929	7,950	5,780	2,170
1930	1,260	5,660	-4,400
1931	<b>—3,24</b> 0	4,200	<b>—7,44</b> 0
1932	<b>—5,47</b> 0	2,640	-8,110
1933*	-2,520	1,950	<b>—4,47</b> 0

<sup>\*</sup>Preliminary estimates.

The corporate saving shown is of course a net figure. Although it was negative from 1930 through 1933 (and there is some evidence that it was negative also in 1934), some corporate earnings were saved. Even in 1932 at least some \$130,000,000 were accumulated by corporations with net income.8

The situation revealed is a dark one. In the aggregate, the drain in the form of losses and dividends for the period 1930-33 exceeded the corporate savings of the entire post-War decade. But some corporations suffered less than others. In particular, if the large companies in which dividends are the chief means of distributing profits are considered separately, the draught upon surplus and capital does not appear so great.9 This is true also of the aggregate if losses on the sale of intercorporate security holdings are not included.

### BUSINESS ASSETS IN PROSPERITY AND DEPRESSION

The large draught upon capital and surplus in the years since 1929 has left its imprint upon the balance sheets of American business. It is interesting to trace the effect.

upon the condition and assets of business enterprise, of the changes recorded in corporate income accounts. We confine ourselves to the total, omitting the finance, real estate and service groups; 10 lack of space as well as shifts in classification make possible only incidental reference to the balance sheets of individual industrial groups.

The aggregate balance sheet of American corporations, excluding the groups mentioned, appears in Table 8. (Besides the dollar figures, relative numbers on the 1929 base are presented.) Our interest lies here chiefly in the asset side of the statement: the liabilities and capital items are given to complete the picture. Cash declined 1.4 billion dollars from 1929 to 1932; receivables, 7.6 billion; inventories, 8.7 billion; capital assets, 6.5 billion. Investments and miscellaneous assets were reduced by but 2.0 billion. On the other side of the balance sheet, current liabilities declined 5.9 billion dollars; long-term debt remained almost constant; and miscellaneous liabilities fell 2.9 billion dollars. GS The difference between these changes in assets and liabilities (17.5 billion dollars) was absorbed by capital, including surplus.

The uneven movements of these values arouse interest. What are the factors making for different degrees of change in the various assets of American business?

We would expect the total assets of business enterprises to decline simply because of the drain upon resources arising from losses and sustained dividend payments. Another important reason would be the liquidation of debts, especially short-term obligations to banks and other creditors. But not all assets could be expected to reflect this drain equally. Besides the conditioning elements originating in differences in liquidity and in business policy, the distribution of capital among different assets would be influenced also by price movements and by changes in the volume of production. The possibility of technological change (change in the technical ratio of equipment to stocks of goods and to number of employees), and the resulting changes in the

<sup>9</sup> The Standard Statistics Company publishes data for 418 large industrial corporations. The figures, with 1927 and 1928 included for purposes of comparison, follow:

> NET INCOME LESS CASH DIVIDENDS (millions of dollars)

	(
1927	565
1928	1,087
1929	1,218
1930	—11
1931	<b>—761</b>
1932	—809
1933	63

<sup>&</sup>lt;sup>10</sup> It is desirable to omit realty concerns, banks and other financial institutions from the present discussion. Owing to certain changes in classification this makes it necessary, also, to exclude service companies.

Includes corporations not distributed among the groups shown. The number is relatively small

<sup>1</sup> See Table 1; also footnote 2 to that table.

<sup>&</sup>lt;sup>2</sup> The 1933 figure has been estimated from reports of large companies. 8 Figures for the period 1919-28 appear in Bulletin 50, p. 10.

<sup>8</sup> This is the annual savings of corporations with statutory net income. It understates the annual savings of all corporations with savings in 1932, because of negative savings of some corporations with statutory net income.

TABLE 8 AGGREGATE BALANCE SHEET, 1929-1932 ALL CORPORATIONS OTHER THAN FINANCE, REAL ESTATE AND SERVICE COMPANIES

		(in millions	of dollars	)	(as	(as percentages of 1929)			
	1929	1930	1931	1932	1929	1930	1931	1932	
Assets									
Cash	7,460	7,513	6,283	6,106	100.0	100.7	84.2	81.8	
Notes and accounts receivable (net)	21,849	19,831	16,829	14,281	100.0	90.8	77.0	65.4	
Inventories	20,799	18,070	14,692	12,077	100.0	86.9	70.6	58.1	
Capital assets (net)	94,813	98,322	93,947	88,307	100.0	103.7	99.1	93.1	
Investments							P		
Tax-exempt	2,913	2,572	2,561	2,677	100.0	88.3	87.9	91.9	
Other <sup>2</sup>	S20 400	40 140	34,586	26,246	{100.0	101.9	87.8	94.9	
Miscellaneous assets	39,400	40,140	34,380	11,157	}100.0	101.9	87.0		
Total	187,234	186,448	168,898	160,851	100.0	99.6	90.2	85.9	
Liabilities and capital								-	
Notes and accounts payable	19,845	18,268	15,411	13,954	100.0	92.1	77.7	70.3	
Bonded debt and mortgages	34,944	37,485	35,465	34,907	100.0	107.3	101.5	99.9	
Miscellaneous liabilities	15,368	14,436	11,982	12,464	100.0	93.9	78.0	81.1	
Capital stock									
Preferred	15,352	14,793	15,166	15,200	100.0	96.4	98.8	99.0	
Common	63,705	64,461	59,734	59,576	100.0	101.2	93.8	93.5	
Surplus and undivided profits less deficit	38,020	37,005	31,140	24,750	100.0	97.3	81.9	65.1	
Total	187,234	186,448	168,898	160,851	100.0	99.6	90.2	85.9	

<sup>1</sup> Excluding tax-exempt corporations and companies not reporting balance sheets.

2 Figures for 1929-31 are not given here since there is evidence that some investments were not separated from miscellaneous assets in the earlier reports.

be remembered; no facts relating to this point may be adduced in this Bulletin.

Differences in liquidity are important in a consideration of the changes revealed in Table 8. Turnover rates (or average life of assets) differ from one kind of asset to another and from one industry to another, and condition the rate of liquidation. The liquidity of capital assets in the economy as a whole, for example, is indicated partly by the ratio of depreciation and depletion charges to the net book value of capital assets. Contrast the value of this figure, a few per cent per annum in the case of capital assets, to the turnover rates of stocks of goods, which run to several hundred per cent per annum. On the other hand, replacements also affect the relative proportions of the different assets in the aggregate balance sheet under review. In the case of fixed assets, certain repairs and replacements are essential if a plant is to be kept in operation, even at a low rate. Inventories must be carried, if business is to be done at all. But the extent of replacement fluctuates, depending on forecasts of the future, as well as on the current volume of production. (The value of replaced assets will change, further, because of price movements.)

New investments must also be considered in analyzing the changes recorded in Table 8. Not all corporations lost money, even in 1932. But the new capital derived from security flotations declined rapidly in recent years, while total corporate savings were negative. According to compilations of the Standard Statistics Company, new-money

relative and absolute values of different assets, must also issues declined from 3,668 million dollars in 1929 to 321 million in 1932. Even if these be stepped up substantially in order to include the financing of small companies not floating public issues, the net result, after subtracting negative corporate savings, is a decline in invested capital. In the face of this lessening of means new investment could not persist at old levels, and even replacements could not, in many instances, be made. Further, the desire to make such commitments waned.

> Changes in the value of unliquidated assets may occur also. Book values of capital assets may be written down to take cognizance of obsolescence and of changes in price levels. In the event of receivership and reorganization this process would be forced. But in many instances it may result from a voluntary admission of the facts.

> Failures followed by withdrawal from business would result in declines in the value of different assets reported by all corporations, including fixed assets. But while withdrawals were numerous, their importance in terms of assets or capital, or even liabilities, was not so great. The Dun and Bradstreet figures provide information on the last item, for commercial establishments.<sup>11</sup> For the years 1929-32,

11 Failures or other retirements from business with no loss to creditors are not covered by the Dun and Bradstreet compilations. No reliable evidence is available concerning these voluntary retirements from business. Indeed, no reliable figures are available as to the number of business concerns in the United States for a series of years, or even for one year. While the number of corporations reporting to the Bureau of Internal Revenue declined but slightly, in the total or in the various industrial groups,

inclusive, liabilities of failing commercial concerns amount- and 12 others defaulted on fixed indebtedness. The comed to 2.815 million dollars. As percentages of total corporate liabilities (current and fixed) of similar industrial groups, the figures are: for 1929, 1.8 per cent; 1930, 2.6 per cent; 1931, 3.2 per cent; and 1932, 4.1 per cent. These percentages, it must be remembered, overstate the correct figures since liabilities of corporate enterprises alone appear in the denominators. Also, if 1929 failures are taken to be 'normal', only part of the failures in 1930-32 may be ascribed to forces resulting from the depression. This would reduce the 1932 figure, for example, to 2.3 per cent.12

Large companies that suffer insolvency and receivership do not ordinarily go out of business. They are reorganized, usually with revaluation of assets. The magnitude of these failures may be indicated by analysis of published reports. Of 492 large industrial companies whose records were examined, 27 fell into receivership in the period 1931-34,18

this may be due to the lag between economic retirement and the legal winding-up of corporate affairs. The number of partnerships has declined, but this appears to be part of the trend noticeable before 1929. The number of concerns on the Dun and Bradstreet list (which includes corporations and partnerships) fell 11 per cent from 1929 to 1933. (A rise from 1933 to 1934 is revealed by this series.) Census data on number of establishments and stores do not correctly represent the changes in number of business enterprises, chiefly because of varying percentage coverage from year to year. The available figures are assembled below. Only net changes in number of enterprises are indicated by these data. The last line of figures duplicates, of course, some of the corporations and partnerships.

NUMBER OF BUSIN		rerprise thousan		HE UNIT	ED STAT	E8
	1929	1930	1931	1932	1933	1934
Active corporations reporting to the Treasury Depart- ment						
a. including sub- sidiaries b. excluding sub-	486	495	491	481		
sidiaries Partnerships report-	456	463	460	452	443	
ing to the Treas- sury Department Commercial concerns	264	245	230	217		
listed by Dun and Bradstreet	2.213	2.183	2.125	2.077	<b>1.9</b> 60	1.97

12 Liabilities, of course, do no more than roughly suggest the magnitude of the losses to holders of equities or to creditors. Some indication of credit losses, as they are suffered by corporations, is given by the bad debts charged off. For all corporations this was 900 million dollars in 1929, and 1,300 million in 1932, an increase of 400 million. If we substract trading and service corporations, in an effort to eliminate bad debts incurred in retail trade, the figures for corresponding years are 700 and 1,000 million. The increase in losses on short-term credit, it would seem, was not large, relative to the volume of bad debts in a prosperous year such as 1929.

panies in receivership owned 3.0 per cent of the invested capital of the 492 companies in 1929, and the defaulting companies 2.1 per cent, 5.1 per cent altogether.

Some instances of voluntary write-down, not accompanied by insolvency, exist. The available evidence, as we shall see, indicates that this form of response, while it resulted in deductions of several billion dollars in the aggregate, could not be expected, in itself, to result in great modification of balance sheet values.

Current stocks of commodities may also be revalued to correspond to market conditions. Reserves for inventorydecline may be set up; and inventories may be valued at market when market prices are lower than cost. The lastmentioned practice is widespread: of 334 companies with available reports, 276 valued their commodity stocks at the lower of cost or market price.14

The net results of all these changes in value and quantity of assets are reflected in the aggregate balance sheet appearing in Table 8, which we may now examine in more

Public utilities were chiefly responsible for the rise in capital assets from the end of 1929 to the end of 1930. For them especially, 1930 was still a good year, and the momentum of long-term planning and capital investment continued into the first year of general recession. By the end of 1931 a net decline in the capital assets of all corporations had been recorded, however, and this continued into 1932.

The decline of ten billion dollars in the two-year period from 1930 to 1932 was relatively small—about ten per cent of total capital assets in 1930. Yet the fall in book value of capital assets exceeded depreciation and depletion charges, 15 although if account be taken of new investment

<sup>13</sup> It is interesting to compare these figures with those of Dun and Bradstreet for commercial concerns in general. The failure rate in the latter group was 1.3 per cent in 1931, 1.5 in 1932, 1.0 in 1933, and 0.6 in 1934. For the 492 large companies, the corresponding rates were: 1931, 0.4 per cent; 1932, 1.8 per cent; 1933, 2.2 per cent; 1934, 1.0 per cent. (The sample of large companies is perhaps insufficient to constitute an adequate basis for generalization.)

"Data compiled by the Statistical Division of the American Telephone and Telegraph Company. The bearing of this practice upon the recording of profits must be mentioned. In a year in which prices turn downwards, such as 1929, reported profits of all corporations would be lower by several hundred million dollars than if inventories had been valued at cost. Conversely, in a year such as 1933, reported profits would be higher.

<sup>15</sup> Depreciation and depletion charges, 1931-32, were reported as follows, in millions of dollars.

1931

1932

ALL CORPORATIONS OTHER THAN FINANCE, REAL ESTATE AND SERVICE COMPANIES depreciation depletion 260 3,460

3,170

240

and replacement, there would be no such excess. It is appression without giving way completely and without radical parent, then, that some of the decline in value of fixed assets was due to deductions other than those for wear and tear and depletion. These consisted chiefly of 'writeoffs' and 'write-downs', together with such items as losses on sale of capital assets, retirement and abandonment of property, and losses due to accidental destruction. (Some reduction in value resulted also from the replacement of retired equipment at prices lower than former book value.)

Besides the difference between the decline in value of capital assets and charges for depreciation and depletion, we find that an additional sum of some six billion dollars, for purchases of new capital goods, must be accounted for by 'other' deductions.<sup>16</sup> If we add this figure to the three billion dollar decline in capital assets unaccounted for by depreciation and depletion charges (ten billion less seven billion) we have a sum close to nine billion, which we must remember probably somewhat overstates the correct figure." This is the amount that represents 'write-offs' and 'writedowns' for 1931 and 1932, as well as types of capital attrition not included under depreciation charges. The result is not only that originating in voluntary revaluation, but also that due to forced changes in value arising from failure and reorganization.

Write-downs and write-offs, in dollars, reached a large figure. But relative to the degree of fall in prices, and to the amount of obsolescence probably uncovered during the depression, the amount does not seem great. (Another element to be considered is the upward revaluation of assets made in the preceding period of prosperity.) There is reason for this apparent inertia. For one thing, government tax policy has made difficult any write-downs exceeding 'normal' depreciation charges. For another, uncertainties concerning the future course of the price level have caused business men to hesitate before accepting depression prices as permanent. An important factor making possible this hesitation may be the organization of a considerable portion of American business in large units. Great enterprises are powerful enough to withstand even a severe de-

<sup>16</sup> Of the nine billion dollars of new capital goods made in 1931 and 1932 for business purposes (Table 10, Bulletin 52 of this series) we may estimate roughly that 65 per cent was purchased by corporations other than those of the finance and service group. (This figure is the ratio of depreciation charges of these companies to total business depreciation.) This amounts to six billion, and may be an overstatement: government purchases as well as some tools and materials normally charged to repairs and renewals are not completely eliminated; and the ratio based on depreciation charges is perhaps larger than the correct proportion.

<sup>17</sup> Reference to changes in net worth of all companies, after allowing for new security issues and draughts due to negative corporate savings, confirms roughly the order of magnitude of this figure.

reorganization of book values and of policies.18

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

Recognition of losses, through revaluation, might have had some beneficial effects. The psychological state of business men would have been improved. And from the point of view of accounting, some confusion of capital with current charges would have been avoided: present and future profits history would be different. But that current replacement costs, obsolescence, and other developments were recognized to some extent, we here have evidence. The degree to which the atmosphere was thereby cleared we can only surmise.

Let us turn to the other assets listed in Table 8. The decline in cash from 1929 to 1932 was surprisingly small, only 18 per cent. (Banks, it must be remembered, are excluded.) Other current assets, of course, fell, as a result of the decline in prices and in volume of business. While receivables (notes and open accounts) exceeded notes and accounts payable by two billion dollars in 1929, the balance was but a seventh of that figure at the end of 1932. Inventories did not fall proportionately to the volume of business; consequently, turnover rates declined. (This was true in every industrial group except one, textiles.)

Working capital, taken as the difference between current assets (cash, notes and accounts receivable, inventories, and tax exempt investments) and current liabilities (notes and accounts payable), declined considerably (34 per cent from 1929 to 1932). This was also true, in greater or lesser degree, of each industrial group. The liquidation of fixed capital could not proceed more rapidly than these goods could be consumed. (The possibility of transfer to noncorporate enterprise may be ignored.) Buildings, machinery, furniture and fixtures—these are not current assets. It is apparent therefore that the drain upon working capital due to losses and dividend payments could not be replenished by the depreciation fund. Nor, indeed, was the entire depreciation fund available for such a purpose. Cer-

18 That very large companies did not, in fact, revalue their assets even to the extent indicated above is suggested by figures compiled by the Standard Statistics Company from the reports of 418 major industrial companies. Debit adjustments of surplus (which include items besides revaluation, and also include stock dividends, and therefore overstate write-downs) were as follows, in millions of dollars. (Data for 1927 and 1928 are given for purpose of comparison.)

YEAR	SURPLUS DEBITS	TOTAL ASSETS
		(END OF YEAR)
1927	584	(END OF YEAR) 27,998
1928	512	29,778
1929	625	32,218
1930	324	32,261
1931	678	30,520
1932	527	28,267
1933	391	27,837

low, and the volume of business small, less working capital was in fact required. Indeed, since the figures shown here are aggregates, it is obvious that in many companies the portion of working capital accumulated as a reserve may have actually increased. But in any event working capital, in the form of liquid assets, was insufficient to finance the requirements that an upturn would bring. The major portion of new working capital lay nascent in the fixed assets of all corporations; the credit-making mechanism of our banking system was needed to quicken it into life.

Long-term debt-bonds and mortgages-changed very little from 1929 to 1932. Since fixed assets fell, the ratio to them of long-term debt rose. This occurred in most industrial groups, including those in which long-term debt bulks large.

Little can be said about miscellaneous assets and liabilities, since they include a considerable amount of intercorporate holdings and debts. Miscellaneous assets include also intangibles and deferred charges, while miscellaneous liabilities cover miscellaneous reserves, and deferred and suspense items.

What was the picture at the end of 1933? In the absence of data covering all corporations, some remarks may be hazarded on the basis of published reports of large companies. Figures for 535 industrial corporations, compiled by the Standard Statistics Company, reveal the following changes between 1932 and 1933:

	PERCENTAGE CHANGE
ASSETS	1932 то 1933
Cash and equivalent	5.9
Receivables	+ 1.0
Inventories	+10.8
Property accounts (net)	<b>— 4.1</b>
Investments	+ 2.1
Intangibles	<b>— 7.6</b>
Other fixed assets	- 5.2
Total	<b>— 1.6</b>
LIABILITIES	•
Current	+15.7
Funded debt	6.4
Other liabilities	3.9
Preferred stock	- 2.2
Common stock and surplus	- 1.7
Capital reserves	- 1.4
Total	- 1.6

Fixed capital assets appear to have declined further, in spite of the up-turn in volume of business. On the other hand, the value of stocks of goods rose rapidly. Net working capital, however, changed but fractionally. One interesting item not available for all corporations, intangibles, fell by

tain forms of replacement and repairs cannot be foregone, more than seven per cent-a decline greater than that of if the plant is to be kept even in partial operation. The any other asset. The rise in receivables, only one per cent, decline of 12 billion in working capital from 1929 to 1932 is in contrast to the large increase of 16 per cent in curwas therefore a natural consequence. But since prices were rent liabilities. With dividend payments still exceeding net income, net worth declined slightly.

#### SUMMARY

At the bottom of the depression, in 1932, only four industries were making profits: public utilities, foods, tobacco products, and chemicals. In all industrial groups in that year small corporations were relatively worse off, on the average, than large companies.

The deficit accumulated during the years of depression had its effect upon the capital, assets, and condition of American corporations. Failures, reorganizations and writedowns mounted as profits fell and losses rose. But in contrast to the severity of the recession the extent of readjustment manifested through insolvencies and revaluations seems small. There are indications here of an important element of inertia, the influence of which must find a place in any explanation of the events of the last few years.

The rise from 1932 to 1933, while not eliminating losses in the aggregate, placed many manufacturing groups on a profitable basis, and decreased the deficits of other industries. The earnings of but four industries were lower in 1933 than in 1932; and two of these showed profits in

Cash dividends continued to fall. Not until 1934 did these lagging payments reflect the upturn of the preceding

In brief, 1932 was definitely the low point in the average earnings of business enterprise. The year 1933, with a few exceptions, showed considerable improvement over 1932 (chiefly in the form of a reduction in losses), and it is probable that 1934 was more favorable. Here are reflected the effects, upon business enterprise, of the interaction between the situation created by the preceding years of decline and the new factors injected into the scene of 1933. While business in the aggregate was not vet on a profitable basis in 1933, or perhaps even in 1934, fears of the end of the profits system must, in the light of the figures, be modified. Industry has always revealed great powers of adaptation and recuperation. What we find today constitutes no exception to this experience.

Other information on profits is contained in INDUSTRIAL PROFITS IN THE UNITED STATES, by R. C. Epstein (\$5). and Corporate Profits as shown by Audit Reports, by W. A. Paton (\$1.25), both published by the National Bureau of Economic Research. To the latter volume Mr. Fabricant contributed some sections. He is now working on a study of Capital Consumption.

BULLETIN readers may also wish to have cloth-bound