NET CORPORATE SAVING IN THE 1970's

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The period since the beginning of the 1970's has been one of low net corporate saving relative to previous periods.[1] This is shown in Chart 1, which compares the movement of the three major components of gross private saving—corporate saving, personal saving, and capital consumption allowances—over the last twenty years. On an annual basis corporate saving in the 1970-75 period averaged 3.9 percent of gross private saving compared to an average of 12.1 percent the previous fourteen years. Personal saving, on the other hand, was unusually high over the same period compared to typical levels in previous years. Also shown in Chart 1 is the saving (or surplus) of the U. S. Government as a percentage of gross private saving. It has generally been negative throughout the 1970's to date, acting as a drain on gross private saving.

While the unusually high levels of personal saving and the long period of continued U. S. Government dissaving are of considerable interest, the primary concern of this article is the behavior of net corporate saving in the 1970's and the consequences of that behavior for the aggregate corporate balance sheet. The first two sections of the article look at the determinants of corporate saving and consider various factors that underlie its weakness in the 1970's. The next two sections consider the impact of corporate saving over the period on corporate borrowing requirements and interest rates and its cumulative effect on the corporate balance sheet. The last section looks briefly at the role of corporate saving in the "capital crisis" debate.

Net Corporate Saving Net corporate saving is calculated as the residual after all other claims on gross corporate income have been paid. Table I outlines the items that are deducted from gross corporate income to obtain net corporate saving.

The first step shown in Table I is to deduct costs from total revenues. These costs include labor costs, material costs, and indirect business taxes. In addition corporations deduct capital consumption allowances to cover depreciation expenses on plant and equipment. While this first step seems straightforward, costs for accounting purposes can be determined in different ways. The measurement of material costs and depreciation, in particular, has been a matter of considerable controversy in recent years.

Corporate revenue remaining after the deduction of these costs is divided into two parts: net interest payments to holders of financial claims against corporate income and reported profits. The sum of these two items is generally called property income. The major distinction between the two types of property income is that net interest payments are treated as an expense. Consequently profit taxes are paid on reported profits but not on net interest payments.

The third step shown in Table I is perhaps the most difficult to understand but in recent years has been very important. It consists of making two adjustments to reported profits to take into account the distorting effects of inflation on profits when costs are measured on an historical basis. Until recently the vast majority of corporations computed reported profits by deducting the historical costs of inputs from the current value of output. In a period of inflation a portion of profits computed in this way essentially represents capital gains on inventories as they are going through the production process. These

Table I

MEASURES OF CORPORATE INCOME, PROFITS, AND SAVING

GROSS REVENUES
- — Labor Costs
- — Material Costs
- — Tax Depreciation
- — Indirect Business Taxes

= PROPERTY INCOME
- — Net Interest Payments

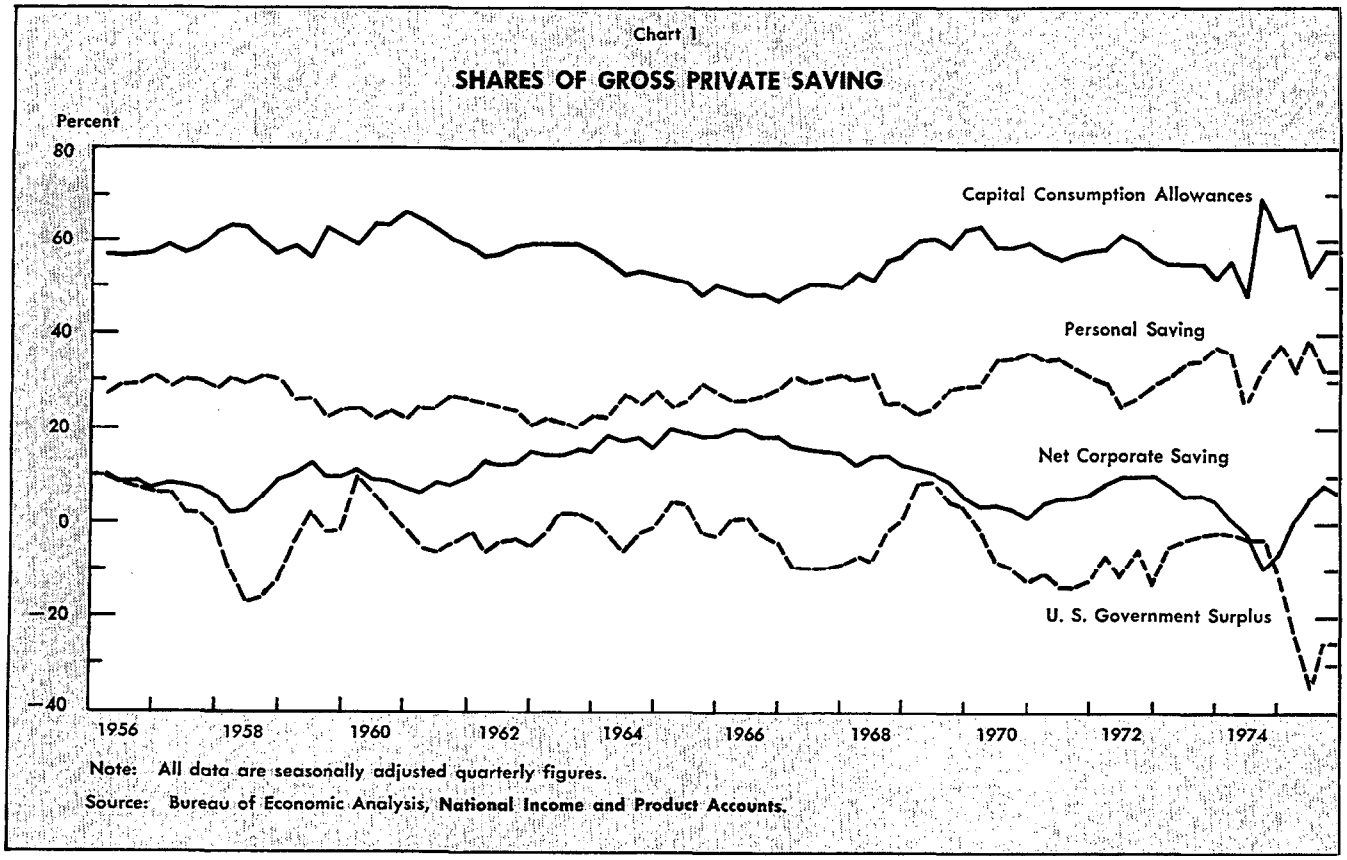
= REPORTED PROFITS
+ (IVA + CCAA)

= OPERATING PROFITS
- — Profit Taxes

= AFTER-TAX OPERATING PROFITS
- — Dividends

= NET CORPORATE SAVING

[1] In this article "corporations" refers only to domestic nonfinancial corporations. Unless otherwise noted, the data cited in the text and in the charts exclude profits arising in the "rest of the world" and profits of financial institutions.



inventory profits cannot be used for taxes, dividends, or expansion of plant and equipment since they must be used to purchase new inputs at current higher nominal prices; that is, they must be used simply to maintain the scale of operations of the firm. For this reason reported profits should be reduced by the amount of these inventory profits to get a truer measure of operating profits—profits that result from operations rather than from inflation. The national income and product accounts (NIA) take this approach by adding to reported profits an adjustment, equal to the *negative* of inventory profits, called the inventory valuation adjustment (IVA).

A second factor that may create a divergence between reported profits and operating profits in a period of inflation is the computation of depreciation for tax purposes. Corporations must figure tax depreciation (capital consumption allowances) on the basis of historical costs. In a period of inflation, tax depreciation might lag behind true economic depreciation based on replacement costs of plant and equipment at current prices. In such a case reported profits are overstated by the difference between economic depreciation and tax depreciation. Alternatively, the cost of capital consumed is understated by the same amount. Another problem with the measurement of economic depreciation is the possibility of changing depreciation rules that do not reflect the true rate at which capital is being consumed. In recent years more liberal depreciation formulas allowing quicker write-offs of plant and equipment have been introduced.

Before 1976 the NIA corporate profit statement reflected tax depreciation. The NIA have just undergone a major revision, however, and now economic capital consumption figures are based on an unchanging formula applied to *replacement* costs.[2]

The corporate profit statement has not only an IVA adjustment but also a capital consumption allowance adjustment (CCAA) to reflect the difference between tax depreciation and economic depreciation as computed by the Commerce Department on the basis of replacement costs. As will be shown below, the IVA has been much larger than the CCAA in the 1970's, although the CCAA has been steadily increasing.[3]

[2] The procedure is described in [20].

[3] Of course, the size of the CCAA depends upon the formula that is used to determine economic capital consumption. Young [20] contains a discussion of the reasons behind the choice of the formula to be used by the Department of Commerce in the NIA. Terborgh [18] has argued that the straight-line write-off assumption used by the Department of Commerce is "in most applications a grievously retarded measure of capital consumption" and has used an alternative formula that results in a capital consumption adjustment that is a larger offset to reported profits.

The last two steps shown in Table I are the deduction of profit taxes and dividends. It should be emphasized that profit taxes are based on reported profits rather than operating profits. Consequently, in a period of rising inflation inventory profits and profits due to under-depreciation of plant and equipment are both taxed at the same rate as operating profits. The consequences of this procedure will be shown below.

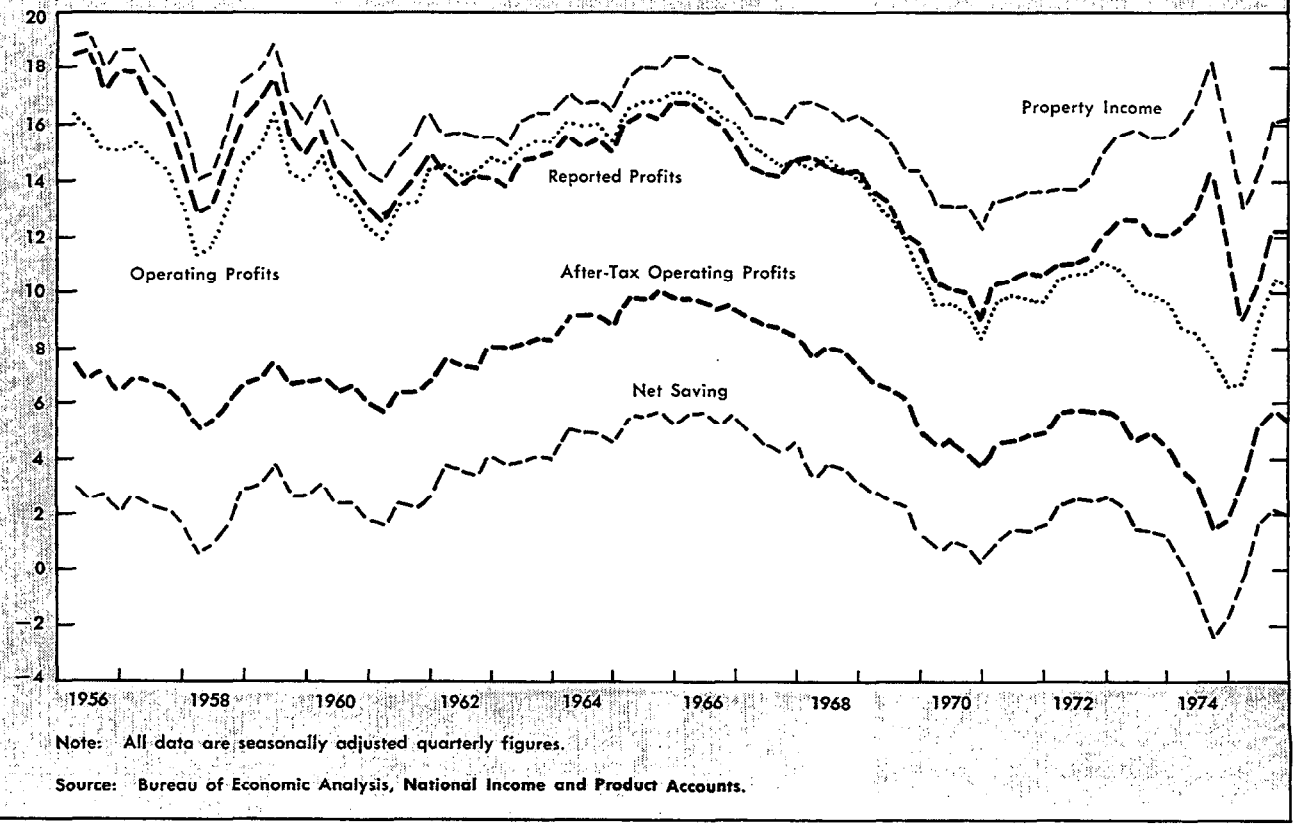
The Decline in Net Corporate Saving The five measures of corporate income discussed in the previous section are shown in Chart 2, all relative to gross corporate product. Net corporate saving in the 1970-75 period averaged 1.1 percent of gross corporate product compared to an average of 3.4 percent in the previous fourteen years. Several factors have contributed to the prolonged relative weakness in corporate saving in the 1970's. First, the period included two recessions, the latter of which was very severe. As the chart demonstrates, property income and profits typically fall relative to gross corporate product during recessions, pulling down net corporate saving. Explanations for this phenomenon are of two types.[4] First, prices generally are viewed as being set at a markup over normal long-run costs. In recessionary times output and productivity fall, with the result that current unit costs exceed normal unit costs. Consequently, the difference between current revenues and current costs declines. The second type of explanation, not necessarily incompatible with the first, is that price behavior relative to costs reflects demand pressures. As these pressures decline in a recession and excess capacity develops, the spread between prices and costs tends to fall, resulting in lower profits and saving.

A second factor that has had an adverse effect on profits, and hence net corporate saving, in the 1970's to date is the substantial rise in the percent of property income going to net interest payments. As shown in Table II, this rose from about 10 percent in the mid-1960's to around 23 percent in 1970 and has remained near that level in subsequent years. The rising share of prop-

[4] A review of price determination studies is contained in [15].

Chart 2

CORPORATE PROPERTY INCOME, PROFITS, AND NET SAVING



Note: All data are seasonally adjusted quarterly figures.

Source: Bureau of Economic Analysis, National Income and Product Accounts.

erty income going to interest payments was a result both of the changing financial structure of the corporate sector as firms relied more heavily on debt to raise funds and the strong rise in interest rates in the latter half of the 1960's. According to most views of price determination relative to costs, the shift to a greater reliance on debt financing would necessarily exert a downward pull on profits, since a greater proportion of property income has to be directed to debtholders. (The factors underlying the rise in net interest payments will be discussed in more detail below.) As shown in Chart 2, property income in the 1970's, compared to previous years, has held up better than reported profits.

The third factor that clearly has contributed to the weakness in corporate saving in the 1970's is inflation. Chart 2 shows the widening gap between reported profits and operating profits as inflation accelerated. The IVA and the CCAA are shown in Table III. The IVA rose sharply in 1973 and 1974 due to large increases in inflation and substantial inventory accumulation. The CCAA has been small in comparison to the IVA because the rising divergence between replacement costs and historical costs of plant and equipment as inflation accelerated has generally been offset, or more than offset, by the impact on tax depreciation of liberalized depreciation formulas. The CCAA increased operating profits slightly from the mid-1960's to 1973 and decreased operating profits in 1974 and 1975. As can be seen from Table III and Chart 2, the combined effects of the IVA and the CCAA rose throughout the 1966-75 decade, jumping sharply in 1973 and 1974.

Table II

SHARES OF PROPERTY INCOME

($ Billions)

	Net Interest	Reported Profits	Property Income	Net Interest as a Percent of Property Income
1966	7.4	69.5	76.9	9.6
1967	8.7	65.4	74.1	11.7
1968	10.1	71.9	82.0	12.3
1969	13.1	68.4	81.5	16.1
1970	17.0	55.1	72.1	23.6
1971	17.9	63.3	81.2	22.0
1972	19.1	75.9	95.0	20.1
1973	24.5	92.8	117.3	20.9
1974	31.7	103.8	135.5	23.4
1975	34.3	95.1	129.4	26.5

Source: Bureau of Economic Analysis, National Income and Product Accounts.

In 1974 inventory profits and profits due to under-depreciation of capital assets rose to 39 percent of reported profits.

The adverse impact of inflation on corporate saving was accentuated by the fact that, as indicated above, corporate profit taxes are paid on the basis of reported, rather than operating, profits. Consequently, when inventory profits and/or profits due to under-depreciation of capital assets cause reported profits to be overstated, tax rates on operating profits rise. This phenomenon is shown in Table IV, which compares the effective tax rates on aggregate corporate reported and operating profits over the last ten years. The effective tax rate on reported corporate profits rose in 1968 due to the tax surcharge imposed that year and rose further in 1969 due to the suspension of the investment tax credit. The effective rate subsequently fell following the removal of the surcharge in 1970 and the reinstitution of the investment tax credit in the second half of 1971. The fall in the effective rate from 1972 through 1974 resulted from the liberalization of depreciation rules in 1971, while the decline in 1975 was primarily due to the increase in the investment tax credit that year.

The effective tax rate on operating profits looks quite different. In particular, effective tax rates on operating profits rose sharply over the 1973-74 period, despite the fact that effective tax rates on reported profits were fairly low by historical standards, as the difference between reported profits and operating profits widened. On the other hand, in 1975, when inventory profits fell sharply, very low effective tax rates (by postwar standards) on reported profits were matched by low effective tax rates on operating profits.

The share of operating profits going to dividends has also been unusually high in the 1970's. The reasons for this are not clear. Dividends tend to adjust slowly to changing profits; consequently, fluctuations in the ratio of dividends to reported and operating profits are largely due to short-run fluctuations in profits. In particular, when profits fall in recessionary times, the dividends to profits ratio tends to rise. However, another possible factor contributing to the unusually high ratio of dividend payments to operating profits so far in the 1970's could be that firms were focusing on reported, rather than operating, profits. This focus, combined with the growing gap between reported profits and operating profits as inflation accelerated, would tend to raise

Table III

ADJUSTMENTS TO REPORTED PROFITS

($ Billions)

	IVA	CCAA	Total Adjustments	Percent of Reported Profits
1966	−2.1	3.8	1.7	−2.5
1967	−1.7	3.6	1.9	−2.9
1968	−3.4	3.6	.2	−.3
1969	−5.5	3.5	−2.0	2.9
1970	−5.1	1.5	−3.6	6.5
1971	−5.0	.5	−4.5	7.1
1972	−6.6	2.7	−3.9	5.1
1973	−18.4	1.6	−16.8	18.1
1974	−38.5	−2.1	−40.6	39.1
1975	−10.8	−4.1	−14.9	15.7

Source: Bureau of Economic Analysis, National Income and Product Accounts.

the share of operating profits going to dividends and decrease the share going to net saving.[5]

Some observers have, in fact, argued that as late as 1974 most corporations were still focusing on reported rather than operating profits in their decision-making process and that this focus, combined with accelerating inflation, was a factor contributing to the falloff in operating profits in the 1970's and especially in 1973 and 1974. There are two types of evidence supporting this view. The first comes from a study by Nordhaus [14] in which he compares pricing equations based on historical costs to pricing equations based on replacement costs. The latter, which would correspond to pricing to maintain operating profit margins, did a much poorer job of explaining the pricing decision than did the former. Consequently, Nordhaus concluded, using data through 1973, that "It appears very likely that 'IVA illusion' constitutes a very large fraction of the current profit squeeze" [14, p. 191]. The second type of evidence is that numerous voices within the nonfinancial corporate sector have acknowledged the continued focus on reported profits into 1974. An example is the statement by George Terborgh: "It is clear that American business has not yet learned to protect itself against inflation" [18].

In any case, by the second half of 1974 widespread attention was being given to the distortional impact of inflation on reported profits, and increasing focus was being given to the matter of accounting methods in an age of inflation.[6] A major consequence has been the switch by many corporations from First In, First Out (historical cost) to Last In, First Out (replacement cost) accounting methods. Under the latter, latest costs become expenses. Therefore, end-of-period inventory is valued at the cost of the first units purchased during the period (or the cost of units purchased in previous periods).[7] The consequence is that in a period of rising prices the reported value of end-of-period inventory assets are lower, reported profits are lower, and the wedge between reported and operating profits is diminished.

As shown in Table III, the IVA fell sharply in 1975. The switch by many firms to LIFO accounting methods undoubtedly played a role in its fall. Other important factors were the substantial fall in the rate of inflation and the net reduction in inventories.

Business management can do nothing at present to remedy the problem of a growing discrepancy between economic and tax depreciation, since they must determine depreciation allowances on the basis of historical costs. Nevertheless, the switch by the Commerce Department in

[5] Unfortunately nothing conclusive can be said by looking at the aggregate corporate data because the dividend figures in the NIA beginning in late 1973 are not comparable with earlier years. The reason for this is the changed status of some multinational corporations—Aramco, in particular—in the accounts due to increased foreign ownership.

[6] Good examples of this attention are [8] and [11]. The distinction between operating profits and reported profits has also resulted in the introduction of a new term—quality of earnings—into the stock market lexicon. "Good" earnings are those related to operating profits.

[7] This is an oversimplification. The major problems with the use of LIFO methods are those associated with the valuation of inventories and the consequent difficulties in interpreting profit statements, and balance sheet ratios that depend on inventory levels. Nelson [12] contains a discussion of these difficulties.

Table IV

EFFECTIVE TAX RATES ON AGGREGATE CORPORATE REPORTED AND OPERATING PROFITS

(Percent)

	Reported Profits	Operating Profits
1966	42.4	41.4
1967	42.4	41.2
1968	46.7	46.6
1969	48.7	50.2
1970	49.5	52.9
1971	47.2	50.9
1972	44.1	46.5
1973	42.1	51.5
1974	41.1	67.6
1975	38.0	45.6

Source: Bureau of Economic Analysis, National Income and Product Accounts.

its treatment of capital consumption in the NIA is a major step in recognizing this danger.

A fourth factor that almost certainly had an adverse effect on corporate profits and saving during part of the 1970's was price controls. The evidence from several studies [4; 14; 16] shows that, given previous relationships, prices were unusually low relative to costs in 1971 and 1972 during Phase I and Phase II of price controls. As a consequence, profits failed to rebound as sharply in the years following the 1970 recession as they had following other postwar recessions.

In summary, the weakness in corporate saving in the 1970's to date was the result of several factors including two recessions, high rates of inflation, the increased share of property income going to net interest payments, and, at least in 1971 and 1972, the experiment with price controls.

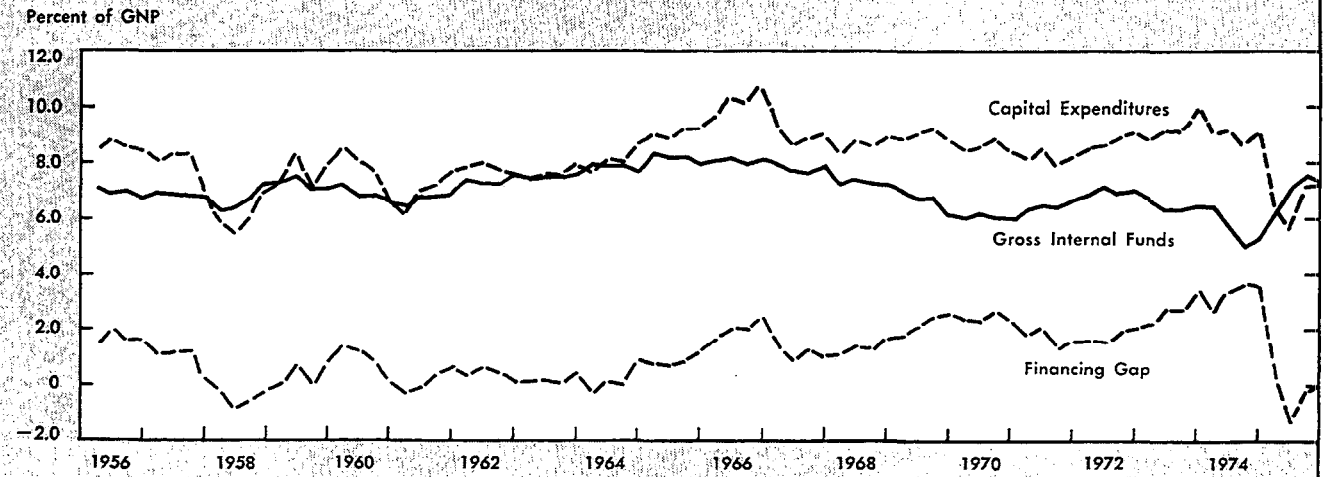
The Corporate Financing Gap Net corporate saving can be combined with tax depreciation and foreign branch profits to get a measure of gross internally generated funds. The difference between total capital investment and gross internal funds—sometimes called the corporate financing gap—corresponds fairly closely to the net funds that corporations have to raise in financial markets. Chart 3 shows that corporate investment was a fairly stable fraction of GNP from the mid-1960's through 1974, although generally at higher levels than in previous years. Gross internal funds relative to GNP, however, fell over that period, primarily due to the decline in corporate saving. As a result the ratio of the corporate financing gap to GNP rose to very high levels by the end of the period, almost twice the previous postwar peaks.

Many observers have argued that the rise in the corporate financing gap over this period was a major determinant of the rise in interest rates [5; 7]. Their reasoning is fairly straightforward. Market interest rates are determined by the demand for and supply of debt securities. As the financing gap of corporations rose over the period, rising interest rates were necessary to outbid competing borrowers, whose borrowing is more interest-sensitive. The results were higher interest rates and a significantly greater share of loanable funds going to the corporate sector. Chart 4 compares the corporate financing gap as a percent of GNP to an average of short- and long-term interest rates and provides support for the view that the rise in the corporate financing gap was an important factor putting upward pressure on interest rates in recent years.[8]

[8] Certain comments relating to Chart 3 and Chart 4 are in order. First, the numbers are divided by GNP so that they can be compared over time. Second, corporations raise funds in both the long- and short-term debt markets. The use of the simple average of the short- and long-term interest rates is intended to capture overall interest rate pressures. Third, the graphs and the accompanying discussion are not meant to imply that corporate financing requirements are the only determinant of the level of interest rates; they are simply intended to provide support for the view that the rising level of these requirements was an important factor underlying the increase in interest rates.

Chart 3

CORPORATE CAPITAL EXPENDITURES, GROSS INTERNAL FUNDS, AND FINANCING GAP

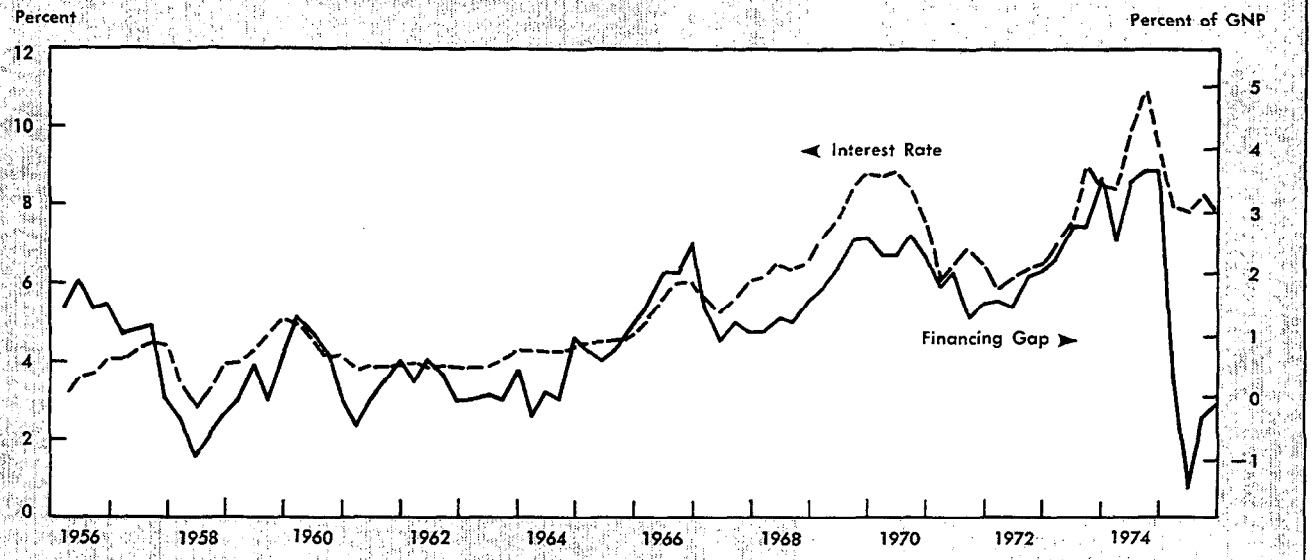


Note: All data are seasonally adjusted quarterly figures.

Sources: Board of Governors of the Federal Reserve System, Flow of Funds; Bureau of Economic Analysis, National Income and Product Accounts.

Chart 4

CORPORATE FINANCING GAP COMPARED TO LEVEL OF INTEREST RATES



Note: The interest rate is a simple quarterly average of the Federal Reserve Board's 4-6 month prime commercial paper rate and the Treasury Department's yield on new Aa corporate bonds. The financing gap is constructed with seasonally adjusted quarterly data.

Sources: Board of Governors of the Federal Reserve System, Flow of Funds and Federal Reserve Bulletin; Bureau of Economic Analysis, National Income and Product Accounts; Treasury Department, Treasury Bulletin.

Corporate Saving, the Corporate Balance Sheet, and Balance Sheet Drag The weakness of corporate saving has also been a factor contributing to two ongoing debates. The first of these debates relates to the significance of the state of the corporate balance sheet as a factor affecting economic activity. The discussion over the state of the corporate balance sheet has focused on certain liquidity and leverage ratios of categories of items from the aggregate corporate balance sheet. Liquidity ratios provide rule-of-thumb measures of a firm's ability to meet its maturing obligations when it is subjected to unexpected variations in income. Two of the most commonly cited aggregate liquidity ratios are the ratio of current assets (less inventories) to current liabilities—the quick ratio—and the ratio of short-term debt to long-term debt. The higher the quick ratio and the lower the ratio of short-term debt to long-term debt, the more liquid is the aggregate corporate balance sheet.

Leverage ratios measure the relative contribution of creditors versus owners to the financing of a firm. Two commonly cited aggregate leverage measures are the ratio of equity to total assets and the ratio of net interest payments to property income. The lower the ratio of equity to assets and the higher the ratio of net interest payments to property income, the greater is the claim of creditors to corporate income and the greater is the risk of bankruptcy.

What are the appropriate levels of these ratios? Economic and finance theory has very little to say about the matter. Nevertheless, there is a widespread belief among members of the financial and business communities that these ratios as a group reached dangerous levels by the end of 1974. The state of the aggregate corporate balance sheet at that point was alternatively described as "fragile," "impaired," "overburdened," "unstable," "imbalanced," and "illiquid." The behavior over time of the four ratios cited above is shown in Chart 5.[9] Two developments are particularly noteworthy. First, all the measures have been deteriorating since the mid-1960's. Two of the four ratios were fairly stable before that time while the other two—equity to total assets and current assets to current liabilities—were continuing trends that began earlier.

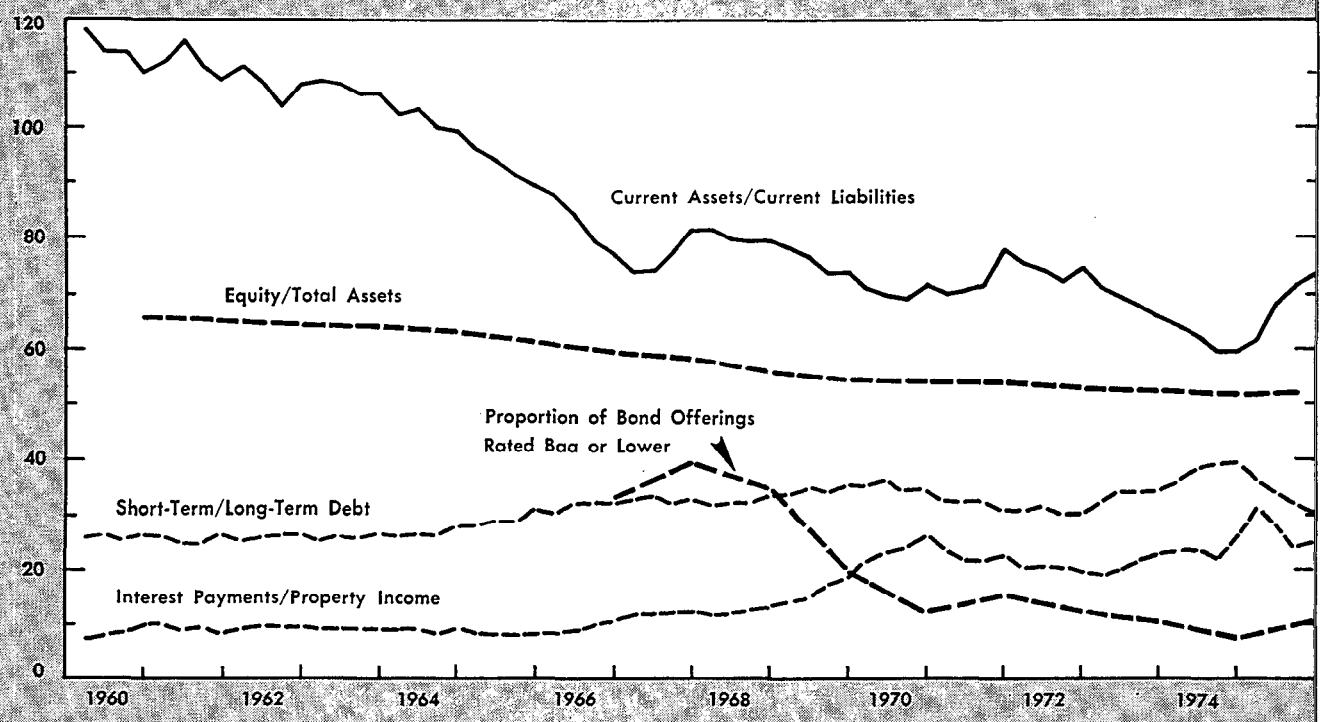
[9] These ratios, while widely cited, frequently use aggregate balance sheet categories that include different balance sheet items. The consequence is that the same ratio can look quite different from source to source. For example, all bank loans are frequently included in the short-term debt category, whereas in Chart 5 long-term bank loans are excluded from that category. If they had been included, the ratio would have been higher but would still show the same trend. It should also be noted that current assets and current liabilities in Chart 5 exclude trade credit and trade debt since they largely net out for the corporate sector as a whole.

Second, the ratios moved fairly closely with the rise in the corporate financing gap, which in turn was closely related to the decline in corporate profits and corporate saving. In particular, the ratios deteriorated most sharply in 1966, 1969, and 1973 when the financing gap rose most rapidly, and deteriorated least or improved when the financing gap declined during 1967, 1971, and 1975. The extraordinary fall in the financing gap in 1975, in particular, was accompanied by a substantial improvement in all the ratios.

The observed relationship between the rise in the corporate financing gap through 1974 and the deterioration of the aggregate balance sheet ratios results from the fact that a financing gap must be financed by depleting liquid assets, increasing short- and long-term debt, or selling new stock. If new stock is not sold to finance the gap between investment and internally generated funds, one or more of the balance sheet ratios shown in Chart 5 will deteriorate. Corporations, in fact, have been reluctant to issue new stock in recent years. Table V shows the net funds raised by corporations through stock sales as a percent of total net funds raised by the corporate sector in financial markets. To some extent, especially 1974, the reluctance to sell stock was a result of the poor performance of stock prices. Similarly, in some years, such as 1971 and 1972, rising stock prices have induced the corporate sector to rely more heavily on stock sales. By itself, however, the performance of the stock market cannot explain the dearth of new stock issues in the period covered in Table V. There are several other possible contributing factors. The most important is probably the differential

Chart 5

AGGREGATE CORPORATE BALANCE SHEET RATIOS



Note: Current liabilities are short-term bank loans, open market paper, finance company loans, U. S. Government loans, and profit tax liability. Current assets are demand deposits, currency, time deposits, U. S. Government securities, state and local obligations, commercial paper, and security R.P.'s. Short-term debt is short-term bank loans plus open market paper. Long-term debt is corporate bonds, tax-exempt bonds, and mortgages. The equity/total assets ratio is for manufacturing corporations only. All data are seasonally adjusted quarterly figures except for the equity/total assets ratio. An adjustment of the equity/total assets ratio for 1974 made in [1, p. 469] is used to adjust for changes in series coverage and account classification from previous years.

Sources: Board of Governors of the Federal Reserve System, **Flow of Funds**; Bureau of Economic Analysis, **National Income and Product Accounts**; Federal Trade Commission, **Quarterly Financial Report for Manufacturing Corporations**; Salomon Brothers, **Supply and Demand for Credit in 1976.**

tax treatment of dividends and interest payments. Interest payments by corporations to debtholders are not subject to the corporate income tax, while dividend payments to stockholders are. Consequently, a smaller before-tax share of corporate income is needed to give an equal after-tax rate of return to a new debtholder than to a new stockholder. Thus, it is in the interest of existing stockholders, up to a point, for the firm to fund its financing gap through debt rather than equity.[10]

Another factor contributing to the relationship between the rise in the financing gap and the deterioration of the balance sheet ratios was the simultaneous rise in interest rates. It was argued earlier that the financing gap was probably a major determinant of this rise in interest rates. Whatever the cause, rising interest rates contributed to the deterioration of the ratios in two ways. First, they increased the incentive to finance short-term rather than long-term—thereby adversely affecting the liquidity ratios—and second, they directly contributed to the proportion of property income going to net interest payments.

An additional factor, unrelated to the rise in the financing gap, that had an adverse effect on the liquidity ratios in recent years is the greater reliance of corporations on liability management as a hedge against financial uncertainty. According to a recent study [17], beginning in the mid-1960's corporations sharply increased their use of bank loan commitments. Clearly, with a guaranteed commitment of funds as protection against unexpected fluctuations in income, the perceived need for a "liquid" balance sheet is lessened.

Aside from the widespread talk of financial instability, two concrete consequences of the deterioration of the balance sheet ratios are identifiable. First, as the aggregate ratios deteriorated, a greater number of corporate credit ratings were lowered by the rating agencies [1]. These ratings are a significant determinant of the cost of borrowed funds for these corporations. Second, the deterioration in the ratios contributed to the development of a two-tier market for long-term funds in which lower-rated companies had an increasingly difficult time raising funds even at an increasingly higher rate. The downward movement in the proportion of publicly-offered straight bond offerings by corporations with a credit rating of Baa or lower during the 1966-74 period is shown in Chart 5 along with the balance sheet ratios. The net result of these two factors was that more companies received lower credit ratings and a smaller percentage of that growing group were able to raise long-term funds.

Table V

NET FUNDS RAISED THROUGH STOCK SALES AS A PERCENT OF TOTAL NET FUNDS RAISED BY THE CORPORATE SECTOR IN FINANCIAL MARKETS

(Percent)

1960	11.8	1968	−.6
1961	17.2	1969	8.7
1962	3.2	1970	14.4
1963	−2.4	1971	24.4
1964	7.4	1972	19.7
1965	0.0	1973	11.0
1966	5.1	1974	5.3
1967	8.1	1975	27.8

Source: Board of Governors of the Federal Reserve System, Flow of Funds.

A third consequence of the behavior of the balance sheet ratios was increasing debate over their impact on the rate of growth in the economy following the 1974 recession. Many observers feel that the state of the corporate balance sheet is a factor inhibiting rapid economic growth, at least in the near-term, because many corporations are still in the process of restructuring their balance sheets. Typical statements (made in the summer of 1975) from two of the most well-known proponents of this view are:

> Currently, the financial base of business corporations needs substantial repair before this sector will be ready to take a fling at inventory speculation and at spending huge sums for plant and equipment [Henry Kaufman, 7].

> Given the scare that households, firms and financial institutions had in 1973-75, we can expect that these cash flows will be used initially to increase the robustness of balance sheets, rather than as a basis for continuing the trends [similar to those shown in Chart 5] exhibited in the charts [Hyman Minsky, 10].

Many of these same commentators argue not only that the recovery will be moderate but also that it *should* be moderate. Their reasons for this view stem from the behavior of the ratios shown in Chart 5. Periods of slow growth in recent years have been periods of decline in the corporate financing gap and improvement in the ratios, while periods of more rapid expansion have been periods of increase in the financing gap and deterioration of the ratios. These observers

[10] Several plans have been proposed to deal with this problem. A plan proposed by Henry Wallich [19], which could be implemented without the major complication of an abrupt change in after-tax profits, would be to place an equal tax burden on all types of property income: interest, dividends, and retained earnings.

fear the consequences of continuing the long-run trends shown in Chart 5. As Kaufman puts it,

> . . . let us recognize that a quick and spectacular advance in economic activity would have terribly adverse implications for the financial position of business. This is because efforts to improve corporate liquidity would have to be shoved aside in order to meet the enlarged new demand for inventory and other real assets [7].

They also note that even though the top tier of higher-rated corporations accomplished substantial improvements in their balance sheets in 1975, the second tier of lower-rated firms made much less progress. Parenthetically it should be noted that from the point of view of these observers the best possible circumstance would be a continuation of the rebound in corporate saving shown in 1975, which would allow a greater part of expansion of real assets to be financed internally than has generally been the case in recent years.

A central idea in the above discussion is that the state of the balance sheet can be a determinant, *aside* from its impact on current borrowing costs, of a firm's investment decisions. Perhaps no other idea is so widespread in business and financial circles and given so little attention in academic circles.[11] The corollary to this idea is that overburdened balance sheets can exert a drag on economic activity as corporations reduce investment expenditures in an effort to improve the condition of their balance sheets. In the extreme, widespread efforts to restructure balance sheets could result in a self-defeating decline in income and prices and a rise in real debt burdens. While modern balance sheet watchers have generally not raised this specter in the inflationary environment of recent years, it has in the past been a matter of genuine concern. As Irving Fisher put it 44 years ago:

> When a whole community is in a state of over-indebtedness, the dollar reacts in such a way that the very act of liquidation may sometimes *enlarge the real debts instead of reducing them*! Nominally, of course, any liquidation must reduce debts, but really . . . it may swell the [real] unpaid balance of every debt in the country, . . . [causing] a vicious spiral *downward*—a tailspin—into the trough of depression [3, p. 25].[12]

Corporate Saving, Capital Crunch, and the Capital Shortage Debate The terms capital crunch, capital shortage, and capital crisis have been widely used the last couple of years in many senses, which can be broadly broken up into two general categories: near-term and long-term. The weakness in corporate saving plays a role in both discussions. The weakness in corporate profits and saving in recent years is the crux of the whole near-term issue. As has been shown in this article, the weak state of corporate saving combined with fairly steady (and relatively high) corporate investment expenditures to create an ever-widening financing gap. These events played an important role in generating concern over deteriorating balance sheets, the development of the two-tier bond market, and rising interest rates. The combined effects of these developments created a growing concern about the ability and/or willingness of corporations to continue to raise funds to finance real investment.

The longer-term use of the term capital crisis concerns itself with the adequacy of the projected saving of various sectors of the economy for financing projected investment needs. It is beyond the scope of this article to dwell at length on the numerous recent studies of the issue.[13] Suffice it to say that predictions concerning the behavior of corporate and U. S. saving generally play a major role in the determination of the likelihood of a long-term capital crisis. Specifically, these studies generally require that to avoid a capital shortage corporate saving must return to levels more characteristic of the pre-1970 period and that, within a couple of years, the U. S. Government budget deficit must be transformed into a budget surplus.

Although no attempt to predict the future behavior of corporate saving will be made here, it can be pointed out that four factors were already at work in 1975 to increase corporate saving significantly. The two most important developments were the rebound in economic activity and the significant deceleration in the rate of inflation. The third factor was the decline in the effective tax rate on corporate operating profits. As indicated earlier, the rise in the effective tax rate on aggregate corporate operating profits in the 1970's was largely an unintended result of the impact of inflation, not conscious government policy. The effective tax rate on aggregate reported profits has declined every year since 1970. In 1975 the effective tax rates on both reported and operating profits were at low levels by post-

[11] That is not to say that the idea has never been considered. McClam [9] has a discussion of the limited role balance sheets have played in theoretical economic discourses in the past.

[12] Fisher's main prescription for preventing cyclical fluctuations in debt from becoming depressions was, of course, to maintain a stable real value of the dollar through a stable money supply.

[13] See [2] for a study that concluded with the instantly famous line that "We can afford the future, but just barely" and [13] for a more pessimistic conclusion.

war standards. The fourth factor working to expand corporate saving was the increasing focus on the impact of inflation on operating profits and corporate saving. The switch by many firms to LIFO accounting methods, the change in the treatment of capital consumption in the NIA, and to some extent, the increase in the investment tax credit in 1975 were all a result of that changing focus.

Summary In summary, several factors combined in the 1970's to cause a prolonged weakness in net corporate saving. This weakness in conjunction with relatively high capital expenditures created unusually large external financing requirements, which, along with other factors, contributed to the deterioration of the aggregate corporate balance sheet and helped spur the capital shortage debate. Last year saw a strong resurgence of corporate operating profits and saving, an extraordinary decline in external financing requirements, and a significant improvement in the aggregate corporate balance sheet ratios. A consequence of these developments has been a marked decline in the intensity of the debates over the state of the corporate balance sheet and the presence of a capital crisis. If the factors that contributed to the deterioration of corporate saving reappear, however, a resurgence of these debates can be expected.

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