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## B

# THE SOURCE AND APPLICATION OF FUNDS ANALYSIS

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### INTRODUCTION

AMONG THE METHODS OF ANALYSIS used by accountants to study the financial position of business enterprises is one which deals with their sources of funds and the uses to which such funds are put. It is often termed "the source and application of funds analysis" in current accounting literature. Its purpose is to trace the flow of funds received and disbursed by business concerns in so far as such flows of funds affect major balance-sheet items between two given dates.

As used in this connection, the term "funds" may have different meanings, depending upon the use to which the analysis is to be put. Usually it represents cash or its equivalent in financial transactions. Thus, undistributed earnings provide funds in the sense that they increase the concern's cash or its receivables, which would in this case be considered a cash equivalent. Securities issued to purchase plant or equipment may also be considered as providing funds, although no cash or even current assets are involved in the transaction. On the other hand, a balance-sheet change occasioned by the revaluation of land or of an intangible would not indicate a source or application of funds, since the increase or decrease in the value of the land or of the intangible would not represent a receipt or expenditure of cash or a cash equivalent. Nor does the analysis necessarily cover all receipts and expenditures of cash during the period under consideration, for if such were the case, it would be equivalent to a cash book. Current cash operating expenses (wages for example) are excluded from the analysis; but other expenses which do not result in the receipt or disbursement of cash (accrued depreciation, for example) are included. Such non-cash charges, when earned, indicate available funds in the sense that they do not involve immediate outlays of cash.

## THE BASIC ANALYSIS

The basic accounting analysis involved entails a tabulation of the changes in the principal asset and liability items of the balance sheet of a business enterprise between two given dates, say a fiscal year. For example:

## BALANCE SHEET AS OF DECEMBER 31, 1938

<i>Assets</i>		<i>Liabilities</i>	
Current assets	\$100	Current liabilities	\$ 50
Property	100	Capital stock	100
		Surplus	50
	<hr/>		<hr/>
Total	\$200	Total	\$200
	<hr/> <hr/>		<hr/> <hr/>

## BALANCE SHEET AS OF DECEMBER 31, 1939

<i>Assets</i>		<i>Liabilities</i>	
Current assets	\$150	Current liabilities	\$100
Property	200	Capital stock	150
		Surplus	100
	<hr/>		<hr/>
Total	\$350	Total	\$350
	<hr/> <hr/>		<hr/> <hr/>

In the example given, the sources of funds for the year were:

Increase in current liabilities	\$ 50
Sales of capital stock	50
Increase in undistributed earnings (represented by an increase in surplus)	50
	<hr/>
Total	\$150

The uses or applications of funds included:

Increase in current assets	\$ 50
Increase in property	100
	<hr/>
Total	\$150

In this case, increases in both current and fixed assets during the year required funds which were provided by incurring additional short-term debt (such as a bank loan), by the sale of additional equity securities, and by the return of a part or all of the year's earnings into the business. Needless to say, the asset items do not always require funds nor do the liability and proprietorship items always supply them. Funds for the liquidation of a current liability, such as a bank loan, may have been provided by a drain on cash, a collection of an account receivable, or the sale of a marketable security previously held as an investment by the concern.

The fineness of the classification of the balance-sheet items to be considered depends of course upon the purpose for which the analysis is being used. A student interested in bank loans would break up the current liability classification at least into notes payable to banks and other current liabilities. Another student, interested in inventory changes, would subdivide current assets into cash, receivables and inventory, and inventory, if possible, into the subclassifications of raw materials, goods in process, finished goods, and supplies. Such classifications and subclassifications would of course have to depend on the availability of the data as well as on the purpose of the study.

### *Adjustments to the Basic Analysis*

As has been suggested above, the analysis involves more than a study of all major balance-sheet changes. Adjustments should be made for all such changes which do not involve a transfer of "funds" in our sense of the term. Some of these changes may have been the result of charges or credits to the income or surplus accounts which did not involve the expenditure or receipt of cash or its equivalent. The earned depreciation written off per year is a case in point. If, in our example, the property account on the asset side of the balance sheet was net of a reserve for depreciation and this reserve had been increased by \$25 during the period because that amount had been charged to profit and loss for accrued depreciation, our calculation of total funds received and used would have been understated by \$25. If, however, the annual depreciation charge had been thought of as an indicator of \$25 available from operations, and if such a charge had been deducted from the reserve for depreciation, so that the use of funds expended for property would have increased, then a more accurate estimate of fixed property expenditures would have been derived. Other non-cash charges, such as additions to other valuation reserves, writedowns of assets, losses on the sale of capital assets, bond discount and stock dividends, should be treated similarly.

If, on the other hand, property had been written up by \$25 during the period under consideration, our calculations of the total flow of funds would have been overstated by that much. In that case the property account in the latter year should have been written down by the amount of the writeup and the analysis applied using this adjusted figure. Other non-cash credits, such as profits

on the sale of capital assets and writeups of intangibles, should be similarly treated.

However, some of the balance-sheet changes for which adjustments must be made are independent of non-cash charges or credits to the income or surplus accounts (for example, a bookkeeping shift of cash as a current asset to cash in the hands of trustees for the future retirement of bonds, which may be considered in another asset classification in the balance sheet). On the assumption that this is the only balance-sheet change for the period under review, current assets will have decreased if the adjustment is not made, indicating a source of funds; and other assets will have increased, indicating a use of funds. In reality, however, no flow of funds has occurred.

This type of adjustment takes on unusual importance in the case of consolidations and mergers. When consolidated balance sheets are first drawn up, the subsidiary having been previously carried on the books as an investment, it is necessary to enter adjustments for transfers of amounts from investments to other accounts such as property, inventory, cash and long-term debt, which are derived from the company newly consolidated. Otherwise flows of funds will be indicated where none have occurred. For a merger of two relatively large companies, it is necessary to build up an estimated consolidated balance sheet for the year prior to the merger. In such a case the estimated balance sheet should be used to compute the sources and uses of funds for the year ending at the date of publication of the first consolidated balance sheet. Such consolidations and acquisitions impair somewhat the significance of quantitative comparisons of total sources and uses of funds for different periods. Comparisons of this nature are made more meaningful if the source and application of funds analysis is applied to both concerns involved in years prior to the merger. Acquisitions of small concerns will have little quantitative importance in any case, compared to the larger changes already computed.

