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AN ACCOUNTING RESEARCH STUDY 2

"CASH FLOW" ANALYSIS and THE FUNDS STATEMENT

By Perry Mason, Ph.D., CPA

AICPA

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"CASH FLOW" ANALYSIS and THE FUNDS STATEMENT

ACCOUNTING
RESEARCH
STUDY NO. 2

"CASH FLOW" ANALYSIS and THE FUNDS STATEMENT

By Perry Mason, Ph.D., CPA

AMERICAN
INSTITUTE
OF CPAs

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Foreword

The Director of Accounting Research of the American Institute of Certified Public Accountants publishes this accounting research study under his authority to circulate the results of the research activities of his staff in his name and in the name of those who have been associated with him in the research project.

Accounting research studies are designed to provide professional accountants and others interested in the development of accounting with a discussion and documentation of accounting problems. The studies are intended to be informative, but tentative only. They furnish a vehicle for the exposure of matters for consideration and experimentation prior to the issuance of pronouncements by the Accounting Principles Board.

The responsibility for this study is that of the Director of Accounting Research and those who have been associated with him in the project. The conclusions and recommendations have not been approved, disapproved, or otherwise acted upon by the Accounting Principles Board, the only agency of the American Institute of Certified Public Accountants having authority to make or approve public pronouncements on accounting principles. The study does not necessarily reflect the views of the Board, nor has it been acted upon by the membership or by the governing body of the Institute.

Individuals and groups are invited to express their views in writing on the conclusions and recommendations contained in this study. These views will be considered by the Accounting Principles Board in forming its own conclusions on the subject.

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Director's Preface

This study of "cash flow" analysis and the funds statement is timely because of the ferment and experimentation that is going on with respect to financial statements. This ferment and experimentation is especially marked in connection with reports on the results of operations. Specific examples are the increased use of the statement of source and application of funds and the recent emergence of an amorphous concept known as "cash flow."

It is always interesting to speculate on the reasons for the appearance of new developments at the time they do, on why they did not appear earlier or postpone their appearance until later. For years a long struggle has been going on to develop the accrual basis of accounting, and the struggle still goes on. In essence the accrual basis itself developed and is developing in an effort to overcome the shortcomings of cash movements as indicators of the results of operations. And yet the newer emphasis on "funds flows" and "cash flows" seems to run counter to the movement to perfect an accrual accounting. Three factors, among others, account for the crosscurrents. The first of these is the lack of uniformity in accounting procedures, especially in the treatment of the "non-fund" transactions. For example, investment analysts appear initially to have developed "cash flow" analysis in response to the wide divergence of procedures within specific industries. As the range of acceptable accounting procedures becomes narrowed, this factor will lose its importance. The second factor is the tendency in times of stress to throw off more sophisticated concepts and revert to more primitive ones. The stress involved is that created by the combined effect of inflation and high taxes; the sophisticated concept is that of accrual accounting; the more primitive one is, of course, the elemental idea of a cash movement. As the problems created for accounting by inflation and high taxes are solved, this second factor should become much less powerful.

The third factor is the extent to which accounting has identified

itself with the measurement of corporate net profit, to the virtual exclusion of other aspects of business activity. As a result, the only report on operating activities that is published in the majority of cases is the report of net income. To the extent that "funds statements" give additional information on what went on in the accounting entity during the period, they supply a welcome expansion of the information supplied to readers of published financial reports. Current developments therefore should lead to a permanent improvement in reporting practices.

As Mr. Mason's study indicates, however, some aspects of the recent popularity of "cash flow earnings" are mischievous and need correction if not complete elimination. The nub of the problem can be seen by concentrating on the function of cash in a business entity and the significance of cash movements, in and out. The backbone of virtually every business activity is a cash cycle—cash is obtained from some source, and is then invested in various productive factors which, in turn, are combined to produce goods and services for sale or delivery to customers who pay for those goods and services in cash, thereby completing the cycle. It is this "flow" through the business which makes forecasts and budgets of (future) cash movements useful tools of management, and statements of (past) cash or funds flow so appealing and popular to investors. But cash outlays, taken by themselves, represent investment—investment which may or may not prove sound. The fate of the investment is reported in an income statement, prepared preferably on accrual principles. Cash receipts or inflow, taken by themselves, represent disinvestment. From the point of view of the business unit, this disinvestment is negative, telling nothing in and of itself as to whether the inflow is beneficial or not. From a social point of view, disinvestment of this type is deflationary and needs some offset to prevent the undersirable consequences of deflation. As a consequence, "cash flow" is no more informative as an indicator of success or failure than "sales price" is in telling us whether the vendor is making good use of his resources. It cannot be emphasized too strongly that the examples of "cash flow earnings" that are found in actual practice are not even indicators of earnings on a cash basis of accounting because no recognition is given to capital consumption on a cash or any other kind of basis. In his diligent search of the literature and his extensive interviews in the field, Mr. Mason was unable to find any significance to "cash flow" as a measure of "earnings" in any way comparable to the significance of "net income" as ordinarily calculated.

I would like to conclude on a personal note of appreciation to Perry Mason. It is always a pleasure to watch an "old pro" at work, and also a bit unnerving. It all seems so easy, to watch them do it, until we try to do the same thing ourselves. Then we realize how much skill and finesse and hours of hard work there are behind the facade of the lucid prose, the simple explanation, the obvious conclusion.

New York, N.Y., November 1961

MAURICE MOONITZ
Director of Accounting Research

Note: The report of the special committee on research program, which constitutes the "charter" of the accounting research division, indicated that a study of the basic postulates of accounting and a study of the broad principles of accounting should precede all other projects and that each new release should be related to these fundamental propositions. The report on the basic postulates of accounting was published on October 1, 1961. The work on the "broad principles" has not been completed. The present study of "cash flow" analysis and the funds statement is primarily concerned with some specialized aspects of the form of financial reporting and its analysis. Since form and analysis are of importance regardless of the specific set of principles which may be applicable, and because the topics discussed are timely, this study is published at this time.

M. M.

Author's Preface

The research which resulted in this publication consisted of reading widely in accounting and financial literature, making a survey of current annual report practices, interviewing a considerable number of financial analysts, credit grantors, and certified public accountants, and corresponding with a sizeable group of individuals who expressed an interest in the subject. Our work was facilitated by the extensive investigations of the funds statement which had previously been made by Professors Hector R. Anton of the University of California, Howard M. Daniels of the University of Houston, Charles T. Horngren of the University of Chicago, and Jack J. Kempner of the University of Montana. Others with whom we corresponded contributed most generously of their time, ideas, and materials from their files.

The author makes grateful acknowledgment to his assistant on the project, Harold E. Arnett, Research Associate on the staff of the Accounting Research Division, for major contributions to the study. The members of the project advisory committee assisted in arranging interviews, contributed or suggested sources of information, reviewed drafts of the report, and otherwise cooperated effectively in the conduct of the study. Maurice Moonitz, as Director of Accounting Research, made many helpful comments and suggestions and the author appreciates greatly his encouragement and support throughout the investigation and preparation of the report.

PERRY MASON

Highlights

"CASH FLOW" IN financial analysis means net income after adding back expense items which currently do not use funds, such as depreciation. It may also involve deducting revenue items which do not currently provide funds, such as the current amortization of deferred income. It corresponds to the "funds derived from operations" in a statement of source and application of funds.

THE *concept* OF "cash flow" can be used effectively as one of the major factors in judging the ability to meet debt retirement requirements, to maintain regular dividends, to finance replacement and expansion costs, etc.

IN NO SENSE, however, can the amount of "cash flow" be considered to be a substitute for or an improvement upon the net income, properly determined, as an indication of the results of operations or the change in financial position.

A FUNDS STATEMENT, preferably in comparative form, should be treated as a major financial statement. It should appear in all annual reports of corporations and be covered by the auditor's short-form report.

THE FUNDS STATEMENT of a corporation should be a summary of financial operations or a report of financial management, and not merely a reconciliation of cash or working capital. The definition of "funds" as "all financial resources" comes closest to this conception of the function of the statement.

THE FUNDS STATEMENT should be accompanied by interpretive comments to assist the reader in understanding the financial policies, plans, and operations of the company.

STATISTICS AND COMMENTS relating to the "cash flow" should not be presented in the annual report of a corporation apart from or without reference to the funds statement.

THE FUNDS STATEMENT should be designed so as to disclose and emphasize the more important financial events of the period covered by the statement. It is recommended that the statement begin with the adjusted net income, the "funds provided from operations," with the adjustments of net income for the non-fund items being shown in a footnote. The form which begins with total revenue, and deducts the out-of-pocket expenses to arrive at the same result, is acceptable and has certain advantages.

General Introduction

For a good many years, accounting textbooks have included demonstrations of the preparation of a statement of financial operations which is generally called a Statement of Source and Application (Disposition, Use) of Funds, or a Statement of Changes in Working Capital. Such a statement presents a condensed analysis of the changes which have taken place in the balance-sheet items during the period, insofar as they reflect the flow of current funds through the business, "funds" commonly being interpreted as working capital (current assets less current liabilities). The illustration on the following page, taken from the 1959 annual report of the Standard Oil Company (Indiana), indicates the essential features of a statement of this type. It should not, however, be taken as the standard form, since, as a later discussion will indicate, there is great variety in the content and method of presentation.

Statements of this sort have been used much more widely for managerial purposes[1] and by security analysts than in annual reports to stockholders, but they are appearing in the annual reports with greater frequency. As a background for this study, the 1959 annual reports of the 600 industrial companies included in the publication *Accounting Trends and Techniques*[2] were reviewed, and in 190 cases one type or another of "funds" statement was presented. Part II of this report consists of a detailed analysis of the problems which arise in the preparation of such a financial statement.

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[1] According to N.A.A. Research Report No. 38, *Cash Flow Analysis for Managerial Control* (1961), management is primarily interested in the type which is prepared on a cash basis and which can be used in preparing cash projections or in cash budgeting (chapter 1).

[2] Prepared and published by the American Institute of Certified Public Accountants.

Sources and Dispositions of Funds *(Thousands of dollars)*	1959	1958
SOURCES OF FUNDS		
From Operations:		
Net earnings	$139,597	$117,775
Depreciation, depletion, amortization, retirements, and abandonments (charges against earnings which do not require disbursement of funds)	171,558	172,324
Total funds from operations	$311,155	$290,099
New borrowing	—	200,000
Decrease in working capital	31,029	—
Miscellaneous	18,850	18,071
Total	$361,034	$508,170
DISPOSITION OF FUNDS		
Capital expenditures	$268,868	$270,387
Dividends paid (including the value on the Company's books of the Jersey stock distributed as dividends)	54,498	53,197
Repayments on borrowings	18,816	39,202
Increase in working capital	—	139,863
Miscellaneous	18,852	5,521
Total	$361,034	$508,170

The most characteristic feature of a funds statement[3] for a business enterprise is the elimination of the effect upon net income of "non-fund" transactions, of which depreciation is the most common example. The result, if given a descriptive appellation, is designated as Total Funds from Operations, as in the above illustration, Funds Provided by Operations, Funds Derived from Operations, Working Capital Provided from Operations, Cash Flow from Operations, or something similar. The calculation is either made directly, by adjusting the net income or net loss as in the above illustration, or indirectly by beginning the statement with the total revenue for the period and deducting the out-of-pocket expenses to arrive at the same result. In recent years security analysts and financial writers have used this adjusted net income figure apart from the funds statement.

[3] Throughout this report, the term *funds statement* will be used as a convenient term of reference for any statement of this general type, without regard to the interpretation of "funds" in a particular case or the form of presentation.

It has also appeared in various sections of the annual reports of a number of corporations. As one of the tools of analysis of investments or of operations, it is most commonly called the "cash flow" of the business. Part I of this report considers this problem under the title of "Cash Flow" Analysis.

The matter of cash flow is of major importance in budgeting or planning by the management, in the demonstration of debt-paying ability to credit grantors, and in the evaluation of securities by financial analysts. Some attention will be given to the use of the concept of cash flow in financial analysis, but otherwise these problems are not included in the scope of this study. *Attention is directed primarily to the annual reports of corporations, especially to the financial statements and the related statistics and comments.*

PART ONE

"CASH FLOW" ANALYSIS

Introduction to Part I

The term *cash flow* is a relatively recent addition to the accounting and financial vocabulary. It has appeared in the literature with increasing frequency during the past decade (the 1950's) and was found very seldom prior to that period. We have observed its use in seven different types of situations: (1) in the literature of investments and security analysis, (2) in the statistics presented in the financial review and other similar sections of the annual reports of corporations, (3) as part of the title of a "cash flow statement," (4) as the designation of the funds provided from operations in a funds statement, (5) in discussions of rate-of-return analysis, payback analysis in capital budgeting, and other similar managerial techniques where it is part of such expressions as "discounted cash flow," (6) with reference to cash projections or cash budgeting, and (7) in the expression "cash-flow system," which refers to the control of cash in and out of a business in the promotion of efficient creation and use of cash balances. In this report we are concerned only with the first four of these usages.

Terms other than *cash flow* are sometimes used such as the following examples taken from 1959 annual reports:

Net cash income—Basic Incorporated.

Net cash generation—Calumet & Hecla, Inc.

Cash income—Dresser Industries, Inc.

Cash funds generated from operations—Gulf Oil Corporation.

Still others are "cash throw-off," "cash earnings," and "internally generated cash."

Use of Cash Flow Concept in Financial Literature

The expression *cash flow*, or any other similar term, in the literature of investments and security analysis is usually the equivalent of "funds provided by operations" in the typical funds statement. For example:

> . . . earnings before depreciation but after taxes . . . represent what is called cash flow.[4]

> Cash earnings . . . represent the sum of net income, depreciation, depletion and amortization, intangible development expenses, surrendered leases and dry hole expenses . . .[5]

This concept has a valid factual background. Funds are normally acquired through the earning of revenue. (In some cases a revenue item does not provide funds, as in the case of the amortization of deferred income, and adjustments should be made for such items.) Unlike the out-of-pocket expenses, such as labor and materials, depreciation and other similar expenses do not represent current outlays of funds. Normally, therefore, there will be a balance of available funds which is greater than the amount of the net income. The net income of a business does not indicate the full amount of spending power that is generated in a particular period by *revenue-earning* operations, after providing for all of the current or short-term operating requirements.

The addition of depreciation (or other such items) to the amount of net income is merely a short-cut technique for arriving at the amount of funds derived from operations. This adjustment helps to explain some of the things that have happened, such as how a business has

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[4] Douglas H. Bellemore, *Security Analysis, Interpretation of Financial Statements,* chapter 11, p. 140. 1959.

[5] IBA Report: "The Security Underwriters Analyze Today's Investment Scene." *Barron's,* Dec. 5, 1960, p. 5.

been able to modernize its plant or pay off a loan without borrowing more money or issuing more shares of stock.

The term *cash flow,* however, is a misnomer—it is neither cash nor flow. The net income is, with rare exceptions, computed on an accrual basis, not on a cash basis. Adding back such items as depreciation does not convert the net income to something which can properly be called *cash* flow or income, since the result still reflects such things as the sales and purchase of goods and services on account, the lag between the acquisition or production of merchandise or products and their appearance on the income statement as a "cost of goods sold" deduction, various accruals of income and expenses, and the amortization of deferred charges or prepaid expenses and deferred credits (which should be and sometimes are involved in the adjustment of net income). "Working capital flow" or "funds flow" would be an improvement in that the revenue-producing operations of a business in large part affect or flow through the current assets and liabilities.[6] The word *flow,* however, is inappropriate since the amount involved is the algebraic sum, the balance or the result, of a flow of many transactions rather than being a measure of the flow itself.

The term *cash flow,* or some similar short phrase such as *cash earnings* or *cash income,* has become accepted in financial literature as a convenient symbol or catch phrase and it is admittedly difficult to suggest an equally effective although more accurate substitute. We shall continue to use it in Part I of this report, but we deplore the employment of such inaccurate terminology and urge the adoption of a more appropriate phrase.

Very few discussions of the cash-flow concept are found in books which have been written in the field of investments and security analysis. The following excerpts appeared in three recent books. The first was presented under the heading of "Depreciation—Not a Cash Outlay".[7]

> Because the annual charges for depreciation and amortization are merely bookkeeping entries, and do not represent correspond-

[6] Research Report No. 38 of the National Association of Accountants, *Cash Flow Analysis for Managerial Control,* to which previous reference was made, uses the terms *cash flow* and *cash fund* in a more proper sense as referring to "cash or equivalent assets" which includes "cash on hand, bank deposits and temporary investments made as a means for holding cash until it will be needed" (page 3).

[7] Douglas H. Bellemore, *Security Analysis, Interpretation of Financial Statements,* chapter 11, pp. 140-41. 1959.

ing outlays of cash, management does have, on this basis, considerable leeway in determining the annual amounts to be charged for depreciation. Depreciation charges do not, by themselves, provide funds for replacements, but earnings before depreciation but after taxes do represent what is called *cash flow*. If the costs of replacement are about equal to the amounts charged for depreciation and if replacements and retirements proceed at a more or less continuous rate this cash flow does supply the required funds for replacement of capital assets. Depreciation thus does supplement retained earnings in supplying funds for plants and equipment and in years of low business profits as in the 1930's it may represent the lion's share. The more rapid the rate of depreciation the larger the amount of such cash flow and the lower the demands for after tax retained earnings and external financing. Many analysts calculate the *cash flow* available to a corporation both in total and on a per share basis. They add the depreciation, amortization and depletion charges to the reported earnings after deductions for these charges and for taxes and the total is the cash flow available to management.

. . . if the analyst is recommending the purchase of a security at current market prices which are *well below book value*, as for example, equivalent to or less than net working capital book value at the time, he is in effect paying nothing for the fixed assets, and may disregard, from the standpoint of earnings, the depreciation, amortization or depletion allowance, or use *cash flow*, earnings before depreciation, as his earnings figure, and this is important, *unless*, the company is actually spending and can be expected to continue to spend annual sums for replacement, equal to or greater than the amounts charted for depreciation. The analyst must realize that dividend payments will generally be based on *cash flow* remaining after capital expenditures deemed necessary by corporate directors.

The following excerpt was found in a discussion of the problem of financing the payment of debt[8]:

For many companies there may not only be the financial problem of meeting interest or rental requirements but also the problem of meeting regular cash payments on the principal of the debt in future years . . . . . it would not be reasonable to assume that the net earnings represent the sole source of cash to meet these payments. From a short-term financial standpoint, the depreciation expenses charged on the income statement is not a compulsory cash outlay. Moreover, there would seem to be a functional relationship between the charging off of the fixed assets

[8] Douglas A. Hayes, *Appraisal and Management of Securities*, chapter 7, pp. 164-66. 1956.

via depreciation and the retirement of debt which presumably helped finance their acquisition.

Of course, if the company is expanding rapidly, the net spending on replacements and new fixed assets may exceed the depreciation charge which would mean in effect that no funds are being generated from this source. However, in periods of adverse economic conditions expenditures on such assets can be suspended to some extent. And because it is the purpose of the analysis at this point to determine whether future recurring obligations for debt principal might embarrass the company during depression conditions, it is suggested that any company is in a reasonably strong position in this respect so long as indicated future serial maturities and obligatory sinking funds do not exceed one-half of the estimated future depreciation expense. Of course, if the net earnings alone after depreciation on both an average and minimum basis seem more than sufficient to meet both interest and principal requirements, this supplementary "cash flow" test is not necessary.

The following discussion appeared under the heading of "Cash Flow Analysis"[9]:

7

In evaluating steel common stocks, the cash flow has come to be regarded as frequently more meaningful than net income alone as a measurement of a company's ability to finance its expansion without undue borrowing or extraordinary withholding of dividends from shareholders. Cash flow is ordinarily taken to mean net income plus depreciation, depletion, and amortization as reported to shareholders. If the company's tax return differs from its shareholders' return with regard to treatment of accelerated amortization, as it does for such companies as Jones & Laughlin, Kaiser Steel, and Granite City Steel, cash flow may also include deferred federal income taxes as the company sets up a tax reserve during its five-year accelerated amortization period, to be drawn down after this period over the normal useful life of the property. For the years in which this deferred tax reserve is being drawn down, such a reversal item would be deducted in computing cash flow.

Cash flow is a useful concept, but it should be used with care in comparing one stock with another. If company A has a straight common stock capitalization and company B, equal in size and otherwise comparable, has financed 75 per cent with debt and 25 per cent with common stock, clearly a cash flow equivalent to 15 per cent of sales for each company will appear to be four times as large in relation to the stock of company B as it will to

[9] Lester V. Plum, Editor, *Investing in American Industries,* chapter 2, p. 67. 1960.

the stock of company A. However, since most steel companies have relatively limited long-term debt, cash flow comparisons may frequently be used to supplement net income comparisons.

The financial periodicals contain numerous references to "cash flow." It has become standard practice to calculate the cash flow and to use it as one of the tools of investment analysis. The following excerpts have been chosen to indicate the extent to which the concept of cash flow has been adopted and to illustrate the various ways in which it has been presented, applied and interpreted. Some of these concepts and uses of cash-flow data are of dubious validity and will be discussed critically at a later point in this part of the report.

> And lastly—and possibly most important—is the fact that much of the profit margin squeeze is artificial, because one of the most rapidly increasing cost items is depreciation charged off against the newly created facilities.
>
> The significance of this cannot be overstated. What has happened is that industry's binge of capital spending, combined with the newer methods of accelerating depreciation charges, has created an enormous expense item on corporate income statements that reduces reported profits but nevertheless allows enormous cash earnings to flow into the company coffers. In effect, corporate profits today are being understated as never before—and this process will continue until the capital spending boom drops to much lower levels.
>
> Large depreciation charges, while they exist, represent another rigid cost item—and it is rigid costs that account for the wide swings in corporate earnings despite relatively minor fluctuations in actual business conditions. . . .[10]

> The decline in domestic drilling may be attributed to several factors the most important being: the previous build-up of a substantial excess capacity to produce, the lower rate of production, and the reduction in cash flow from refining and marketing as well as from production . . .[11]
>
> In many cases earnings are understated by reason of accelerated or abnormally heavy depreciation accruals. Yet this depreciation money is pouring into the corporate treasury all the same. A high relative showing [of cash flow per $1 of equity]

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[10] Ward Gates, "A Sound Approach to 1960 Third Quarter Reports," *The Magazine of Wall Street and Business Analyst*, Nov. 19, 1960, p. 224.

[11] Charles W. Haynie, "Better Sales Volume But Slower Profit Recovery for Oil Equipments," *The Magazine of Wall Street and Business Analyst*, Sept. 26, 1959, pp. 36-37, 54-56.

> will, therefore, partly compensate for a poor showing on [net return on equity.][12]

After observing that Sinclair Oil Corporation's earnings in 1959 had dropped to $2.96 a share while the company maintained dividends at $3.00 per share, a writer commented:

> Yet, as some shrewd oil analysts were pointing out last month, there was another side to the coin. Oilmen could still count on heavy cash flow in the form of depreciation, depletion allowances and drilling write-offs in addition to profits. Sinclair, for example, normally has cash "earnings" nearly triple its reported net. "So there is no reason," argues one analyst, "why the oils cannot continue for awhile to pay out more than they earn."
>
> Such a course might not be as imprudent as it first appears. Sinclair's Spencer has noted that Sinclair came through two very difficult years in 1958 and 1959 in which it earned only a combined $6.19 a share and yet paid dividends of $6. In those years, he noted, the Company built up its physical assets yet managed to keep working capital at a high level and even paid off debts . . .[13]

> In 1956 Kaiser [Steel] earned $6.57 a share on sales of $201 million. That year its cash flow, a generous $39 million, represented a fabulous return on Kaiser's original equity capital.[14]
>
> In its domestic operations . . .its cash flow (net income plus depreciation) last year came to $41.5 million. Deducting $3.4 million for debt service, $4.7 million for preferred dividends, and $6.6 million for common dividends, this leaves $26.5 million in available income. That, however, represents only a 20% raw return on Celanese's $140.7 million in net worth, a 16.6% raw return on a net fixed plant. Neither is a particularly impressive figure.[15]
>
> This would give up a second target at 40 [dollars per share] at which price the stock would be valued at not quite 12 times last

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[12] "The Keys to Performance," *Forbes—Business and Finance,* Jan. 1, 1960, p. 22.

[13] "Endangered Dividends?" *Forbes—Business and Finance,* Apr. 15, 1960, p. 29.

[14] "Build Now, Pay Later," *Forbes—Business and Finance,* Jan. 15, 1960, p. 34.

[15] "The Long Ordeal of Celanese," *Forbes—Business and Finance,* Apr. 15, 1960, p. 23.

year's cash flow estimate and probably barely more than ten times this year's cash flow.[16]

The Hudson Coal Co. so far has always generated enough cash to pay its bills and cover the fixed charges on its funded debt. It doesn't generate enough cash, it is true, to cover depletion write-offs—but that is not entirely a bad thing. The coal mine's cash throw-off helps the parent company and so does the tax credit it gets on the mine's book loss... Explains Bill White: "As long as the Coal Company brings in cash and provides $3-$4 million a year in freight revenues, it is going to continue to be a worthwhile property to hold."[17]

In 1958, for the first time since the War, IBM's cash flow (net income plus depreciation) substantially exceeded its capital outlays by about $34 million. In other words, cash income exceeded cash outgo. IBM's growth had become self-financing...

The fact was that IBM's enormous and still growing depreciation write-offs were pouring a far vaster golden stream into the IBM treasury. A mere $60.7 million in 1953, depreciation by 1959 had more than trebled to $204.6 million, seemed likely to hit $235 million this year...

... IBM was no longer cash poor, no longer had to borrow heavily to pay for its expansion (as recently as 1956, IBM's debt amounted to nearly half its total capital). Better yet, equity dilution, that bugbear of fast-expanding firms, no longer threatened IBM stockholders. With its debt ratio fast shrinking and cash piling up, IBM would be unlikely to have to sell common stock again—no matter how great its future expansion needs.[18]

There still are particularly good values in the oils, an almost completely neglected industry whose problems have been overexaggerated. Case in point: little attention has been paid to the fact that Phillips Petroleum (44, paying $1.70) has reduced its debt and increased working capital in the past two years despite heavy capital expenditures. The explanation lies in a cash flow of roughly $7 per share. This high level of internally generated cash removes the threat that new financing again will result in per share earnings dilution...[19]

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[16] John W. Schulz, "Defensively Aggressive," *Forbes—Business and Finance,* Mar. 1, 1960, pp. 58-59, 65.

[17] "Difficult Customer," *Forbes—Business and Finance,* Mar. 1, 1960, p. 35.

[18] "IBM Hits the Jackpot," *Forbes—Business and Finance,* Mar. 1, 1960, pp. 43-44.

[19] Sidney B. Lurie, "The Market Outlook," *Forbes—Business and Finance.* Feb. 1, 1960, pp. 37-39.

Corporate income was definitely off last year, making sad reading for stockholders. It fell, by preliminary estimate, from $23.8 billion to $23.3 billion net after taxes. But one thing did not fall: industry's real working income, its all-important cash flow (net income plus depreciation, depletion and amortization). Thanks to a rising tide of depreciation, a sort of second income, industry's total cash flow remained remarkably steady at about $46 billion.

A decade ago, when corporate profits virtually equaled last year's level, industry had no such bolster. That year, industry's throw-off from depreciation totaled just $7.8 billion. Thus, industry was left with a good $15 billion less in cash to work with than it had last year.

To be sure, last year's $46-billion cash flow was not all uncommitted money. Out of it, U. S. corporations ladled a record $14 billion in dividends, leaving some $32 billion available for additions to working capital and for plant expansion.
Considering industry's $35.7-billion bill for capital outlays last year, it was none too much. Instead, the $3.7-billion difference between industry's income and outgo had to be filled by new financing.

The continued lusty flow of cash into corporate coffers was reassuring news for stockholders. With earnings static, dividends were apt to be static too. But some companies, finding that they were accumulating cash faster than they could profitably use it, boosted their dividends. For the rest, the ample cash flow provided a cushion for otherwise vulnerable dividends—as it did last year in the steel industry.[20]

Kaiser Steel has the most top heavy capitalization of any major steel company; funded debt amounts to no less than 56% of capital, preferred stock another 13%. This has meant heavy annual charges for interest and debt retirement. But the burden is manageable. Fortunately Kaiser has also developed one of the heftiest depreciation throwoffs in the business. Hence it now has cash flow more than sufficient to handle the debt.[21]

Capital outlays averaged only a little over $10 million annually in 1958 and 1959, but are expected to total some $20 million this year. No financing problem is involved, however. Depreciation charges have risen steadily in recent years and will probably amount to around $13 million in 1960, approximately 1½ times net income. This heavy cash flow is a distinct advantage in per-

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[20] "Second Income," *Forbes—Business and Finance,* Feb. 1, 1961, pp. 16-17.

[21] "Build Now, Pay Later," *Forbes—Business and Finance,* Jan. 15, 1960, p. 34.

mitting steady expansion and buttressing dividend payments, recently restored to a $2 annual rate from $1.60.[22]

Capital outlays for 1960 are expected to range around $5 million, off from last year's peak $6.5 million. As in all post-war years, this will be paid for by retained earnings and depreciation allowances.[23]

At current levels, the stock is quoted at about 12 times reported 1959-60 fiscal year earnings and at six times "cash" flow earnings, including $2.27 per share of net income after taxes, and $2.40 per share of depreciation and depletion.[24]

Since capital expenditures in the year just ended totaled $45 million and another $30 million is budgeted for this fiscal year, Deere's financial position should remain on the tight side for a while. However, since cash flow from depreciation is rising sharply and retained earnings probably will be large in fiscal 1961, no equity financing is anticipated.[25]

In analyzing and comparing particular companies with one another, the investor should pay attention to the very useful yardstick known as cash earnings.

Actually, cash earnings can be more significant than reported net income. Cash earnings may be defined as cash flow available for the payment of dividends *and* reinvestment in the business for growth and expansion. Cash earnings are derived by adding net income as reported, non-cash chargeoffs and charges against income for expenditures to expand and develop oil and gas reserves.

. . . The use of cash earnings figures helps to iron out differences in accounting procedures among oil and gas companies.[26]

Oil-industry analysts tend to base their real comparisons on "cash" earnings rather than reported net income because of the variation in the handling of property extinguishment costs. To

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[22] "Earnings Turn for Koppers Company," *Financial World,* Dec. 14, 1960, p. 19.

[23] "Anchor Hocking Has Sales Up-Trend," *Financial World,* Sept. 7, 1960, p. 19.

[24] "Spencer Chemical Gives Liberal Yield," *Financial World,* Nov. 9, 1960, p. 25.

[25] "New Tractors to Pull Net of Deere Out of Doldrums," *Barron's,* Dec. 12, 1960, p. 29.

[26] "IBA Report—the Security Underwriters Analyze Today's Investment Scene," *Barron's,* Dec. 5, 1960, pp. 5-6, 22-27.

facilitate such comparisons it is recommended that exploratory costs, amortization of intangible drilling costs, and depreciation and depletion be shown separately.[27]

The case for P/E ratios not being too high at present can perhaps be sewed up by a careful look at the record under varying economic conditions. The case for P/E ratios being too low today rests on [the use of the wrong base period for comparisons], plus the significant change in the quality of today's corporation earning power, as evidenced by considerably higher depreciation charges and hence cash earnings, *and* the little-considered "automatic stabilizer" of the 50% corporate income tax . . .

Part II of the case that today's P/E ratios may well be too low depends on an examination of the quality of earning power. We are all subconsciously familiar with the concept that today's earning power is well buttressed by very much higher depreciation and other non-cash charges, and that business today is writing off to expense far heavier research expenditures which in fact take on some of the aspects of capital rather than recurrent annual expenditures. Thus we know instinctively that today's "cash" earnings are better than yesteryear's.[28]

The largest and most consistent source of funds for financing foreign operations is the annual charge for depreciation and amortization of existing fixed assets, including small amounts of depletion charges. . . . At current levels depreciation charges are equal to about 60 percent of foreign plant and equipment expenditures. In comparable domestic industries the proportion is much higher.[29]

Use of "Cash Flow" by Security Analysts

The security analyst is primarily concerned with two problems[30]: (1) the earnings trend in relation to the securities of a particular

[27] E. Linwood Savage, Jr., "Conclusions Regarding Annual Reports," *The Analysts Journal,* Feb. 1954, pp. 51-53.

[28] A. Hamilton Bolton, "Price-Earnings Ratios May Be Too Low!" *The Analysts Journal,* Nov. 1958, pp. 37-39.

[29] *Survey of Current Business,* October 1960, p. 21. U. S. Department of Commerce.

[30] This information was obtained largely from interviews with a number of security analysts and from a study of reports which they had prepared on specific companies, material which is not generally available in published form.

company—here he is concerned with the past and current earning power and financial strength in order to forecast future earnings, and (2) the investment features of one company as compared with those of another—he compares the potential earnings and the financial strength of various companies. The cash-flow concept appears to be widely if not universally used in both of these areas.

The definition of "cash flow" used by the security analysts, however, is not always the same for all purposes. The opinion expressed on page 4 that "cash flow" is usually the equivalent of "funds provided from operations" in the typical funds statement holds good here, but there are some exceptions. Occasionally, the term *cash flow* is used as the equivalent of total sources of funds and some other phrase, such as *cash income,* is employed for the customary figure. In the more superficial analyses, especially in the absence of a funds statement, the calculation is apt to be merely the sum of net income and depreciation.[31] In the extractive industries, the customary computation includes adjustments for depletion, dry hole costs, and amortization of development costs.[32] The more sophisticated and thorough studies adjust for other "non-cash" or "non-fund" items such as deferred income taxes, deferred executive compensation, and amortization of intangibles. For some purposes, especially when attempting to compare one company with another, extraordinary nonoperating or nonrecurring items, interest charges, and income taxes are eliminated. The result is not the correct amount of "cash flow" in any absolute sense, but it may facilitate comparisons between companies having extraordinary charges or credits, different financial structures or income tax abnormalities.

In evaluating the securities of a company for investment purposes, the analyst uses "cash flow" as one of his more significant tools. It assists him, for example, in arriving at his judgment as to the probability that the debt retirement commitments can be met without refinancing, that the regular dividend will be maintained in the face of falling earnings, that continued exploration in the case of the ex-

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[31] In fairness to the analysts who may appear to be making "superficial" analyses, it should be admitted that in many cases depreciation is the only significant adjustment factor. The danger, however, is that the simplified calculation may become habitual and other material non-fund items may be overlooked.

[32] See "Preparing an Oil Share Analyzer," by Michael Kourday, *The Analysts Journal,* Feb. 1957, pp. 39-43, for a discussion of oil-company analysis.

tractive industries can be financed without additional capital investment, or that plant and equipment can be modernized, replaced, or expanded without increasing the equity or debt capital.

The "cash flow" data are often presented by the analyst in comparative form for a period covering several years, as averages for a period of time, and as projections into the future. Complete funds statements are often used to present an over-all view of the financial management of the company. What might be called the regular "cash earnings" are sometimes expressed as percentages of "gross invested capital" (usually defined as undepreciated cost of plant and equipment plus net current assets). Where the "non-fund" items are sizeable and complex, as in the oil and other extractive industries, or where the accounting methods vary from one company to another, their elimination is intended to improve the comparability of the operating results of companies in the same industry. To facilitate comparison, the cash flow is sometimes expressed in terms of tons of shipments, or the ratio of market value per share of stock to "cash flow" per share is presented.

Presentation of Cash Flow Data in Annual Reports

In recent years, a sizeable proportion of the annual reports of industrial corporations have presented statistics, charts, and comments which apply the same cash-flow concept as that used by the financial writers and analysts. The following examples were taken from the 1959 annual reports of a group of 39 companies, included in the 600 studied as a basis for this report, which presented information of this sort. Where a funds statement was also included in the annual report, the amount of the cash flow could, with rare exceptions, be identified with the net income adjusted for "non-fund" items on the funds statement.

Brief Comments Only

In nine instances, no funds statement was presented and the only reference to any phase of cash-flow analysis was found in a sentence or section in the president's letter or in the financial review section of the report. The president's letter in the report of The May Department Stores Company contained the longest set of comments in this group of nine companies:

> *Cash Flow*
>
> Depreciation and amortization, including real estate subsidiaries not consolidated, totalled $12,971,000 in 1959 as compared to 11,760,000 in 1958. Combined with earnings, depreciation brought total cash flow of the companies to a new high of $5.17 per share of common stock, as compared to $4.67 per share in 1958.
>
> We obtain an exceptionally high cash flow from depreciation per dollar of sales for a department store company because we own the bulk of our real estate. This flow of funds into the business provides an important source of capital for future growth.

Finance and Real Estate

The company and its unconsolidated real estate subsidiaries spent $21,800,000 in 1959 for new branch store and shopping center construction and for remodeling existing stores as compared to $20,100,000 the year before. We plan to spend more than $40,000,000 for these purposes in 1960, in the initial stages of our five-year expansion and modernization program. This $100,000,000 program will not require new equity financing. It is anticipated that adequate funds will be provided by a 30-year, 5%, $50,000,000 mortgage loan combined with the cash flow from depreciation and retained earnings . . .

At the other extreme from these rather comprehensive comments was the inclusion of a single very brief note such as: "Internal cash generation, represented by depreciation, retained earnings and tax deferrals, totaled $2,909,834." (Penn Fruit Co., Inc.)

The financial review section of the report of Calumet & Hecla, Inc., instead of using the typical cash-flow calculation, employed an unusual but useful concept of "net cash generation" which associated the dividends with the net income and presented the remainder as a contribution toward the funds available for other purposes. (See comments on page 18 from the reports of Universal-Cyclops Steel Corporation and Pennsalt Chemicals Corporation for a similar practice.)

The following table shows the net cash generated in 1959.

Net Income	$4,710,821
Less Dividends Paid	2,199,428
Retained Earnings	$2,511,393
Cost depletion and Amortization	540,793
Depreciation	1,950,617
Net Cash Generation	$5,002,803

In our opinion net cash generation of the company is more than adequate to maintain the efficiency and earning power of our operations.

This was the only presentation of cash flow in the Calumet & Hecla report.

Some of the comments related the cash flow to other financial items and assisted the reader in interpreting the results. For example:

The Company's overall financial condition remained strong in spite of the moderate earnings decline . . . Cash income in 1959, represented by net earnings together with depreciation and amortization allowances, exceeded cash outflow in the form of dividend payments and capital expenditures.

After several years of high capital expenditures, Dresser's plants,

mines and mills are now in top condition and ready to handle, economically, a considerable increase in sales. It seems likely that plant and equipment expenditures will not exceed depreciation charges for perhaps two or three years. (Dresser Industries, Inc.)

During the year, capital expenditures totaled $9,608,000, largely to provide additional facilities for the production of transistors and computers. Depreciation charges were $5,267,000. Cash flow from earnings and depreciation amounted to $12,443,000 compared with $7,560,000 in the previous year . . . (Philco Corporation)

During the same two years the provisions for depreciation and amortization totaled $8,396,206. Cash income retained in the business (net income plus depreciation provision less cash dividends) was $11,911,257 and $5,988,893, respectively for 1959 and 1958. For the two-year period combined, this amounted to $3,912,998 less than the aggregate expenditures for capital additions. (Universal-Cyclops Steel Corporation)

Due to improved earnings, funds generated internally from depreciation, amortization and retained earnings amounted to $8,441,000, the highest in the Company's history. The magnitude of this figure is important, in that it is the principal means by which future growth of the Company is sustained. These are the funds that are available for investment in new plants and facilities, which in turn will provide additional earnings in subsequent years. (Pennsalt Chemicals Corporation)

Other Isolated Comments

The president's letter in the report of Consolidated Foods Corporation contained the following comment:

> A significant development in recent years is the marked increase in the flow of cash from operations. This has resulted from higher earnings and from additional cash generated through depreciation. The corporation is using the more rapid depreciation rates permitted under the Revenue Act of 1954. In 1957, for example, total operating cash flow was $6,512,835 compared with dividend payments of $2,473,912. This year cash flow from operations was almost $9,000,000 compared with dividend payments of $2,919,766.

The only other reference to cash flow was in a bar chart in the "ten year summary" section which demonstrated the cash flow as the sum of the "earnings" and depreciation, and showed the amount of dividends for each of the ten years.

The financial review section of the report of Kimberly-Clark Cor-

poration, under the caption of "Working Capital," contained the brief comment: "Cash flow from operations during the year was equivalent to $4.29 a share." A five-year comparative funds statement was presented later in the section, but there was no demonstration of the amount of the cash flow.

The "Review of Operations" section of the report of Richfield Oil Corporation mentioned the amount of "cash income" in the following comment:

> Net income for 1959 was $28,058,000, or $6.95 per share, as compared with $20,094,000, or $5.02 per share, for the prior year. . . . Cash income rose from $57,005,000 in 1958 to $64,433,000 in 1959. Dividends, including a special year end dividend of 50¢ per share, were continued at the annual rate of $3.50.

The "cash income" for 1959 corresponded to the first item in a funds statement, shown on the following page of the report, which was described as funds "provided by earnings (net income before provisions for depreciation, depletion, dry hole losses, retirements, etc.)."

The report of United Carbon Company included a funds statement, and additional cash-flow data, expressed both in total amount and per-share, were presented in several other places. One comment was: "Cash flow from operations, a significant measure of performance in view of the Company's important stake in the petroleum industry, rose to $14,790,025 or $11.61 per share compared with $14,172,252 or $11.52 per share for the preceding year." The amount for the current year, $14,790,025, did not correspond to the sum of the net income of $8,094,512.61 and the provision for depreciation and depletion of $5,749,591.75 as shown on the funds statement, since it did not include nonrecurring income of $1,459,198.79 and the funds statement did not show an adjustment of net income of $2,405,119.41 for "dry holes, abandoned wells, surrendered leases, etc." The "Facts in Brief" section showed cash flow of $16,249,224 for 1959 which included the nonrecurring income item; a footnote reconciled the two amounts.

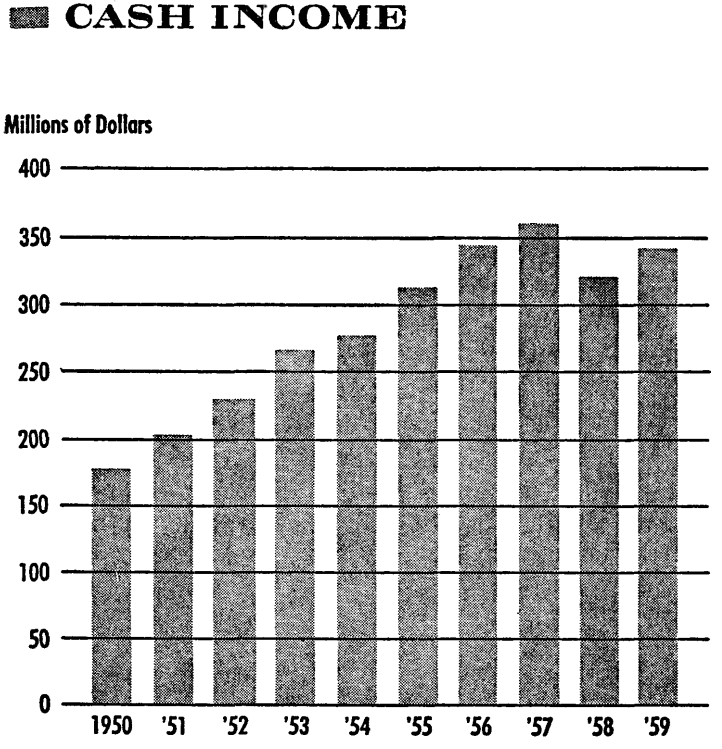
Use of Graphic Analysis

Twenty-two companies employed graphic analysis in presenting the cash-flow data. In one instance, Lone Star Cement Corporation, such a chart was the only place in the annual report in which the cash-flow term or concept was used. In two other cases, Allegheny Ludlum Steel Corporation and Consolidated Foods Corporation, the presentation of cash flow was confined to a chart and some brief comments.

In one case, in addition to a chart and brief comments, the financial statistics contained some cash-flow figures. In the remaining eighteen reports, a funds statement was presented and cash-flow data were shown in various places such as the highlights, the financial review, and/or the financial statistics section. The charts displayed variety as to form, the period covered, and content. Most of them presented the information in terms of total dollars, but others used per-share figures. Ordinarily, they covered a 10-year period.

The simplest type of chart merely presented the cash flow, the definition of this or a similar term being given parenthetically in the title of the chart or in nearby comments.

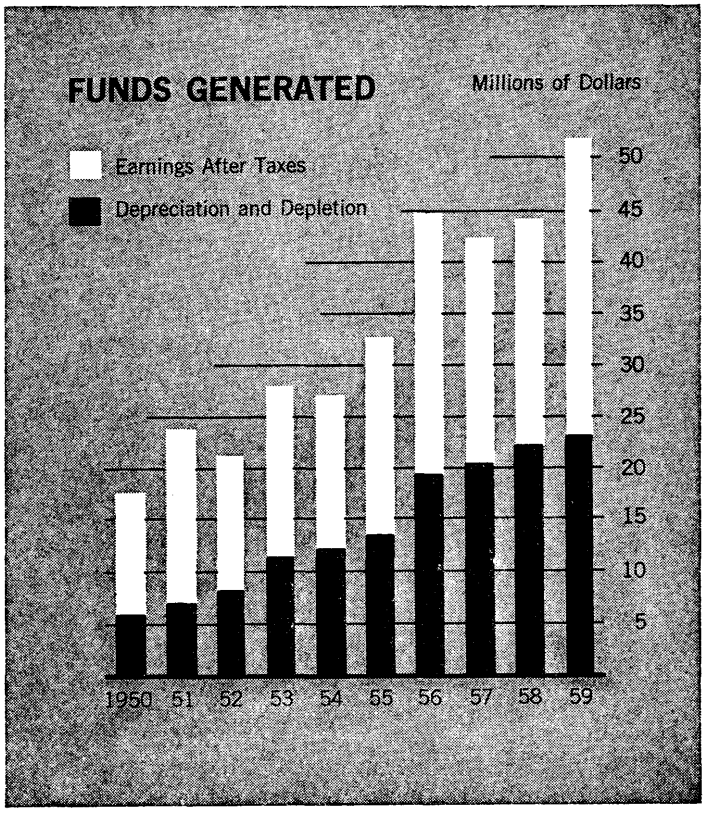
The following example was taken from the annual report of the Shell Oil Company:



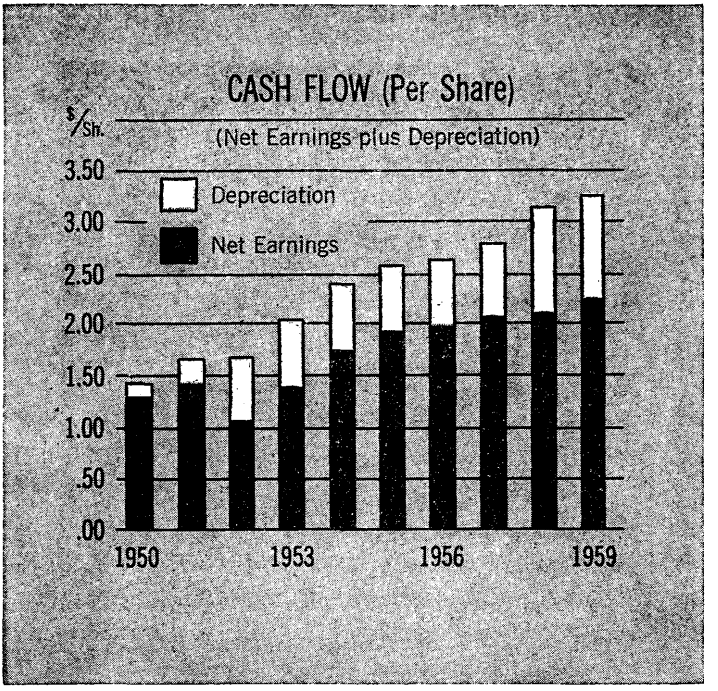
Cash income was defined as "net income plus write offs" in a schedule of financial statistics. Other companies which used charts similar to this one were:

Gulf Oil Corporation
The Pure Oil Company
United Carbon Company

A number of companies used a graphic chart to demonstrate the calculation of the cash flow and to compare the results over a period of years. The following two examples from the reports of St. Regis Paper Company and Lone Star Cement Corporation, illustrate some of the possible variations:



(St. Regis Paper Company)



(Lone Star Cement Corporation)

Other companies which used charts of this type were:

Automatic Canteen Company of America
Basic Incorporated
Haloid Xerox Inc.
Heyden Newport Chemical Corporation
Houdaille Industries, Inc.
Owens-Illinois Glass Company
Permanente Cement Company
Sperry Rand Corporation
Standard Oil Company (Indiana)

The chart presented in the Haloid Xerox Inc. report was accompanied by the following comments:

> As indicated by the chart . . . , cash flow per common share adjusted for the 4-for-1 stock split was $1.53, a new high. The amount of internally generated cash with which to do business is determined not by net income alone, but by net income plus depreciation and amortization including patent amortization. Aggregate cash flow for the past four years has been more than 2½ times net income, a relationship present in relatively few companies.

> During 1959 the rapid growth of the past several years in charges against operations for depreciation and amortization of plant and equipment continued as the total reached a new record of $2,259,000, compared with $1,768,000 in 1958. Five years ago the comparable figure was only $883,000. The increase is due, in large part, to growth in the depreciation of leased xerographic equipment.

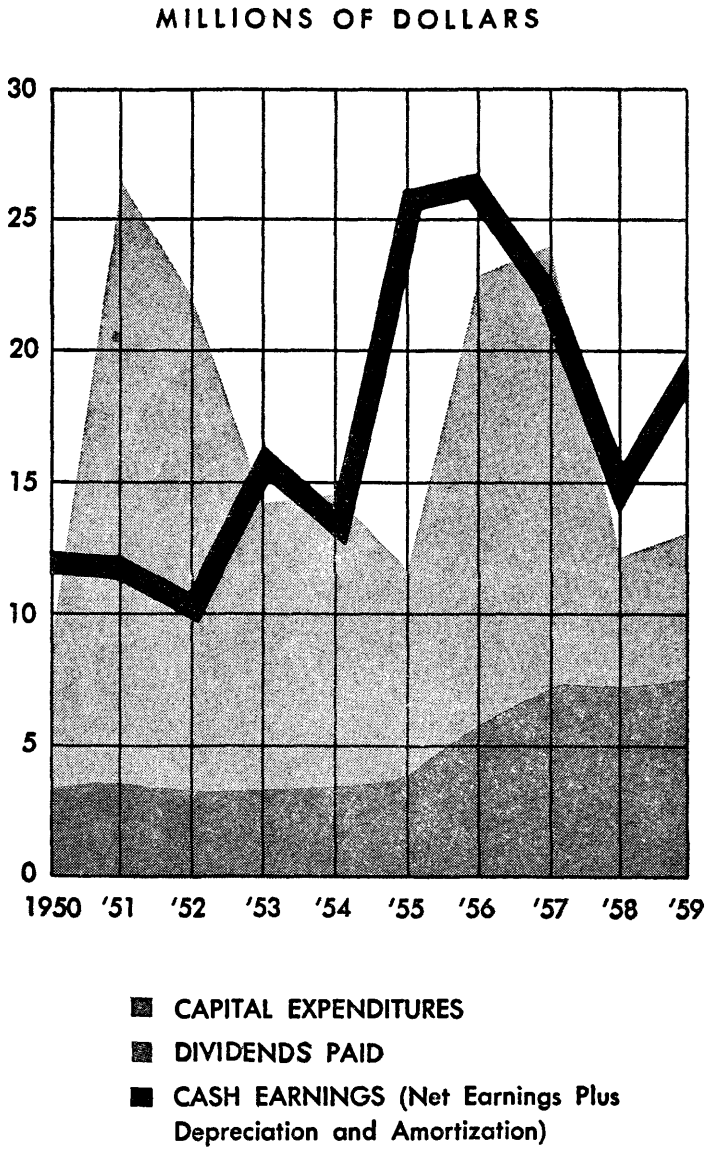
The "cash flow" used by this company in its charts and statistics differed from the "total funds from operations" shown on its funds statement by the amount of the "executive compensation earned, payment deferred" which was treated as a net income adjustment on the funds statement. The observation: "Aggregate cash flow for the past four years has been more than 2½ times net income, a relationship present in relatively few companies" seems inappropriate since this ratio varies inversely with the net income. A company with relatively lower net earnings would look still better.

Interpretive comments also acompanied the chart presented in the report of Sperry Rand Corporation. A similar chart in the report of Consolidated Foods Corporation included an additional bar showing dividends paid in each year. A line chart in the report of the Reynolds Metals Company showed "cash income" to be the sum of net income, depreciation, etc., and tax reserves. The report of Allis-Chalmers Manufacturing Company contained a pie chart showing the relationship of the "cash outlays for operating expenses" to "cash-flow earnings" in terms of the revenue dollar, cash-flow earnings being computed as the sum of the depreciation, dividends paid, and earnings retained.

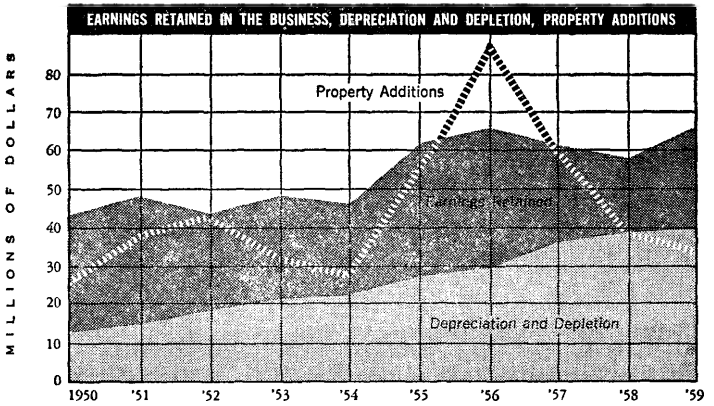
Some companies prepared more elaborate charts which related the cash flow to uses to which such funds might be put, and therefore provided some interpretation of the cash flow. Several charts introduced capital expenditures into the graphic analysis. For example, the next chart, taken from the annual report of Allegheny Ludlum Steel Corporation, combined cash flow, capital expenditures, and dividends, and was accompanied by the explanatory comments:

> Dividends during 1959 were maintained at the 50-cent quarterly rate of the preceding year, and totaled $7,730,000, compared with $7,708,000 paid in 1958. The accompanying chart shows the relationship of net cash income to capital expenditures and dividends paid for the past ten years. In 1959, almost $7,000,000 from net cash income was available for future growth and debt repayment.

Net Cash Income Versus Dividends & Capital Expenditures

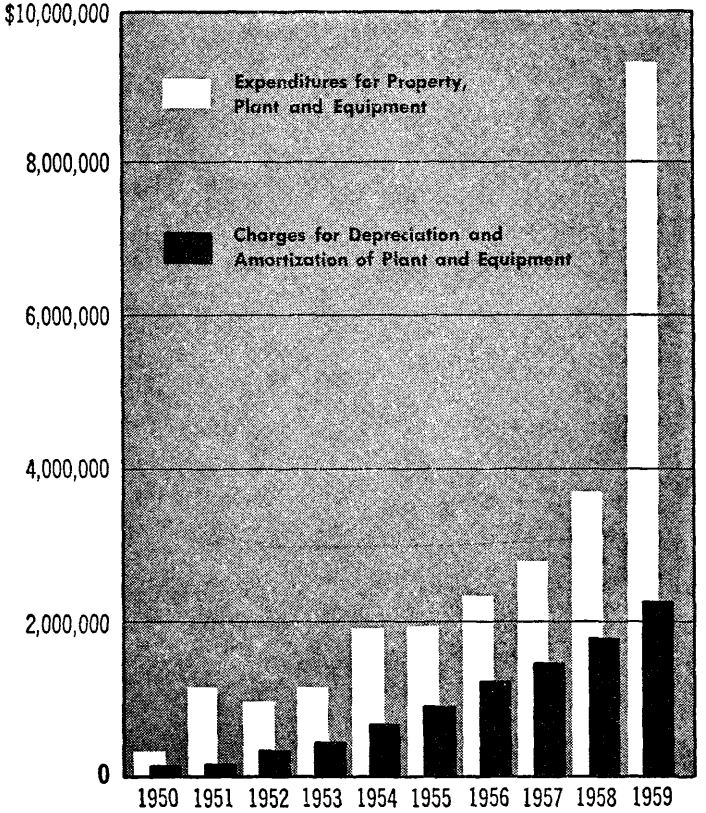


Similar charts were used by Continental Oil Company and Weyerhaeuser Company to demonstrate the presumed contribution of cash flow toward the financing of capital expenditures. The following chart was taken from the Weyerhaeuser Company report:



Certain other charts merely related that portion of the cash flow which was equal to the charges for depreciation to the amount of capital expenditures. The following example appeared in the report of Haloid Xerox Inc.:

Annual Expenditures for Property, Plant and Equipment and Charges for Depreciation and Amortization of Plant and Equipment *(Includes Rental Equipment and Parts)*



Other companies which presented a similar chart were:

Shell Oil Company
Sperry Rand Corporation
Standard Oil Company (Indiana)
United Carbon Company

Two companies, Sinclair Oil Corporation and Wheeling Steel Corporation, used charts to show a comparison of working capital and cash flow. The chart in the report of Wheeling Steel Corporation was accompanied by the following comment:

> Cash income or cash flow, comprising earnings and depreciation, is one of the important indicators of a company's financial strength. As shown on the accompanying chart, Wheeling Steel's cash flow used for property additions, retirement of debt, and dividends, was $21.7 million in 1959 and $23.6 million in 1958.

Cash Flow Data in Operating Statistics

Cash-flow data were frequently shown in the highlights, the financial review, and the operating statistics summaries of the annual reports, either in total amounts, amounts per share, or both.

The report of Rayonier Incorporated presented only the per-share cash-flow data in two statistical summaries, using the caption "Cash flow, per share of common stock" in one and "Funds generated in operations per share" in the other. Although a funds statement was presented, there was no demonstration of the total amount of cash flow. One of the schedules, the "Summary of Operations," follows:

Summary of Operations	1959	1958
Net sales	$129,503,553	$108,018,262
Provision for taxes on income	$ 9,080,000	$ 3,820,000
Net income	$ 13,334,827	$ 3,601,754
Net income, per share of common stock	$ 2.35	$ .65
Cash dividends, per share of common stock	$ .60*	$ .50
Cash flow, per share of common stock	$ 5.09	$ 3.00
Book value, per share of common stock	$16.47	$15.15
Working capital	$ 55,089,057	$ 38,652,801
Long-term debt	$100,000,000	$100,000,000
Employees	6,501	6,480
Wages and salaries paid, including benefits	$ 34,464,903	$ 30,340,467
Stockholders, including beneficial ownership	18,384	16,957

**In addition, a stock dividend of 3% was paid on November 28th.*

Houdaille Industries, Inc. also confined the cash-flow data in the statistical summary to the amounts per share.

Two reports showed the amount of cash flow in the statistical summaries but did not indicate the cash flow per share. The following example is taken from the annual report of Shell Oil Company:

Financial	1959	1958
Revenue	$1,819,954,000	$1,674,132,000
Net Income	$147,418,000	$128,583,000
Net Income per Share	$2.43	$2.12
Cash Dividends per Share	$1.02½	$1.00
Cash Income (net income plus write-offs)	$342,807,000	$323,148,000
Working Capital at End of Year	$284,606,000	$299,738,000
Cash and Short Term Securities at End of Year	$159,459,000	$148,874,000
Long Term Debt at End of Year	$133,478,000	$143,342,000
Capital Expenditures	$280,073,000	$223,082,000

Similar treatment of the cash-flow data was observed in the report of Union Oil Company of California.

A more common practice was to show both the total and the per-share amounts of cash flow in the statistical summary. The following schedule appeared in the anual report of Allied Laboratories, Inc. Incidentally, it contained the only reference to cash-flow data in the entire report, and there was no indication of how the amount was calculated.

	1959	1958
Net Sales	$30,164,000	$30,707,000
Net Profit before Taxes	$4,098,000	$4,277,000
Income Taxes	$2,100,000	$2,200,000
Net Profit after Taxes	$1,998,000	$2,077,000
Per Share	$2.52	$2.64
Funds Generated by Operations	$2,526,000	$2,501,000
Per Share	$3.18	$3.18
Cash Dividends	$1,029,000	$794,000
Per Share	$1.30	$1.05
Additions to Plant	$881,000	$1,290,000
Working Capital at End of Year	$14,064,000	$13,629,000
Stockholders' Equity at End of Year	$20,684,000	$19,474,000
Per Share	$26.05	$24.73

Other companies which presented both the total amount and the per-share of cash flow were:

Basic Incorporated
Permanente Cement Company
St. Regis Paper Company
United Carbon Company

Two companies, Haloid Xerox Inc. and The Garlock Packing Company, included in the statistical summaries the percentage of "cash flow to net worth" and of "cash flow to net operating investment," as well as other cash-flow data. In the latter case, the calculation of the cash flow was not demonstrated and could not be derived from the available information.

Lily-Tulip Cup Corporation presented a six-year comparative schedule which demonstrated the calculation of "gross cash flow" and the deduction of dividends to arrive at "net cash flow."

With the continuing enlargement of our investment in plant and machinery, the annual amounts set aside for depreciation and amortization steadily increase. The provision for 1959 was $2,893,748, an increase of $309,823 over that required for the same purpose for the prior year. Since these amounts are not immediately expended in cash, they are available, together with net income after dividends, for the further expansion of the business, replacement of older facilities and payment of debt as it matures. The following tabulation shows the amounts obtained in 1959 and the five preceding years from internally generated funds, otherwise known as "cash flow."

	Net Income	Depreciation and Amortization	Gross Cash Flow	Cash Dividends	Net Cash Flow
1959	$6,612,184	$2,893,748	$9,505,932	$3,118,787	$6,387,145
1958	6,002,826	2,583,925	8,586,751	2,875,384	5,711,367
1957	6,556,541	2,047,755	8,604,296	2,853,807	5,750,489
1956	6,106,800	1,860,675	7,967,475	2,515,420	5,452,055
1955	5,309,782	1,540,419	6,850,201	2,339,563	4,510,638
1954	4,674,907	1,251,687	5,926,594	1,736,733	4,189,861

Critique of "Cash Flow" Analysis

The concept of "cash flow" as the amount of funds derived from operations (net income plus depreciation, etc.) can serve as an effective analytical tool. The discussion, presentation and interpretation of cash-flow data, however, are often inadequate and sometimes inaccurate and misleading.

The Financial Aspects of Depreciation Accounting

Many of the comments and much of the discussion of cash flow display an inexact comprehension of the nature of depreciation and other similar "non-fund" adjustments. The language used and the form of presentation often imply or state baldly that depreciation is a "source" of funds. The accounting for depreciation gives no support to such a contention. The cost of a depreciable asset, such as a building or a truck, uses funds in the period in which the acquisition takes place; and this cost must be covered during the scope of its life by the excess of revenue over operating costs other than depreciation on that asset if a loss from operations is to be avoided. In other words, depreciation is an operating cost or expense and the purpose of depreciation accounting is to distribute the cost (less salvage, if any) systematically over the operating periods included in the useful life of the property.[33] The only sense in which depreciation is a "source" of funds is that, like any other accrued operating expense, it restricts the amount of dividends which *might* be distributed to shareholders if it were not recorded.[34] Or, as Howard F. Greene has put it: "De-

[33] See *Accounting Terminology Bulletin No. 1*, pp. 20-25, for a more complete definition and discussion. American Institute of Certified Public Accountants. 1953.

[34] Also, of course, like any other deductible expense, it decreases the amount of income taxes which otherwise would have to be paid in the current year.

preciation is not a 'source' of funds; it just doesn't use funds provided by other sources." It could also be said that the amount of depreciation can properly be included in a *measure* of the amount of cash flow. The cash flow, as the amount of funds provided by revenue-earning operations, is actually the difference between the funds derived from revenue less the funds used for out-of-pocket expenses. The addition of depreciation (or other such items) to the amount of net income is merely an arithmetic device to arrive at the same result.[35]

The financial aspects of depreciation accounting can be summarized as follows:[36]

> 1. The recording of depreciation as such has no effect upon the amount of current funds which come into the business except insofar as the selling price of a product may be based upon its cost of production, as in the case of a cost-plus contract. Once the selling price is fixed, the making of the bookkeeping entries for depreciation can have no effect upon the total receipts or revenue; an increase in the amount of depreciation will not increase the revenue or flow of funds into the business and the reduction or omission of an entry for depreciation will not decrease it.
>
> 2. Whenever the revenue covers all of the expenses including the depreciation, there will be an increase in *net* assets other than the depreciating property equal to the amount of depreciation charged off. The deduction of depreciation from revenue does not involve an expenditure of funds, so the funds received in connection with sales and other revenue will to this extent be retained in the business.

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[35] Professor Charles T. Horngren suggests that the term *depreciation* may have different meanings to the accountant and the financial analyst. To the accountant, depreciation is an allocation of cost to operations, while the financial analyst looks upon depreciation as that portion of incoming funds from customers which is, or should be devoted to spending on fixed assets or to retirements of long-term debt which arose from past fixed asset outlays. (See page 41 of his article "Increasing the Utility of Financial Statements" in the July 1959 issue of *The Journal of Accountancy.*) We feel, however, that there is only one proper conception of depreciation and that both the accountant and the financial analyst must recognize that while it is primarily an allocation of cost to operations, it usually has a financial aspect which is also significant.

[36] Adapted from "Financial Aspects of Depreciation Accounting," by Perry Mason. *The Accounting Review,* Sept. 1935, pp. 238-46. See the article for a detailed demonstration leading to these conclusions.

3. The assets retained as a result of the recording of depreciation will not automatically be accumulated in a fund waiting to be invested. These assets can not be identified. The funds on hand at the beginning of a period, funds received from borrowed or invested capital, and funds derived from operations are ordinarily combined in the accounts with no attempt at segregation according to source.

4. In a manufacturing enterprise the connection between the recording of depreciation and the retention of assets is indirect. Depreciation first becomes a part of the cost of work in process and finished product and only when the goods have been sold will new funds come into the business which may be thought of as being retained as a result of the recording of depreciation.

5. These financial aspects of depreciation accounting may be utilized in the administration of the financial budget. The amount of depreciation included in the budget of expenses may ordinarily be considered as available funds in the financial budget and may be appropriated for any purpose. It seems reasonable to assume that the replacement of the depreciable assets has the first claim on such funds, but in any one period there may be an excess available for other purposes. If it is feasible to make replacements with borrowed capital, the funds made available in connection with the depreciation accounting might well be used to retire the original indebtedness or other original investment.

Cash Flow Can be Negative

It seems frequently to be assumed that there will inevitably be a cash flow at least equal to the depreciation recorded during the current period. As was pointed out in conclusion number 2 in the previous section, this will be true only if the revenue covers all of the expenses including the depreciation. Where the net loss for a period exceeds the "nonfund" adjustments, cash flow will be negative instead of positive. The following two demonstrations, prepared from the annual reports of the New York, New Haven and Hartford Railroad Company, illustrates this possibility:

New York, New Haven & Hartford Railroad Company

COMPARATIVE CASH FLOW

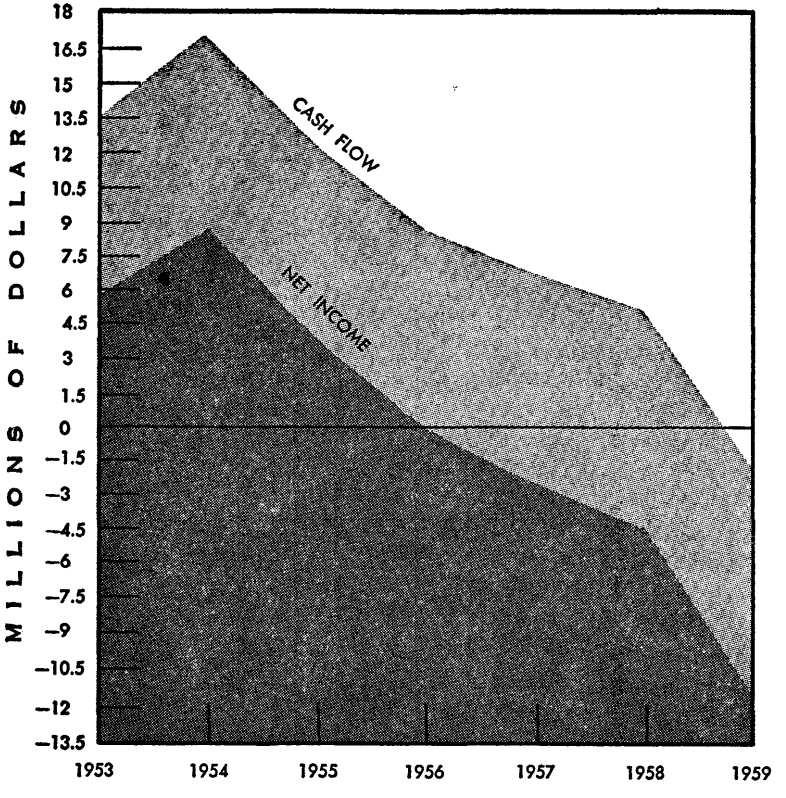
	1953	1954	1955	1956	1957	1958	1959
Net Income	$ 6,060,000	$9,091,000	$4,247,000	$ 262,000	$(2,364,000)	$(4,277,000)	$(10,816,000)
Depreciation—Structures	3,075,000	3,115,000	3,128,000	3,149,000	3,191,000	3,305,000	3,343,000
Equipment	4,652,000	5,012,000	5,033,000	5,404,000	5,833,000	5,925,000	5,888,000
	7,727,000	8,127,000	8,161,000	8,553,000	9,024,000	9,230,000	9,231,000
Cash Flow	$13,787,000	$17,218,000	$12,408,000	$8,815,000	$ 6,660,000	$ 4,953,000	$ (1,585,000)

Source: Moody's Transportation Manual—1960

Note that in 1957 and 1958 the cash flow was positive and the net income negative, and that in 1959 both were negative.

New York, New Haven & Hartford
Railroad Company

NET INCOME AND CASH FLOW



In a case of this sort, the "non-fund" adjustments are still significant in that they reduce or offset the apparent drain on current funds caused by the net loss from operations.

Expansion Without Increasing Capital Investment

Another phenomenon associated with depreciation accounting is the possibility, under certain circumstances, of increasing the physical plant and equipment without increasing the invested capital[37], in other

[37] "Invested capital" for this purpose would include retained earnings as well as shares of stock or debt.

words, expansion can take place without capital contributions even though the business is just breaking even. The required condition is that, prior to the retirement from service of a unit of property, an amount equal to part or all of the funds retained as the result of the depreciation accounting be invested in depreciable assets. The general principle involved is illustrated in the following demonstrations.

The first demonstration is based upon the following assumptions:

1. A unit of equipment is purchased at a cost of $36,000. This is the only type of depreciable asset used by the business.
2. It has a usable life of three years, with no salvage value.
3. It is replaced at the beginning of the fourth year at the same cost, $36,000.
4. The business will at least break even on its operations.

Year	Cost of Equipment	Accumulated Depreciation	Retained Assets	Stockholders' Investment
First Year				
One unit purchased	$36,000			$36,000
Depreciation		$12,000	$12,000	
Second Year				
Depreciation		12,000	12,000	
Third Year				
Depreciation		12,000	12,000	
One unit retired	(36,000)	(36,000)		
Fourth Year				
One unit purchased	36,000		(36,000)	
Totals	$36,000	—	—	$36,000

(Continued in the same manner.)

In a case of this type, no expansion is possible without additional capital investment, since the accumulation of assets associated with the depreciation entries is insufficient to acquire another unit of equipment.

The assumptions of the second demonstration are the same except that three units of equipment are purchased at a cost of $12,000 each, or a total of $36,000. Additional units are available at a cost of $12,000 each and will be acquired at the beginning of each period to the extent possible without increasing the capital investment.

Year	Cost of Equipment	Accumulated Depreciation	Retained Assets	Stockholders' Investment
First Year				
3 units purchased	$36,000			$36,000
Depreciation		$12,000	$12,000	
Second Year				
1 unit purchased	12,000		(12,000)	
Totals—4 units	$48,000	$12,000	—	$36,000
Depreciation		16,000	16,000	
Third Year				
1 unit purchased	12,000		(12,000)	
Total—5 units	$60,000	$28,000	$ 4,000	$36,000
Depreciation		20,000	20,000	
3 units retired	(36,000)	(36,000)		
Fourth Year				
2 units purchased	24,000		(24,000)	
Totals—4 units	$48,000	$12,000	—	$36,000
Depreciation		16,000	16,000	
1 unit retired	(12,000)	(12,000)		
Fifth Year				
1 unit purchased	12,000		(12,000)	
Totals—4 units	$48,000	$16,000	$ 4,000	$36,000
Depreciation		16,000	16,000	
1 unit retired	(12,000)	(12,000)		
Sixth Year				
1 unit purchased	12,000		(12,000)	
Totals—4 units	$48,000	$20,000	$ 8,000	$36,000
Depreciation		16,000	16,000	
2 units retired	(24,000)	(24,000)		
Seventh Year				
2 units purchased	24,000		(24,000)	
Totals—4 units	$48,000	$12,000	—	$36,000

(Continued in the same manner.)

Under the assumed facts of this illustration, the number of units of equipment in service can be increased from three to four without requiring an increase in invested capital. To the extent that conditions such as these exist, it is true that the portion of cash flow related to the charge for depreciation may contribute to the financing of expansion

or of higher replacement costs.[88] The effect becomes particularly significant if it occurs during a period of expanding capital investment.[89]

Misuse of Depreciation in Financial Analysis

Unless it can be shown that the depreciation rates being employed by industry are inaccurate and unreasonably high, or that other improper accounting methods are being used, there is no defensible basis for saying that "much of the profit margin squeeze is artificial, because one of the most rapidly increasing cost items is depreciation . . ." and that "corporate profits today are being understated as never before."[40] While there can be differences of opinion as to the amount which should be charged to operations in a particular period, a systematic amortization of cost is essential before arriving at a meaningful concept of earnings of a company. Accelerated depreciation methods are widely used for income tax purposes, but under the most approved accounting procedures, their use in the financial statements would be considered proper only if the results corresponded to a reasonable allocation of cost under the operating conditions of the particular company.

It is often said or implied that large depreciation charges are advantageous because of their apparent contribution to the cash flow. This seems to say that a business which owns its equipment is better off than one which leases it, which is certainly not a safe generalization. For example, the comment that: "We obtain an exceptionally high cash flow from depreciation per dollar of sales for a department store company because we own the bulk of our real estate"[41] is true in a narrow technical sense, since a store which rented its premises would not have a corresponding amount of depreciation, but its implications

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[88] The earliest demonstration of this point which has come to our attention was in "Depreciation and Value of Public Utilities," by Charles C. James, *The Journal of Accountancy,* Dec. 1916, pp. 409-16. Also see "Economics of Depreciation Financing," by Sadao Takatera, *Kyoto University Economic Review,* April 1960, in which recognition of the phenomenon is traced back to Karl Marx and Friedrich Engels (1867).

[89] See "Depreciation—A Dynamic Force," by M. H. Earp, *The Analysts Journal,* Nov. 1957, pp. 71-72.

[40] Ward Gates, *The Magazine of Wall Street and Business Analyst.* See footnote No. 10, p. 8.

[41] See excerpt from annual report of The May Department Stores Company, pp. 16-17.

are questionable. All other things being equal, the funds flowing into a business from its operations are the same whether the property is owned or rented. If owned property, as is commonly the case, has been largely acquired with the use of borrowed capital, the periodic payments on the indebtedness *could* be about the same as the payments on the lease or, in any case, will have to be met before funds will be available for financing an expansion of facilities. If there is little or no debt on which periodic payments have to be made, there might be a substantially greater amount of funds available for financing expansion in a given year where the property is owned by the business. There are, however, offsetting factors, perhaps effective in other years, such as the financing of the original investment and of the replacement of the facilities, or the operating expenses such as taxes, insurance and maintenance which are generally assumed by the lessor. The relative cash flow is one of the factors to be taken into account in arriving at the lease-or-buy decision, but it is not necessarily true that ownership of the property results in a significantly larger amount of funds being available for future growth.[42]

To speak of depreciation as a "source of funds"[43] or to use the language "cash flow from depreciation"[44] is ill-advised since it implies that the total cash flow will vary with the rate or method of depreciation. This is not true (with the rare exception of cost-plus contracts and the like) except that if the change in rate or method is recognized for income-tax purposes, there may be a temporary effect to the extent of the postponement or acceleration of the tax.

Cash Flow Earnings Not a Substitute for Net Income

Many of the comments made in connection with cash-flow analysis leave the reader with the impression that somehow or other the "cash earnings" are superior as an indication of the company's "real earning

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[42] See section on "Financial Considerations in Leasing" in *Reporting of Leases in Financial Statements,* by John H. Myers, for a discussion of cash-flow problems in leasing. American Institute of Certified Public Accountants. (To be published.)

[43] *Survey of Current Business,* U. S. Department of Commerce. See footnote No. 29, p. 13.

[44] *Barron's.* See footnote No. 25, p. 12.

power."[45] Calculations of the Price/Cash Earnings ratio are sometimes made and presented as a substitute for or supplement to the Price/Earnings ratio in evaluating a company's stock.

It should be self-evident that a cash-flow earnings figure cannot be considered a substitute for or an improvement upon the net income, calculated with a proper and reasonable deduction for depreciation, depletion, amortization, and the like.[46] That portion of the cash flow associated with the accounting for depreciation and similar items is merely part of the cycle of (1) investment in an asset, (2) recovery of the cost from revenue-earning operations (disinvestment), and (3) reinvestment. Unlike the net income, this portion of the cash flow has no effect upon the stockholders' equity or "net worth." Only the net income can properly be compared with the stockholders' investment in arriving at a measure of the success of business operations. It seems completely improper to say that the "cash flow . . . represented a fabulous return on Kaiser's original equity capital"[47] or to refer to depreciation as "a sort of second income."[47]

Priorities on Use of Cash Flow

There is a strong implication running through the comments in the literature, including those in the annual reports of corporations, that the total cash flow can be considered available for the financing of replacements, exploration, or expansion of plant facilities. This is certainly not an assumption which can be applied indiscriminately. For example, the following selected items from a group of funds statements in the 1959 annual reports show that even the net amount of cash flow after dividends may not always be available for capital expenditures.

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[45] See, for example, "'Cash flow earnings'—a dangerous concept," Accounting and Auditing Problems, Carman G. Blough, editor, *The Journal of Accountancy,* Oct. 1958, pp. 77-78.

[46] It is readily admitted that the significance of net income is impaired if improper or inconsistent methods of accounting for these "non-fund" items is encountered, and if different accounting methods are used by companies in the same industry. The cash-flow figure may then have more stability and comparability than the net income, but it still is not a measure of the increase in the stockholders' equity arising from operations of the period.

[47] *Forbes—Business and Finance.* See footnotes No. 14, p. 9, and No. 20, p. 11.

Company	Cash Flow	Dividends	Redemption of Preferred Stock or Payment of Debt	Available Balance Amount	%
Crown Zellerbach	$67,842,000	$26,089,000	$12,043,000	$29,710,000	44%
Daystrom	2,320,370	1,091,548	995,309	233,513	10%
Kennecott Copper	69,769,293	66,318,306	—	3,450,987	5%
Maytag	15,799,815	6,924,891	5,017,500	3,857,424	24%
McKesson & Robbins	13,768,726	5,815,841	5,617,584	2,335,301	17%
Metal & Thermit	2,485,603	736,912	2,600,000	None	–
Phelps Dodge	42,507,000	30,428,000	—	12,079,000	28%

Without conscious effort on the part of management, there is no segregation or earmarking of any portion of the cash flow. In analyzing or interpreting the results of a period, however, it may be helpful to adopt certain assumptions as to the priority of the various uses of these funds. It would ordinarily be appropriate, for example, to assume that regular dividends, installments of debt payment, and required increases in working capital (not necessarily in this order), constitute prior claims to that portion of the flow arising from net income, and that the cost of maintaining the physical plant through replacements of retired units constitutes a prior claim to that portion associated with depreciation. It would then follow that expansion of facilities can be financed out of such funds only after these other requirements have been met. Such assumptions would vary with the circumstances of a particular case and with the purpose of an analysis, but they are helpful in grasping important relationships and in avoiding erroneous conclusions.

Another factor in cash-flow analysis is the distinction between the short-run and long-run situation. In a given year or other short period, it may be possible in some cases to postpone new equity or debt financing and use funds in a way which would be inappropriate from the long-range point of view. During the early part of a recession period, inventories are allowed to shrink, and capital expenditures and rehabilitation of equipment are often postponed. Because of these and other similar factors, current funds tend to pile up and it may reasonably be assumed, for example, that the cash flow will bolster the possibility of continuing regular dividends, or of meeting debt retirement requirements, without getting into financial trouble. Later on, if serious losses develop, there may of course be a shortage of current funds. In boom periods, with strong pressure for modernization and expansion of plants, the demands for liquid resources are numerous and pressing and the probability of new financing becomes much stronger.

Cash-Flow Data in Annual Reports

In general, the presentation of cash flow data in the published annual reports which we reviewed left much to be desired. The comments were seldom presented in a meaningful manner, or clearly related to other exhibits which contained the same or similar information, such as the funds statement. (See pages 16-29.) The significance of the cash-flow information was seldom indicated.

The graphic charts which were prepared were generally inadequate. (See pages 19-26.) The best thing that can be said about most of them is that they saved the security analyst a few moments of time in making similar calculations. While graphic presentation is often helpful in enabling the reader to grasp relationships and trends, a chart should include enough data, as a few did, to permit meaningful interpretation and should be accompanied by comments which assist the reader in comprehending what the chart is trying to say.

It seems very doubtful if the statistics which we observed (see pages 26-29) were worth including in the annual reports, at least in the form in which they were presented. Such data can be very misleading. Again, they may be of some assistance to the security analyst, but it is not apparent how the stockholder can obtain anything helpful from them, since usually no basis was given for judging the significance of isolated amounts or per-share figures. When net income per share and cash flow per share are shown in juxtaposition or otherwise appear in the same statistical table, it looks as though the company were saying: "Our earnings this year were not so hot, but look at our cash flow!" There is a real danger that the reader will interpret the cash-flow earnings as the real earnings and fail to comprehend the significance of the net income figure. In order to have meaning to the reader, cash-flow statistics must be related to the entire financial operation, which can best be done by means of a funds statement accompanied by interpretive comments.

Conclusions and Recommendations

1. "Cash flow" in financial analysis means net income after adding back expense items which currently do not use funds, such as depreciation. (It may also involve deducting revenue items which do not currently provide funds, such as the current amortization of deferred income.) This concept of "cash flow" as the amount of assets or funds made available after meeting the current requirements of revenue-earning operations is a valid and useful analytical tool. It can be used effectively as one of the major factors in judging, for example, the ability to meet debt-retirement requirements, to maintain regular dividends, and to finance replacement and expansion costs.

2. Depreciation and other similar "non-fund" charges to operations are not "sources" of funds. The amount of the "non-fund" items, however, can properly be used, together with the net income or net loss, in the *measurement* of the cash flow if operations are successful, or of the drain on current resources if operations are unsuccessful. This is a convenient or short-cut means of computing the funds provided by operations.

3. It is possible under some circumstances that an expansion of physical plant and equipment can take place without additional equity or debt financing, where depreciation and other similar factors are present. There is a strong presumption, however, that the major portion of the retained funds associated with depreciation accounting will be needed to finance replacements, and that the funds required for expansion must in large part be provided by the retention of earnings or other additional invested capital.

4. In no sense can the amount of cash flow or cash income be considered as a substitute for or an improvement upon the net income, properly determined, as an indication of the results of operations or the change in financial position. Under some circumstances, especially where the accounting methods used are significantly different, cash-

flow calculations may improve the comparability of operating statistics from one company to another. There are, however, many other differences between companies which make effective comparisons extremely difficult. For example, in a rate-of-return computation, the elimination of depreciation would not avoid the lack of comparability of the cost of the plant and equipment where the acquisitions were made at different price levels.

5. The presentation of cash-flow data in annual reports of corporations can be greatly improved. The inclusion of a well-designed comparative funds statement[48] in the annual report should become a generally accepted practice. It should be accompanied by interpretive comments and charts which would provide the reader with useful information as to the conduct of financial affairs by the management during the period covered by this type of operating statement. Isolated comments or statistics concerning cash flow should be avoided since they are generally meaningless and often misleading.

[48] Part II of this report is a detailed study of this type of financial statement.

PART TWO

THE FUNDS STATEMENT

Introduction to Part II

The discussion of the funds statement in Part II, like the consideration of "cash flow" analysis in Part I of this report, will relate primarily to the annual report of a corporation to its stockholders. This in no way implies that the funds statement is not of equal or even greater importance in reporting the operations of an unincorporated business or of a nonprofit organization, or as a tool of management planning and control in any type of enterprise. While there may be some differences in such matters as form, the degree of detail, and the use of projections into future periods, most of the material presented here will be applicable to any type of situation in which the funds statement is used.

The funds statement is used widely by financial analysts and credit grantors. If none is shown in the annual report, attempts are usually made to prepare one from the available information in the annual report plus any additional material which may be furnished by the company. This type of report is also used in some governmental reports and in certain areas of economic and financial research. It is, then, a financial statement which is or should be of interest to all readers of corporate annual reports.

Most of the evidence and illustrations of existing practices were obtained from the 190 funds statements found in the survey of the 1959 annual reports of the 600 industrial companies included in the publication *Accounting Trends and Techniques,* to which reference has previously been made.

Characteristics of the Funds Statement

The funds statement, as a part of the annual report of a corporation, can be characterized as a condensed report of how the activities of the business have been financed, and how the financial resources have been used, during the period covered by the statement. It is an operating statment since it summarizes the financial activities for a period of time, but it performs a different function from the income statement which is also a report on operations but is primarily a presentation of revenue and expense items and the computation of the net income for the period.

The principal raw material used in the preparation of a funds statement ordinarily consists of a comparative balance sheet with the net changes which have taken place in the various items during the period being indicated. Also needed are analyses of certain accounts, especially the retained earnings, where the differences between the beginning and ending balance-sheet figures need adjustment for satisfactory reporting, or where a difference is the result of a combination of several items which must be separated. While some items shown on the income statement may be utilized in the preparation of the funds statement, they are not indispensable.

The statement organizes this material, after some eliminations, combinations, and additional analysis and reclassification, into two principal groups—(1) sources of funds and (2) application, disposition, or use of funds. Broadly speaking, sources of funds are indicated by decreases in assets and increases in liabilities or in the stockholders' equity, while applications of funds are associated with increases in assets and decreases in liabilities or in the stockholders' equity.

The essential nature of a funds statement can be illustrated by preparing the opening balance sheet of a corporation in the form of such a report. The period in this case is the time elapsing from the

conception of the business to the date when it is ready to begin operations. The balance-sheet items would be shown as follows:

Sources of Funds	
Issued shares of stock	$1,000,000
Borrowed on real estate mortgage	250,000
Borrowed on promissory note	10,000
Total funds provided	$1,260,000
Disposition of Funds	
Purchased land and building	$ 465,000
Purchased machinery and equipment	700,000
Appropriated for working capital (materials and supplies, cash in bank, etc.)	95,000
Total funds applied	$1,260,000

The only significant item missing from this illustration, as compared with the typical funds statement, is the amount of funds provided by revenue-earning operations.

Objectives or Purposes of the Funds Statement

The funds statement is not a supporting schedule to the balance sheet, the income statement, and the statement of retained earnings, although it is technically based upon the same accounting data and "ties in" to these financial statements. It is, instead, a complementary statement, an important report in its own right, which presents information which cannot easily be obtained, or cannot be obtained at all, from the other financial statements. It contributes materially to the financial aspects of the answers to such questions as:

1. Where did the profits go?
2. Why were dividends not larger?
3. How was it possible to distribute dividends in excess of current earnings, or in the presence of a net loss for the period?
4. Why are the net current assets down although the net income is up?
5. How is it that the net current assets are up even though there was a net loss for the period?

6. Why must money be borrowed to finance purchases of new plant and equipment when the required amount is exceeded by the "cash flow" – (the sum of the net income and depreciation)?
7. How was the expansion in plant and equipment financed?
8. What happened to the proceeds of the sale of plant and equipment resulting from a contraction of operations?
9. How was the retirement of debt accomplished?
10. What became of the assets derived from an increase in outstanding capital stock?
11. What became of the proceeds of the bond issue?
12. How was the increase in working capital financed?

Definitive answers to questions such as these are seldom obtainable from a casual inspection of the funds statement. The funds derived from a particular source are rarely segregated and used for a particular purpose, but are instead merged with other funds and allocated under the over-all decisions and policies of the financial management. Certain useful assumptions, however, can often be made and reasonable conclusions are usually not difficult to reach. The grouping of related items, such as the funds provided from operations and the dividends, is a helpful practice, and the interpretation can be greatly facilitated if the management prepares comments and explanations of its own, such as:

> Funds provided from operations amounted to $3,500,000. Of this amount, $2,000,000 was distributed to stockholders as dividends, and $500,000 was appropriated for additional working capital. The remaining balance of $1,000,000, together with the proceeds of $4,000,000 from the issue of additional debenture bonds, was used to finance the replacement of retired units of plant and equipment to the extent of $1,750,000 and the purchase of additional property at a cost of $3,250,000.

Comparative funds statements, covering several years of operations, enable the reader to obtain useful information such as the financing methods used in the past, dividend policies which have been followed, and the contribution of funds derived from operations to the growth of the company. They may also provide reliable clues as to future financial requirements.

The funds statement, then, is a report of the financial operations of

the company. It discloses the results of the policies followed by the financial management in a way which probably makes it more understandable to most readers than are the other financial statements. This statement is often more comparable with those of other companies than are the balance sheet and income statement since, as was pointed out in Part I, some of the major variations in accounting procedure are eliminated in the calculation of the "cash flow" or funds provided from operations. The funds statement cannot replace the income statement but it presents at least an equally significant analysis of the financial phase of business operations.

What is Meant by "Funds"?

The term "funds" can be and has been defined in various ways, including the following:

Literal Cash. One possibility is to interpret "funds" as literal cash —undeposited cash and demand deposits in banks. A funds statement prepared on this basis, sometimes called a "cash flow statement," shows results corresponding to those obtained from a set of books kept on a cash receipts and disbursement basis. The net income is adjusted for the amount of the increases or decreases in accounts receivable, accounts payable, inventories, accrued revenue and expenses, etc. We know that this type of funds statement is sometimes prepared, especially for the use of management in predicting future cash requirements, but we found only one example[1] in published annual reports and it appears infrequently in accounting literature.[2] A few of the funds statements appeared to have been prepared on a cash basis, but they still reflected accrual accounting in the calculation of funds derived from operations and in the treatment of the other working-capital items, since they made no adjustments for receivables, payables, inventories, etc. The funds statement of Acme Steel Company illustrates this type of presentation:

[1] The 1960 report of Norris Dispensers, Inc.

[2] Only the most recently published textbooks demonstrate the preparation of the "cash flow statement." See Finney & Miller, *Principles of Accounting, Intermediate,* Fifth edition (1958), chapter 25; Milroy & Walden, *Accounting Theory and Practice—Intermediate* (1960), chapter 29. It has appeared occasionally in the CPA examination questions.

SOURCE AND USE OF CASH *(in thousands of dollars)*

	Year Ended December 31, 1959	1958
CASH PROVIDED FROM:		
Operations:		
Net income for the year	$ 3,616	$ 5,307
Add expenses which did not require the outlay of cash:		
Depreciation and amortization	3,582	3,400
Other (deduct)	725	(161)
FROM OPERATIONS	$ 7,923	$ 8,546
Sale of securities of the Company:		
Debentures	$ 6,000	—
Preferred Stock	1,950	5,250
Common Stock (exercise of stock options)	412	—
FROM SALE OF SECURITIES	$ 8,362	$ 5,250
Sale of land, buildings and equipment no longer required in operations	583	187
Sale of government securities held to cover construction of steelmaking facilities	—	9,836
CASH PROVIDED	$16,868	$23,819
CASH USED FOR:		
Dividends to share owners	$ 3,535	$ 2,794
Additions to land, buildings and equipment	2,886	1,466
Construction of steelmaking facilities	9,103	20,302
Additions to net current assets (exclusive of cash)	1,658	1,163
Other (deduct)	522	(565)
CASH USED	$17,704	$25,160
DECREASE IN CASH	$ 836	$ 1,341

Although this statement concludes with the decrease in the cash balance, the "cash provided from operations" is actually working capital or net current assets provided from operations, and it is unlikely that "additions to net current assets" represent "cash used."

Cash and Marketable Securities. Several other funds statements in the annual reports concluded with the change in "cash and marketable securities," which is another possible conception or definition of the term *funds*. None of them, however, actually adjusted the

net income to this basis or otherwise indicated that this interpretation of "funds" was being employed.[3]

Net Monetary Assets. Still another concept of "funds" has been described as net monetary assets,[4] net quick assets,[4] or as "the sum of cash on hand or in bank, cash in process of collection (i.e., short-term receivables) and secondary cash reserves, such as temporary holdings of U. S. government bonds or other highly marketable securities, less cash in process of disbursement (i.e., short-term payables)".[5] Inventories and prepaid items are excluded. If this meaning of "funds" were adopted, the net income would be adjusted for the change in inventories. This interpretation was not found in any of the funds statements which were included in our study.

Working Capital. By far the most common definition of "funds" is "working capital" or net current assets. Many books and articles define the term in this way and assume or state that the basic purpose of the funds statement is to account for the change in working capital during the period covered by the statement. A large proportion of the funds statements that we studied carried such titles as "Summary of Changes in Consolidated Working Capital," and still more emphasized the change in the amount of working capital by the form in which they were presented. For example, the form used by Alco Products, Incorporated, was as follows:

[3] Research Report No. 38 of the National Association of Accountants. *Cash Flow Analysis for Managerial Control,* to which references have previously been made, defines *cash fund* as "capital in the form of cash or equivalent assets available at management's discretion for meeting obligations as they mature or for investment in operating assets. Included in the cash fund are cash on hand, bank deposits, and temporary investments made as a means for holding cash until it will be needed" (page 3).

[4] Milroy & Walden, *Accounting Theory and Practice—Intermediate* (1960), chapter 29.

[5] Moonitz and Staehling, *Accounting, An Analysis of Its Problems,* vol. 1 (1950), chapter 4, p. 94. Also see "Inventories and the Statement of Funds," by Maurice Moonitz, *The Accounting Review,* July 1943, pp. 262-6; and "Reporting on the Flow of Funds," by Maurice Moonitz, *Accounting Review,* July 1956, pp. 375-85, where an exception is made for inventories in the form of refined gold or silver and for work done on cost-plus-fixed-fee contracts. The inclusion of inventories and prepayments in the concept of "funds" is also questioned in Paton & Paton, *Corporation Accounts and Statements* (1955), chapter XV.

WORKING CAPITAL
(in thousands of dollars)

Working capital at the beginning of the year		$56,620
Additions:		
Net income for the year		3,314
Provision for depreciation, deferred income taxes, etc., which do not require cash outlays		2,220
Total available		62,154
Deductions:		
Purchase of new plant and equipment	$1,812	
Common stock dividends	1,760	
Portion of notes payable due within one year	1,050	4,622
Working capital at the end of the year		$57,532

All Financial Resources. A different and somewhat broader approach is sometimes taken to the problem of interpreting the term "funds." It is conceived as purchasing or spending power, or as all financial resources, arising, as several writers have pointed out, from external rather than internal transactions of the business enterprise.[6] In other words, it extends the concept to include assets or financial resources which do not affect or flow through the working capital accounts.

This conception of what is meant by "funds" seems to us to be the most useful meaning of the term. The narrower definitions, such as cash or working capital, have often led to the omission from the statement of the effect of transactions which do not directly affect cash or working capital, but which nevertheless are important items in the financial administration of the business. Examples are the purchase of property in exchange for shares of stock or bonds, gifts or subsidies, exchanges of property, and the like. The inclusion of such transactions is sometimes justified by assuming intermediate steps, e.g., the issue of bonds for cash and the purchase of the property

[6] See, for example, "The Funds Statement Reconsidered," by Louis Goldberg, *The Accounting Review*, Oct. 1951, pp. 485-91; "Reporting on the Flow of Funds," by Maurice Moonitz, *The Accounting Review*, July 1956, pp. 375-85; and "The Sources and Applications of Funds Statement: Suggested Improvements," by Donald A. Corbin, *Proceedings of the Thirty-Fifth Annual Conference of the Western Economic Association* (1960), pp. 29-33.

with cash. This introduction of hypothetical transactions would usually be unnecessary under the "all financial resources" concept since the changes in such items would naturally fall into the scope and purpose of the funds statement.

It may be proper and useful for some purposes, such as cash budgeting, to prepare a statement which is literally limited to changes in cash or in working capital, but for general use and reporting to stockholders, the broader approach provides a more complete and informative presentation. There would still be a need for a funds statement even though there were no change in cash or working capital.

The narrower concepts also tend to restrict the form in which the statement is prepared and to introduce too high a degree of uniformity in the arrangement of the items. The funds statement should be a flexible device, designed to disclose and emphasize all significant changes and transactions, whether they are within or without the current asset and liability groups. Too often a single figure of increase or decrease in working capital is shown, when one of the most significant changes may have been an increase or decrease in inventories, receivables, or some other current item.

It was not always possible to tell just when this broader concept of funds was being used, but the following example, taken from the annual report of Thatcher Glass Manufacturing Company, Inc., appears to have a more flexible and complete conception of the function of the statement and of the nature of "funds" than most of those we examined:

Funds received from:	
Earnings	$ 2,641,000
Depreciation and other charges to earnings not requiring cash	2,357,000
New common stock issued in connection with acquisition ($2,159,000) and for cash	2,305,000
Increase in long-term notes	5,175,000
	$12,478,000
Funds used for:	
Plant addition (including $1,120,000 for Celon plant)	$ 5,389,000
Additions to other assets	756,000
Dividends	1,482,000
Increased working capital	4,851,000
	$12,478,000

The issue of common stock in connection with the acquisition of new plant assets did not affect cash or working capital, but it was nevertheless reported as a significant financial event.

Title of the Funds Statement

About 15 per cent of the funds statements which we observed in published annual reports did not provide a title for the statement. These were presented as part of the president's letter or in the comments on financial condition. Of the remainder, about half used some variation of the traditional Statement of Source and Application (Utilization, Employment, Disposition, Use) of Funds. Some shortened the title to such phrases as Application of Funds, Statement of Funds, or Funds Statement. A sizeable group, conforming to the popular conception of the nature and purpose of the statement, used "working capital" or its equivalent in the title—Changes in Working Capital, Changes in Net Current Assets, etc. Several recognized the statement as a report of financial operations and used the title Summary of Financial Operations, although they emphasized the change in working capital in the arrangement of the items. Other unusual titles were: Changes in Financial Position (Automatic Canteen Company of America; Granite City Steel Company), Funds Received and Disbursed (The Black and Decker Manufacturing Company), Cash Flow and Working Capital (G. C. Murphy Company), New Funds (The Pillsbury Company), Funds Generated and Expended (Kimberly-Clark Corporation; St. Regis Paper Company), Financing Expansion and Replacement (The Standard Oil Company (Ohio)—the expenditure for expansion and replacement of facilities was the most significant item among the "disposition of funds" items) and Money Provided and Its Disposition (Weyerhaeuser Company).

It is probably impossible to find a short title for any statement which conveys much to the reader as to its contents and function. The titles "balance sheet" and "income statement," for example, have not been considered self-explantory in spite of their widespread use. The title of a funds statement might well be modified from time to time in order to emphasize the principal event or events of the period, such as the title Financing Expansion and Replacement, cited above. We feel that titles such as Summary of Financial Operations, Report on Financial Operations, or Report on Financial Management are definitely superior to others which are more commonly used. The word *operations*, however, is so commonly associated with the

income statement, almost to the point of characterizing it as *the* operating statement, that there may be some risk of confusion in using this term in the title of the funds statement. Financial Management or Financial Activities would be desirable substitutes for Financial Operations. The important point is to find language which makes it clear that the funds statement is not a statement of financial position, but is instead a report of financial changes, flows, or movements during the period.

Technical Problems

The Non-fund Adjustments

There are a number of transactions which result in changes in the balance-sheet accounts during a period, but which do not involve either the receipt or expenditure of funds. Depreciation is the most common example. Their effect must be eliminated in the preparation of a funds statement.

The results of non-fund transactions which do not affect the funds derived from operations, such as the retirement from service of a fully depreciated asset, are merely omitted from the statement without comment or disclosure.

In the case of those non-fund transactions which do affect the amount of current net income, there are two ways in which the adjustment can be made. The most commonly used method is to adjust the net income[7] for the amount of the non-fund transaction—the transaction is, in effect, reversed. In the other method, the funds statement is expanded to include the total funds derived from revenue and a summary of out-of-pocket expense items; in this case the non-fund items are usually omitted or, if necessary, the items which appear in the statement are shown at their adjusted amounts. The resulting "funds provided by operations" is identical under either of these two methods. The statement of Acme Steel Company illustrates the first method, as shown by the following excerpt (see page 52 for the complete form):

[7] If the effect of the original transactions was to decrease net income, the amount is added back; if the effect was to increase net income, it is deducted from net income. If there is a net loss, the adjustments are made in the opposite manner.

. . . . . .

	1959	1958
Cash Provided From:		
Operations:		
Net income for the year	$3,616	$5,307
Add expenses which did not require the outlay of cash:		
Depreciation and amortization	3,582	3,400
Other (deduct)	725	(161)
From Operations	$7,923	$8,546

. . . . . .

The following form, taken from the annual report of Gulf Oil Corporation, illustrates the second method:

EMPLOYMENT OF FUNDS—1959

FUNDS WERE RECEIVED FROM	
Sales and other revenues	$3,202,773,000
FUNDS WERE PAID OUT FOR	
Purchased crude oil, petroleum products, and merchandise	$1,067,719,000
Taxes on income and general taxes	651,629,000
Wages, salaries, and employee benefits	302,447,000
Other expenses	614,182,000
Total	$2,635,977,000
FUNDS LEFT FROM OPERATIONS	$ 566,796,000
IN ADDITION FUNDS WERE RECEIVED FROM	
Sale of properties and other items (net)	18,015,000
WHICH PROVIDED TOTAL FUNDS FOR THE YEAR	$ 584,811,000
THESE FUNDS WERE USED FOR	
Properties, plants, and equipment	$ 312,736,000
Related business investments	23,035,000
Retirement of long-term debt	17,383,000
Cash dividends to Gulf shareholders	96,876,000
Cash dividends to minority shareholders	9,623,000
Total	$ 459,653,000
BALANCE ADDED TO WORKING CAPITAL	$ 125,158,000

The number of non-fund adjustments depends in part upon the conception of "funds" which has been adopted. The "cash-flow statement" will involve the largest number and the statement based on the "all financial resources" concept will have the smallest number. The following discussion is not intended to be a complete list of the possibilities, but it will include the principal types of adjustment situations.

Depreciation. As has been said before in Part I (page 31), although depreciation is not a source of funds, the "deduction of depreciation from revenue does not involve an expenditure of funds, so the funds received in connection with sales and other revenue will to this extent be retained in the business." Since practically all enterprises use depreciable assets, the adjustment for depreciation is undoubtedly the most common non-fund adjustment and may often be the only one.

There are, however, some situations where elimination of the current charge for depreciation is not the proper adjustment in arriving at the "funds derived from operations." Perhaps the most significant and clear-cut case is the long-term construction contract where depreciation on equipment has become embodied in the cost of the work done, but no revenue has been recorded on the contract. In such a case the effect of the depreciation should be eliminated in computing the funds applied to work done on the contract, but it should not be added back to the net income which has been derived from other sources. Technically speaking, the same problem arises in any manufacturing situation, where depreciation is a part of the cost of unsold inventories. The conventional treatment of the entire amount of depreciation for the period as an adjustment of the current net income may cause a significant error if there is a substantial difference between the inventories at the beginning and end of the period.[8] The determination of the amount of depreciation included in the inventories would, however, often be impracticable, and it is doubtful if there are many cases where the adjustment would be significant.

Adjustments Similar to Depreciation. There are a number of other non-fund situations which are identical in principle and adjustment technique to depreciation. They include the write-off of undepreciated balances of abandoned property, and amortization of leaseholds, bond discount, goodwill, organization costs, research and development costs, and other intangibles. Oil companies, and other companies in the extractive industries, adjust for various exploratory and development costs shown under such titles as intangible drilling costs, dry hole costs, surrendered leases, and pre-operating expenses. Ordinarily

[8] If the term "funds" is defined as working capital, it can be maintained that depreciation represents a transfer from "fixed capital" to working capital and that no adjustment should be made. If a concept of "funds" is adopted which excludes inventories (see page 53), the change in inventories is eliminated as a non-fund transaction and the problem of eliminating depreciation from the inventories does not arise.

these costs will have been incurred in prior years and do not represent a use of funds in the current year. Sometimes, however, the expenditures, e.g., dry hole costs, takes place in the same period as the charge-off, and practice varies between (1) making no adjustment, in which case the expired costs are treated the same as other operating expenses, and (2) adjusting net income for the expired costs and showing the original outlay as part of the funds applied. The second method is more complete and consistent. There seems to be no good reason why the intervention of such an arbitrary factor as the close of the accounting period should affect the presentation of the two phases of the transaction. It is important to disclose the amount spent for exploration regardless of when the charge-off takes place.

There are also charge-offs in the current asset group which are parallel to depreciation and which logically could be treated in the same way. Examples are found in the expiration of prepayments such as insurance, rent, or taxes. Such transactions are internal and do not involve either a decrease or an increase in spending power or financial resources. It is unlikely, however, that the amounts involved would justify the introduction of this degree of refinement into the preparation of the funds statement, although such adjustments would have to be made under a strict cash-flow statement approach.

The addition to an allowance for bad debts seems to follow the same pattern as the addition to accumulated depreciation, and it is sometimes maintained that the same type of adjustment should be made in preparing a funds statement. A better interpretation, in our opinion, is that the entry is merely a correction or restatement of the revenue and of the value of the receivables. The receivables are thus stated at their estimated realizable value in the period in which they originate, and no adjustment of net income should be made.

Direct write-offs of uncollectible receivables, like other losses of financial resources such as losses by theft or embezzlement, can properly be treated as uses or applications of funds.

Noncurrent Liabilities. There are several types of accrued liabilities of major significance, the increases in which do not represent a current source of funds. Provisions or "reserves" for deferred income taxes, deferred executive compensation, and unfunded pension costs are common examples. Adjustments of net income should be made for material amounts of this sort.

Sometimes there are long-term "deferred credits," such as unearned or prepaid rent, or unrealized profit on layaway or installment sales, decreases in which, as the income is earned, do not represent either

a source or use of funds. Illustrations of deductions from net income for such non-fund credits are somewhat rare, but the situations in which adjustments are called for occur frequently, and the amounts involved are sometimes sizeable. For example, the "Deferred Profit on Sale of Real Estate and Other Deferred Income" on the balance sheet of Webb & Knapp, Inc. decreased $1,341,775 in 1959, an amount which was substantially in excess of the net income for the year, $1,026,984.

There are similar situations in the current liability group, but adjustments would be made for them only when the amounts were material, or when a literal cash-flow statement was being prepared.

Other Non-fund Adjustments. There are a number of other non-fund transactions which do not affect the net income. Some of them are significant phases of financial management which should be reported under a broad conception of the function of a funds statement, while others clearly should not.

The conversion and refunding of security issues—preferred for common stock, bonds for stock, new bonds for old, etc.—are usually important phases of financial management. (These transactions do not fit neatly into the concept of funds as financial resources, so it may be that the device of a hypothetical transaction, e.g., redemption of the original issue followed by a new issue, will be necessary to satisfy the requirements of precise logic.) Under the conception of the funds statement as a report of financial operations, rather than merely a cash or working-capital reconciliation, there would seem to be good reason for reporting these transactions. Practice generally has been otherwise, but we believe the inclusion of transactions of this type would improve the usefulness of the statement, since these changes in the financial structure are significant and would otherwise not be specifically reported in the financial statements. The following example of the inclusion of a conversion in the funds statement was found in the annual report of Fansteel Metallurgical Corporation. One of the sources of funds was: "Received from Sale of Stock through exercise of Options and Conversion of Debentures." The amount of the converted debentures was part of the "Reduction in Long-Term Debt" in the distribution-of-funds section.

Stock dividends and stock splits involving transfers from retained earnings to capital stock should not appear in the funds statement. There has been no change in the amount or personnel of the stockholders' equity and no receipt or expenditure under any concept of the term *funds.* It can be argued that the stock dividend is the

result of two hypothetical transactions, the payment of a cash dividend followed by a reinvestment in stock of the company, but we prefer to draw the line at this point. The transaction will be reported at another place in the set of financial statements, usually in the analysis of retained earnings, so no harm is done if it is omitted from the funds statement.

Another type of non-fund transaction, the effect of which should not appear in the funds statement, is the appropriation of retained earnings for a "surplus reserve" such as a reserve for contingencies, or a transfer from such a reserve back to retained earnings. Others include the write-down or write-up of assets, the write-off of fully depreciated property, and corrections of the net income of prior years.

In general, then, the concept of "funds" should be broad enough to permit the inclusion in the funds statement of all major changes in the financial structure and the acquisition of assets from any source —gift, purchase, exchange, or otherwise. Only in this way does the statement fulfill its function as a report on financial operations. Adjustments or eliminations should be confined to transactions which do not conform to this standard.

Analysis of Accounts and Transactions

From the standpoint of basic mechanics, the funds statement is a schedule of changes in the balance-sheet items during a period of time with some condensation or combinations in order to confine the presentation to major financial matters. Some transactions, however, should be analyzed and reclassified in order to achieve the most informative results. For example, a proper showing of the proceeds from an issue of stock would involve adding to the par or stated value any premium or "paid-in" surplus and deducting any discount. The proceeds from the issue of bonds would be the face value plus any premium or minus any discount.

Long-term Debt. Another possibility of increasing the scope of the information shown in the funds statement, which can be recommended, is to analyze the changes in certain accounts and show the gross amount of the changes rather than only the net change. A fairly common practice of this type is to show both the increase and reduction in long-term debt which has taken place during the period. In our survey we found 53 instances in which there was both an increase and decrease in long-term debt. They were about equally divided between showing only the net change as a source or application of

funds, and showing the gross amounts. In a few cases both amounts were disclosed, but one was subtracted from the other. Liabilities assumed or incurred in connection with the acquisition of property were occasionally set apart and shown in the application of funds section as a subtraction from the cost of the property acquired.

In most instances in which long-term debt occurred, there were current maturities which were transferred on the balance sheet from the noncurrent to the current liability category. The resulting apparent decrease in the amount of the long-term debt was usually treated as the equivalent of a payment of the debt in order to permit a showing of the change in working capital. The funds statement in the annual report of American Machine and Metals, Inc., illustrates this type of situation and also demonstrates the possibility of subtracting a decrease in long-term debt from an increase.

Funds Provided By:		
Net income		$3,055,639
Depreciation and amortization charged to income		761,503
Long-term debt increase	$1,000,000	
Less: Portion due within one year transferred to current liabilities	513,333	486,667
Proceeds from the sale of capital stock under Stock Option Plan		135,880
Other		7,565
		$4,447,254
Funds Used For:		
Property, plant and equipment		$1,539,192
Patents		403,059
Dividends		1,401,924
		$3,344,175
Increase in working capital		$1,103,079

Some companies, however, in effect reversed the transfer and reported on the funds statements only the actual reduction, if any, of the debt. The following example, taken from the annual report of Tidewater Oil Company, clearly indicates that this practice was followed:

Source and Disposition of Funds

	(thousands of dollars) 1959	1958
Source:		
Net income	$ 33,941	$ 2,616
Provision for depreciation and depletion, dry hole losses and amortization of undeveloped leasehold costs	58,511	60,358
Long-term borrowing, less repayments	17,290	27,110
Change in working capital, exclusive of changes in current portion of long-term debt	(10,774)	2,052
Change in investments and advances	(1,002)	1,621
Disposition of capital assets	6,636	3,291
Total	104,602	97,048
Disposition:		
Capital expenditures	100,069	94,053
Purchase of treasury stock	1,549	—
Cash dividends on preferred stock	2,984	2,995
Total	104,602	97,048

Unless the funds statement is prepared on a literal cash basis, any unpaid balance of the transfer from noncurrent to current liabilities need not be reversed. As a matter of consistency, this current portion of the long-term debt should be treated in the same manner as other current liabilities.

Acquisition and Sale of Noncurrent Assets. Another area in which analysis is of major importance is the presentation of changes in plant and equipment or other noncurrent assets. Various methods were used by the companies included in our survey.

In over half of the cases, the gross amount of assets acquired was shown in the application section of the funds statement. The following excerpt from the statement of Gulf Oil Corporation illustrates this practice (see page 59 for the complete form):

. . . . . .

In Addition Funds Were Received From	
Sale of properties and other items (net)	18,015,000
Which Provided Total Funds For The Year	$584,811,000
These Funds Were Used For	
Properties, plants, and equipment	$312,736,000

. . . . . .

For another illustration, see the Tidewater Oil Company funds statement at the top of this page.

Other companies combined the additions and reductions into one net figure. The statement in the annual report of Hudson Pulp and Paper Corp. used this method of presentation.

Source and Application of Funds

SOURCE

Net income	$2,425,000
Depreciation, amortization and depletion	3,759,000
Provision for deferred Federal income taxes	633,000
Sales of Common Stock under stock option plans	49,000
Decrease in working capital	434,000
Decrease in deferred charges	9,000
Other	10,000
	$7,319,000

APPLICATION

Additions to plant assets, net	$2,445,000
Additions to timber resources, net	1,136,000
Dividends on capital stock	1,679,000
Reduction in long term debt	1,659,000
Purchases of Preferred Stock	304,000
Increase in other assets	96,000
	$7,319,000

The disclosure of the proceeds from the sale of property is another phase of this problem. They should appear either as a source of funds or as an offset to the expenditures for additions. This requires the adjustment of net income for the amount of gain or loss on the sale, unless the gain or loss has been handled through the earned surplus account. There were, however, comparatively few cases in our survey where such an adjustment was made. The following statement, taken from the annual report of Archer-Daniels-Midland Company, illustrates the technique:

	1959	1958
Working capital at beginning of year	$47,954,372	$46,737,180
Additions:		
From profit and loss:		
Net profit for the year	$ 5,435,386	$ 3,903,622
Provision for depreciation	3,729,459	3,868,847
Provision for income taxes deferred—Note B	154,018	154,017
Loss on disposal of depreciable assets	251,535	—
TOTAL FROM PROFIT AND LOSS	$ 9,570,398	$ 7,926,486
Capital stock sold	184,670	14,093
Net current assets from acquisition of subsidiary for treasury stock	206,064	2,167,046
	$57,915,504	$56,844,805
Deductions:		
Additions to property, plant and equipment	$ 4,028,410	$ 6,995,867
Less proceeds from assets disposed of	730,872	1,544,090
NET ADDITIONS	$ 3,297,538	$ 5,451,777
Less cost of treasury stock applied thereon	125,000	1,406,024
NET EFFECT ON WORKING CAPITAL	$ 3,172,538	$ 4,045,753
Dividends paid in cash ($2.00 per share)	3,206,123	3,189,312
Cost of treasury stock acquired	—	1,296,749
Investment in and advances to other corporations	602,448	314,322
Increase (decrease) in other investments, advances, etc.	(43,417)	44,297
	$ 6,937,692	$ 8,890,433
WORKING CAPITAL AT END OF YEAR	$50,977,812	$47,954,372

A variation which discloses the proceeds from the sale of property but does not adjust the net income figure is sometimes used. The following segment of a funds statement illustrates this possibility:[9]

Proceeds of equipment sold	$6,480	
Less gain included in income	3,560	
Book value recovered		$2,920

[9] Included in material submitted by the committee on accounting procedures of the Ohio Society of CPAs.

In a number of cases involving the disposition of assets, the undepreciated cost, instead of the proceeds from their sale, was shown as a source of funds. It is possible, of course, that in a particular instance there was no gain or loss. We know, however, that there was a gain or loss in some of these cases, and it seems reasonable to assume that there normally would be. The funds statement of Crown Cork & Seal Company, Inc., illustrates this variation in procedure:

Source and Application of Cash

Cash obtained from:		
Profit from operations	$ 2,643,000	
Depreciation	2,087,000	
Deferred income taxes	206,000	
Total derived from operations	$ 4,936,000	
Money borrowed less payments	7,600,000	
Proceeds from sale of common stock (option plans)	224,000	
Customers receivables—decrease	495,000	
Inventories—decrease	1,433,000	
Liabilities other than borrowings—increase	2,037,000	
Plant and equipment retired less accumulated depreciation	1,895,000	$18,620,000
Cash applied to:		
Plant and equipment expenditures	$13,531,000	
Common stock purchased	3,385,000	
Preferred stock purchased	579,000	
Preferred dividends paid	329,000	
Prepaid insurance, taxes, etc.—increase	114,000	$17,938,000
Increase in cash resources		$ 682,000

Insofar as inconsequential sales of property take place with some regularity, there is no good reason for adjusting the net income for the gain or loss and disclosing the disposition in the funds statement. Such transactions are then part of the regular "operations" of the business. When, however, the amounts involved are material, the analysis and adjustments should be made as a matter of disclosing significant financial events.

The offsetting of acquisitions and dispositions of property and showing only the net amount is definitely objectionable unless the amount of the offset is immaterial. These are usually important transactions in the financial management of the business and should be disclosed in the funds statement.

Consolidated Funds Statements

The funds statements which appear in corporate annual reports are prepared on a consolidated basis to the same extent as the other financial statements. Consolidated statements of any sort have certain advantages and limitations. They present the accounting data as though the parent and the consolidated subsidiaries were being conducted as a single business unit, which ordinarily provides the most meaningful statements of operating results. The artificialities of separate legal and operating entities are by-passed and the statements reflect the results of unified control. At the same time, some legal provisions may apply only to the separate companies, such as bond indenture restrictions and requirements, and the definition under the corporation law of the amount of surplus available for distribution as dividends. Insofar as a subsidiary operates with a high degree of autonomy, its own statements may be just as significant as the consolidated statements. In the case of the funds statement, the degree of autonomy exercised by the separate financial managements would determine the extent to which separate statements, in addition to the consolidated statement, would be desirable. There are a number of special technical problems in the preparation of a consolidated funds statement.[10]

Acquisition of Fully Owned Subsidiaries

Consolidated Subsidiaries. If a subsidiary company is fully owned[11] by the parent and is included in the consolidation, no special prob-

[10] The discussion which follows is somewhat more detailed than is characteristic of the rest of the report. This was done deliberately since there appeared to be very little published material on the consolidated funds statement.

[11] The problems which arise when there is a minority interest are considered at a later point in this section.

lems arise in the preparation of a funds statements except in the year of acquisition. In that year the assets of the subsidiary, including any intangible assets emerging in the transaction, should appear as "funds applied." They may be specifically labeled as relating to the acquired subsidiary or, especially in the case of current assets, they may be combined with other acquisitions. Although it does not appear to be the customary practice, the liabilities of the subisidiary at the date of acquisition can best be shown as a subtraction from the acquired assets since, as a flow of funds, the parent is merely acquiring an equity in the net assets, or, in other words, is applying funds to the acquisition of assets subject to debt. The liabilities of the subsidiary do not constitute a current source of funds in any realistic sense. The source of the funds used in the acquisition of the net assets of the subsidiary will be indicated by an increase in the outstanding capital stock of the parent, by a decrease in cash, or by some similar change in the balance-sheet items. The funds statement of Sunshine Biscuits, Inc. contained an illustration of the acquisition of subsidiaries:

Funds Provided:

Net Income for the year	$7,936,376	
Less, preacquisition earnings of businesses acquired in 1959	45,117	$ 7,891,259
Depreciation (less $64,393 accrued in 1959 by businesses acquired prior to dates of acquisition)		3,133,034
Proceeds from sale of capital assets		551,054
Amortization of excess of cost over underlying assets of businesses acquired		91,504
Fair value of Capital Stock exchanged for businesses acquired in 1959 (18,020 Shares)		1,624,760
Total		$13,291,611

Disposition of Funds:

Additions to plant and equipment	$ 4,946,970
Book value of plant and equipment of businesses acquired in 1959	1,298,265
Excess of cost over underlying assets of businesses acquired in 1959	184,938
Dividends paid	5,215,452
Increase in investments and sundry assets	22,014
Increase in net working capital	1,623,972
Total	$13,291,611

This statement also demonstrated adjustments to eliminate the pre-acquisition net income and depreciation which were included in the income statement.

Where the funds statement is prepared as an analysis of the changes in working capital, the current assets of the acquired subsidiary at the date of acquisition, less its current liabilities, will appear as part of the change in working capital during the period. The remainder of the acquisition transaction, when it involves an exchange of stock or other securities for noncurrent assets, is often omitted as a non-fund transaction. As we have previously indicated, this is improper since it eliminates from the statement an important financial transaction. A number of cases were observed where the source of the funds which provided for the acquisition of the net assets or of the net current assets of the subsidiary was improperly described. The funds statement in the annual report of the Owens-Illinois Glass Company indicated as one of the sources of funds: "Net current assets acquired for common shares issued in the acquisition of a domestic subsidiary"; the proper wording would be: "Common shares issued in the acquisition of the net current assets of a domestic subsidiary," since the issuing of the shares of stock is the source of the funds which were used in the acquisition of the assets. As another example, the funds statement of The Emerson Electric Manufacturing Company listed as a source of funds: "Net assets of subsidiaries acquired for common stock," when it should have read: "Common stock issued in the acquisition of the net assets of subsidiaries."

Unconsolidated Subsidiaries. If a fully-owned subsidiary is acquired but is not included in the consolidation, the same general procedure would be followed as in the case of a consolidated subsidiary, except that the cost of the net assets acquired would appear as a single item in the funds statement, such as "Investments in Unconsolidated Subsidiaries."

If a subsidiary which previously was omitted is brought into the consolidation as of the beginning of the current year, and if the parent has followed the practice of taking up its share of the net earnings or losses of the subsidiary, the effect should be ignored as far as the funds statement is concerned. The comparative balance sheet may show increases in certain types of assets and liabilities, offset by a decrease in the investment in unconsolidated subsidiaries, but no movement of funds is involved and these changes should not appear in the funds statement.

If the investment in the subsidiary now brought into the consolidation has been carried at cost, the accumulated but unrecognized earnings or losses of the subsidiary to the beginning of the current year will normally appear as an extraordinary item in the consolidated income statement or as an adjustment of retained earnings. This amount should not appear in the current funds statement except, where appropriate, as a non-fund adjustment of net income, since it represents a flow of funds in previous years, not in the current year.

The procedures just suggested have not always been followed in practice. For example, the annual report of John Morrell & Co. contained this explanatory comment:

> In our 1958 financial statement, the investment in our English subsidiary was carried as an investment in the amount of $1,160,914, representing the equity in the net assets of such subsidiary at October 31, 1953. Because of the expansion of our English operations, and the firmness of the English currency situation, it has been deemed advisable to consolidate our English company with our domestic companies in the financial statements for the current year. By this treatment, the consolidated net working capital of the company has been increased by $814,000, the amount of the net working capital of the English subsidiary at October 31, 1959 . . .

In the funds statement, the net current assets of the English subsidiary were a part of the net increase in working capital and a source item was shown: "Net current assets of English subsidiary, $814,000," which, as has been pointed out earlier, was an improper description, since the source of the assets cannot be the assets themselves.

If the reverse situation arises, where a previously consolidated subsidiary is dropped from the consolidation, again the transaction should not appear in the funds statement. An increase in "Investments in Unconsolidated Subsidiaries" will replace the net assets of the subsidiary, but there will have been no flow of funds in any meaningful sense.

Subsidiary Acquired in a Pooling of Interests. In a pooling of interests, where one of two combining companies may continue as a subsidiary of the other, the net assets of the subsidiary are normally taken into the consolidated balance sheet at their carrying value on the books of the subsidiary. The source of funds in this case may appear in part as an increase in retained earnings by an amount equal to the earned surplus of the subsidiary at the date of the pooling. This increase should be combined with the remaining amounts associated with the issue of shares of stock to the subsidiary's stockholders in arriving at the total contribution of funds by this group to the pooling.

Disposition of Fully Owned Subsidiaries

If a parent disposes of a fully-owned subsidiary, the assets and liabilities of the subsidiary (or the investment account if the subsidiary is unconsolidated) disappear from the consolidated balance sheet and are ordinarily replaced by cash or other assets. On the funds statement, the proceeds of the sale should appear as a source of funds.

Earnings or Losses of Unconsolidated Subsidiaries

If the practice is followed of taking up the earnings or losses of unconsolidated subsidiaries, the amount taken up in the current period becomes a part of the consolidated net income. The availability of the related funds to the consolidated group is the same whether or not the subsidiary is included in the consolidation. The net income should therefore be adjusted for the amount of depreciation or other such non-fund transactions reflected in the amount taken up.

Amortization of Difference Between Cost and Book Value

If the excess of the cost to the parent of the shares of a subsidiary over their book value is set up as an intangible asset and amortized, or if the credit resulting from the reverse situation is written off over a period of time, the amortization entries should be reversed for funds-statement purposes as non-fund transactions.

Problems Where There are Minority Interests

The amounts relating to minority interests are often relatively small and, as a result, may be combined with other immaterial items and not be identifiable on the funds statement. For the same reason, the change in the minority interests is often shown without analyzing it into its various components. Much of the following discussion would be applicable only to those cases where the transactions relating to the minority interests are significant in amount.[12]

Year of Acquisition. If less than 100 per cent of the shares of stock of a subsidiary are acquired by the parent, a minority interest ordinarily appears in the consolidated balance sheet in the year of acquisition.

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[12] A special investigation was made of these problems by correspondence with the auditors of certain companies whose financial statements indicated that they had minority interests.

It should be treated on the funds statement as one of the sources of the funds used in acquiring the net assets of the subsidiary.

Treatment of Minority Share of Net Income or Loss. The "funds derived from operations" section of the funds statement should reflect the full consolidated net income or loss, since the consolidated statements present the results of operations of the group of companies as a whole. If the statement begins with the net income assignable to the majority interest,[13] the minority share should be added back (or deducted, if a loss) as one of the adjustments in arriving at the funds derived from operations. Preferably, when this form of funds statement is used, it should begin with the consolidated net income, i.e., the net income before the allocation to the minority interest. The funds statement of The Pittston Company, for example, began with "Net income, $7,061,920" which was the rounded sum of two items on the income statement: "Income before Provision for Minority Interest, $6,355,868" and a "special credit" of $706,051.

Dividends to Minority Shareholders. If no other transactions have taken place during the period which affect the amount of the minority interest, the change in its balance will be the difference between the allocated net income and the dividends to the minority shareholders of the subsidiary. On the funds statement the dividends to the minority shareholders should be combined with the dividends to the shareholders of the parent company in order to arrive at the total distribution of the current or previously accumulated consolidated earnings. This calculation was made in arriving at the dividends shown on the funds statement of The Pittston Company which was cited in the previous paragraph. The following excerpt from the statement of Gulf Oil Corporation illustrates another method of handling the dividends to minority shareholders (see page 59 for the complete form):

. . . . . .

These Funds Were Used For

. . . . . .

Cash dividends to Gulf shareholders	96,876,000
Cash dividends to minority shareholders	9,623,000

. . . . . .

[13] Where the amount of the income allocated to the minority interest is relatively small, it is often "buried" on the income statement in such items as "Other Income," "Miscellaneous Income," "Miscellaneous Deductions," "Interest and Sundry Charges," "Dividends, Interest and Other Income," and "Selling and Administrative Expense."

Increase in Parent Company Interest. If the parent acquires a larger proportion of the shares of stock of a subsidiary, so that the minority interest is reduced or eliminated, the transaction should be reported in the funds statement.

Where cash or other assets are involved, or if debt is incurred, the transaction clearly fits into the concept of financial events which should appear on the statement. Where, however, the decrease in the minority interest has been accomplished by the issue of shares of stock of the parent, the situation is not so clear-cut. It can be argued that, looking at the companies as a single entity, no significant financial change has taken place – a minority capital interest has merely moved into the majority category. The personnel of the shareholders has changed, but not the total amount of their interest in the corporation. Nevertheless, this shift in the financial structure of the consolidated group seems to be as important as some of the other financial events, such as conversion of securities, and we therefore recommend that it be reported in the funds statement.

It appears to be a common practice to report the increase in the parent company's interest, even though only a stock issue is involved. For example, the funds statement in the annual report of Automatic Canteen Company of America showed a source item: "Value of shares of Common Stock issued . . . in consideration for additional interests in subsidiaries, $110,623," which was offset in the "Utilization of Funds" section by: "Net reduction in interest of minority stockholders."

Decrease in Parent Company Interest. It follows from the preceding discussion that if the parent disposes of some of its holdings of subsidiary-company stock, so that a minority interest is created or increased, the transaction should appear in the funds statement. The proceeds from the sale or exchange of the shares – the increase in the minority interest plus or minus any gain or loss – can properly appear as a source of funds. The application of the funds will be reflected in the increase in net assets, or in a decrease in the majority stockholders' equity accounts.

Loss of Control by Parent Company. If the parent disposes of enough of its holdings to lose control, the subsidiary no longer qualifies for consolidation. The minority interest and all of the assets and liabilities of the subsidiary disappear from the consolidated balance sheet and ordinarily are replaced by cash, "investments," or other assets. On the funds statement, the proceeds of the sale would appear as a source of funds.

Other Transactions Affecting Minority Interests. A minority interest may appear when a previously unconsolidated subsidiary is brought into the consolidation; as was indicated in the discussion of fully-owned subsidiaries, this is merely a restatement of a previously existing situation and does not involve any movement of funds during the current period.

In some instances, there is an additional capital contribution by the minority shareholders. In others, the stock held by the minority shareholders is redeemed, or the subsidiary is liquidated. Transactions such as these would appear in the funds statement.

Form and Arrangement

General Form

The 190 funds statements included in our survey displayed great variety in form and arrangement of the items, but there were three general forms which were used in all but a few cases. About one-half of the statements, after showing the total sources of funds and the total funds used, concluded with the increase or decrease in working capital (or cash, or cash and marketable securities). The statements of Acme Steel Company (page 52), Gulf Oil Corporation (page 59), American Machine and Metals, Inc. (page 64) and Crown Cork & Seal Company, Inc. (page 68) illustrate this form.

A variation of this conception of the funds statement, as a demonstration of the change in the balance of cash or working capital, showed the opening balance for the period at the top of the statement and concluded with the closing balance. This is illustrated by the statements of Alco Products, Incorporated (page 54) and of Archer-Daniels-Midland Company (page 67).

The third commonly used form presented the sources and uses of funds in two groups with equal totals. The change in working capital was usually shown as a single figure, as one of the sources, if a decrease, or one of the applications, if an increase. This form was used in the funds statements of Thatcher Glass Manufacturing Company, Inc. (page 55), Tidewater Oil Company (page 65) and Hudson Pulp and Paper Corp. (page 66).

[In our opinion] this third variation is the preferable form of presentation. It conforms to the concept of the funds statement as a report of financial operations, performing a broader function than merely a reconciliation of cash or working capital. A decrease in a working capital item or in the total working capital can properly be called a source of funds in that it releases spending power which can be used

in some other way, and an increase is an application or use of funds which otherwise would have been available for other purposes.

Arrangement of Items

There is no reason why the arrangement of the items on a funds statement should be standardized. Certain classifications will, however, be helpful in most cases. The important types of sources of funds are: (1) revenue-earning operations, (2) the disposition of noncurrent assets, (3) reduction in working capital, (4) increase in debt, and (5) capital contributions by the shareholders. The more significant classes of application of funds are: (1) acquisitions of noncurrent assets, (2) increase in working capital, (3) reduction of debt, and (4) distributions to shareholders. The arrangement of these items or groups should be kept flexible so that the more significant changes during a period can be given prominent positions and emphasis.

It is customary to show the sources before the application of funds, or at the left if the two-sided form is used, but occasionally the positions of the two groups are reversed; this is not a matter of great importance. Immaterial items should be combined and condensed. The reader will be assisted in following and interpreting the statement if related items are shown together.

Non-fund Adjustments of Net Income. The most common defect in the funds statements included in our study was the treatment of the non-fund adjustments of net income. In about two-thirds of the cases the adjustments for depreciation and other such non-fund items were merely listed among the "sources" of funds without explanation of their true character. The statements of American Machine and Metals, Inc. (page 64), Tidewater Oil Company (page 65), and Hudson Pulp and Paper Corp. (page 66) illustrate this confusing practice.

As we have insisted before, depreciation and other such non-fund charges are not sources of funds. If they appear in the funds statement, they should clearly be indicated as adjustments of the net income in arriving at the funds provided by operations. A minor improvement was achieved in some cases, such as in the statement of Thatcher Glass Manufacturing Company, Inc. (page 55), by labeling the depreciation adjustment as "Depreciation and other charges to earnings not requiring cash." A much better practice is illustrated by the funds statement of Acme Steel Company (page 52) where the "expenses which did not require the outlay of cash" are listed and added to net income to arrive at the "cash provided from operations." It might be

well to add "in the current period" to such phrases as "not requiring cash," since depreciation actually does represent an expenditure made when a depreciable asset was acquired. Several companies followed, in our opinion, a still better practice of beginning the statement with the funds derived from operations and omitting the calculation or showing it parenthetically. The statement of Westinghouse Air Brake Company illustrates one of the possibilities:

Consolidated Statement of Sources and Uses of Working Capital

For the years ended December 31	1959	1958
Sources of Working Capital:		
Net income before provision for depreciation (1959—$4,887,832; 1958—$5,158,556)	$16,281,588	$13,956,869
Common capital stock issued under option plan	571,084	21,422
Total	16,852,672	13,978,291
Uses of Working Capital:		
Property additions	3,513,920	3,437,200
Dividends paid	5,041,863	5,019,574
Reduction of long term debt	1,450,000	1,426,000
Other—net	4,088,797	2,549,838
Total	14,094,580	12,432,612
Increase in Working Capital	$ 2,758,092	$ 1,545,679

For the information of the technicians and professional analysts, and to demonstrate that the funds statement ties into the income statement, the calculation of the funds derived from operations could quite properly be shown in a footnote and the statement proper would not be cluttered up with what is little more than an arithmetic calculation.

The expansion of the funds statement to include the revenue and out-of-pocket expenses usually does not involve the disclosure of the non-fund adjustments in arriving at the funds derived from operations. (See previous discussion and the statement of Gulf Oil Corporation

on page 59.) This version of the funds statement was used by only a small proportion of the companies covered by our survey, but it has received strong support from some of those who have written on the subject.[14] It is certainly an acceptable arrangement but we feel that the form which begins with the net income, adjusted for non-fund items, is more concise and focuses attention upon one of the major financial results, the funds provided by revenue-earning operations. A possible variation would be to begin the statement with the funds derived from operations and show the calculation in a footnote as revenue less out-of-pocket expenses. In any case, however, it would be desirable to have footnote disclosure of the depreciation and other non-fund adjustments for the benefit of the professional analyst and others interested in the technical aspects of the statement.

Grouping of Related Items. As we have observed before, it is seldom possible to trace with certainty a particular source of funds to a particular application. It is possible, however, to make some reasonable assumptions, and management can often provide useful disclosures of its financial policies and of the relative priorities of the various uses of funds by grouping related items.

The most common grouping practice that we observed was in the treatment of dividends. They were often deducted from net income before the non-fund adjustments were made, as in the following statement of the International Paper Company:

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[14] See, for example, Paton & Paton, *Corporation Accounts and Statements* (1955), chapter XV; and "Reporting on the Flow of Funds," by Maurice Moonitz, *The Accounting Review*, July 1956, pp. 375-85.

Professors H. M. Daniels, William A. Paton and Herbert F. Taggart, in correspondence with the author, argued vigorously in favor of this form, partly because "the lifeblood in flow of funds is represented by revenues," but primarily because otherwise "you will never . . . get away from the designation of depreciation, depletion, amortization of patents, accumulation of bond discount, and similar transactions as sources of funds."

Consolidated Summary of Financial Operations
For Year Ended December 31, 1959

FUNDS AVAILABLE:		
Net earnings for the year		$ 83,610,673
Less: Dividends paid in cash—		
On $4 preferred stock	$ 838,710	
On common stock	39,340,713	40,179,423
Retained earnings		$ 43,431,250
Non-cash charges for depreciation and depletion deducted in arriving at net earnings		57,433,693
		$100,864,943
APPLIED AS FOLLOWS:		
Invested in plants and properties—net	$57,795,924	
Invested in woodlands—net	7,166,556	
Increase in funds segregated for U.S. capital expenditures	12,549,350	
Invested in jointly owned companies, etc.—net	5,354,576	
Other items—net	1,137,421	84,003,827
INCREASE IN NET WORKING CAPITAL		$ 16,861,116

It would be just as appropriate, and more in conformity with the general purpose of the funds statement, to deduct the dividends from the total funds provided by operations, i.e., from the adjusted net income. This was done, for example, in the statement of The Champion Paper and Fibre Company:

sources and use of funds

Sources	
From Current Operations	
Net Income for the Year	$ 7,678,000
Depreciation, Depletion and Amortization	8,340,000
Miscellaneous Sources—Net	212,000
TOTAL	$16,230,000
Less Cash Dividends Declared on	
Preferred Stock	$ 450,000
Common Stock	5,290,000
TOTAL	$ 5,740,000
Net from Current Operations	$10,490,000
Issue of 4½% Convertible Debentures	20,036,000
TOTAL NET SOURCES	$30,526,000
Uses	
Capital Expenditures and Investments	$23,416,000
Debt Retirement	1,294,000
TOTAL USES	$24,710,000
Increase in Working Capital	$ 5,816,000

Although we found no example of the practice, it would sometimes be effective to show the amount of current installment payments on debt as a deduction from funds provided by operations. They are often as much a financial claim against current revenue as are the expenses, especially where the amount is based upon units of production, e.g., in the timber industry, or upon units of sales, e.g., the sale of subdivision lots or houses.

Another practice is to associate the retirement or sale of old property with the purchase of new items. The proper procedure would be to deduct the proceeds of the sale from the cost of purchased property, as in the following illustration taken from the annual report of Standard Brands Incorporated:

ADDITIONS TO WORKING CAPITAL		
Net income for the year		$15,862,100
Depreciation and other non-cash items		8,208,311
		$24,070,411
DEDUCTIONS FROM WORKING CAPITAL		
Dividends paid		$ 9,601,930
Additions to plant and equipment	$9,695,510	
Less proceeds from property disposals	584,127	9,111,383
Increase in miscellaneous investments		856,144
Reduction of long-term debt		500,000
All other—net		286,091
		$20,355,548
INCREASE IN WORKING CAPITAL		$ 3,714,863

A more common practice, however, is to deduct the net book value of the property being sold from the cost of the newly acquired property. As we have previously indicated in the discussion of acquisition and sale of noncurrent assets (pages 65-68), this does not provide a complete and informative analysis of what took place.

In a few instances the amount of current depreciation was deducted from the investment in property during the period. As we said in Part I (page 40), there is some point in relating to the financial requirements of property replacement that portion of the cash flow which is equal to the current depreciation. The instances we observed, however, presented this relationship in a most confusing manner and we doubt if this method of handling current depreciation is as useful as treating it as an adjustment of net income.

Other more appropriate groupings were the deduction from the cost of new property of: the amount of capital stock issued for part of the acquired assets (Weyerhaeuser Company; John Morrell & Co.), the liabilities incurred in connection with the purchase of property (Pfaudler Permutit Inc.; Wheeling Steel Corporation), and "funds set aside in prior years" (United States Steel Corporation).

Treatment of Working Capital. The changes in working capital were seldom presented effectively. Supporting schedules to provide the details back of a single figure of net increase or decrease were provided only occasionally; the reader was usually forced to turn to the comparative balance sheet to determine what had happened to the individual items. In still fewer instances were significant changes in individual current assets and liabilities shown on the funds state-

ment; these exceptions usually occurred when the statement concluded with the change in cash or its equivalent.

The changes in some of the individual items in the working-capital group are often as important or more important than anything else that has happened during the period. For example:

The funds statement of Addressograph-Multigraph Corporation showed an increase in working capital of $12,714,000. About $12,500,000 of this was an increase in cash and United States Government securities which is a larger amount than any other single item on the funds statement. It appeared that about two-thirds of this amount came from the issue of additional shares of common stock and a large proportion of the increase was apparently used in 1960 in the financing of capital expenditures.

The funds statement of Aluminum Company of America showed an increase in working capital of about $26,300,000, but the accounts and notes receivable increased about $24,700,000 and the inventories some $15,000,000, amounts larger than most of those on the funds statement.[15]

In our opinion, the widespread practice of showing only a single figure on the funds statement for the change in working capital is highly undesirable except where no important changes have taken place in the individual items. A far better practice is to show separately any changes of major significance and summarize the remaining items as a single item under a caption such as: "Other increases (or decreases) in working capital." This would make a supporting working-capital schedule unnecessary, especially if a comparative balance sheet were presented.

Graphic Presentation

In a few cases the funds statement was prepared in graphic form, either as the only presentation or as a supplement to the conventional tabular form. The following illustration appeared in the annual report of The Atlantic Refining Company:

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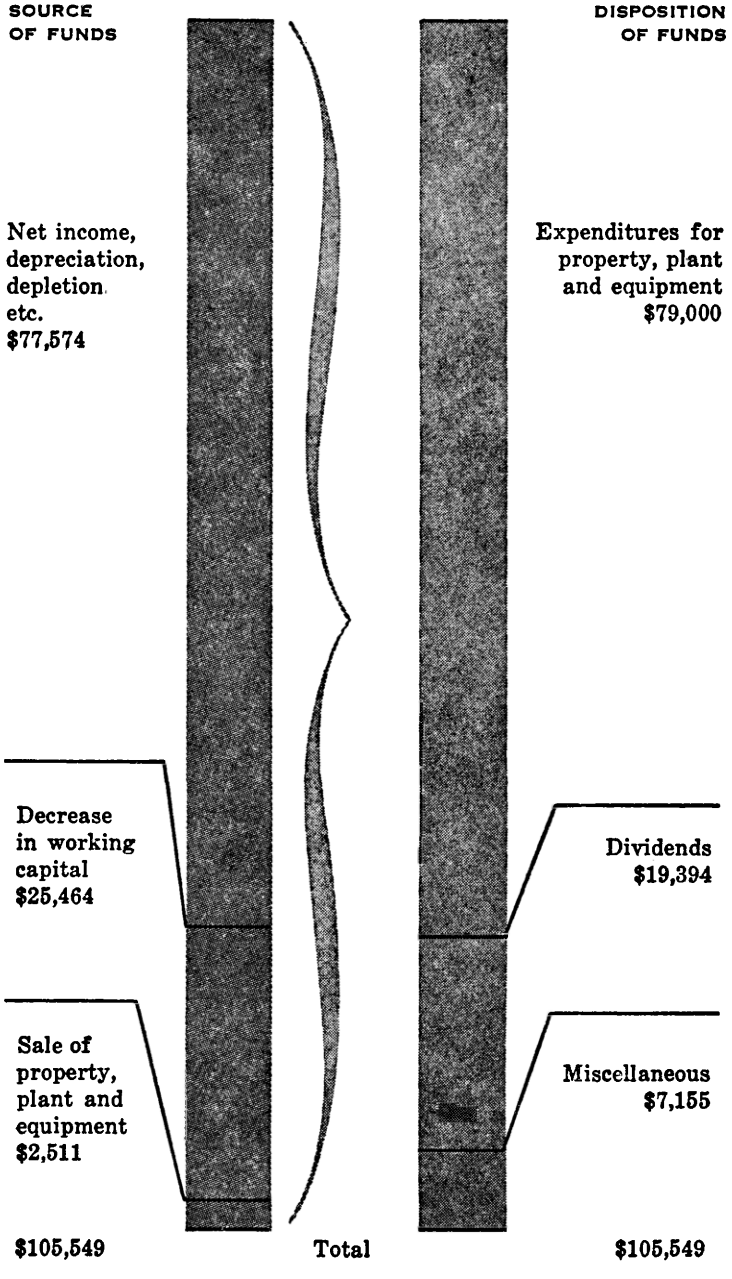
[15] Mr. John C. Burton called our attention to "an even better example" in the 1960 annual report of Aldens, Inc. He reported that during the year 1960, the company sold securities so as to be able to finance their own receivables. During the year, the receivables increased from around $30 million to $65 million, about two-thirds of the total assets, yet the funds statement merely showed one lumped figure of $24 million as the net increase in working capital.

SOURCE AND DISPOSITION OF FUNDS

(IN THOUSANDS OF DOLLARS)



As was shown in Part I, graphic charts can sometimes be useful in presenting comparative excerpts and relationships taken from the funds statement.

Other Variations in Presentation

There were many minor variations in the way in which the items were arranged and described in the funds statements included in our survey. The number of items shown varied from five to twenty-one. For general purposes, a high degree of condensation seems appropriate, with four or five classes of sources and of uses of funds being sufficient for adequate comprehension of the major financial operations.

Several companies began the statement with net income before income taxes and showed the income taxes as a disposition of funds. There can be little objection to this method of emphasizing the financial requirements of income taxes, but since they are usually set forth clearly in the income statement, there seems to be little advantage in repeating them on the funds statement.

Five oil companies out of twenty-one broke down the capital expenditures into from five to eight types of property, such as "production, transportation, refining, marketing, miscellaneous."

Comparative and Cumulative Statements

Seventy-one out of the 190 funds statements included in our survey were comparative in form, covering from two to thirteen periods, with two, five, and ten years being the most popular. The statements of Acme Steel Company (page 52), Tidewater Oil Company (page 65) and Archer-Daniels-Midland Company (page 67) illustrate the most common two-year comparative form.

Cumulative statements, usually for five or ten years, were sometimes presented. In a few cases they were the only funds statements in the annual reports. The following statement of Addressograph-Multigraph Corporation illustrates a combination of a two-year comparative and 10-year cumulative statement:

	Fiscal Years Ended July 31		10 Years Ended July 31, 1959
FUNDS PROVIDED:	1959	1958	
Net income	$ 9,834,000	$ 9,138,000	$ 67,168,000
Depreciation and amortization	2,763,000	2,570,000	16,916,000
In exchange for common stock	8,557,000		11,161,000
Net decrease in other assets	57,000	969,000	210,000
Bank loans		5,000,000	5,000,000
Total funds provided	$21,211,000	$17,677,000	$100,455,000
FUNDS APPLIED:			
Cash dividends paid	$ 4,492,000	$ 3,736,000	$ 31,089,000
Net additions to properties	3,748,000	3,574,000	31,587,000
Redemption of long term debt	257,000	310,000	2,487,000
Miscellaneous			14,000
Repayment of bank loans		5,000,000	5,000,000
Total funds applied	$ 8,497,000	$12,620,000	$ 70,177,000
EXCESS:			
Net increase in working capital	$12,714,000	$ 5,057,000	$ 30,278,000

A comparative funds statement has the same general advantages of any comparative financial statement. Significant changes and trends are disclosed and abnormalities become apparent. The financial progress and the effect of financial policies can more readily be observed. There are, however, some difficulties, one of the most important being lack of flexibility. An arrangement that is particularly effective for one year may not be for another. In order to avoid misleading results, the figures for previous years should be revised when errors are subsequently discovered, or other adjustments are made. A comparative statement covering a number of years tends to become unduly long and cumbersome. The practice adopted by The Champion Paper and Fibre Company of presenting both a statement for the current year and a 10-year comparative statement is to be commended.

The cumulative statement tends to eliminate the distorting effect of abnormalities and estimates, and to paint in broad strokes a picture of the historical financial policies and operations of the company. It is particularly useful in showing the results of an expansion or construction program extending over several years. It does not, however, portray accurately the current problems and policies and should not replace the statement for the current year.

Location in the Annual Report

The funds statement appeared in various places in the corporate annual reports included in our study. The most common location was in the president's letter or in the financial review section. In 71 out of 190 statements, it was shown with the other principal financial statements. There are good reasons for each of these locations. As a report of financial management, of interest not only to stockholders but also to financial analysts, credit grantors, and economists, the statement deserves the prominence of a position with other major accounting exhibits. As an interpretive report, it lends itself well to comments and analysis such as those found in the president's letter or in the financial review section. We recommend that it be recognized as one of the major accounting reports and, accordingly, be placed with the other principal financial statements. The comments in other sections of the annual report, while important if not essential, can make use of a still more condensed version, can abstract pertinent portions of the statement, and/or can make appropriate references to the complete schedule.

The Auditor's Report. We found the funds statement specifically mentioned in the auditor's short-form report in only four cases. In two other instances it was covered by reference to identifiable groups of financial statements. In a number of other cases the funds statement may have been included in the general reference to "financial statements," but a limited investigation indicated that this was unlikely.

We recommend that the funds statement be included in the group of financial statements covered by the auditor's report. Our inquiries indicate that there will be little objection to this procedure. Such statements are commonly included in long-form reports or are prepared for other supplementary purposes. Little or no additional auditing will be required since the funds statement is based upon data already subjected to tests and other auditing procedures in connection with other financial statements. The principal problem will be to make sure that the statement conforms to proper standards of preparation and disclosure.

Conclusions and Recommendations

1. The funds statement should be treated as a major financial statement. It should be presented in all annual reports of corporations and be covered by the auditor's short-form report.

2. The statement should be broad enough in scope and in its concept of "funds" to make it a report of all financial management operations. It should not be merely a reconciliation of cash or working capital. The definition of "funds" as "all financial resources," or as spending or purchasing power, comes closest to this conception of the function of the funds statement. The title need not be uniform, but should be as descriptive as possible. "Summary of Financial Activities" or some similar title is recommended.

3. It should be standard practice for the management to include in the annual report interpretive comments related directly to the funds statement which assist the reader in understanding the financial policies, plans, and operations of the company. As indicated in Part I, comments and statistics of "cash flow" should not be presented apart from or without reference to the funds statement.

4. There should be no standard arrangement of the items within the funds statement. Instead, it should be designed to disclose and emphasize the more important financial events of the period covered by the statement. Related items may be shown together when the result contributes to the clarity of the statement. Unimportant items may be combined. The change in working capital should not be shown as a single item unless the changes in individual current assets and liabilities are immaterial.

5. The more popular form of the statement which begins with net income is recommended for general use, but great care should be taken to avoid giving the impression that depreciation and other such adjustments are "sources" of funds. The best way to accomplish this

is to begin the statement with the adjusted net income, the "funds provided from operations," and show the details of the calculation in a footnote.

6. The form which begins with total revenue instead of net income (see page 59) is acceptable and has certain advantages, but it is not recommended as a preferable arrangement. If it is used, disclosure of the non-fund items which have been omitted in the computation of the amount derived from operations is desirable.

7. Gross changes in capital stock and in liabilities should be shown where the amounts are material. The proceeds from an issue of securities should appear as a separate source of funds.

8. Where significant in amount, the proceeds from the sale of property should be disclosed and shown separately from the acquisition of noncurrent assets.

9. The consolidated funds statement should present the combined financial operations as though a single business unit were involved. The significant net income figure, therefore, is not the net income after deducting the share of the minority interest, if there is such, but is the consolidated net income or the net income of the group of companies as a whole. Dividends to minority shareholders should be combined or grouped with dividends to parent-company shareholders.

10. Comparative and cumulative funds statements should be encouraged. Except at the end of the first year of operations of a new or reorganized company, a two-year comparative statement should be presented as one of the group of major financial statements. Comparative funds statement data for longer periods, such as five or ten years, should also be included in the annual report, following the pattern adopted by the company for other financial summaries.

Selected Bibliography

(The following items were selected primarily for their relevance to this research project. No attempt has been made to trace ideas to their sources or to compile a definitive bibliography on the topics covered in the report. With a few exceptions, general reference works, including textbooks and handbooks, have been omitted.)

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