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

Volume Title: The Financing of Large Corporations, 1920-39
Volume Author/Editor: Albert Ralph Koch

Volume Publisher: NBER

Volume ISBN: 0-870-14132-5

Volume URL: http://www.nber.org/books/koch43-1
Publication Date: 1943

Chapter Title: Funds Retained from Operations

Chapter Author: Albert Ralph Koch

Chapter URL: http://www.nber.org/chapters/c5891

Chapter pages in book: (p. 76-90)

## FUNDS RETAINED FROM OPERATIONS

IN recènt years there has been much discussion in the literature of finance and economics concerning the importance of the total funds retained by large business corporations from operations -sometimes called "internal funds"-as contrasted to the funds secured from outside the business. "Funds from operations" is defined as the excess of business receipts over dividends and other expenses which require an immediate outlay of funds, such as wages, materials, taxes, and interest. In other words, this item is comprised of undistributed earnings, depreciation accruals and a residue that is sufficiently described here as "other funds retained from operations." ${ }^{2}$

Earlier studies of corporate financing underestimated the importance of funds retained from operations relative to other sources of business funds; more recently there has been some tendency to overestimate the significance of funds retained from operations and this has given rise to a considerable amount of misconception. It has been shown, for example, that funds retained from operations have tended over the two decades to approximate gross capital formation. This is variously interpreted: as proof that we are in a declining economy, or that capital markets are not contributing to the functioning of business, or that large corporations no longer need outside financing. These statements may or may not be correct. Their validity is not, however, established by the high ratio of funds retained from operations to gross capital formation, which was to have been expected for the following reasons:

1. Depreciation accruals are an important element of gross business savings (that is, total funds retained from operations), amounting in fact to almost three-quarters of total funds, 192139, for large manufacturing, trade, railroad and telephone corporations combined. Over a number of years replacement expenditures tend to equal depreciation.
2. The period studied included some years when the economy was operating far below full capacity. The great depression itself may be evaluated as an evidence of stagnation, but the fact that
business enterprise did not invest depreciation accruals during this period is scarcely a proof of a declining economy.

## TOTAL FUNDS RETAINED FROM OPERATIONS AND GROSS BUSINESS SAVING

It is impossible to secure completely satisfactory estimates of the total funds retained from operations by all business enterprises. A rough estimate of their volume can be secured, however, by adding together Simon Kuznets' net business saving estimates and Solomon Fabricant's depreciation and depletion estimates. In Table 8 the total funds retained from operations by our samples of manufacturing, trade, railroad and telephone companies are compared with the gross business saving of all manufacturing, trade and public utility enterprises, and of all business except farming, for selected groups of years.

The total funds retained from operations by our combined sample of large corporations in four broad industrial categories have contributed a larger proportion of total gross business saving since 1930 than in the previous decade. Actually, in 1930-33, business enterprises as a whole dissaved-that is, had negative gross saving of $\$ 1.1$ billion-while our large concerns were saving $\$ 3.1$ billion. During the recovery period, 1934-37, our combined sample retained funds amounting to 66 percent of total gross business saving.

In the manufacturing and trade industrial groups, too, the funds retained from operations by the large corporations were the equivalent of a greater proportion of gross business saving in the thirties than in the twenties. In manufacturing our sample retained funds equal to only 30 percent of gross manufacturing saving in 192129, as contrasted to 58 percent in 1930-33, and to 78 percent in 1934-37.

Large and medium-sized corporations as a group are responsible for more business saving than small corporations as a group, because such a great number of small concerns are unprofitable. In 1937, for example, all non-financial corporations had gross saving of $\$ 2.9$ billion (Table 9 ). One half of one percent of all these corporations, holding 65 percent of the assets, accounted for 62 percent of gross saving. Medium-sized corporations had the highest proportion of savings: with only 23 percent of total corporate assets, they were responsible for 31 percent of total gross corporate
saving. The 92 percent of the corporate universe in the smallest total asset size class (with 12 percent of total corporate assets) were responsible for only 7 percent of corporate saving.

Table 8-Total Funds Retained from Operations by a Sample of Large Corporations Compared with Gross Corporate Business Savings, 1921-37a (dollar figures in billions)

| Years | Industry | Total Funds Retained from ${ }^{*}$ Operations by Sample | Gross <br> Corporate <br> Business Savings | Total Funds Retained by Sample as a Percent of Gross Business Savings |
| :---: | :---: | :---: | :---: | :---: |
| 1921-29 | Manufacturing | \$7.9 | \$26.0 | 30\% |
|  | Trade | . 5 | 11.8 | 4 |
|  | Transportation \& other public utilities | c $7.2^{\text {b }}$ | 10.6 | 68 |
|  | ALL business | $15.6{ }^{\circ}$ | 79.2 | 20 |
| 1930-33 | Manufacturing | 1.5 | 2.6 | 58 |
|  | Trade | . 2 | -. 3 | d |
|  | Transportation \& other public utilities | c $1.4{ }^{\text {b }}$ | 3.8 | 37 |
|  | ALL business | $3.1{ }^{\circ}$ | -1.1 | d |
| 1934-37 | Manufacturing | 3.6 | 4.6 | 78 |
|  | Trade | . 2 | . 6 | 33 |
|  | Transportation \& other public utilities | 1.7b | 3.7 | 46 |
|  | all busingss | $5.5{ }^{\circ}$ | 8.3 | 66 |
| 1921-37 | Manufacturing | 13.0 | 33.3 | 39 |
|  | Trade | . 9 | 12.2 | 7 |
|  | Transportation \& other public utilities | 10.3 ${ }^{\text {b }}$ | 18.1 | 57 |
|  | all business | \$24:20 | \$86.5 | 28\% |

${ }^{\text {a }}$ Gross business saving is net business saving plus depreciation and depletion accruals. The data on net business saving are Kuznets' revised estimates and were secured directly from the National Bureau. Data on depreciation for 1921-35 and depletion for 1925-35 were computed from National Bureau of Economic Research, Capital Consumption and Adjustment, by Solomon Fabricant (1938) Pp. 32, 39. Figures for 1936 and 1937 were estimated from Statistics of Income using Fabricant's methods.
${ }^{\text {b }}$ Class I railroads and their lessor companies and the Bell Telephone System.

- Sample of large manufacturing and trade corporations, all Class I railroads and their lessor companies, and the Bell Telephone System. See Appendix A for coverage of the manufacturing and trade sample. Data for some corporations were not ayailable in the earlier years.
d Negative percentage.

Table 9-Gross Savings of All Non-Financial Corporations, 1937, by Size of Corporation ${ }^{\text {a }}$ (dollar figures in billions)

| Size | Number | Total Assets | Gross <br> Savings | percentagr distribution |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number | Total Assets | Gross <br> Savings |
| Small (under \$500 thousand) | 294,297 | \$20 | \$.2 | 92.4\% | 12\% | 7\% |
| Medium-sized (\$500 thousand-10 million) | 22,491 | 38 | . 9 | 7.1 | 23 | 31 |
| Large ( $\$ 10$ million and over) | 1,676 | 105 | 1.8 | . 5 | 65 | 62 |
| total | 318,464 | \$163 | \$2.9 | 100.0\% | 100\% | 100\% |

${ }^{a}$ Computed from Bureau of Internal Revenue, Statistics of Income for 1937, Pp. 80-81 and 135-36, and from the Source Book of Statistics of Income maintained in worksheet form in Washington. Gross savings equals compiled net profits, minus income and excess-profits taxes and cash dividends paid, plus depreciation and depletion.

## FLUCTUATIONS IN <br> TOTAL FUNDS RETAINED FROM OPERATIONS

The ultimate source of all funds retained from operations is the cash sales dollar. The amount retained in the business is indicated on financial statements by the net income after dividends, adjusted for all non-cash charges and credits.

Total funds retained from operations have always been an important source of business funds. For 1921-39 the manufacturing, trade, railroad, and telephone companies in our sample had total funds retained from operations amounting to $\$ 26.9$ billion, a sum considerably in excess of their security sales during these years. The annual volume of such funds fluctuated greatly with business activity, increasing in expanding years and decreasing in contracting years. It dropped; for example, from an annual high of $\$ 2.6$ billion in 1929 to $\$ .2$ billion in 1932.

The enterprises in our manufacturing sample accounted for over 50 percent of the total funds retained by the concerns in these four broad industrial categories. A large part of these manufacturing funds was held by the integrated petroleum concerns in the sample. In total manufacturing as well as in the major manufacturing groups total funds retained from operations fluctuated
greatly with different phases of the business cycle. For example, in 1932 for all manufacturing these funds were but 2 percent of those in 1929. All manufacturing groups (except petroleum, food other than meat packing, and chemicals) experienced at least one year in which these funds were negative.

The large retail trade corporations accumulated funds from operations at a steadier rate than the manufacturing concerns. This was particularly true of the chain grocery stores and chain variety stores.

## RELATIVE IMPORTANCE OF TOTAL FUNDS RETAINED FROM OPERATIONS

Much of the recent discussion of big business financing implies that total funds retained from operations (internal funds) have become more and more important during the past two decades. Our samples of manufacturing and trade corporations do not present clear evidence of this. In Table 10 total funds retained from operations by these concerns are compared with (1) their fixed capital expenditures, and (2) their fixed capital expenditures plus changes in net working capital. Fixed capital expenditures include fixed property expenditures and investments in subsidiaries and affiliates; changes in net working capital include changes in total current assets minus changes in total current liabilities.

Total funds retained by manufacturing were in 1921 the smallest percentage of fixed capital expenditures plus changes in net working capital. After this year, the lowest percentage was found to be in 1938 for manufacturing, in 1936 for trade. In other words, although large enterprises retain a high proportion of funds from operations relative to these expenditures, this relationship is not new but has endured for at least two decades.

Examining the cyclical character of funds retained from operations, we see some differences in importance in specific phases of the cycle relative to (1) fixed capital expenditures, and (2) fixed capital expenditures plus changes in net working capital. Although funds retained from operations and fixed capital expenditures fluctuate positively with changes in business activity, fluctuations in the former are greater. The net working capital of these large corporations is usually decreased in years of depression, and the result of adding fixed capital expenditures to net working capital changes is to obtain a series which exhibits greater cyclical fluctuations than
Table 10-Total Funds Retained from Operations by a Sample of Large Manupacturing and Trade Corporations in Relation to Fixed Capital Outlays, and to Fixed Capital Outlays Plus Changes in Net Working Capital, 1921-39 (dollar figuqes in millions)

| Yearb | Manuracturing |  |  | trade |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Funds Retained from Operations |  |  | Total Funds Retained from Operations |  |  |
|  | Amount | As a $\%$ of Fixed Capital Outlays | As a $\%$ of Fixed Capital Outlays Plus Changes in Net Working Capital | Amount | As a $\%$ of Fixed Capital Outlays | As a \% of Fixed Capital Outlays Plus Changes in Net Working Capital |
| 1921 (T) | \$142 | 25\% | 40\% | \$-4 | - $39 \%$ | $\bigcirc$ |
| 1922 (P) | 488 | 113 | 93 | 36 | 204 | 180\% |
| 1923 (P) | 745 | 86 | 72 | 52 | 220 | 137 |
| 1924 (T) | 772 | 138 | 97 | 56 | 230 | 124 |
| 1925 | 1,053 | 131 | 96 | 64 | 148 | 97 |
| 1926 (P) | 1,107 | 109 | 87 | 63 | 189 | 91 |
| 1927 (T) | 912 | 88 | 87 | 70 | 172 | 101 |
| 1928 | 1,246 | 124 | 95 | 91 | 85 | 55 |
| 1929 (P) | 1,459 | 85 | 74 | 89 | 81 | 48 |
| 1930 | . 717 | 56 | 81 | 43 | 67 | 64 |
| 1931 | 220 | 37 | 127 | 51 | 146 | 142 |
| 1932 (T) | 35 | 9 | c | 22 | 87 | 2,200 |
| 1933 | 524 | 133 | 132 | 72 | 596 | 131 |
| 1934 | 610 | 120 | 113 | 67 | 270 | 112 |
| 1935 | 862 | 138 | 122 | 73 | 281 | 128 |
| 1936 | 984 | 118 | 103 | 42 | 134 | 37 |
| 1937 (P) | 1,115 | 89 | 75 | 48 | 118 | 102 |
| 1938 (T) | 688 | 94 | 67 | 51 | 164 | 96 |
| 1939 | 974 | 136 | 95 | 80 | 182 | 94 |
| 1921-39 | \$14,653 | 95\% | 89\% | \$1,066 | 143\% | $88 \%$ |

[^0]total funds retained from operations. In years of prosperity, as a rule, fixed capital expenditures and net working capital changes substantially exceed, while in periods of depression they fall considerably below, total funds retained from operations.

Among the major manufacturing groups the ratio of total funds retained from operations to fixed capital expenditures varied markedly for the entire period, from 2.37 for tobacco companies to .67 for meat packers. In trade, the ratio varied from 1.62 for chain grocery stores to 1.11 for department stores.

## FLUCTUATIONS IN UNDISTRIBUTED EARNINGS

The manufacturing sample had undistributed earnings (net income less cash dividends) of $\$ 3.8$ billion over the period studied. This volume fluctuated greatly, dropping from a 1929 peak of over $\$ 700$ million to a negative balance of over $\$ 500$ million in 1931. Among the major manufacturing groups, only textile and meat packing companies had a negative balance for the entire period. In 1932, on the other hand, all industries except tobacco found themselves in such a position.

The trade concerns collectively and by major groups retained earnings more consistently than the manufacturing concerns. This is not surprising in view of the greater stability of earnings of trade corporations and the presence in our sample of many fastgrowing, profitable groups of chain stores. Chain grocery stores and chain variety stores had positive undistributed earnings in every year but one during the past two decades.

Railroads were responsible for large retained earnings during the twenties, $\$ 2.4$ billion. In the thirties, however, losses after dividends totaled $\$ 1.2$ billion. Railroads, some in bankruptcy or receivership, have cut interest and dividend payments drastically. In spite of these reduced payments to security holders, losses after dividends have been incurred in every year since 1929 except 1936.

The Bell Telephone System also had substantial retained profits for 1921-29, over $\$ 400$ million; since that time it has had a negative balance after dividends of almost $\$ 100$ million. Although these telephone companies have not been weak and unprofitable like the railroads, they have experienced declining revenues; dividend payments have been maintained in the face of this decline according to a policy of the System. Actually, there was less need
for the retention of funds in the telephone business in the thirties than there was during the preceding decade.

## UNDISTRIBUTED EARNINGS AND CASH DIVIDENDS

The amount of earnings available for reinvestment in the business depends among other things on the timing and magnitude of cash dividends. Such payments are subject, to a great extent, to the discretion of business management. For the broad industrial groups, manufacturing, trade, railroads, and telephones, cash dividends were much more stable than net income. In addition, dividends lagged behind income, failing to rise as rapidly or to as great an extent in periods of increasing business activity as well as failing to fall as rapidly or to as great an extent in periods of decreasing business activity. This stability of cash dividends reflects the presence of fixed-dividend preferred stock in the financial structure of some companies as well as the desire of management to maintain regular disbursements to stockholders. Payments in excess of income and, in some cases in spite of deficits, in the early thirties were financed mainly by liquidations of current assets which had been built up in preceding years.

For the manufacturing sample as a whole, earnings exceeded dividends in all but five years. Over the entire period, these corporations paid out over three-quarters of earnings in dividends. To phrase it differently, $\$ 3$ went to the stockholders for every $\$ 1$ which was ploughed back into the business.

Among the major manufacturing groups, the variation in dividend policy was marked, the ratio of cash dividends to net income for the entire period varying as follows:

| Petroleum | $66 \%$ |
| :--- | :--- |
| Building materials and equipment | 69 |
| Food other than meat packing | 75 |
| Rubber | 77 |
| Automobiles and trucks | 78 |
| Chemicals | 79 |
| Machinery | 83 |
| Tobacco | 84 |
| Iron and steel | 87 |
| Meat packing | 125 |
| Textiles | 536 |

The meat packing and textile companies paid out more in dividends than they earned, textile companies paying out $\$ 91$ million in dividends while earning only $\$ 17$ million.

Trade corporations paid out a smaller proportion of their earnings in dividends (about 60 percent). For every $\$ 3$ that went to the stockholders of the 27 large trade corporations, $\$ 2$ was retained in the business. Earnings for the entire group exceeded dividends in every year except 1921 and 1932. For the period as a whole, however, there was a decided downward trend in the relative proportion of earnings retained in the business, the ratio of cash dividends to net income increasing from an annual average of 60 percent for 1921-29 to 72 percent for 1934-39.
The disparity among the various trade industries also was much less than in manufacturing. For the entire period, the disbursement ratio for each of the five industries was:

| Department stores | $62 \%$ |
| :--- | :--- |
| Miscellaneous chain stores | 62 |
| Chain grocery stores | 61 |
| Chain variety stores | 61 |
| Mail-order houses | 60 |

Railroads and telephone companies, on the other hand, paid out a much greater proportion of their earnings than either manufacturing or trade concerns. Over the two decades, the Bell Telephone System paid out $\$ 1$ to its stockholders for every 12 cents which was retained in the business. Dividends exceeded earnings in 1932-35 and in 1938. In no year did telephone companies fail to pay out at least three-fifths of their income. The sizable and stable dividends of the American Bell (later the American Telephone and Telegraph Company) have never failed to impress students of corporation finance. For the period 1881-99, dividends of American Bell averaged nearly $\$ 15$ per share annually, and since then the dividends of A.T.\&T. have ranged from $\$ 71 / 2$ to $\$ 9$. Indeed, from 1922 through 1939 a $\$ 9$-per-share dividend was paid annually, even during the severe depression years of 1932-35. ${ }^{3}$

The large proportion of railroad earnings that was paid out in dividends was the result of the depressed state of earnings in the industry, especially since 1929, rather than an indication of large dividend disbursements as in the case of the telephone industry. Although for the entire period the railroads reinvested about 60 cents for every dollar paid out in dividends, since 1929 (except in 1936) they paid out as a group more in dividends than they earned. In 1932, Class I railroads and their lessor companies paid
out almost $\$ 150$ million in dividends in spite of losses of over $\$ 100$ million. ${ }^{4}$

## FLUCTUATIONS IN DEPRECIATION ACCRUALS

Another important component of total funds retained from operations is the annual charge to income for depreciation. ${ }^{5}$ The depreciation charge is not in itself a producer of cash funds and we must not allow ourselves to think of this charge as a supplier of so many cash dollars a year. It is rather an estimate of the property "used up" in the course of business, which must some day be replaced if the producing unit is to be maintained intact.

Yet as we have seen in Chapter 2, the bookkeeping recognition of wear and tear on property by charges for depreciation and the expenditures on property do not occur simultaneously. This difference in timing may lead to the availability at given periods of time of disposable funds from depreciation accruals for general corporate purposes. During the twenties, for example, the United States Steel Corporation kept its depreciation, insurance and pension reserve accruals invested in readily marketable securities. These accruals were utilized for other purposes than financing fixed capital replacements, in 1929 to finance bond retirements and in the thirties for working capital requirements.

Over a period of years, however, most corporations-unless they are in process of liquidation-spend at least the equivalent of their depreciation accruals to replace depreciated assets. Indeed, for an individual company depreciation accruals, plus' writedowns and less writeups of property, should in theory equal property expenditures over the life of the company.

Over the period studied the combined depreciation accruals of our samples of large manufacturing and trade corporations, all large railroads and telephone companies total more than $\$ 17$ billion, over $21 / 2$ times their net undistributed earnings of $\$ 6.2$ billion. These accruals were not only larger but also more consistent than undistributed earnings. For the combined sample they rose steadily from $\$ .5$ billion in 1921 to $\$ 1.1$ billion in 1929. They dropped to $\$ .9$ billion in 1934 but rose again to almost $\$ 1.1$ billion in 1939.

The accruals of the manufacturing concerns are large relative to the accruals of the other industrial groups, not only because of the importance of manufacturing in total business, but also because of the importance of fixed assets in the financial structure of such
concerns. A large proportion of these accruals are attributable to the petroleum companies in our sample because of the inclusion of intangible development costs and depletion of oil wells in the depreciation figures of oil companies, and because of the high rate of technological change in refining equipment.

These data on depreciation accruals suffer from several limitations in an analysis of the industrial distribution of charges for capital consumption. The data do reflect, it is true, the relative value and age of the fixed assets and the depreciation methods of individual industries. However, they also reflect the differences in coverage of the individual industries included in our sample. Moreover, one industry may charge off certain expenditures directly to income while another may capitalize them and charge them off in future periods. In the case of steam railways, for example, depreciation in 1934 was but 16 percent of maintenance charges; for trade, it was 277 percent. ${ }^{6}$ The ratios of depreciation to maintenance in the other major industrial classifications included in this study were:

| Manufacturing | $137 \%$ |
| :--- | :---: |
| Electric light and power | 132 |
| Telephones | 89 |

Since our analysis has been restricted to capitalized expenditures and the sources of their financing, these industrial differences in bookkeeping practices somewhat handicap strict industrial comparisons of property expenditures and depreciation accruals. Unfortunately, data on maintenance expenditures with which to correct for the different practices of recording capital consumption are fragmentary for most industries prior to the formation of the Securities and Exchange Commission. ${ }^{7}$ In the case of railroads, however, for which adequate data are available and in which such expenditures are relatively most important, maintenance charges amounted to almost $\$ 27$ billion in 1921-39, considerably more than twice the amount expended on capitalized property. ${ }^{8}$

## DEPRECIATION AND SALES

One way of measuring the relative importance of depreciation accruals among different industries is to compare their ratios of depreciation to sales (Chart 9). For the entire 19-year period the
average ratios of the major industrial groups studied varied as follows:

| Telephones | $16.2 \%$ |
| :--- | :---: |
| Electric light and power (1926-39) | .9 .7 |
| Manufacturing | 5.0 |
| Railroads | 4.3 |
| Trade | .9 |

Depreciation charges relative to operating revenues in the telephone industry are very large, reflecting its long-lived fixed prop-
chabt 9
RATIO OF DEPRECIATION TO SALES FOR LARGE CORPORATIONS, BY INDUSTRY, 1921-39

erty, the comparative unimportance of raw material costs, and the rapid developments and inventions in telephony during the past two decades. There has been no tendency for the level of depreciation accruals of telephone companies, relative to revenues, to change during these years. ${ }^{9}$

Since the major portion of the capital consumption of the railroad industry is recorded by maintenance expenditures, its low ratio of depreciation to sales is not surprising, in spite of the importance of railroad fixed assets. This difference in accounting for capital consumption may be due in part to the influence of the
profits position of the industry. ${ }^{10} \mathrm{~A}$ probable effect of the accounting practices of railroads is to postpone maintenance expenditures in poor years and to increase them in good years. In other words, for any given year it is within the discretion of railroad management to decide what proportion of consumed service life to replace, and what proportion not to replace, in order to have funds available for other purposes. There has been a noticeable increase in the level of the ratio of depreciation to operating revenues of railroads during the past two decades. The depressed state of operating revenues during the past ten years has been the chief reason for this increase.

Among large manufacturing corporations, as in the case of railroads, there appears to have been an increase in the ratio of depreciation to sales in the thirties as contrasted to the twenties. For our sample, the ratio increased from an annual average of 3.4 percent in 1921-23 to 5.3 percent in 1937-39. The increase in the ratio during the thirties was due largely to the greater decrease in sales than in depreciation. Whereas sales dropped from $\$ 12.6$ billion to $\$ 6.1$ billion ( 52 percent) for 1929-32, depreciation accruals dropped from $\$ 533$ to $\$ 495$ million (only 7 percent).

The distribution of the aggregate ratios of depreciation to sales for major manufacturing industries for the two-decade period was marked, ranging as follows:

| Petroleum | $10.6 \%$ |
| :--- | :---: |
| Chemicals | 6.6 |
| Iron and steel | 6.1 |
| Building materials and equipment | 4.3 |
| Rubber | 3.6 |
| Automobiles and trucks | 3.2 |
| Machinery | 3.2 |
| Food other than meat packing | 3.2 |
| Textiles | 3.1 |
| Meat packing | .9 |
| Tobacco | .5 |

The large ratio in the case of petroleum companies, as has been suggested before, is due to the inclusion of intangible development costs and the depletion of oil wells in the depreciation figure as well as to the high obsolescence of refining equipment. The importance of fixed depreciable assets in chemical and iron and steel companies explains their high ranking. The inclusion of depletion of mines and quarries in the depreciation figures of building materials and equipment companies helps to explain their position on
the list. At the other end of the ranking, tobacco companies require little fixed plant and equipment in their operations. The cost of tobacco and the building up of good will through advertising are much more important business costs. In the case of meat packing, raw material and labor costs far outweigh the costs of fixed capital allocable to a given unit of product.

Fixed property, and hence depreciation, are relatively unimportant in trade. For the retail trade companies represented in our sample the aggregate ratio of depreciation to sales for the period 1921-39 was less than 1 percent. This ratio averaged 1.1 percent during the thirties as contrasted to .7 during the twenties; the increase was due to a greater relative increase in depreciation than in sales. ${ }^{11}$ Recent figures reflect the depreciation of property acquired during the late twenties when the mail-order houses went into the retail store business and when department stores spent lavishly on modernization and luxurious fixtures and equipment. Among the five groups of trade companies included in the sample, the ratio of depreciation to sales for the 19 -year period varied as follows:

| Miscellaneous chain stores | $1.4 \%$ |
| :--- | ---: |
| Department stores | 1.2 |
| Mail-order houses | 1.2 |
| Chain variety stores | 1.1 |
| Chain grocery stores | .6 |

## FLUCTUATIONS IN "OTHER FUNDS RETAINED FROM OPERATIONS"

Our third component of total funds retained from operations, "other funds retained from operations," is in the main the algebraic sum of all other non-cash charges and credits to income and changes in surplus reserves. In the case of railroads a number of miscellaneous sources of cash income are included under this heading. Among these we find profit on the sale of property and miscellaneous assets; certain non-operating income which is earned by railroad subsidiaries but not taken directly into the parent company in the form of dividends or interest; and aids, grants, and gifts from cities, corporations, or individuals to assist the railroad in developing some facility which would be of benefit both to the donor and to the railroad.

For our samples of large manufacturing, trade, telephone, and railroad companies, the volume of these funds varied directly with
business activity, increasing in years of recovery and prosperity and decreasing in years of recession and depression. Other funds for railroads were substantially larger than undistributed earnings, because of the severe operating losses sustained during the thirties.

Other funds from operations of manufacturing concerns, when positive, are largely due to accruals to capital, pension, or insurance reserves, which are set up to provide for future contingencies. These funds were substantially less than undistributed earnings.

The volume of other funds from operations of the Bell Telephone System was dominated by service-pension accruals charged to operating expenses, and interest received from investments of the Pension Fund, largely in unsecured promissory notes of Bell telephone companies. The Pension Fund had assets of over \$200 million in 1939. The Bell Telephone System was in fact one of the largest insurance institutions in the country. This source of funds provided telephone companies with an economical means of obtaining needed capital for plant extensions.


[^0]:    - See Appendix A for coverage of the sample. Data for some corporations were not available in the earlier years. b For peaks and troughs, see Table 5, footnote b.
    c Fixed capital outlays plus changes in net working capital negative.

