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SUMMARY OF FINDINGS

UNDISTRIBUTED corporate earnings have been widely discussed in connection with cyclical fluctuations in business activity, long-run trends in investment and employment, changes in the economic functions of the securities markets, and other economic problems. Yet the amount of factual information on corporate income retention policies is far from commensurate with the general interest in their significance. This study attempts to provide some additional information on the subject utilizing various statistical materials. Though such an attempt hardly needs justification, it may be useful to indicate what particular aspects of the subject are dealt with and what light the findings of the study may be expected to throw on broader economic issues.

The analysis was confined to the manufacturing sector of the corporate economy, for the reason that samples of corporate financial reports were available mainly for manufacturing corporations. However, in recent decades this sector of the economy has been responsible, on the average, for more than one-half of the income retained by all corporations. The main object of the study has been to ascertain whether corporate income retention has followed stable patterns during the years analyzed. It is commonly known that the amounts of net income retained by corporations have varied widely from one year to another and from one company to another. But it may be inquired whether these variations in retained income have been related, in a more or less stable manner, to some specific changes in business or financial conditions. Two questions seem particularly relevant in this connection: To what extent have variations in income retention been associated with changes in corporate profitability? How closely have these variations been related to changes in corporate investment?

The relationship of income retention to profitability is important in connection with the broader problem of the relationship between national income and national saving. Is our economy characterized by a stable "propensity to save"? Do we typically have so much saving at high levels of national income that it becomes difficult to maintain an equilibrium be-

tween the supply of and the demand for investible funds? Such questions can be resolved only in the light of better factual knowledge than has been available to date. Since corporate retained income represents a substantial part of total national savings, a study of the corporate propensity to save (that is, the relation between corporate net income and corporate saving) should prove of considerable importance.

It has sometimes been assumed among corporation officials that sound principles of corporate financial management require retention of 50 cents out of every dollar of net income. If corporations typically followed this "rule of thumb," the pattern of corporate saving would, of course, be clearly defined and stable. The data on manufacturing corporations, however, indicate a different picture. While it is true that greater corporate net income, whether measured in dollars or in percent of net worth, has, in general, been accompanied by greater dividends as well as greater retentions, the two components of income have not changed in equal degree and the ratio of retained income to total net income has not been 50 percent—or any other fixed percentage—at various net income levels.

Our analysis indicates that net income retention did not begin, generally speaking, until a certain minimum level of net income—approximately 5 percent of net worth—had been attained. Below that level dividends were paid in excess of current earnings; that is, there was "dissaving" rather than retention of income. Above that level corporate saving appeared, representing at first only a small fraction of net income but increasing in relative importance with increases in the level of income.

Upon examining annual changes in net income, retained income, and dividends, however, a fairly stable relationship appears for both low and high levels of income. Thus, it is found that an increase in net income of one dollar (per hundred dollars of net worth) has been associated, on the average, with a rise in retained income of 70-80 cents, on the one hand, and a rise in dividends of 20-30 cents (per hundred dollars of net worth), on the other. Similarly, a decline in annual net income of one dollar (per hundred dollars of net worth) has been associated, on the average, with a decrease in retained income of 70-80 cents and a decrease in dividends of 20-30 cents (per hundred dollars of net worth). In the language of economic theory, it can be said that the average corporate propensity to save has varied with the level of net income, but that the marginal corporate propensity to save has remained the same at different levels of net income.

This pattern of behavior is revealed by the aggregate data for all manu-

facturing companies combined as well as by the sample data for large corporations and for small- and medium-sized concerns. There are, of course, many individual deviations from the average relation, the years 1936 and 1937, when the undistributed profits tax was in effect, being outstanding instances; but, on the whole, the pattern appears to be quite clear and shows a notable degree of stability over fairly long periods.¹ The data for all manufacturing corporations combined show no significant trend in the corporate propensity to retain—either in an upward or in a downward direction. In the case of large corporations, a small downward trend is observed, while for the small- and medium-sized companies the opposite tendency prevails.

In order to determine whether, in a given year, highly profitable companies have, in general, retained more of their income than companies of lesser profitability a cross-section analysis of a sample of large manufacturing corporations has been made. It has been found that although a direct relation between corporate profits and saving rates is observable for the years 1925–26, it is difficult to observe any pattern for the years 1940–41, when many highly profitable concerns retained surprisingly small proportions of their income. However, the contrast between these two periods disappears when certain other factors affecting income retention are analyzed. It is then seen that in both 1925–26 and 1940–41 an inter-company difference of one dollar of net income (per hundred dollars of net worth) was accompanied, other things being equal, by a difference of about 70 cents in retained income and 30 cents in dividends (per hundred dollars of net worth).

Among other factors affecting income retention, dividends paid in the preceding period have been found of considerable importance. The relation in this case is, as one would expect, an inverse one: lower previous dividends were associated, other things being equal, with higher current retentions. The rate of asset expansion and the size of earned surplus and reserves also appear to have affected income retentions, although our findings concerning these two factors are less conclusive.

In general, this analysis reveals fairly clear patterns of corporate behavior with respect to net income retention. While the amounts retained varied greatly from one year to another, and from one company to another, the relation between net income and retained income remained fairly

¹ The data for all manufacturing corporations relate to the period 1922–43; those for large manufacturing corporations to the period 1915–43; and those for small- and medium-sized manufacturing corporations to the period 1917–43.

stable over the quarter-century period studied. Unless some new factors adverse to corporate income retention emerge in the future, it seems reasonable to expect that so long as corporate profits remain high, corporate saving will also remain high, providing substantial funds for corporate expansion. If the business sector of the economy is to absorb substantial amounts of personal savings in addition to funds obtained by retention, ample opportunities and strong incentives for new investment will be needed. This brings us to the second major question: What is the relation between internal and external funds in financing corporate investment?

It has frequently been stated that income retention has tended to make corporations virtually independent of the capital market and thus to diminish the demand for external financing. This alleged trend toward corporate financial self-sufficiency has been denounced as conducive to a maldistribution of capital resources, on the one hand, and to a dearth of investment outlets for personal savings, on the other. In connection with these arguments, it is important to distinguish between the changes in internal financing that occur at constant levels of corporate investment and the changes in internal financing that occur when corporate investment changes. Although it is obvious that at any given level of investment more corporate saving implies less need for external funds, it is equally true that under conditions of fluctuating investment requirements corporate saving and external financing may increase or decrease together.

An attempt has been made to ascertain whether the degree of corporate dependence on internal funds varies with the level of corporate investment and whether the variations follow a more or less stable general pattern. In addition, inflows and outflows of internal and external funds over periods of cyclical expansion and contraction have been examined.

It is known that manufacturing corporations have a high degree of financial self-sufficiency as compared with other sectors of the corporate economy. It is interesting to note, therefore, against this background, that all manufacturing corporations combined dissaved, on balance, \$1.7 billion over the nineteen-year period preceding World War II (1923-41), and their net absorption of external financing amounted to \$5.5 billion. Thus, the net expansion of physical assets in manufacturing over this period of nearly two decades (about \$4 billion) was financed, on balance, entirely from external sources.

When the data are arranged according to phases of business cycles, it can be seen that during the expansion phases manufacturing corporations

accumulated physical assets (that is, engaged in *net* investment) and that they financed this activity from external as well as internal sources. In contrast, during contraction phases manufacturing corporations reduced their physical assets (that is, incurred *net* disinvestment) which was accompanied by a decline in the amount of external financing used as well as by corporate dissaving. In other words, during expansions these companies accumulated their own savings and absorbed outside savings, using these resources for investment outlays and thus contributing to the economy's expenditure stream. During contractions there was a reverse flow of financial resources: corporate dissaving was incurred and external funds were released through partial repayment of debt, stock redemption, and the like. This process affected adversely the economy's expenditure stream.²

Differences are found between the behavior of large manufacturing corporations and that of small- and medium-sized corporations. During the interwar period large manufacturing companies tended to reduce on balance their use of external financing in both cyclical expansions and contractions. They retained income on a substantial scale during expansion phases, while their net dissaving during contraction phases was relatively small. Small- and medium-sized companies showed rather erratic fluctuations in both internal and external financing. Their dissaving during the contraction phases was much greater, relative to their income retention during the expansion periods, than was that of large concerns. On the other hand, small companies showed a tendency to absorb external financing mainly during periods of cyclical contraction.

Despite these variations, both large and small corporations have shown a tendency to increase the use of external as well as internal funds with increases in the rate at which their assets were expanded. At low asset expansion rates income retention provided, in general, a sufficient amount of funds or even more than was necessary to meet a company's investment requirements. At higher asset expansion rates external financing was resorted to, and the relative importance of external funds rose continuously as the rate of expansion increased. It is true that the relationship among income retention, external financing, and asset expansion is not as close

² It should be noted that, when dissaving is incurred as a result of the payment of dividends in excess of current income, this may help maintain the stockholders' personal expenditures and, to that extent, have a favorable effect on the total expenditure stream. But corporate dissaving may also occur without an outflow of financial resources to other sectors of the economy. Thus, if dissaving results from the fact that net income before depreciation is insufficient to cover depreciation charges, it represents a reduction in the owners' capital through wear and tear, unaccompanied by a release of funds.

as that indicated by our analysis of retained income, dividends, and net income. Obviously, other important factors are at work, and in some cases the relative importance of external and internal financing was substantially different, even though the rates of asset expansion were approximately the same. Nevertheless, the general tendency for external financing to increase in relative importance with increases in the rate of corporate investment is clearly discernible. This tendency is evident both when the rate of *physical* asset expansion and when the rate of *total* asset expansion are examined, though the pattern of relationship is somewhat closer when financing methods are related to the growth of total assets. Furthermore, this general tendency for external financing to gain in relative importance at higher expansion rates is revealed by studying intercompany differences at a given time as well as by analyzing variations over a period of time. Finally, it is important to note that, although there are many individual deviations from the general pattern of relationship, no general tendency can be observed for the ratio of internal to external financing, at given rates of corporate investment, to change over the period of time examined. In other words, allowing for variations in the rate of corporate investment, manufacturing corporations seem not to have become either more or less financially self-sufficient.

Our findings, therefore, point to the conclusion that the amount of funds absorbed by corporations from the capital market has depended primarily on the rate of corporate investment. Changes in the degree of dependence on external financing were associated with changes in the level of investment activity rather than with changes in corporate "propensity to save" or "propensity to borrow." Unless future patterns of behavior change radically, it would appear that corporations will continue to draw heavily on the capital markets when their expansion is rapid, but that internal financing will be adequate when net investment is slack.