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# SUMMARY OF FINDINGS

THE GROWTH OF THE LARGE CORPORATION has had important consequences for all aspects of the American economy. In production it has meant the loss of the personal relationship between owner and worker; in marketing, the separation of producer and consumer; and in finance, changing requirements for business capital and credit.

The purpose of this study has been to outline the financial structure and behavior of large corporations and to discover how their financial requirements have changed. The period 1920–39 was chosen for study in part because these two decades include many of the different business and financial conditions characteristic of our history and in part because of the abundance of corporate financial records available for these years.

Although the corporations included in this study are few in number they are responsible for a great part of all business sales and they own a great part of all business assets. They include the largest concerns in the industries studied; most of them have total assets of $10 million and over.

## DEMAND FOR FUNDS

Business demand for funds arises primarily out of the need for fixed and working capital. Fixed capital includes property—land, plant, buildings, machinery, equipment and fixtures—and investments in subsidiaries and affiliates. Analysis of the fixed property expenditures of our samples of large corporations in five broad industrial categories of American business—manufacturing, trade, railroad, telephone, and electric light and power—reveals diverse trends in demand for funds. Expenditures of large trade, railroad, telephone, and electric light and power companies failed to reach the levels of the twenties during the late thirties. In the case of large manufacturing companies, however, particularly in such major industries as automobiles and trucks, chemicals, iron and steel, machinery, and petroleum, fixed property expenditures in the late thirties exceeded even those of the late twenties.

The importance of property expenditures can also be indicated by analyzing their relationship to depreciation, depletion, and amortization accruals, and to sales. For the years 1921–39 as a whole, all five of the broad industrial categories noted above, as well as all major trade groups and all major manufacturing industries except textiles, expended more on property than they set aside from income for depreciation, depletion, and amortization accruals. However, the fixed property expenditures of six major manufacturing industries failed to equal capital consumption, as measured by the sum of depreciation and depletion accruals plus net property writedowns.

Relative to depreciation, depletion, and amortization accruals as well as to sales, the fixed property expenditures of our samples of large corporations in all of the broad industrial classifications except manufacturing declined during the two decades. This decline was greatest in the telephone and electric light and power industries. The decline also occurred in certain major manufacturing industries—for example, in building materials and equipment and chemicals—but was not true of such important manufacturing industries as iron and steel, and petroleum.

Demand for funds for investments in subsidiaries and affiliates is particularly characteristic of large corporations. Among all the industries studied there was a feverish acquisition movement during the late twenties. Since many of these acquisitions were promoted mainly for financial gain rather than for technological reasons, the depressed state of the securities market has been an important factor in dampening this movement in later years.

A second important demand for funds arises out of the need of business enterprises for working capital or current assets. Current asset requirements change seasonally, cyclically, and over the long-run. Moreover, their volume varies greatly with type of industry. Manufacturing and trade concerns require a greater portion of their total assets in a current working form than is true of public utility companies. Indeed, in the case of most trade companies, current assets exceed fixed assets. Among major manufacturing and trade groups, too, the variation in working capital requirements is great.

The principal distinction between fixed and current assets is the difference in the time period for which each of the two types of assets is held by individual business enterprises. Because of the shorter life span of current assets within individual enterprises, a much greater proportion of it can be liquidated during years of business contraction. Therefore, although substantial volumes of funds are expended on current assets during expansions, the liquidation of these current assets during contractions provides funds for other corporate purposes.

Inventory is the most important element of the current assets of most business concerns. Inventory variations, then, are similar to variations in total current assets, increasing in expansions and decreasing in contractions of business activity. Changes in the dollar volume of inventory are closely related to price changes, most minor changes in it being due primarily to fluctuations in prices rather than to changes in the physical stock of goods.

Over the two decades, the inventory holdings of our samples of manufacturing and trade corporations have not changed significantly in relation to sales. This finding is contrary to the opinion, widely held, that the decline in business demand for external financing, particularly for bank loans, is to be attributed to a decline in inventory holdings. Several developments since 1920 might lead us to expect a falling off in the need for inventory financing, among them improved transportation, communication and industrial organization. On the other hand, the increased importance of durable goods in the economy (requiring longer periods of production and a larger volume of goods tied up in manufacturing) might lead us to expect larger inventory/sales ratios. Actually, we find a stable relationship between inventory and sales for the most part. Only the department store group manifests a clear tendency to increase inventory turnover.

Business enterprises also require current funds to extend credit to customers. These credit extensions are indicated on business financial statements by accounts receivable whose dollar volume, like that of total current assets and inventory, varies positively with changes in general business. During the years 1921–39 the receivables of manufacturing corporations decreased, while those of trade corporations increased, relative to sales and total assets. The growth of consumer instalment selling resulted in a large-scale transfer of manufacturing receivables to the finance companies. Competition by finance companies and other lending agencies, on the contrary, affected credit rates and resulted in a loosening of credit terms in the trade concerns, and thus to an increased holding of receivables.

Almost invariably the accounts receivable of large manufacturing and trade corporations exceed their accounts payable. In other words, these concerns are net trade creditors of the rest of the corporate universe, unincorporated business, and individual consumers. Relative to sales and total assets, the net volume of credit extended by large manufacturing concerns to these other segments of the community has not changed perceptibly, while credit extended by large trade concerns has increased somewhat.

The final element of the current assets of business concerns is cash and cash equivalent, that is, marketable securities. The majority of the large corporations studied kept more cash and marketable securities on hand relative to sales and total assets in the thirties than in the twenties. This has been done at least in part for precautionary reasons. The result has been to tie up an increased volume of funds in liquid form within business enterprises.

## SOURCES OF FUNDS

The primary sources of funds for business enterprises are short-term borrowings, funds retained from operations, and security sales. The volume of short-term borrowing relative to that of the other two primary sources of funds varies greatly with type of industry, being larger in trade than in manufacturing, and larger in manufacturing than in public utilities. Among the major manufacturing and trade groups studied, variation was also great. In manufacturing, for example, short-term liabilities are important in the automobile and textile industries but insignificant in the iron and steel, and chemicals industries.

For the manufacturing sample, short-term borrowings decreased, that is, absorbed rather than provided funds, over the two decades. This decrease occurred in spite of sizable fixed capital expenditures and additions to working capital. It was, however, not consistent throughout the period but was concentrated primarily in the contraction of the early twenties and to some extent in the contraction of the early thirties. Indeed, during the recovery of the middle thirties, 1933–37, short-term debt was an important source of funds for many large manufacturing corporations. Although an increase occurred in the short-term borrowings of the trade sample, this increase was small compared to their fixed capital expenditures and additions to current assets.

In general, bank loans of manufacturing and trade were unimportant as a source of funds. Moreover, their dollar volume relative to sales and total assets was at the end of the period considerably below that at the beginning. Practically all of this decrease occurred during the early twenties; since the middle twenties the relative volume of these loans has fluctuated with business activity around a fairly stable level. Finally, the bank loans of large corporations are small relative to their bank deposits. To phrase it differently, our sample of large manufacturing and trade concerns as a group was the net creditor rather than the net debtor of the banking community over the two decades studied.

Trade payables due to other business concerns are also unimportant as a source of funds for most large manufacturing corporations. Although these payables tend to vary positively with general business, over the entire period they showed a decrease relative to sales and total assets. Trade payables are a more important source of funds for trade than for manufacturing; in trade, also, these payables have become less important relative to sales and to total assets since 1920.

A primary source of funds for business enterprises is the retained portion of the cash sales dollars. The major part of these funds retained from operations is expressed in financial statements by the volume of undistributed earnings, and depreciation, depletion, and amortization accruals. During the past two decades large manufacturing and public utility corporations as a group have been responsible for a major part of the funds retained from operations by all corporations. In spite of variations in individual industries, small and medium-sized corporations in general accounted for only a small part of funds retained from operations by all corporations.

The total volume of funds retained from operations by large concerns in all of the broad industrial categories has been much less relative to sales and total assets during the thirties than it was during the twenties. Most of this decrease has been due, of course, to the decrease in earnings during the thirties, particularly in the case of railroads. Moreover, in years of comparable business activity the total volume of funds retained from operations by our samples of large manufacturing and trade corporations relative to their fixed capital expenditures has not changed perceptibly since 1920.

The volume of one of the two major components of total funds retained from operations, undistributed earnings, is dependent upon profitability and dividend policy. Of the broad industrial categories studied, large trade concerns are the most profitable and pay out the smallest proportion of net income as cash dividends. Railroads, on the other hand, are least profitable and along with telephone companies pay out the largest part of their net income as dividends. Thus as a result of both of these factors undistributed earnings have been a more important source of funds of trade than of railroad corporations. Manufacturing, telephone, and light and power concerns rely less than trade, and more than railroad, concerns on this source of funds.

The dollar volume of the other major component of total funds retained from operations, represented by earned depreciation, depletion, and amortization accruals, is much larger in manufacturing than in the other broad industrial categories. Moreover, among major manufacturing groups it varies greatly, being far more important in industries with huge fixed capital investments (such as iron and steel, and petroleum) than in industries with large inventory (such as meat packing and tobacco). Relative to sales—or operating revenues—however, depreciation, depletion, and amortization accruals are most important in telephone, and electric light and power companies. Generally speaking, in most industries these accruals have increased relative to sales over the twenties and thirties, although in trade they remained small.

The final important source of funds of large American business corporations is the securities market. Because of the peculiar characteristics of this market and the expense of securities flotation it is practically open only to large, well-established enterprises. Large manufacturing and public utility companies are responsible for most corporate security sales. Since security sales fluctuate with general business activity and since the latter half of the two-decade span studied contained more years of business contraction than the first half, security sales decreased over this period. During years of equivalent business activity, however, security sales during the thirties were as large, if not larger, than those of the twenties. Manufacturing issues in 1937, for example, were larger than the issues of any other year in the two decades, with the exception of 1929, and security issues in 1938 were topped in the twenties only by 1929 and 1927. Relative to undistributed earnings, new funds from the securities market were a more important source of funds in the thirties than they were in the twenties, primarily because of the depressed state of earnings during the thirties.

In 1921–39, although the manufacturing companies in our sample as a group sold almost $6.5 billion of their own securities, during the same period they purchased over $7 billion of their own and other securities. During the late twenties, because of the large volume of purchases of securities of subsidiaries and affiliates, these concerns purchased rather than sold securities net. In the expansion of the middle thirties, on the other hand, because of the small volume of acquisitions, these manufacturing corporations as a group sold more securities than they purchased. For the period as a whole, the proceeds of many security issues of large manufacturing corporations were utilized to acquire existing equities. Thus during these years our sample of industrial giants financed the major part of their operations without drawing on the savings of the public.

Thus our findings indicate that during the two decades of the twenties and thirties certain changes in the financing of large corporations have occurred because of changes in the demand for funds while others have occurred because of changes in the availability of sources of supply. In the case of our sample of public utility companies there was a decided decrease in fixed property expenditures over the period. This was not true at all of our sample of large manufacturing corporations, and only to a slight extent of trade. Concerns in all industries ceased to acquire large volumes of securities in other companies. The manufacturing corporations in our sample decreased somewhat the volume of their customer financing, but their inventory remained about the same, and their cash and marketable security holdings increased, relative to total assets and to the volume of business done. Large trade corporations, on the other hand, came to finance their customers to a greater extent, maintaining roughly the same volume of inventory and a greater volume of liquid assets relative to sales and total assets.

Over the two decades as a whole short-term borrowings of large corporations decreased relative to other sources, although during the expansion of 1933–37 they sustained a greater relative increase than any other source of funds. In all industries funds retained from operations were less relative to the sum of all other sources of funds during the thirties than during the twenties as a result of the combined effect of decreased profitability and a higher ratio of net income paid out in dividends. This was particularly true of railroads. Security sales were greater relative to other sources of funds during the late twenties than during any other period of expansion. In the case of public utility companies, security sales during the thirties have been much less than those of years of comparable business activity in the twenties. This has been due primarily to the low levels of fixed property expenditures of public utility companies in recent years. In manufacturing and trade, however, the dollar volume of security sales during certain years in the late thirties reached the levels of comparable years in the twenties. Even more noteworthy is the fact that in manufacturing new funds from the securities market rose as a percent of undistributed earnings from 52 percent in the twenties to 187 percent in the thirties.