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CHAPTER 2

Description of the Data

BECAUSE the organization of the data is necessarily complex and involves at each stage a decision with respect to consistency of the flows which are measured, we believe it is necessary to describe the sources of information, the adjustments that were made to the data, and the rationale for these procedures. In what follows, we have attempted to report the methodology employed in measuring the corporate flows of funds.

Sources of Funds

NET PROFIT

The "net profit" line in the tables measures accounting profits, exclusive of capital gains and losses, of all corporations required to report for tax purposes to the Internal Revenue Service. Our "net profit" concept does not correspond to the corporate profits component of the national income accounts, although both adjust the underlying Internal Revenue Service data to exclude capital gains and losses. Beyond this, however, substantial adjustments have resulted in important quantitative and conceptual differences between these net profit figures.

The starting point for the derivation of the NBER figure on corporate profits before tax is Table 18 of the national income accounts. The annual all-corporate figure is published. The annual industrial breakdown is also published for part of the period (unpublished information for the remainder of the period was secured from Department of Commerce worksheets). The quarterly data for all corporations and the industrial breakdown were obtained from Department of Commerce worksheets.

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The profits before tax of banks, insurance carriers, and corporate farms appearing in the national income accounts were removed. It was not necessary to remove profits of savings and loan associations reporting to the Internal Revenue Service since these were already excluded from the national income accounts. Nor was it necessary to adjust for investment company profits which are derived almost wholly from capital gains and dividend receipts, and are therefore also excluded from corporate profits in the national income accounts. National income corporate profits include so-called "rest-of-the-world" profits which are corporate earnings, net of taxes paid to foreign governments, accruing to United States residents (individuals and corporations) from corporations doing business abroad. These profits were removed, but those components received by or accrued to United States corporations were added back for the derivation of "net profits."¹

In addition, the inventory valuation adjustment which the Department of Commerce subtracts from accounting profits for purposes of measuring national income was added back into corporate profits. The inventory valuation adjustment is an estimate of the contribution to corporate accounting profits, of profits or losses on inventory account caused by changing price levels. This adjustment is appropriate for deriving a more accurate measure of the corporate contribution to the gross national product but not for analyzing the flow of funds. Both annual and quarterly figures were obtained from the Department of Commerce. The annual figures, including the bulk of industry detail, are published in Table 23 of the national income accounts. The remaining industry detail and the quarterly figures were obtained from Department of Commerce worksheets.

A small adjustment was made to the inventory valuation adjustment to exclude coverage of the corporate farms sector only. The adjustment, based on the book value of corporations, averaged less than one-half of 1 per cent of the total inventory valuation adjustment.²

Corporate profits in the national income accounts are net of dividends paid by United States corporations to one another, because the business sector is treated on a consolidated rather than on a combined basis. Therefore, the national income accounts' figures for corporate profits and for undistributed profits are understated by the amount of intercorporate dividends. For this reason, intercorporate dividends were

¹ See pp. 43 ff.

² See p. 62.

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added back into corporate profits after figures for banks, insurance carriers, and corporate farms were removed.

Annual figures for domestic dividends received by United States corporations were taken from *Statistics of Income*, as were the figures required for the sector coverage adjustment. Extrapolations of *Statistics of Income* data beyond 1954, including the industry detail, were obtained from Department of Commerce worksheets. Quarterly figures for all corporations, as well as industry components, were estimated by distributing the annual totals among the quarters on the basis of quarterly dividends paid by the 7,000 corporations in the Department of Commerce sample. These figures appear on a regular monthly basis in the *Survey of Current Business*. The annual sector coverage adjustment was distributed among the quarters on the same basis.

Next, dividends received by United States corporations from foreign (non-United States) corporations were added back into corporate profits after adjustment for foreign taxes on dividend income. The foreign dividends after tax received by banks, insurance carriers, and corporate farms were removed. Figures on the foreign dividends received before tax by all corporations were taken from Table 38 of the national income accounts for the years in which *Statistics of Income* data were available. Subsequent data were obtained from Department of Commerce worksheets. Since the dividends received before tax were available by industry, it was necessary to allocate the taxes paid on them by industry. This was done on the basis of the relationship of dividends received before tax for all corporations.

Quarterly figures, including the industry detail, were estimated by distributing the annual totals among the quarters on the basis of the line in the quarterly balance of payments table "Income on investments, other private"; this series appears regularly in the *Survey of Current Business*.

In a further step, branch profits after taxes paid to foreign governments by United States corporations were added back into corporate profits, after adjustment for sector coverage. Annual figures, including the industry detail, for both branch profits after tax and tax paid on these profits were obtained from Department of Commerce worksheets. The adjustment for sector coverage excluded figures for banks and insurance carriers; it was estimated from data in Table K of *Statistics of Income* for the years 1950, 1951, and 1953, which reported income from foreign sources exclusive of dividends. The adjustment was based on the ratio of such income of banks and insurance carriers to in-

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come from foreign sources exclusive of dividends of all corporations on their operations abroad.

Quarterly figures, including the industry detail, were estimated from movements in the balance of payments item "Income on investments, direct investments." These figures are available from the line in the quarterly balance of payments table "Income from investments, other investments" which appears regularly in the *Survey of Current Business*. The quarterly distributions were applied to all annual figures, including the industry detail and the adjustments for sector coverage.

Another adjustment is also required to include the branch profits of foreign corporations operating in the United States. While the operations of these corporations are included, but not separately accounted for, in the *Statistics of Income* data, their payments abroad are netted out in the national income accounts and should be added back into dividends paid. This was not done, however, because almost all of the less than \$65 million in branch profits after taxes were earned by banks and insurance carriers.

An adjustment was made to add to profits an estimate of sales subsequently cancelled by renegotiation of contracts between the government of the United States and domestic corporations. The annual figures for 1950-54 were obtained from Table 38 of the national income accounts and for 1955, from Department of Commerce worksheets. The entire amount was allocated to the manufacturing industry, and quarterly figures were estimated as one-fourth of the annual totals.

To estimate corporate profits, the National Income Division of the Department of Commerce adds to the profits figure of the Internal Revenue Service an estimate of profits revealed by tax audit. It was necessary to reverse this adjustment and to distribute the sum by industry. The industrial distribution of the audit profits was based on the federal income and excess profits tax liability, after adjustment for sector coverage and for credits claimed for foreign taxes paid in the given year. The 1954 distributions were used to allocate the 1955 figure by industry. Quarterly figures were estimated as one-fourth of the annual totals.

Corporate profits in the national income accounts also differ from accounting profits because depletion allowances are not considered a charge against income. Thus, corporate profits (and undistributed profits) are overstated by the amount of the depletion allowances. It was necessary, therefore, to reverse this Department of Commerce ad-

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justment.³ A small adjustment was made to remove the depletion charges of banks and corporate farms.

One important adjustment, the last of the long list made to derive the profits of all corporations, was needed because the data describing the flows of funds through the railroad industry in the National Bureau accounts were based on Interstate Commerce Commission rather than Internal Revenue Service tabulations and definitions. It was necessary to derive rail profits from Internal Revenue Service data, remove this amount from the total for all corporations, and then substitute the profits figure based on Interstate Commerce Commission data. The derivation of the final figures based on Internal Revenue Service data followed the procedure described above for other industry groups.

Railroad profits before taxes are based primarily upon Interstate Commerce Commission tabulations which appear in Bureau of Transport Economics and Statistics, *Transport Statistics of the United States, 1955*. They were computed as the sum of (1) net income after tax of all steam railroads (Part 1, Table 108 of the above source); (2) net income after tax of the Pullman Company (Part 2, Table 1); (3) net income after tax of electric railroads (Part 3, Table 1); (4) federal income taxes accrued⁴ (NBER file Table T. 14); (5) state income taxes accrued⁵ (NBER file Table T-00); and (6) inventory valuation adjustment (Department of Commerce). Quarterly profits were estimated by distributing the annual figures by the quarterly distribution of the net income of class I line-haul railroads, as tabulated by the Interstate Commerce Commission, Bureau of Transport Economics and Statistics, *Selected Income and Balance Sheet Items of Class I Railroads in the United States*.

The sum of all the above adjustments yielded the net-profits-before-tax figures which appear in the summary tables. The net profits of the "trade, service, other industry" group were calculated as the residual of the all-corporate universe less the manufacturing, mining, railroad, gas and electric, and communications industries.

The figures for final profits before tax differ in several ways from those in the Department of Commerce table for corporate sources and uses of funds. First, the latter rely on the corporate profits figures

³ See pp. 48-49 for the estimating procedures used to derive annual and quarterly depletion allowance figures.

⁴ See discussion of tax payments for methods employed to estimate tax accruals, pp. 62 ff.

⁵ *Ibid.*, pp. 69 ff.

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appearing in the national income accounts, whereas these accounts were subjected to many adjustments in the National Bureau tables. Second, the Department of Commerce tables treat the corporate sector on a consolidated rather than on a combined basis and thus eliminate intercorporate dividend receipts. Third, the Commerce figures exclude receipts from abroad. Fourth, Commerce data include profits revealed by tax audit.⁶

The principal difference between the methods employed by Dawson and the National Bureau, in estimating the profit-before-tax figures, results from our decision to shift from regulatory authority to Internal Revenue Service data to estimate the flows through the gas and electric, and the communications industries. In addition, Dawson's profit figure, like the national income accounts figure, includes depletion.

The Federal Reserve Board tables for corporate sources and uses have no direct estimate of corporate profits. Rather, they contain an estimate of "net operating surplus" which is equal to the sum of profits plus depreciation, depletion, amortization, and bad debt charges.⁷ The sum of these items in the National Bureau tables do not equal the Federal Reserve Board's "net operating surplus" because, as indicated above, the flows through the railroad industry are based on Interstate Commerce Commission data whereas the Federal Reserve Board flows are based exclusively on Internal Revenue Service data for income statement items.

DEPRECIATION AND AMORTIZATION

Estimates of depreciation and amortization charges for the corporate business sector are primarily based on tabulations in *Statistics of Income*. Annual figures for the industry detail are taken directly from *Statistics of Income, Part II*, without adjustment. For 1955 the figures are taken from Department of Commerce worksheets. The sector coverage adjustment for banks, insurance carriers and corporate farms for 1955 was obtained by a rough extrapolation of the 1954 *Statistics of Income* figures.

Interstate Commerce Commission data for depreciation and amortization of rails were substituted for Internal Revenue Service data, with the exception of the treatment of emergency amortization since 1950 discussed below. We used the sum of depreciation and amortization

⁶ See pp. 48-49 for discussion of depletion.

⁷ The bad debt charges as a source of funds are accounted for in the Bureau tables in "other internal charges" discussed below, see pp. 50 ff.

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charges of class I line-haul railroads (*Transport Statistics in the United States, 1955*, Table 100) plus the depreciation charges of the Pullman Company taken from the annual report of the Pullman Company in *Moody's Railroads*. According to Interstate Commerce Commission regulations, railroads which were able, under existing tax laws, to accelerate the writing off of equipment for purposes of computing their income tax liability, were not permitted to speed up the rates of depreciation on road and equipment for purposes of computing reported net income. Thus, Interstate Commerce Commission depreciation and amortization charges understated true flows to the railroad industry subsector on depreciation and amortization account by the amount of the accelerated depreciation which railroads took. It was therefore necessary to reduce reported profits by that amount and to increase depreciation and amortization reported by the ICC by the same figure. The sum of the depreciation and amortization charges plus net profits remains the same after these adjustments. The net operating surplus or internal sources are not affected, but the adjustment does preserve the accuracy of the dividing line between profits and depreciation and amortization charges.

The revised rail figure was substituted for the Internal Revenue Service rail figure and the all-corporate total was adjusted to take account of the difference between these two sets of figures. The annual depreciation and amortization of the category "trade, service, other," is derived as a residual. The revised and adjusted all-corporate total was taken as the correct control. The annual figure for the other industry groups was subtracted from the all-corporate total.

Quarterly estimates of depreciation and amortization for the corporate universe and for manufacturing were obtained from the Department of Commerce. In order to adjust for sector coverage quarterly, the sum of the annual depreciation and amortization charges of banks, insurance carriers, and corporate farms taken together was distributed over the quarters. It was assumed that the quarterly rates of change of these charges were constant within the year, so that the quarterly figures were estimated as the geometric interpolations of the rates of change of the annual figures. The same procedure was followed in distributing annual depreciation and amortization charges of the mining and gas and electric industries. The quarterly distribution of the annual figures for these charges in the communications industry was made on the basis of the quarterly reports of depreciation and amortization of

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the American Telephone and Telegraph Company, consolidated with principal telephone subsidiaries.

For railroads, quarterly estimates of depreciation and amortization were treated separately. First, the annual depreciation charges were distributed quarterly according to the reported charges of class I line-haul railroads in the ICC monthly report *Selected Income and Balance Sheet Items of Class I Railroads in the United States* (ICC, Bureau of Transport Economics and Statistics). Second, the quarterly distribution of the emergency amortization charges was based on the geometric interpolation of the change in the annual figures, assuming a constant quarterly rate of change within the year.

Quarterly estimates for the "trade, service, other" group were computed as a residual.

DEPLETION

Annual depletion figures for all corporations and the industry groups were based on tabulations contained in *Statistics of Income* through 1954. The treatment of depletion allowances in the NBER sources and uses statements differs from those of the Department of Commerce, as well as from Dawson who follows Commerce practice. Depletion charges are a charge against income. However, for purposes of computing the national income, the National Income Division of the Department of Commerce adds these charges to accounting income in order to measure corporate income. Commerce also includes this adjustment in the corporate profits figure which it reports in its statement of sources and uses of funds. Because we view depletion allowances as a charge against income, income figures reported in our NBER tables are lower than those of the Department of Commerce by the amount of depletion. The depreciation, amortization, and depletion charges are therefore higher by the same amount, but internal sources and the net operating surplus remain the same.

An extrapolation of the all-corporate annual depreciation figure was obtained from the National Income Division. The sector coverage adjustment was a rough extrapolation from the 1954 *Statistics of Income*. The industry detail for 1955 was taken from Commerce worksheets where depletion is estimated by product rather than by industry. In 1953 the depletion allowances claimed by manufacturing corporations in the Internal Revenue Service reports were \$77 million more than the allowances obtained by using the 1953 Department of Commerce figures. This difference was accounted for by the following four

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products: (1) lumber, (2) petroleum and coal, (3) stone, and (4) primary metals. In 1954 the difference had risen to \$82 million. The 1955 figure for the difference between manufacturing and the above four products was estimated roughly at \$85 million, on the basis of the continued rise in estimated depletion allowances of all corporations. In 1954, the depletion allowances of the Internal Revenue Service mining industry group were \$6 million more than the sum of Commerce depletion estimates. This was accounted for by: (1) metals, (2) anthracite coal, (3) bituminous coal, (4) petroleum, and (5) nonmetallic minerals. It was assumed that the same difference held for 1955. Mining and manufacturing industries accounted for approximately 95 per cent of all corporate depletion allowances.

The 1955 depletion allowances for the gas and electric industry group were estimated as the same percentage of the allowances of all corporations other than manufacturing and mining as in 1954. There were no depletion allowances for the communications and railroad industry groups.

The annual depletion figures were distributed quarterly by means of estimated quarterly movements in the value of the production of depletable assets. These quarterly distributions were based on movements of the price and production indexes of three mineral products: (1) petroleum, (2) coal, and (3) nonferrous metals. These products were given relative weights of .70, .15, and .15, respectively. Production indexes were taken from the Federal Reserve Board's index of industrial production without seasonal adjustment, and price indexes were taken from the Bureau of Labor Statistics wholesale price index. The BLS code numbers of the products were 05.56 for petroleum, 05.11 for coal, and 10.22 for metal. The resulting quarterly relative movements of this crude value index were then applied to the annual depletion figures for each industry separately, as well as for the all-corporate figures.

INSURANCE BENEFITS

Insurance premiums are a cost of doing business and are a charge against income. Uninsured damages are also a charge against income. Receipts of insurance benefits, on the other hand, are not accounted for in the income statement but do involve a flow of funds to the recipients of these benefits.

Annual figures on corporate receipts from claims arising under insurance coverage of corporate assets or activities were obtained from the Federal Reserve Board's flow-of-funds data. The payments are

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exclusively from private insurance carriers for the period covered by these accounts. Both the industrial allocation and the adjustment for sector coverage were based on the industrial distribution of capital assets obtained from *Statistics of Income*; rough extrapolations of 1954 figures were used for 1955. Insurance benefits for the corporate universe were obtained by reducing the Federal Reserve Board figure by the proportion of capital assets of all corporations accounted for by banks, insurance carriers, and corporate farms. Quarterly figures were estimated as one-fourth of the annual figures.

The tables of both Dawson and the Federal Reserve Board include an accounting of corporate insurance benefits, but neither adjusts the series for sector coverage. The Department of Commerce tables do not include any accounting for insurance benefits.

OTHER INTERNAL CHARGES

"Other internal charges" as a source of funds is the sum of (1) bad debt charges and (2) several income statement items of the railroad industry sector, adjusted to place them on a cash-flow basis rather than on the accrual accounting basis required of the railroads in reports submitted to the Interstate Commerce Commission.

The National Bureau treatment of the bad debt charge conforms to the precedent established by the Federal Reserve Board and by Dawson. The treatment of the railroad items is also essentially the same as the Dawson procedure.

Adding the bad debt charge to the income account for both total sources and total uses is an attempt to avoid errors, which might arise because of incomplete data, in measuring the flow of funds on trade credit account on a cash-transactions basis. *Statistics of Income* contains data on gross corporate receivables, bad debt reserves as a deduction from gross receivables, and the bad debt charges to the income account. Flows of trade credit are measured as first differences of receivables *net of bad debt reserves*; this is equal to gross credit extended minus gross repayments and minus the increase in bad debt reserves. Thus, an extension of trade credit when measured net of bad debt reserves is understated by the rise of the bad debt reserve, and similarly for net repayments. First differences of net receivables, therefore, include internal charges that are not flow-of-funds transactions. The rise in reserves associated solely with an extension of trade credit not only understates uses on a cash-transactions basis but also understates sources *via* the charge to profits. One means of coping with the problem is to

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record write-offs separately as donations of creditor to debtor. Unfortunately, no data are available on write-offs.

Although the increase in bad debt reserves is a charge against income, it is not the only component of the bad debt charge. Write-offs not covered by the reserve may also be included in the bad debt charge, but this need not always be the case. Instead, write-offs in excess of reserves may merely be charged to the surplus account on the balance sheet, short-circuiting the income statement. Because no separate information on charge-offs is available, these components cannot be separated.

The National Bureau treatment is therefore a conceptually unsatisfactory compromise required by data considerations. The bad debt charge is taken as the estimate of the increase in the bad debt reserve, which implies that write-offs are zero. The small loss experience of nonfinancial corporations in the postwar period suggests that only minor errors are introduced by this procedure.

Note that this adjustment is a separate item in the summary corporate sources and uses statement to "gross up" the accounts, which thereby makes total measured sources and total measured uses somewhat larger. As in the case of other items, the user of the accounts is free to employ the item as he sees fit; whether in its present form, by adding the bad debt charge directly to receivables and profits if he prefers, or by removing the item from the accounts entirely. In the last case, both total measured sources and total measured uses would be similarly affected because the same item for the bad debt charge has been added to both sides of the account.

The all-corporate annual figures for bad debt charges through 1954 were obtained from *Statistics of Income*. The 1955 annual figures are rough extrapolations of the 1954 figures, based on the assumption that improved business conditions in 1955 would result in a decrease in bad debt charges. Figures for industry allocations and sector coverage adjustment for banks, insurance carriers, and corporate farms are taken directly from *Statistics of Income*. Quarterly figures were computed as one-fourth of the annual figures.

Accrual items charged against the railroad industry income account were added back into the sources of funds side to put these accounts more nearly on a cash-flow basis. Although most of the individual items were small relative to other flows, the sum of the items taken together was of sufficient size to necessitate adjustment of the tables. The principal need in shifting from an accrual to a cash basis is to account

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for the excess of accrued interest over interest paid. The Interstate Commerce Commission tabulates interest paid for class I, line-haul railroads only (*Transport Statistics in the United States, 1955, Part 1, Table 121*). To estimate the interest paid by all railroads, the ratio of interest paid to interest accrued of all class I roads (Table 121) was applied to the interest accrued for all railroads (Table 156). The excess of accrued interest over interest paid was then included in "other internal charges."

Several other accruals were similarly estimated and included in this item. These data were also taken from *Transport Statistics in the United States, 1955, Part 1*. These were: (1) retirement of road and equipment charged to operating expenses (Table 89B); (2) income applied to sinking and other reserved funds (Table 113); (3) deferred maintenance of way and equipment (Table 89); (4) major repairs to equipment (Table 89); (5) delayed income debits less credits (Table 113); and (6) amortization of discount on funded debt (Table 113). Data on these accrual adjustments were available for class I line-haul railroads only and *no adjustment was made for the other railroads*. The quarterly railroad figures were estimated as one-fourth of the annual figures.

Dawson's tables contain a corresponding accounting of these flows. The Federal Reserve Board, on the other hand, accounts for the bad debt charge but makes no adjustment for the railroad accruals because its data on flows through the railroad industry sector are based on Internal Revenue Service data. The Department of Commerce tables make no accounting for these flows.

TAX REFUNDS

Tax refunds are a source of funds which must be accounted for in a cash-flow, sources-and-uses statement. The all-corporate annual figures were taken from Federal Reserve Board worksheets; the quarterly figures were derived by distributing the annual figures on the basis of the Internal Revenue Service worksheet on quarterly corporate income and profits tax refunds.⁸

Adjustments for sector coverage and the industry allocation of tax refunds were made by lagging federal corporate income and excess profits tax liability (adjusted for foreign tax credit claimed) one year

⁸ There is a small difference in the two series of approximately \$20 million annually. In revisions of the data, Internal Revenue Service, rather than Federal Reserve Board series, should be used.

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behind tax refunds. Thus, the adjusted tax liability data for 1949 were applied to the 1950 tax refund figures. The same allocations were used to distribute the refunds over the quarters.

CORPORATE SHORT-TERM BANK BORROWING

The data for corporate short-term borrowing on an original maturity basis, which include the industry detail, are taken from SEC working capital worksheets. This component of working capital is based on the 1955 Commercial Bank Loan Survey of the Federal Reserve Board. Several adjustments were made in these data to conform to the National Bureau tables.

A relatively small adjustment was made to exclude loans to corporate farms. A rough estimate of these loans was made on an annual basis by assuming that 65 per cent of the *Statistics of Income* figure for corporate farm notes, bonds, etc., with less than one-year original maturity, consisted of short-term bank borrowing by corporate farms. The 1955 figure was extrapolated by using loans of all farms taken from National Bureau data. The resulting series differs from short-term commercial and industrial loans of all corporations because it includes loans to personal finance companies. The latter are not classified as business or commercial and industrial loans, in the banking statistics.

There is no separate accounting within the public utility sector (electric, gas, and often, local utilities) of water and sanitation corporations in the SEC series prior to 1955. At the end of that year, such loans amounted to \$11 million; it was assumed that short-term bank borrowing of water and sanitation corporations was zero until that date. For 1955, the short-term bank borrowing of water and sanitation corporations was removed from the utility sector and put into the trade, service sector.

The quarterly industry allocations were obtained directly from the SEC worksheets, except for corporate farms. Quarterly allocations for the latter were made by interpolation on the basis of loans to all farms.

NOTES AND ACCOUNTS PAYABLE

The series on notes and accounts payable, annually and quarterly, and by industry, was taken directly from working capital worksheets of the SEC, with an adjustment to exclude the payables of corporate farms. The SEC figures (except rails, which are from ICC data) are based on *Statistics of Income* balance sheet items (1) accounts payable, and (2) notes, bonds, etc., with an original maturity of less than one year,

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after deducting (1) short-term bank loans and (2) United States government advances and prepayments.

The SEC makes several adjustments to the IRS data. It adds an estimate of the understatement of payables by defense contractors who have netted government prepayments against other working capital items. It also shifts some IRS "other liabilities" to the payables category to make the totals conform with the reports filed by individual companies with the SEC. At the end of 1953 this adjustment amounted to \$290 million.

The year-end payables of corporate farms were estimated as the sum of the IRS items of accounts payable plus 35 per cent of notes, etc., with original maturity of less than one year. The 1955 figure was extrapolated on the basis of the balance sheet of all farms; quarterly figures were obtained by linear interpolation of the year-end estimates.

The Department of Commerce, the Federal Reserve Board, and Dawson also take the SEC figures. The Department of Commerce makes no adjustment for corporate farms.

CORPORATE LONG-TERM BANK BORROWING

Estimates of corporate long-term bank borrowing are on an original (not current) maturity basis. If first differences were taken on a current maturity basis, then a decrease in long-term debt, as a result of its maturing within one year, would show up as a net repayment of long-term debt and a net incurrence of short-term debt, when neither would be the case. The current maturity basis, however, may be more appropriate for some analytical purposes, such as working capital analyses. The National Bureau series presented here is based on a revision of the SEC quarterly estimates of long-term corporate bank borrowing. (The industry allocation was independently derived and is described later.)

The SEC series was based on the 1946 Commercial Loan Survey. The National Bureau series takes into account additional information revealed by the Federal Reserve Board's Commercial Loan Survey, taken on October 5, 1955. First, an estimate was made for corporate long-term bank borrowing at the end of the third quarter of 1955. The percentage difference between this and the SEC figure for the same date was linearly interpolated back to 1946. The resulting percentages were then applied to the SEC series. With some further adjustments (described below), the revised SEC series was considered better than several existing estimates of corporate long-term bank borrowing.

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The October 1955 figure was estimated in several steps. First, the reported figures, which were for member banks only, were stepped up to estimate loans for all commercial banks. Then, the estimated loans of all banks were adjusted to insure that the universe was comparable with the corporate universe used in the Bureau tables.

The figures for loans to corporations reported in the Commercial Loan Survey of October 1955 were raised to reflect loans of all banks, on the basis of the relationship between commercial and industrial loans of member banks to those of all banks as of June 30, 1955 and December 31, 1955. The step-up ratios were interpolated between the two dates. On June 30, 1955, there was a step-up of 1.07355 and on December 31, of 1.07176; the resulting interpolation was 1.07265. This step-up of 7.265 per cent was applied to the commercial loan figure of \$8,276 million long-term bank loans, resulting in an estimate of \$8,877 million for long-term business loans on a commercial loan survey basis.

Business loans were then adjusted for coverage. The Commercial Loan Survey concept included real-estate loans on business property. These flows are accounted for in the series on corporate mortgages, and it was therefore necessary to remove them to avoid double counting. The Federal Reserve Board estimate for such real-estate loans at the end of the third quarter of 1955 was \$1,088 million. This sum was subtracted from \$8,877 million of business loans, yielding \$7,789 million of non-real-estate long-term loans to corporations. The long-term bank borrowing of personal finance companies is not included in business loans in the banking statistics. Since finance companies are included in our corporate universe, it was necessary to add their long-term bank borrowing into the series. An estimated \$105 million of such loans for the third quarter of 1955 were added to the non-real-estate loan figure.⁹ Thus, corporate long-term bank borrowing was estimated at \$7,894 million for the third quarter of 1955.

This figure was compared with the SEC figure for the same date. The percentage difference was interpolated back to 1946, the date of the earlier Commercial Loan Survey, and the percentages were applied to the old SEC series. The series so adjusted became the all-corporate long-term bank borrowing series included in these accounts.

The industry detail for all industries, excluding the residual group "trade, service, other," was independently estimated.

⁹ E. Shapiro and D. Meiselman, "The Financing of Consumer Credit Institutions," *Consumer Instalment Credit: Conference on Regulation*, Washington, D.C., 1957, Vol. I, Part II, p. 298.

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The level and the movement of the figures for the residual industry group were important checks on the accuracy of the all-corporate series. Both the level and the flows appeared to conform to other financial information for this group over the entire decade. Industry data were taken from the following sources. For manufacturing (annually and quarterly), a new series was estimated by revising an existing SEC series in a manner similar to that employed in revising the SEC series for all corporations. The Commercial Loan Survey estimate for long-term loans to manufacturing corporations was compared with the SEC figure for the end of the third quarter of 1955. The percentage difference between the two was interpolated back to 1946 and was then applied to the SEC series.

For the mining industry, the annual and quarterly figures were taken directly from the SEC worksheets; these had already been revised to adjust for the data revealed in the 1955 survey.

The annual estimate for the gas and electric industry was based on a tabulation of Federal Power Commission data called "other long-term debt." The gas utilities' data are reported in *Statistics of Natural Gas Companies* published annually by the Federal Power Commission; the electric utility data are found in *Statistics of Electric Utilities in the United States*, which also appears annually. Some public utility corporations are in both tabulations. Thus, it was necessary to check individual companies in the annual Federal Power Commission reports to avoid double counting of the same long-term debt. The quarterly figures were obtained by linear interpolation.

The flow of long-term bank borrowing of the railroad industry group was estimated as the change in the level of "unpaid conditional sales contracts" reported and tabulated by the Interstate Commerce Commission. The annual data can be found in Table 141-A in the ICC Annual Report, *Statistics of Railways in the United States*. The quarterly figures were obtained by linear interpolation.

The communications industry had no long-term bank borrowing.

The figures for the "trade, service, other" group were estimated as the residual of the revised SEC series described earlier less the directly measured industry series described above.

CORPORATE SECURITY ISSUES

The Securities and Exchange Commission is the principal source of data employed to estimate issues and retirements of securities of corporate business. The bulk of the figures is available on a monthly

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basis and with considerable industry detail. The series is consistent with our definition, i.e., it attempts to measure cash flows resulting from issues and retirements of corporate securities. It is published under the title of "Net Change in Corporate Securities Outstanding."

Since the SEC has tabulated statistics on mining security issues separately only since 1953, this component was estimated back to 1950 by decreasing the percentage of mining stock and bond issues to all-corporate stock and bond issues in the 1953-55 period. This procedure was employed on the assumption that the 1953-55 period was characterized by a temporary increase in mining securities due to uranium and Canadian oil issues.

The use of gross rather than net flows on corporate security account is followed neither by the Federal Reserve Board, by Dawson, nor by the Department of Commerce, all of whom net retirements against new issues and present data only for the net change in securities outstanding. Data are presented in gross form in the Bureau accounts whenever possible. Gross figures give some indication of activity in the capital markets, particularly on the part of underwriters. They also reveal interesting detail on such important capital market operations as refundings.

The SEC totals for bond issues of the corporate sector were revised to exclude those of corporate farms and sales by the Reconstruction Finance Corporation. The annual total of sales by corporate farms through 1954 was estimated at 15 per cent of the change in the IRS corporate farm balance sheet item, "notes, bonds, etc., more than one year maturity." The 1955 level figure was extrapolated on the basis of the change in farm mortgages. The quarterly figures were obtained by interpolation. The RFC sales of bonds, annually and quarterly, were taken directly from SEC worksheets and were removed from the railroad and the all-corporate sectors.

The SEC totals for stock issues of the corporate sector were revised for sector coverage. Securities included in the SEC totals, which were issued and retired by banks, insurance carriers, investment companies, and corporate farms, were removed.

Data on security issues of banks were obtained for the 1950-53 annual flows from worksheets of the Federal Reserve Board. FRB estimates were for net issues, but it was assumed that there were no retirements during that period, so that the net and gross issues were identical. The annual figures for 1954 and 1955 were taken from worksheets of the SEC. The 1954 figures were for gross issues only, and were

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\$6 million higher than net issues estimated by the Federal Reserve Board for the same year; it was assumed that retirements constituted the difference. Starting in 1955, the SEC estimated gross issues and retirements, and these figures were taken directly.

The 1953 quarterly estimates of security issues of banks were estimated by distributing the annual total according to the quarterly distribution of the annual change in capital stock outstanding of commercial banks. The latter figures appear in Table IV-b-17a, line 7 of Raymond Goldsmith and Robert Lipsey, *Studies in the National Balance Sheet of the United States*, Princeton for NBER, 1953, Vol. II. The 1954 quarterly figures were estimated by the SEC; the estimate of retirements in that year was spread evenly over the quarters. The quarterly figures for 1955 were taken directly from the SEC.

To remove the issues of insurance carriers, 32 per cent of Table IV-b-17a, line 8 (*ibid.*) was subtracted from SEC totals. No gross issue figures for insurance carriers were available for the 1950-54 period, but examination of individual company reports within that period and for subsequent years tend to justify the assumption that retirements were small enough to be ignored. The 1955 annual totals for gross issues and retirements were obtained from SEC worksheets. Quarterly figures for 1953 and 1954 were estimated as one-fourth of the annual totals for each year; those for 1955 were obtained directly from SEC worksheets.

Security issues of investment companies were removed from the SEC totals, to make the industrial coverage conform to our definition of the corporate business sector. Both annual and quarterly figures for gross issues and retirements of investment company securities were taken from SEC worksheets. The figures, starting in 1954, are for open-end investment companies only and are based on data collected, not by the SEC as in previous periods, but by the National Association of Investment Companies. It is assumed that the latter's figures were used by the SEC to derive totals for all corporations; thus, the appropriate adjustment to reverse the inclusion of the investment company issues would be to exclude the National Association of Investment Companies' data, rather than the totals which include closed as well as open-end companies.¹⁰

¹⁰ Estimates of gross sales and retirements of closed-end investment companies have been prepared by the Postwar Capital Market Study and can be found in the tables describing the flows of funds through closed-end investment companies. It must also be noted that the SEC totals do not include issues and retirements of

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SALE-LEASEBACKS

Annual figures on sale-leasebacks were obtained from the Federal Reserve Board. They appear in the Board's corporate sources and uses table as the item "real estate transfers." This item refers only to the sale-leaseback financing technique of obtaining external funds.

The Federal Reserve Board estimates are based on information in the *Life Insurance Fact Book* on the holdings of commercial property by life insurance companies. It is assumed that such property has been built by corporations and subsequently sold to and simultaneously leased back from life insurance companies. With several minor adjustments, the Federal Reserve Board's annual series is based on net changes in the *Life Insurance Fact Book* series.

In our tables, all these flows were allocated to the "trade, service, other" industry group. The sale-leaseback technique was also utilized by other industries to some degree, but the amounts are not known. The series also understates flows on sale-leaseback account because it neglects sale-leasebacks between corporations and pension funds, college endowment funds, and others. There is no source to enable correction of this deficiency in information. Quarterly figures were estimated on the basis of commercial mortgages held by insurance companies. The Department of Commerce and the Dawson tables contain no accounting for flows on sale-leaseback account.

CORPORATE MORTGAGES

All loans to corporations secured by real estate, with the exception of mortgage bonds, are considered corporate mortgages in these accounts. Thus, the series includes construction loans as well as traditional mortgage loans.

Both annual and quarterly figures for the all-corporate totals, which exclude farms, were taken from worksheets of the Federal Reserve Board. Following the procedure employed by Dawson, 78 per cent of the corporate mortgage debt on commercial property (that is, any property other than residential) was allocated to the "trade, service, other" group. Of the remainder, 10 per cent was allocated to the mining industry and the rest to manufacturing. All corporate mortgages on residential property were allocated to the "trade, service, other" group.

face-amount investment companies. As is the case for closed-end companies, these flows have been small in the postwar period, especially relative to sales and retirements of mutual fund shares.

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The difference between the Department of Commerce and Federal Reserve Board series on corporate mortgage loans is large; they appear to be based on significantly different estimating procedures. As is indicated above, our procedure conforms with Dawson's.

DEBT TO GOVERNMENT

The debt to government series excludes government advances and prepayments which are included in the short-term borrowing line. The annual and quarterly data are taken directly from the Federal Reserve Board worksheets. The industrial allocations were derived as follows: the railroad sector debt to government was obtained directly from the Board's worksheets; 90 per cent of the remainder was allocated to manufacturing and the other 10 per cent to mining.

Uses of Funds

PLANT AND EQUIPMENT EXPENDITURES

The Securities and Exchange Commission figures (exclusive of banks and insurance companies) were used with an adjustment to exclude reused equipment of AT&T. The AT&T annual figure was allocated among the quarters on the basis of the ratio of the quarterly to annual plant and equipment expenditures of the communications industry. The remainder of the series, which were available quarterly, were not adjusted for sector coverage. The resulting overstatement of uses is probably small since it is doubtful that corporate farms have significant expenditures on plant and equipment account.

It is important to recognize that this series, as well as the accounts, measures uses of funds expended for new plant and equipment only. There is no attempt to measure expenditures for used plant and equipment and such expenditures may be important.¹¹ The resulting understatement in the uses of funds is paralleled by an understatement of sources of funds resulting from corporate sales of plant and equipment. It is highly unlikely that the understatement of both sources and uses is identical, either for the corporate sector as a whole or for individual industry components of the all-corporate universe. Students of the problem have estimated that corporations are net sellers of used

¹¹ The Department of Commerce estimates corporate expenditures on used plant and equipment as \$630 million in 1955, \$200 million in 1954, \$253 million in 1953, \$100 million in 1952, \$300 million in 1951, and \$400 million in 1950.

Description of the Data

equipment to the noncorporate universe. It is also likely that some individual industries are consistently net sellers of used equipment.

Thus, the accounts tend to understate the net sources of such funds flowing to the all-corporate universe and to some individual industry components. They also tend to understate expenditures by the non-corporate universe on plant and equipment account. These omissions, of course, may contribute significantly to discrepancies in the sources and uses of funds account of the corporate universe as well as the individual industry groups.

Neither Dawson nor the Federal Reserve Board include expenditures for used plant and equipment. However, the Department of Commerce includes estimates for corporate expenditures on this item in its sources and uses data.

OTHER CAPITAL EXPENDITURES

Several items of capital expenditure other than new plant and equipment are accounted for in the NBER line "other capital expenditures." Components include: (1) flotation costs incurred in issuing new securities—the difference between gross and net proceeds from the sale of new securities—and (2) expenditures by corporate landlords for residential land and residential construction.

Annual and quarterly figures for flotation costs of all corporate security issues are found in the annual reports of the SEC (estimated gross proceeds and net proceeds). The flotation costs were secured directly for manufacturing, mining,¹² communications, railroad, and gas and electric industries. The sum of these was subtracted from the unadjusted all-corporate total. The residual consisted of the flotation costs of banks, insurance companies, investment companies, and corporate farms, as well as those of the industries included in the "trade, service, other" group. The residual sum was allocated between the sector coverage group and the "trade, service, other" group on the basis of the stock issues of these groups. The sector coverage adjustment for flotation costs was then subtracted from the unadjusted all-corporate figure to derive the flotation costs for the adjusted all-corporate group.

Both annual and quarterly figures on corporate expenditures for residential land and residential construction were taken from work-

¹² Flotation costs of security issues of the mining industry for the years prior to 1953, the first time mining issue data were separately tabulated by the SEC, were estimated on the basis of known flotation costs since 1953 and estimated security issues before that period.

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sheets of the Federal Reserve Board. The entire amount of this flow was allocated without adjustment to the "trade, service, other" group which includes the real estate industry.

Unlike Dawson and the Federal Reserve Board, the Department of Commerce sources and uses tables have no accounting for the items contained in "other capital expenditures."

CHANGE IN INVENTORY

There are two related sources of data describing changes in corporate inventory holdings. One series prepared by the Department of Commerce is based on *Statistics of Income*, without adjustment. The SEC prepares the other series and adjusts the data to correct for underreporting to the Internal Revenue Service by defense contractors, particularly aircraft manufacturers who net inventories of goods in process against progress payments advanced by the Federal Government. The SEC data appeared to contain the more nearly correct figures for our series.

It was necessary, however, to make one adjustment to the SEC figures which report the *book value* of corporate inventories. Changes in book values may result from price level changes and may, therefore, not represent a cash flow. The inventory valuation adjustment taken from the Department of Commerce is an estimate of the change in book value resulting from price movements only, with sign opposite to the direction of prices. When inventory valuation adjustment is added to the change in book value, the sum represents a net cash use of funds on inventory account. This adjustment corresponds to that made to the national income accounts profits on the sources side.¹³

Annual and quarterly figures for the book value of corporate inventory holdings, including the industry detail, were obtained from the SEC. The inventory valuation adjustment was described in the section on net profits.¹⁴ A small sector coverage adjustment was made to eliminate the flows of corporate farms. Year-end figures for the inventory holdings of corporate farms were obtained directly from *Statistics of Income* through 1954. The quarterly book value of inventory holdings of corporate farms was interpolated and the 1955 year-end figure was extrapolated on the basis of the book value of the inventory of all farms contained in Mendelson, Table 4-1.¹⁵ The inventory

¹³ See pp. 42 ff.

¹⁴ P. 42.

¹⁵ Morris Mendelson, *The Flow of Funds Through the Financial Markets 1953-1955*, New York, NBER, 1959, pp. 1-27, line A20.

Description of the Data

valuation adjustments applicable to inventory holdings of corporate farms were estimated on the basis of the relationship between the book value of corporate nonfarm inventories and the inventory valuation adjustment applicable to the all-corporate universe.

FEDERAL CORPORATE INCOME TAX PAYMENTS

For estimating payments of federal income and excess profits taxes by industry, annually and quarterly, the major sources of data were (1) the monthly Treasury series on receipts of all corporate income and excess profits taxes and (2) the *Statistics of Income* compilation of federal income tax liability of all corporations by industry, incurred in the given year. Numerous estimating procedures were devised to employ these sources for developing a tax payment series for the National Bureau accounts.

The *Statistics of Income* figures are tabulations of the tax liabilities of United States corporations on income before credits for foreign taxes paid on income earned outside of the United States. This introduces a bias in the allocation of tax payments to the extent that the industrial distribution of foreign taxes differs from the industrial distribution of United States tax liability. The bulk of such credits were claimed by the manufacturing and mining industry groups, so that their tax payments to the United States would tend to be overstated and those of other industry groups would tend to be understated.

In the 1953 *Statistics of Income*, for example, credit claimed for foreign taxes paid amounted to \$599 million; income and excess profits tax liability of all corporations before such credits amounted to \$7,644 million.¹⁶ The mining industry group, reflecting the importance of foreign petroleum operations, claimed foreign tax credits of \$286 million when their income and excess profits tax liability before credits was \$313 million, leaving a net liability to the United States of only \$27 million. Manufacturing corporations claimed tax credits of \$223 million, leaving only \$90 million of tax credit claims for all other industry groups. This sum was allocated to each industry by direct reference to Internal Revenue Service industry groups for the years 1949, 1950, 1951 and 1953.

The all-corporate total for 1952 was derived on the basis of the ratio of Commerce foreign taxes on branch profits earned by United States

¹⁶ Data on returns with statements filed on Form 1118 in support of credit claimed for foreign taxes paid are contained in Table J, p. 15, Part II, 1953 *Statistics of Income*. Comparable data are available in *Statistics of Income* for other years.

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corporations abroad to Internal Revenue Service data for 1951 and 1953. For the industry allocation, foreign taxes paid by mining corporations were allocated by following the above procedure for the all-corporate total; 80 per cent of the remainder was allocated to manufacturing and 20 per cent was distributed among the other industries. The all-corporate and industry allocations for foreign tax credits claimed in 1954 and 1955 were estimated on the basis of the 1953 relationship between Internal Revenue Service and Department of Commerce data. In this manner a federal tax liability series, adjusted for credits claimed for foreign taxes paid, was derived.

The annual *Statistics of Income* tabulations cover tax return data of corporations whose fiscal years end within the federal government's fiscal year. Thus, for example, *Statistics of Income* for 1954 includes income statement and balance sheet information for corporations whose fiscal years end between July 1, 1953 and June 30, 1954. Payments schedules vary somewhat among corporations whose fiscal years ended at different times within the calendar year, particularly after the adoption of the Mills Plan described immediately below. The schedules for the period covered by these tables are summarized in National Bureau file Table T-O. The distribution of fiscal year endings also differs among the industries. It was necessary, therefore, to estimate the annual income and excess profits tax liabilities of these industries by the fiscal year endings relevant to the discharge of excess profits tax liabilities in order to avoid incorrect timing of tax payments. The fiscal year distribution for 1952 profits before tax was estimated on the basis of that for industries as reported in Table B, pp. 14-17, of the 1952 *Statistics of Income*; similar tables appear in several other editions of *Statistics of Income*.¹⁷ The same distribution was applied to the tax liability figures in all six years covered by these tables. Possibly some additional accuracy might have been introduced by applying *Statistics of Income* fiscal year-end data to the tax liability data of the corresponding year.

Payments of federal corporate income taxes in each year can be allocated by industry on the basis of the federal income tax liability of the previous year, obtained from *Statistics of Income* and adjusted for foreign tax credits. This method assumes that all income tax liabilities are fully discharged in the year after they were incurred. This

¹⁷ A full description and analysis of the social accounting and tax problems raised by fiscal year reporting can be found in W. L. Crum, *Fiscal Year Reporting for Corporate Income Tax*, Technical Paper 11, New York, NBER, 1956.

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seems to be a reasonable assumption for purposes of estimating annual tax payments for the period ending 1950; prior to the adoption of the Mills Plan, corporate income and excess profits taxes were paid in four equal quarterly instalments. An acceleration of tax payments began, however, for corporations whose fiscal year ended in December 1950. Initially, they were required to pay 30 per cent of their tax liabilities in each of the first two quarters of 1951 and 20 per cent in each of the last two quarters of the year. In each succeeding year, the proportions to be paid in the first two quarters of the fiscal year rose. By 1954, the entire tax liability incurred on profits earned in that year by corporations whose fiscal years ended in December, had to be discharged in equal quarterly payments in each of the first two quarters of 1955. The Revenue Act of 1954, effective in 1955, altered corporate tax payments toward a "pay-as-you-go" basis comparable to the payments of personal income taxes. In 1955 corporations whose fiscal years ended in December of 1955 were required to pay 5 per cent of their estimated tax liability for the year in each of the last two quarters.

For all corporations, before adjustment for sector coverage, and for all directly measured industries (manufacturing, mining, gas and electric, communications, and rails), the industry detail of tax liabilities distributed by fiscal year endings, when combined with the payments schedules summarized in National Bureau file Table T-O, yielded the tax payments of each industry in each quarter of the six-year period. Annual figures were then obtained as the sum of the quarterly figures.

The estimation of industry detail on tax payments during 1955 presented several problems which did not arise in earlier years. First, the estimating procedures required the use of data not yet available from the most recent *Statistics of Income*. The data needed were the all-corporate and industry detail of (1) profits before taxes, (2) income tax liability, (3) credits claimed for foreign taxes paid. Second, 1955 was the first year in which corporations were required to pay corporate income taxes before the end of the fiscal year in which the income was earned. The 1955 income tax liability for all corporations and industry components was obtained by applying to the 1954 tax liability the ratio of 1955 to 1954 profits before taxes. From this was subtracted the adjustment for estimated credit claimed for payment of foreign taxes in 1955.¹⁸

The estimated 1955 tax liability figures were also used to adjust

¹⁸ See p. 42.

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tax payments for the changes resulting from subsequent revision of the tax payment schedule. Corporations whose fiscal years ended in the first quarter of 1956 were required to pay 5 per cent of their estimated tax liability in the last quarter of 1955. Corporations whose fiscal years ended in the third quarter of 1955 were required to discharge 50 per cent of their tax liabilities in the last quarter of 1955. If these payment schedules were strictly applied to the tax liabilities estimated above, the estimated tax payments would have been higher than actual tax receipts. Corporations in making tax payments apparently tended to underestimate their liabilities, possibly because they were unable to forecast the rise in corporate profits which occurred in 1955 or were biased toward underreporting in order to lower their tax prepayment requirements. To deal with this problem, the tax liability figures were arbitrarily reduced by 25 per cent in estimating actual tax payments.

In common with the bulk of the data describing the flow of funds through the railroad industry, tax payments of the railroads were estimated on the basis of Interstate Commerce Commission, rather than Internal Revenue Service, data. The figures for profits after tax accruals for all railroads were taken from Table 109 of the ICC annual report, *Statistics of Railways in the United States*. Profits after tax accruals for class I railroads were taken from Table 111, and the federal tax accrual of class I, line-haul railroads was taken from Table 106. Although the ICC does tabulate the total tax accrual of all railroads, only for class I rails does it separate the federal income and excess profits tax accrual from other tax accruals. The tax liability of all railroads was estimated on the basis of the relationship of profits after tax of all rails to profits after tax of class I, line-haul rails; this ratio was applied to the federal income and excess profits tax accruals of class I roads to step them up to the all-railroad totals. The resulting tax liability figures were found to be higher than comparable IRS figures in each year. It was felt that the step-up ratios were too high because the non-class I, line-haul rails tended to be smaller and less profitable than the larger roads, and were therefore subject to a lower tax rate on the average than the class I roads. For this reason it was decided to use only half of the adjustment to move from class I to all railroad liabilities. Tax payments of the railroad industry group were estimated from the tax liability figures by the methods used to estimate the payments of other industries. It was assumed that all railroad fiscal

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years ended in December, so that it was not necessary to make any fiscal year-end adjustments.

In adjusting federal tax payment estimates for sector coverage, the payments of banks, insurance carriers, and corporate farms were excluded. No adjustment was made for savings and loan associations and investment companies. The omission of the adjustment for savings and loan associations introduces a very small error because the profits tax liability of these organizations is small.¹⁹ Omitting the adjustment for investment companies also involves small error because these companies pay relatively small amounts of federal corporate income taxes. Investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, the universe of investment companies in the sector coverage adjustment, are exempt from taxes on all distributed earnings if they distribute 90 per cent of their net investment income. Regulated investment companies pay corporation taxes at the regular rates only on retained earnings from interest and dividends; similar provisions obtain for capital gains taxes. The effect of the law is to provide incentives to distribute earnings. Therefore, almost all of the income of investment companies is exempt from federal income and excess profits taxes.

The tax payments of banks, insurance carriers, and corporate farms were estimated by methods similar to those employed for other industries, and were subtracted from the tax receipt data obtained from the Treasury Department. Information on the 1955 tax liability for banks was based on the annual report of the Federal Deposit Insurance Corporation, and for insurance carriers on Best's *Aggregates and Averages*. Although Best's does not contain data on tax payments, they can be estimated by taking the change in its balance sheet item, "Federal Income Tax Liability" and adding the figure to the income statement item, "Deductions for Federal Income Taxes." It was assumed that all banks, insurance carriers, and corporate farms had fiscal years which ended in December. Total tax payments for these industries in the third and four quarters of 1955 (the 5 per cent prepayment in each of the quarters of the estimated tax liability for 1955) were estimated at \$51 million in each quarter; of this amount, \$1 million was a rough estimate of the corporate farms share.

The federal income and excess profits tax payments of the residual "trade, service, other" industry were estimated as the Treasury re-

¹⁹ In 1954 their income tax liability was \$5.4 million.

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ceipts of corporate income and excess profits tax; less sector coverage adjustments for banks, insurance carriers, and corporate farms; less the payments of the manufacturing, mining, communications, electric and gas, and railroad industry groups.

In its flow data the Department of Commerce treats tax payments on an accrual rather than on a cash-transactions basis. When a corporation incurs a tax liability to the federal government on profits earned, the Department of Commerce accounts for the simultaneous profits and tax liability in the following manner: the balance sheet item "income tax liability" is treated on the same basis as other working capital liability figures; i.e., any increase in the item is treated as a source of funds, and a decrease is treated as a negative source. Starting, then, with profits before tax as a source of funds, the Department of Commerce first nets against this amount the tax liability incurred in the earning of the profits, showing only profits after income tax liability. If taxes were paid in the same accounting period as the profits were earned, then the Department of Commerce accounts would differ from our accounts only to the extent that its tables would be less gross. But taxes paid within the given accounting period are not likely to be equal to liabilities incurred, and the difference is accounted for by Commerce in the change in the tax liability figure. Thus, if profits before taxes are \$100 million, income tax liability is \$52 million (assuming an average tax rate of 52 per cent), and tax payments are also \$52 million, then the Commerce accounts show profits after tax liability of \$48 million as a source of funds and tax liability as a source of funds is zero. Since the Commerce accounts are on a net basis, they would have no item for tax payments. The National Bureau accounts are reported on a gross and cash-flow basis and would show profits before tax of \$100 million as a source of funds and tax payments of \$52 million as a use of funds.

If, on the other hand, the corporation (or industry) earned the same \$100 million, incurred the same tax liability of \$52 million, but paid only \$25 million in taxes, then the Commerce accounts would report profit after tax liability of \$48 million as before. The balance sheet would show an increase in tax liabilities of \$27 million, resulting from a tax liability incurred of \$52 million, \$25 million of which is discharged in the accounting period. Thus, the Department of Commerce would report the \$27 million increase in tax liability as a source of funds. Total sources would increase to \$75 million. In effect, the accounts treat the change in tax liability as borrowing from govern-

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ment and profits after tax liabilities as a source of funds. Our National Bureau accounts treat the same items as follows: profits before taxes of \$100 million are a source of funds and tax payments of \$25 million are a use of funds. The net source of funds would be \$75 million, the same as in the accrual accounting system.

The original Federal Reserve Board tables did not include quarterly estimates and the revised ones still do not provide industry detail. Therefore, the FRB was able to estimate federal corporate income tax payments from tax receipt data of the Treasury Department only after adjustment for sector coverage. The Dawson tables do not separate state from federal corporate income tax payments although total tax payments are measured as the sum of the two components. In the Dawson estimates, payments of federal corporate income taxes for each year are industrially allocated on the basis of the federal income tax liability of the previous year. These data were obtained from *Statistics of Income*, but no adjustments were made for fiscal year-end reporting.

STATE CORPORATE INCOME TAX PAYMENTS

State corporate income taxes are assumed to have been paid in full in the year following that in which the tax liability is incurred. Thus, the 1951 liability is assumed to be discharged in 1952. Annual figures on state income tax liability are estimated by the Department of Commerce and appear in Table 38 of the National Income Accounts. We allocated the annual figures for all corporations by industry on the basis of the industrial distribution of federal income tax liabilities. Adjustment for sector coverage was also based on the sector coverage ratio applicable to federal tax payments made in the same year.²⁰

The timing of quarterly payments was estimated on the basis of the 1954 payments schedules of ten states which, in that year, accounted for 83 per cent of the state corporate income tax receipts.²¹ The schedules for any one of the ten states were weighted by that state's corporate income tax receipts relative to those of the ten-state total. Information on tax receipts was taken from *Facts and Figures on Government Finance, 1954-1955* (The Tax Foundation), and the payment schedules were taken from the Commerce Clearing House, *Tax Service*. In 1954 it was found that 27.76 per cent of the payments were made in the first quarter, 34.93 per cent in the second quarter, 19.35 per cent in the

²⁰ See pp. 67-68.

²¹ The ten states were California, Connecticut, Massachusetts, New York, North Carolina, Oregon, Pennsylvania, Tennessee, Wisconsin, and Virginia.

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third, and 17.97 per cent in the fourth. The same distributions were applied to the annual figures for 1953 and 1955.

The Department of Commerce tables make no explicit accounting for state or federal income tax payments. The accounts are on an accrual basis so that "other current liabilities" should rise as state income tax liabilities are incurred and fall as those liabilities are discharged. Neither Dawson nor the Federal Reserve Board report state income tax payments separately in their corporate sources and uses tables. These payments are included by both as components of profit tax payments.

RENEGOTIATION PAYMENTS

Renegotiation payments are cash payments by corporations to the United States Government resulting from renegotiation of war and defense contracts. These flows are recorded in the year the payments took place. Annual figures were obtained from the Federal Reserve Board. These totals were allocated to the manufacturing group, except that in 1950 and 1952 a small amount was distributed to the "trade, service, other" group. The annual figures were distributed equally over the four quarters.

DIVIDENDS AND BRANCH PROFITS PAID

This series measures dividend payments in cash and other assets; it excludes stock and liquidating dividends. The series includes dividend payments of all corporations reporting to the Internal Revenue Service, with sector coverage adjustments to exclude those paid by banks, insurance carriers, investment companies, and corporate farms. As is true of other series in these accounts, Interstate Commerce Commission data for the railroad industry group are substituted for Internal Revenue Service figures. The branch profits are those of branches of foreign corporations in the United States.

The series is not on a purely cash-flow basis because it also includes some payments in the form of tangible property and of securities of other corporations held by the dividend-paying corporation. Such payments are of relatively small magnitude but, because there need be no source corresponding to the use, they do contribute to the discrepancy between total measured sources and total measured uses. For example, when corporation A pays a dividend in the form of stock in corporation B, the value of the stock is a use of funds. There is no corresponding source of funds, in part, because our accounts for corporate

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holdings of corporate securities are incomplete. It was not possible to separate cash from noncash dividends because *Statistics of Income* does not do so, although corporations are required to distinguish between the two on the original tax returns they submit to the Internal Revenue Service.

Annual figures for all corporations reporting to the Internal Revenue Service were taken directly from *Statistics of Income*. The 1955 figure was taken from worksheets of the National Income Division. Figures for the manufacturing, mining, electric and gas, and communications industries were taken from the same sources, as were those for banks, insurance carriers, and corporate farms; these last figures were required in order to adjust the all-corporate series for sector coverage.

Dividend payments of investment companies were also excluded. The annual series for these payments was from two sources: (1) annual estimates of the Federal Reserve Board and (2) tabulations of the National Association of Investment Companies. Although the Securities and Exchange Commission collected and tabulated investment company data through 1953, it neither received nor published figures on dividends paid by these companies. The Federal Reserve Board made some rough estimates of dividend payments based on the residual between total measured sources and total measured uses of funds of investment companies; the data for these estimates were obtained from the Securities and Exchange Commission. Starting in 1953, the National Association of Investment Companies collected and published information on dividends paid by those investment companies which were members of the Association. Although registration with the Securities and Exchange Commission under the Investment Company Act of 1940 is a requirement for membership in the Association, not all registered companies have been members. At the end of 1953, for example, the total assets of open-end members were \$4,146 million, or 97 per cent of the total assets of all open-end companies registered with the Securities and Exchange Commission on the same date. Almost all of the remaining \$156 million were accounted for by Coca-Cola International Corporation, which is registered as a nondiversified open-end investment company under the 1940 Act.

The coverage of closed-end companies, however, was less complete. At the end of 1953 all closed-end companies registered with the Securities and Exchange Commission had total assets of \$3,371 million: \$733 million for diversified closed-end companies and \$2,638 million for nondiversified companies. Of the nondiversified companies, the Chris-

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tiana Corporation and the Delaware Realty and Investment Company, members of the DuPont family empire, had total assets of \$1,837 million; the remainder of the nondiversified group had total assets of \$801 million. Neither Christiana nor Delaware Realty and Investment was a member of the Association whose closed-end members had total assets of \$928 million at the end of 1953. Thus, dividends paid by closed-end members understated those paid by all registered closed-end companies although neither Christiana nor Delaware paid out large dividends.²²

The Federal Reserve Board estimate of dividends paid by all investment companies during 1953 was \$415 million; that of the National Association of Investment Companies was \$286 million. The FRB figure appeared to be high even after taking into account the undercoverage of closed-end corporations by the National Association of Investment Companies. It was decided, therefore, to take the mean of the two figures as the estimate for 1953. Annual Federal Reserve Board estimates for earlier years were stepped down by the ratio of the revised 1953 figure to the unrevised 1953 Federal Reserve Board figure. The National Association of Investment Companies' annual series subsequent to 1953 was stepped up by the ratio of the revised 1953 figure to the original NAIC figure for 1953.

Interstate Commerce Commission data on dividend payments of railroads were substituted for the Internal Revenue Service *Source Book* figure. The annual series consisted of the sum of the dividends paid by all steam railways regarded as one system.²³

The Interstate Commerce Commission total for railroads was then included in the all-corporate series, so that the figures for the residual industry group differ from those based on Internal Revenue Service figures by the difference between the ICC and IRS tabulations for the rails.

Annual figures for the all-corporate universe were allocated among the quarters by means of the quarterly distribution of dividends paid by a sample of 7,000 corporations, as recorded in a monthly Department of Commerce series in the *Survey of Current Business*. This series re-

²² The latter had small dividend receipts and payments, despite the value of its portfolio. The bulk of its assets consisted of shares of Dupont whose ratio of dividends to price was low.

²³ Interstate Commerce Commission annual report, *The Statistics of Railways in the United States*, Table 109; electric railways, Table 170; and the Pullman Company, Table 166.

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ports dividends at the time they are actually paid, rather than when they are declared. The Department of Commerce also publishes some industry detail for the same series. This provided the basis for distributing the annual figures of the manufacturing, mining, gas and electric, and communications industry sectors. Quarterly figures for the railroads were estimated on the basis of dividends paid by class I rails. The quarterly payments of the "trade, service, other" industry group were calculated as the residual after the estimates for the above industries were subtracted from the adjusted all-corporate figures.

The series on dividends paid differs from the corresponding line in the Federal Reserve Board and Dawson accounts in that it does not include the branch profits of foreign corporations in the United States. These were omitted from the Bureau tables, because almost all branch profits are earned by foreign insurance carriers and banks operating in the United States—a group which is excluded from our data as part of the sector coverage adjustment. Figures on branch profits are available from the worksheets of the Balance of Payments Division of the Department of Commerce. (The Division only measures annual after-tax profits paid to foreign parents or reinvested in the United States.) In 1952, for example, such profits were estimated at \$44 million, of which \$38 million were accounted for by insurance carriers; in 1955 they were \$62 million, of which those of insurance carriers were \$40 million. In both years, most of the remaining branch profits were earned by agencies of foreign banks operating in the United States.

The Bureau accounts also differ from those of Dawson and the Board in the use of regulatory authority data for dividends paid. The Federal Reserve Board series is taken directly from the Internal Revenue Service with adjustments for sector coverage only. Dawson relies on tabulations of the regulatory authorities for dividends paid by the railroad and gas and electric industries and, to some extent, for those paid by the communications industry. Our tables rely on regulatory data for the rails only.

The Department of Commerce tables contain no explicit treatment for dividends paid. Commerce has an accounting of retained profits only, with profits and profits taxes measured on an accrual rather than on a cash basis.

CASH AND DEPOSITS

The estimates of the net change in corporate cash and in all deposit holdings are adjusted SEC figures, based on *Statistics of Income* data.

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For the railroad industry, the SEC and the National Bureau use ICC data. The SEC estimates year-end cash and deposit holdings of non-rail corporations in its working capital universe—all corporations reporting to the Internal Revenue Service with the exception of banks, insurance carriers, and savings and loan associations—by stepping up the Internal Revenue Service cash and deposit account to compensate for under-reporting by those corporations which have not submitted balance sheets.²⁴

The stepped-up cash and deposit figures are further adjusted if other information at the disposal of the SEC reveals industry or item misclassification. The treatment of Western Electric is a case in point. In 1954 this company filed its tax return on a consolidated basis with its parent, the American Telephone and Telegraph Company. Western Electric's working capital items were therefore imbedded in the *Statistics of Income* totals for the communications industry. In previous years, Western Electric filed with the Internal Revenue Service on an unconsolidated basis and was properly classified as a manufacturing corporation. In order to make the 1954 data consistent with the figures of the previous years and to help preserve the meaning of the industry detail, the SEC reclassified Western Electric as a manufacturing rather than a communications corporation.²⁵

Corporations may hold cash and deposits in excess of the figures reported to the Internal Revenue Service. Gas and electric corporations often set aside cash, deposits and government securities for specific purposes and report these assets to the Internal Revenue Service as "other assets" or "other investments." Federal Power Commission tabulations are an independent check on such misclassifications. Where differences between balance sheets suggest that such corporations have reported incorrectly to the Internal Revenue Service, the SEC adjusts the figures to make them conform more closely to the Federal Power Commission data.

The SEC substitutes Interstate Commerce Commission for Internal

²⁴ Cash and deposits taken from *Statistics of Income* balance sheets are stepped up by the ratio of the total compiled receipts of all corporations to those of corporations which have submitted balance sheets to the Internal Revenue Service. This is done by industry because balance sheets and the degree of under-reporting differ substantially among industries.

²⁵ Shifts in industry classification of the same corporation or of the activities of subsidiary members of a corporate family present recurring and often unavoidable sources of difficulty in the use of *Statistics of Income* data. It is only in the most obvious cases that users can reclassify or adjust the data.

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Revenue Service data on cash holdings and deposits of the railroad industry. Our tables also use Interstate Commerce Commission totals, but differ from the SEC figures in that the coverage of the railroad industry is broader. To the cash and deposit holdings of class I, II, and III, line-haul, switching and terminal railroads, and their lessors (*Statistics of Railways in the United States*, Interstate Commerce Commission, Table 156) and special deposits of class I line-haul railroads, class I switching and terminal companies, and their lessors (Tables 128-131), have been added the cash of the Pullman Company (Table 167), the Railway Express Company (Table 169), and electric railways (Table 170). The all-corporate cash and deposit figures were adjusted for differences between SEC and National Bureau estimates of cash and deposit holding of the railroad industry.

The SEC cash figures were adjusted for sector coverage by removing the holdings of open- and closed-end investment companies registered with the SEC under the Investment Company Act of 1940, and the cash and deposits of corporate farms. Investment company cash was taken from National Bureau tabulations (See Goldsmith and Lipsey, *National Balance Sheet*, notes to Table III-5f); these figures were obtained from SEC tabulations published in the *Statistical Bulletin* of the SEC through 1953. Thereafter, cash figures were estimates based on tabulations of the National Association of Investment Companies for open-end companies and National Bureau tabulations (*ibid.*, notes to Table III-5f-2) for closed-end companies. Corporate farm cash and deposits were taken from *Statistics of Income* and were extrapolated for 1955 on the basis of estimates of cash holdings of all farms.²⁶

Quarterly figures were taken from SEC estimates, adjusted in the same manner as the annual figures. Quarterly cash holdings of corporate farms were interpolations of year-end figures based on movements of cash of all farms.²⁷ End-of-quarter cash of investment companies was also taken from Mendelson.²⁸ The quarterly cash holdings of railroads were estimated on the basis of movements in the quarterly SEC rail data which were adjusted to our railroad cash total by linear interpolation of year-end differences in the two series.

The Department of Commerce corporate flow data uses the SEC data directly. Dawson's estimates of railroad cash and deposits are derived in a manner similar to that used by us. His estimates of cash

²⁶ M. Mendelson, *Flow of Funds*, Table 4-1, p. I-27.

²⁷ *Ibid.*

²⁸ *Ibid.*, Table 22-1, line A-1, p. I-199.

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holdings of gas and electric corporations are taken directly from Federal Power Commission tabulations.

The Federal Reserve Board makes an additional adjustment to the corporate cash and deposit figures in order to account for payroll taxes collected by corporations but not yet forwarded to the federal government. The figure is a constant \$250 million and does not change over the period covered by our accounts; it therefore does not contribute to flows on cash account and was not included in the National Bureau cash estimates. Dawson included the adjustment in his cash estimates and, in addition, allocated his corporate totals by industry on the basis of wages and salaries paid. This procedure resulted in flows of some small magnitude within the corporate universe, to the extent that industries differ from period to period in the importance of their wage and salary payments relative to those of all corporations.

UNITED STATES GOVERNMENT SECURITIES

Data on annual and quarterly corporate holdings of United States government securities are taken directly from SEC estimates and are adjusted for sector coverage only. The Securities and Exchange Commission figures are based on *Statistics of Income* data with adjustment for under-reporting; Interstate Commerce Commission figures are substituted for IRS rails. Until 1954, *Statistics of Income* had no balance sheet break between obligations of the United States government and obligations of state and local governments—the balance sheet item was labeled “investments, government obligations.” This information was supplied to the Internal Revenue Service on the corporate income tax return but no tabulations of the components were made. Among them were: (1) obligations of states, territories and possessions, and their political subdivisions; (2) obligations of the United States government; (3) obligations of instrumentalities of the United States government, both guaranteed and nonguaranteed.

The Securities and Exchange Commission estimated corporate holdings of municipals principally by capitalizing corporate receipts of tax-exempt interest. United States government securities were then considered the residual. Thus, the SEC figures include both items 2 and 3 above. The Bureau's corporate sources and uses tables and balance sheets also treat both guaranteed and nonguaranteed obligations as United States government securities.²⁹

²⁹ Elsewhere in the Postwar Capital Market Study the nonguarantees are shown separately, where possible, as a subcategory of “other bonds.” The discrepancy that

Description of the Data

Some corporations net tax notes against income tax liabilities when reporting to the Internal Revenue Service. The SEC attempts to correct the Internal Revenue Service data by adjusting both reported current liabilities and holdings of governments on the basis of the volume of tax notes outstanding. In 1954, for example, when the adjustment was made for manufacturing corporations only, the *Statistics of Income* figure was increased by \$531 million.

Other corporations misclassify their holdings of United States government securities when such assets are set aside for specific purposes such as expansion or contingencies. Such securities are accounted for in "other assets" or "other investments." For this reason, government securities held by manufacturing corporations have been adjusted upward by \$400-\$500 million. Similar adjustments for the gas and electric industry sector were discussed above.³⁰

The 1954 *Statistics of Income* tabulations break down the item "investments, government obligations" into: United States obligations, obligations of states, territories, and United States possessions, and a residual category titled "not stated." The SEC allocated the residual between United States and municipal securities so that the sum of the two exhausts the total.

Sector coverage adjustments to SEC data were made to remove corporate farms and investment companies. Annual figures on United States government obligations held by corporate farms were taken from *Statistics of Income* with a small adjustment to the published "investments, government obligations" figure for holdings of state and local obligations. These municipal securities were estimated on the basis of the reported tax-exempt interest earned by corporate farms relative to that received by all corporations. This ratio was then applied to estimates of municipals held by all corporations at the end of each calendar year. Quarterly figures were estimated as interpolations of the annual data, in which changes were small. The 1955 year-end figure was a rough extrapolation.

Data on investment company holdings of United States government securities were obtained from SEC tabulations through 1953. Thereafter, holdings of open-end companies were taken from tabulations

is introduced by this inconsistent treatment is small because nonfinancial corporations hold few nonguaranteed obligations. The Federal Reserve Board has estimated that corporations held \$300 million of nonguaranteed United States government obligations at the end of 1955.

³⁰ See pp. 75-76.

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of the National Association of Investment Companies; those of closed-end companies, from Mendelson.³¹

The Department of Commerce series are taken directly from the SEC estimates. The Federal Reserve Board also uses SEC data, but adjusts them to remove investment companies. This is the only sector coverage adjustment to the SEC data by the FRB. Subsequent to 1953, this adjustment appears to have been made only for open-end investment companies.

STATE AND LOCAL GOVERNMENT OBLIGATIONS

Annual and quarterly figures on corporate holdings of state and local government obligations are taken from the SEC working capital worksheets.³² Because the SEC excludes banks, insurance carriers, and savings and loan associations, it was necessary to exclude the holdings of corporate farms and regulated investment companies. The SEC estimates, as explained earlier,³³ are based on the capitalization of receipts of tax-exempt interest reported in *Statistics of Income*. There was no evidence that open-end or closed-end investment companies held municipals during the period covered by the tables.³⁴ The holdings of face-amount investment companies (for sources, see Goldsmith and Lipsey, *National Balance Sheet*, notes to Table III-5f-2) were removed from the SEC all-corporate estimates.

The adjusted annual all-corporate series was allocated among the industry groups on the basis of the industry distribution of tax-exempt interest receipts in *Statistics of Income*. The 1955 year-end industrial distribution was assumed to be the same as that for 1954. The quarterly allocations were made by linear interpolation of the year-end percentage distributions.

The Department of Commerce makes no separate accounting for state and local government obligations. Flows resulting from changes in holdings of these securities would therefore appear in their accounts under "other current assets" or "other assets." Although the Federal Reserve Board does not account explicitly for this item in its sources and uses tables, the transaction accounts record changes in such hold-

³¹ *Flow of Funds*, Table 22-1.

³² Corporate holdings of state and local government obligations are a component of "other current assets" in the SEC working capital series.

³³ See p. 77.

³⁴ No doubt explained by their tax status under the Investment Company Act of 1940.

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ings. Dawson includes state and local government obligations with federal, in his item "government obligations."

NOTES AND ACCOUNTS RECEIVABLE

The annual and quarterly series, "notes and accounts receivable," by industry, were taken directly from the SEC working capital worksheets after an adjustment to exclude corporate farms. The SEC figures are based on *Statistics of Income* data with the substitution of ICC data for railroads. The SEC corrects these data to adjust for misclassification of progress payments made by the federal government to defense contractors; the entire adjustment is in the manufacturing group.

An adjustment was made to the SEC data to remove the receivables of corporate farms. Year-end figures through 1954 were obtained directly from the *Statistics of Income*. The 1955 figure was a rough extrapolation. The quarterly figures for farms were estimated as linear interpolations of year-end figures.

CORPORATE SECURITIES

Transactions in corporate securities were estimated only for the gas and electric, railroad, and communications industries. Year-end figures for the gas and electric industry were taken from Federal Power Commission tabulations of individual company holdings of "other investments and funds, less reserves."³⁵ These figures exclude investments in affiliates. Since some companies are reported in both reports, it was necessary to eliminate double counting by a check of individual company reports. After elimination of these duplications, flows were estimated as first differences of the level figures. Quarterly flows were estimated as one-fourth of the annual flows.

Annual figures for corporate securities held by the railroad industry were taken from the ICC annual report, *Statistics of Railways in the United States*. The balance sheet figures were the sum of security investments, exclusive of investments in affiliates of class I, line-haul railroads (Table 128), lessors of class I, line-haul railroads (Table 129), class I, switching and terminal railroads (Table 130) and lessors of the same (Table 131). The annual flows were derived by allocating the annual totals on the basis of quarterly changes in security investments

³⁵ Data for electric utility and gas utility corporations were found in the Federal Power Commission annual reports, *Statistics of Electric Utilities in the United States* and *Statistics of Natural Gas Companies*, respectively.

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of class I, line-haul railroads reported in the monthly ICC *Selected Income and Balance Sheet Items of Class I Rails*.

The level figures for corporate securities held by the communications industry were estimated from information contained in the annual reports of the American Telephone and Telegraph Company and in the Federal Communications Commission annual reports, *Statistics of the Communications Industry in the United States*. Level figures were estimated as the sum of (1) AT&T investments in and advances to Western Electric and the unconsolidated affiliates, Southern New England Telephone and Telegraph Company and Cincinnati and Suburban Telephone and Telegraph Company, and (2) "other investments" of Class A telephone companies. Flows were derived as first differences of the level figures and quarterly figures were estimated as one-fourth of the annual flows.

BAD DEBT CHARGES

The SEC figures for notes and accounts receivable are net of bad debt reserves. When flows on trade credit account are estimated as first differences of this series, problems of consistency with a cash-transactions basis of these accounts are introduced.³⁶ Under our assumptions, the bad debt charge to the income account is taken to be the change in the bad debt reserve on the balance sheet. Because this sum is added to the sources side as a component of Other Internal Charges, it is also added to the uses side as Bad Debt Charges.

RETIREMENT OF SECURITIES

Retirement of securities is discussed in detail above in the section on security issues.³⁷

³⁶ These considerations are discussed on p. 50.

³⁷ See pp. 56-58.