THE STATEMENT OF CHANGES IN FINANCIAL POSITION: A USEFUL TOOL IN FINANCIAL DECICION-MAKING

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INTRODUCTION

In recent years, the environment in which business enterprises operate has been changing rapidly. Changes in the economic, political, international, and social structure necessitates changes in the informational needs of users of financial statements. Higher standards of measurement and financial reporting, coupled with the significant expansion of the amount of information disclosed, have been foremost among the new needs of users of financial statements.

The balance sheet, income statement and statement of retained earnings provide useful information related to the business activities of a company for a given period. These statements although helpful, depend on the many subjective and allocative issues evident in the accounting profession. For instance, a company may inflate its income statement simply by electing LIFO rather than FIFO accounting (in a period of rising prices). Similarly, straight line depreciation yields greater income in an asset's earlier years than under an accelerated method. These differences are simply «cosmetic».

Many questions are usually asked by investors, creditors and internal management who are interested in the financial operations of a business enterprise :

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How was Olympic Airways able to purchase long - term assets recently in the same year that it realized a net loss; How much of the proposed expansion by Hilton Hotel will be financed through cash provided by operations; However,, an examination of the balance sheet, income statement, and statement of retained earnings often fails to provide answers to questions of this nature. These statements present to a limited extent and in a segmented way information about the financial and investment activities of an interprise during the period. None of these statements however, presents a detailed summary of all the sources of funds during the period and their uses.

A statement specifically created to satisfy the needs of financial statement users, and which is considered to be as one of the primary financial statements, is the statement of changes in financial position. All countries which have highly developed accounting standards are using today this statement. This statement provides information that is useful in assessing changes in a company's liquidity and reports the flow of funds into and out of a business during an accounting period.

THE OBJECTIVES OF THE STATEMENT OF CHANGES IN FINANCIAL POSITION

The Statement originated in a simple analysis called the «Where - Got and Where - Gone Statement» that consisted of a listing of the increases or decreases in the company's balance sheet items. Later on, the name of this statement was changed to «the funds statement». In 1961, the American Institute of Certified Public Accountants (AICPA), recognizing the significance of this statement, conducted research in this area that resulted in the Publication of Accounting Research Study No. 2, entitled «CashFlow Analysis and the Funds Statements»[1]. This study recommended that the funds statement be included in all annual reports to the company's stockholders. In 1963, the Accounting Principles Board (APB) recommended the title be changed to «Statement of Soucre and Application of Funds» and suggested that statement of source and apl ication of funds should

1. Perry Mason, «Cash Flow Analysis and the Funds Statement», Accounting Research Study No, 2 (New York : AICPA, 1961) p, 49,

be presented as supplementary information in financial reports[2]. The importance of and demand for this type of information resulted in the issuance in 1971 of APB Opinion No. 19, which made this statement mandatory that a «statement of changes in financial position» be presented as an integral part of the financial statements.

Indeed, the primary objective of accounting is made clear in financial Accounting Concept No. 19 «Objectives of Reporting Changes in Financial Position» which states :

> ... that information concerning the financing and investing activities of a business enterprise and the changes in its financial position for a period is essential for financial statement users, particularly owners and creditors, in making economic decisions. When financial statement purporting to present both financial position (balance sheet) and results of operations (statement of income and retained earnings) are issued, a statement summarizing changes in financial position should also be presented as a basic financial statement for each period for which an income statement is presented. These conclusions apply to all profit - oriented business entities, whether or not the reporting entity normally classifies its assets and liabilities as current and noncurrent *K*

The statement of changes in financial position is not intended to substitute the income statement or the balance sheet, but is intended to provide information that these statements either do not provide or provide only indirectly. Like the income statement, the statement of changes in financial position provides a connecting link between two balance sheets. The information included in a statement of changes in financial position is relevant to users of financial statements in making business decisions. Therefore, the format of the statement and the definition of funds adopted should take into account the needs of those who use the information to make financial decisions. For instance, the statement may be prepared on a cash basis for internal use and also for externa! use when cashflow is considered to be of primary importance to creditors and investors. When the

2. «The Statement of Source and Application of Funds», *Opinions of the Accounting Principles Board No. 3*, (New York : AICPA, 1963) par. 8.

3. «Reporting Changes in Financial Position» *Opinions of the Accounting Principles Board No. 19*, (New York : AICPA, 1971) par. 7.

concept of liquid resources (funds) is considered to be more useful the statement may be constructed on a working capital basis.

Along with the income statement, balance sheet, and the statement of retained earnings, the statement of changes in financial position is included in the annual reports of publicly owned corporations. The main objectives of the statement of changes in financial position are : (1) to summarize the financing and investing activities of a business enterprise during an accounting period, (2) to indicate the financial resources (funds) provided from operations and other sources during an accounting period, (3) to show the uses or applications of financial resources during an accounting period, and (4) to complete the disclosure of changes in the amounts and causes of all changes in the financial position during an accounting period. In this respect, the term funds may be interpreted to mean cash or working capital.

Most enterprises prepare the statement of financial position on a working capital basis. Under either the cash method or the working capital method, the statement includes the impact of financing and investing activities which do not directly affect funds (cash or working capital). These activities are known as exchange transactions, which will not be discussed in this paper.

Working capital management is important because decisions regarding the firm's short-term assets and liabilities have a significant impact on both the firm's profitability and its risk. Working capital decisions affect the firm's profits through their impact on sales, operating costs and interest expense. They affect the firm's risk through their impact on the variability of the firm's cashflows, the probability of not receiving the cash flows, and the ability to generate cash in a crisis. The financial literature is filled with examples of firms that developed successful long - term competitive strategies, but failed because of a lack of attention to working capital management.

In general, by carrying out their responsibilities, the firm's financial managers should seek to maximize the market value of the firm. Two implications of the market value objective are relevant for managing working capital. First, financial managers should assess investments in working capital assets such as receivables and inventories in the same manner as they assess investments in the firm's capital assets. In short, they should determine the cashflows associated with these decisions and make that choice which maximizes their present value and second, financial managers should assess decisions regarding the firm's cash positions in terms of their effect on the present value of the firm's cash flows.

A statement of changes in financial position, indicates where cash came from and how it was used. When a firm is negotiating a loan, one of the first areas of analysis is the determination of how funds have been used in the past, what funds will be generated in the future, and how future funds will be used. That is, the, statement of changes in financial position provides, on a historical basis, the information necessary for determining the pattern of funds flows. The pattern of flow of funds and the effects on the firm's working capital position may indicate that the firm is making progress or that problems are developing.

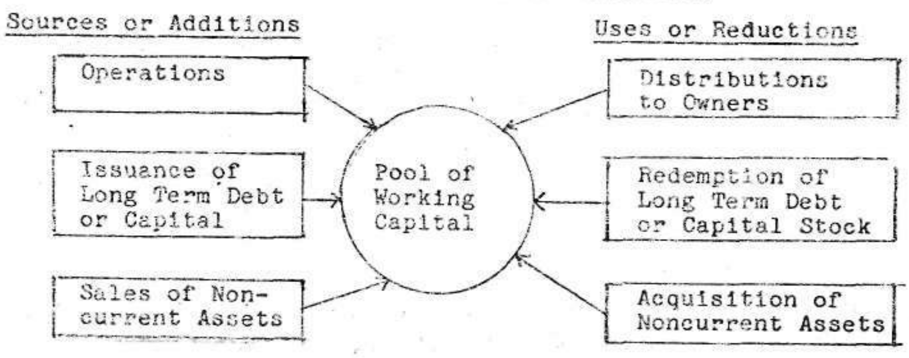
Decisions made in marketing, production, personnel, corporate planning, and credit management can have a profound impact on the firm's working capital position. Financial managers must forecast this effect and discuss it with other corporate officers so that they can consider changing their policies when the firm's working capital position is threatened.

Finally, the sources and uses of working capita! approach illustrates how the financial manager's responsibilities for working capital are distinct, but also related to his or her responsibilities for managing the firm's capital investment program and long - term financial structure .However, since the firm's capital investment and capital structure decisions both affect the firm's pool of working capital (shown ai the center of Diagram) 1) the firm's working capital decisions are clearly related to its long-term capita! investment strategy and its capital, structure.

A diagramatic representation of the flow of funds through a typical firm is shown in Diagram 1.

Diagram 1

Sources and Uses of Working Capital



STEPS IN PREPARING THE STATEMENT OF CHANGES IN FINANCIAL POSITION

The starting point in preparing a statement of changes in financial position is to determine the change in each balance sheet iten, and then to record it as either a source or a funds in accordance with the following rules :

Sources :

1. Decreases in asset accounts.
2. Increases in a liability account.
3. Increases in capital accounts.

Uses :

1. Increases in asset accounts.
2. Decreases in a liability account.
3. Decreases in capital accounts.

Sources of funds in general include bank loans and retained earnings, money generated by selling assets, collecting receivables and even drawing down the cash account. Uses include obtaining fixed assets, increasing inventories, and repayment of debts.

Funds are defined as either current assets minus current liabilities known as working capital, or as cash. Funds (working capital) typically come from three sources : (1) operations (profits). (2) increases in external financing and (3) disposition of noncurrent assets. Funds are generally used for (1) operations (losses), 2) dividends, (3) decreases in external financing and (4) acquisition of noncurrent assets.

The changes that take place in financial position from one period to another can be measured in several different ways. The most commonly used approaches are the Working Capital Approach and the Cash Flow Approach,

WORKING CAPITAL APPROACH

Working capital as a fund, is viewed as including all current assets (increases in working capital) and all current liabilities (decreases in working capital). Any transaction that results in a net increase in working capital is a "source,, of working capital ; that is, it provides working capital. Any transaction that results in a net decrease in working capital is a "use,, of working capital ; that is, it applies working capital. Some transactions merely rearrange the internal content of working capital that is, they neither increase nor decrease working capital. For example, the collection of cash from an account receivable, the write-off of an account receivable, (under the allowance method), the payment of an account payable, and the purchase of inventory for cash or on short-term credit, are neither sources nor applications of working capital, because the net balance does not change. "Thus, in the analysis of working capital we must separate the transactions that cause changes (increase in working capital from those that merely change the composition but not the total of working capital. It is the change in the working capital balance, along with other significant (nonworking capital) changes in resources, that the statement of changes in financial position reports See Footnote[4],,.

When funds are defined as working capital, we can formulate an equation analyzing its effects using the following notation :

CA = current assets

CL = current liabilities

NCA = noncurrent assets

NCL = noncurrent liabilities

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4. Donald E. Kieso and Jerry J. Weygandt, Intermediate Accounting, (John Wiley & Sons, New York, 1983) p. 1075.

OE $=$ owner's equity

Δ $=$ the change in an item, whether positive (increase) or negative (decrease) from the beginning of a period to the end of the period.

The basic accounting equation states that :

$$\text{Assets} = \text{Liabilities} + \text{Owners Equity}$$

$$CA + NCA = CL + NCL + OE \qquad (1)$$

Given this equation then the following must be true :

$$\Delta CA + \Delta NCA = \Delta CL + \Delta NCL + \Delta OE \qquad (2)$$

Rearranging terms in this equation, we get the working capital equation :

$$\Delta CA - \Delta CL = \Delta NCL + \Delta OE - \Delta NCA \qquad (3)$$

Which means that working capital is equal to current assets minus current liabilities, so the left hand side represents the net change in working capital. The right hand side of the equation, reflects changes in all nonworking capital accounts, must also be equal in amount to the net change in working capital. The equation states that increases in working capital are equal to, or caused by, the increase in noncurrent liabilities plus the increase in owners equity less the increase in noncurrent assets.

A Summary of Sources and Uses of Working Capital is given below ;

Sources

— Net Income (operations)
— Issuance of Long Term Debt Capital
— Issuance of Capital Stock
— Sale of Noncurrent Assests

Uses

— Dividends
— Redemption of Long - Term Debt
— Redemption of Capital Stock
— Acquisition of Noncurrent Assets

We now present a numerical illustration of the concepts presented in this paper :

Facts :

Assume Corp. XYZ had the following transactions during 1986.

(1) Inventory of $ 700,000 was acquired during 1986.

(2) Inventory of $ 600,000 is sold to customers on account for $ 1,250,000.

(3) Salaries of $ 190,000 are paid in cash.

(4) Other expenses of $ 130,000 are paid in cash.

(5) Cash collections of customers' accounts total $ 900,000.

(6) Cash payments to suppliers of merchandise total $ 500,000.

(7) Salaries earnred but not paid as of December 31, 1986, are accrued, $ 20,000.

(8) Other expenses not paid as of December 31, 1986, are accrued, $ 20,000.

(9) Depreciation for 1986 is recorded, $ 100,000.

(10) Long Term debt is issued for cash, $ 1,000,000.

(11) Dividends of $ 100,000 are declared and paid.

(12) Equipment costing $ 1,250,000 is acquired for cash.

TABLE 1

EFFECT ON WORKING CAPITAL EQUATION

	Working Capital Changes			Nonworking Capital Changes	
	ΔCA	— ΔCL	= ΔNCL	+ ΔOE	— ΔNCA
1) **Inventory costing $ 700,000 is acquired on account increasing a current asset and a current liability**	700,000 —	700,000 =	0 +	0 —	0
2) **Merchandise costing $ 600,000** is sold to customers on accounts **receivable for $ 1,250,000,** increasing a current asset–accounts receivable $ 1,250,000, decreasing inventory by **$ 600,000 and** increasing owner's equity by $ 650,000.	1,250,000 (—600,000) —	0 =	0 +	650,000 —	0
3) Salaries of $ 190,000 are paid decreasing a current asset and owner's equity	(—190,000) —	0 =	0 +	(—190,000) —	0
4) Other expenses of $ 130,000 are paid in cash, decreasing a current asset and owner's equity	(—130,000) —	0 =	0 +	(—130,000) —	0
5) Cash collections of customers' accounts total $ 900,000 increasing the current asset, cash, and decreasing a current asset, accounts receivable	900,000 (—900,000) —	0 =	0 +	0 —	0
6) Cash payments to suppliers of merchandise total $ 500,000 decreasing a current asset and a current liability	(—500,000) —	(—500,000) =	0 +	0 —	0
7) Salaries of $ 10,000 earned but not paid as 12/31/86 are accrued, increasing a current liability and decreasing owners equity	0 —	10,000 =	0 +	(—10,000) —	0

TABLE 2

	ΔCA	—	ΔCL	=	ΔNCL	+	ΔOE	—	ΔNCA
	Working Capital Changes				Nonworking Capital Changes				
8) Other expenses of $ 20,000 not paid as of 12/31/86, are accrued increasing a current liability account and decreasing owner's equity	0	—	20,000	=	0	+	(—20,000)	—	0
9) Depreciation for 1986 of 100,000 is recorded decreasing owner's equity and noncurrent assets	0	—	0	=	0	+	(—100,000)	—	(—100,000)
Total From Operations	(530,000)	—	230,000	=	0	+	200,000	—	(—100,000)
10) Long - Term Debt issued for cash, 1,000,000, increasing a current asset and a noncurrent liability	1,000,000	—	0	=	1,000,000	+	0	—	0
11) Dividends of 100,000 are declared and paid, decreasing a current asset and owners' equity	(—100,000)	—	0	=	0	+	(—100,000)	—	0
12) Equipment costing $ 1,250,000 is acquired for cash, decreasing a current asset and increasing noncurrent assets	(—1,250,000)	—	0	=	0	+	0	—	1,250,000
Totals :	$ 180,000	—	230,000	=	1,000,000	+	100,000	—	1,150,000
Net Change in Working Capital and Nonworking Capital		—	50,000	=	—50,000				

ADDITIONAL INFORMATION

- Net Income is $ 200,000.
- Depreciation Expense is $ 100,000.
- Dividends declared and paid total $ 100,000.

In preparing the statement of changes in financial position we analyze the effects of the above transactions on the basic accounting equation. The results are presented in Tables 1 and 2.

Case I:

Preparation of the Statement in Financial Position : Funds Defined as Working Capital

Sources of Working Capital		
Operations		
Net Income	200,000	
Add Back : Expenses not using Working Capital : Depreciation	100,000	
Total Sources from Operations		300,000
Proceeds from Long Ter Debt.		1,000,000
Total Sources of Working Capital		1,300,000
Uses of Working Capital		
Dividends		100,000
Acquisitions of Buildings and Equipment		1,250,000
Total Uses of Working Capital		1,350,000
Net Decreases in Working Capital during the year (Sources–Uses)		50,000

TABLE 3

Company XYZ Balance Sheets for December 1985 and 1986

Current Assets	December 31, 1985	December 31, 1986
Cash	$ 300,000	$ 30,000
Accounts Receivable	200,000	550,000
Inventory	400,000	500,000
Total Current Assets	$ 900,000	$ 1,080,000
Noncurrent Asset		
Buildings and Equipment (cost)	$ 1,000,000	$ 2,250,000
Acc. Depreciation	(300,000)	(400,000)
Total noncurrent Assets	$ 700,000	$ 1,850,000
Total Assets	$ 1,600,000	$ 2,930,000
Current Liabliities		
Accounts Payable	400,000	620,000
Salaries Payable	50,000	60,000
Total Current Liabilities	$ 450,000	$ 680,000
Noncurrent Liabilities		
Bonds Payable	—0—	1,000,000
Owners' Equity		
Capital Stock	1,000,000	1,000,000
Retained Earnings	150,000	250,000
Total Owners' Equity	$ 1,150,000	$ 1,250,000
Total Equities	$ 1,600,000	$ 2,930,000

The comparative balance sheets of XYZ Company for December 31, 1985 and 1986, are presented in Table 3. These statements are needed in order to obtain balance sheets for the beginning and end of the period covered by the statement of changes in financial position.

TABLE 4

Analysis of Changes in Working Capital Accounts
Current Asset Item Increase (Decrease)

Cash	(270,000)
Accounts Receivable	350,000
Inventory	100,000
Net Increase in Current Assets Items	180,000
Current Liability Increase (Decrease)	
Accounts Payable	220,000
Salaries Payable	10,000
Net Increase in Current Liability Items	230,000
Net Decrease in Working Capital During the Year	50,000

Table 4 provides information necessary for a complete assessment of a company's liquidity and changes in the structure of its assets and equities. For instance, cash decreased by $ 270,000, whereas accounts receivable increased by $ 350,000 during the year. Together, this represents an increase of $ 80,000, in the company's most liquid assets. However, most of the increased liquidity does not reflect cash immediately available to pay liabilities or to make purchases. Instead, cash must first be collected from customers. Thus, financial decision makers interested in assessing changes in the structure of the company's working capital would find the information given in Table 4 of the statement of changes in financial position to be useful.

CASH FLOW APPROACH

Under this approach the changes in the cash balance that take place over a period of time are summarized. Any transaction that either increases or decreases cash is considered in preparing the final statement. For example, the purchase of land for cash is considered a change in a financial position because it decreases cash.

A transaction that has no effect on cash such as the purchase of land on credit is not reported. Using cash to measure changes in financial position has limitations, because many important transactions resulting in changes in financial position are of noncash nature and are excluded from this statement.

Case II :

Preparation of the Statement of Changes in Financial Position :
Funds Defined as Cash

As stated previously, working capital was defined as follows :

$$ACA - ACL = ANCL + \Delta OE - ANCA \qquad (4)$$

We can expand this equation by classifying changes in current assets into :

(1) Changes in cash and

(2) Changes in current assets other than cash.

The above equation can be rewritten :

$$ACash + ACA \text{ (other than cash)} - ACL = ANCL + \Delta OE - ANC\ A \qquad (5)$$

Rearranging :

$$ACash = ACL + ANCL + \Delta OE - ACA \text{ (other than cash)} - ANCA \qquad (6)$$

TABLE 5

Sources and Uses of Cash

Sources of Cash		
Operations		
Net Income	200,000	
Additions		
Depreciation	100,000	
Increased Accounts Payable	220,000	
Increased Salaries Payable	10,000	
Subtractons		
Increased Accounts Receivable	(350,000)	
Increased Inventories	100,000	
Total Sources from Operations		80,000
Nonoperating Sources		
Proceeds of Long Term Debt Issues		1,000,000
Total Sources of Cash		1,080,000
Uses of Cash		
Dividends		100,000
Acquisition of Building & Equipment		1,125,000
Total Nonoperation Uses of Cash		1,350,000
Net increase (decrease) in cash for the year : Sources - Uses		(270,000)
Net (decreases) in Cash Account for the year : From Balance Sheet		(270,000)

The left hand side of the equation, representing the change in cash during the period, must be equai in amount to the changes in all noncurrent accounts. Thus, by analyzing and explaining all changes in noncash accounts during a period, we shall have developed the information necessary to explain the change in cash.

The statement of changes in financial position reports net income as a source and dividends as a use, rather than netting these items out and just reporting the increase in retained earnings. In addition, this statement answers the following questions : The upper part answers the question regarding Company XYZ's major sources of long - term funds. The middle part of the statement answers the question about how Company XYZ used its available funds for nonworking capital purposes. The lower part which deals with current assets and liabilities indicates how the company's liquidity position changed during the year. As it can be seen Company XYZ's major sources of funds were net income (plus depreciation) and proceeds from long-term debt. These funds were used to increase fixed assets and to pay dividends.

CONCLUDING REMARKS

With the advent of bankrupt companies as well as the many reorganization mergers and acquisitions, the statement of changes in financial position becomes a necessity to the financial user. When examined with the other two statementss the user is greatly aided in his evaluation of the company. This statement provides realistic means of analyzing the sources and uses of funds. In addition, short term management of assets and liabilities can also be evaluated and compared over time.

It is concluded that the statement of changes in financial position be used as a supplement to the balance sheet and income statement, rather than as a substitute in all publicly owned Greek Companies. We believe that when the three statements are taken together, the financial decision maker will be much better informed of the company's financial position. Consequently, this statement will serve as an effective tool in early detecting companies which may face financial difficulties, or may become problematic or even going bankrupt.

The statement of changes in financial position has become a standard tool of financial analysis in most European countries and in the U.S.A.. because of the very useful information found in it. That is, Accounting Authorities require that the statement of changes in financial position should be accompanying the income statement and balance sheet as a basic financial statement.

Finally, the results of financial statement analyses cannot be used by themselves as direct indications of good or poor management. Such analyses merely indicate areas that must be investigated further. That is, financial information derived from financial statements must be combined with managerial judgement and an investigation of other facts before valid conclusions can be drawn.

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