

Funds Flow View: An Alternative Approach to Financial Accounting

Michimasa Satoh

1. *Introduction*

(1) Purpose

It is sometimes argued that the balance sheet can be interpreted in terms of funds; it is considered a static funds statement, which shows the sources of corporate funds and how they have been used to date. When Robert Sprouse analyzed three views of the balance sheet,⁽¹⁾ he referred to the above interpretation and wrote; “(this) approach to the balance sheet has emerged in recent years” and commented; “the relevance of the balance sheet as a static funds statement is not at all clear” (Sprouse, 1973). But is such a view new? Does it have no more relevance than any other views? The purpose of this article is to explore such view by tracing its development in accounting literature, and to illustrate how it can influence the development of a conceptual framework of financial accounting.

(1) See Sprouse (1973). He compared three balance sheet views: the static funds statement view which corresponds to the Funds Flow view, the sheet of balance view which corresponds to the Revenue and Expense view, and the statement of financial position view which corresponds to the Asset and Liability view.

(2) Background

More than two decades have passed since the funds statement became one of the major financial statements.⁽²⁾ However, so far there has not been an adequate answer to the question of how traditional financial statements such as the balance sheet and the income statement can be treated in the framework of financial accounting in which the funds statement is involved.

Two factors make this inquiry difficult. First, there are several different kinds of "funds statements". Many recommendations have been made relating to which objectives of this statement should be emphasized, how the concept of funds should be defined, and what form of this statement should be adopted.⁽³⁾ This confusion has seriously hampered any effort to create a coherent framework of financial accounting that includes the "funds statement". The second factor which has discouraged the creation of a new framework is an over-reliance on the Asset and Liability view and the Revenue and Expense view, two traditional, wellknown approaches, causing an alternative view, which can be called the Funds Flow view, to be neglected.⁽⁴⁾

Advocates of the Asset and Liability view emphasize the concept of asset and liability as this view's "center of gravity".⁽⁵⁾ Assets are defined as economic resources. The balance sheet is the most important statement in this view because it embodies these central elements and

(2) It was in 1970 that the SEC ruled to include the funds statement in the set of financial statements (SEC, Accounting Series Release No.117) and in 1971 that APB issued its opinion No. 19, asking that the statement of changes in financial position be deemed as a major financial statement.

(3) For the history of the funds statement, see Rosen and DeCoster (1969).

because it provides information about the financial conditions of a company. According to this view, revenue and expense can result only from changes in economic resources or obligations during the period; income is, therefore, the increase in the net assets between two points of time. Since income is treated this way, the income statement is interpreted to show the causes of the changes in the net asset.

The Revenue and Expense view interprets the concept of revenue and expense (and hence the concept of matching expense with revenue) as the central element of its framework. The income statement is the most important because the central element is embodied in this statement and because it provides information which is useful in explaining the operating

(4) The term "Assets and Liability View" and "Revenue and Expense View" were first used by the FASB in 1976. The FASB neglected the Funds Flow view and placed the non-articulation view as the third one. After all the FASB did not accept the idea that non-articulation of the balance sheet and the income statement can convey much more information than the articulated financial statement. The nonarticulation view is basically a combination of certain aspects of the other views. For the discussions of the non-articulation view, see Rappaport (1971), Sorter (1974), and Hendriksen (1977, pp. 134~135).

(5) It was A. C. Littleton who used this phrase first. He believed that every subject has one special concept which functions as a center of gravity. And he concluded that the concept of income from matching expenses with revenues is the center of gravity in the subject of accounting: "There must be some basic concept that makes accountancy different from all other methods of quantitative analysis; there must be some central idea which expresses better than others the objectives, effects, results, ends, aims, that are characteristic of accounting—a 'center of gravity' so to speak, Examples of characteristic notions of this sort include: for arithmetic, number; for geometry, point; for physics, force; for astronomy, space; for biology, life; for psychology, consciousness; for logic, thinking; for ethics, goodness; for esthetics, beauty; for music, consonance; for law, justice; for government, equality; for economics, values; for accounting, —?" (Littleton, 1953, p. 18)

performance of a company. Advocates of the Revenue and Expense view hold that “the needs of proper matching determine when revenue and expense are recognized and that measures of earning are not necessarily circumscribed by the changes in resources and obligations during that period (Sprouse, 1978, p. 68).” Hence the balance sheet is interpreted as a means to carry forward the balances of ledger accounts. In this sense, the balance sheet can be called a “balance of balance”.

The Revenue and Expense view was established as a dominant view of financial accounting when the GAAP was formulated in the 1930s. In the 1960s, the emphasis began to shift from the Revenue and Expense view to the Asset and Liability view.⁽⁶⁾ Today, it is evident that the FASB has selected the Asset and Liability view as the preferred approach in constructing a conceptual framework of financial accounting.⁽⁷⁾ However, although these traditional views have well explained the balance sheet and the income statement, they have not succeeded in integrating the funds statement into their framework. In the FASB conceptual statement No. 6 “Elements of Financial Statements of Business Enterprises”, the Board did not attempt to define the funds statement in terms of assets and liabilities. Neither the concept of cash nor funds was included in the ten basic elements of financial statements.

Similarly, nothing has been mentioned about the funds statement in

(6) See, for example, Staubus (1961). ARS No. 1 was rejected by the Accounting Principles Board because the Board thought that these proposals were too radically different from the generally accepted accounting practice at that time. The same philosophy has, however, been succeeded by the FASB conceptual framework project.

(7) The FASB is silent on this point.

terms of revenues and expenses. The funds statement was dealt with only on the last page as a financial statement analysis in *An Introduction to Corporate Accounting Standards* by W. A. Paton and A. C. Littleton, in which the Revenue and Expense view was first typically applied. Also in the following AAA publications, the information presented by the funds statement was believed to be useful, but not more useful than the information given by the income statement or the balance sheet.⁽⁸⁾

Before the funds statement became one of the major financial statements in 1970, these two views could adequately explain financial accounting. The balance sheet and the income statement were clearly the two major financial statements and the primary question was clearly which of these should dominate. But after 1970, since the SEC and the APB have concluded that the funds statement is a major financial statement, a new approach is needed.

The Funds Flow view may contribute in solving this problem. The Funds Flow view is structured similarly to the Asset the Liability view and the Revenue and Expense view in the sense that its main concept—in this case, the concept of funds which flow through a company—is the central focus of its framework. Further, a typical application of this view is seen in its interpretation of the balance sheet as a static funds statement. However, the income determination aspect of this view has been almost ignored. In my opinion, this is a serious deficiency of the Funds Flow view of financial accounting.

With this problem in mind, I would like to make it clear first how the balance sheet and the income statement have been interpreted in terms

(8) See also AAA (1954) and AAA (1957).

of funds in the history of financial accounting in the United States (section 2). Then I will discuss the Funds Flow view which is developed in relation to the funds statement (section 3). The significance of the Funds Flow view to the conceptual framework of financial accounting will be discussed in the last section (section 4).

2 . *Funds Flow view of the Balance Sheet*

(1) Cash theory

The first evidence of the Funds Flow view of the balance sheet is probably the "cash theory" which appeared in *The Philosophy of Account* by Charles T. Sprague in 1907. According to Sprague's "cash theory", the balance sheet may be interpreted as follows:

"A very large number of the transactions are genuinely cash, and it is evident that the others may be separated into two each, one involving a receipt of cash and the other an expenditure. Without at present dwelling on this, we may conclude that any asset, except cash itself, may be considered to have cost money, and that any liability or proprietorship may be considered as having procured money or as being a source of money. The debit side of the balance sheet is transformed into a statement of cash paid, and the credit side into a statement of cash received—a reversed cash statement." (p. 48)

Sprague's interpretation of the balance sheet failed to receive wide support. This was probably due to several different factors. First, there are problems inherent in the cash theory itself. Sprague assumed that every transaction passed through the phase of cash; this assumption is, of course, far from real accounting practices. Furthermore, according to

the cash theory, retained earnings should be defined as a source of cash receipts. It is obvious, however, that retained earnings can not be treated as if it comes from a single cash transaction. Second, the circumstances surrounding the cash theory were unfavorable to its development. When Sprague referred to the cash theory, he contrasted this theory to the proprietary theory and "the other theory" which was later named the entity theory. When W. A. Paton discussed the superiority of the entity theory to the proprietary theory in 1922, he did not mention the cash theory (Paton, 1992). Until 1947, the controversy between the proprietary theory and the entity theory overshadowed the significance of the cash theory.⁽⁹⁾

Furthermore, in the United States, it appears that the practical aspects of the balance sheet have received more attention than such theoretical aspects as the "cash theory". This is evidenced by the "where-got, where-gone" statement which appeared in the book written by William M. Cole in 1908 (Cole, 1908). Cole showed that the flow of funds can be derived from two successive balance sheets. This technique implicitly relies on the assumption that the balance sheet embodies the flow of funds. After the publication of Cole's book, many authors referred to funds flow analysis as an interpretation of the balance sheet for practical use.⁽¹⁰⁾ Theoretical explanations, such as the "cash theory", were therefore neglected.

In 1909, Walter Staub offered another explanation of the balance sheet. He argued that all the assets except cash and accounts receivable can be

(9) Vatter contrasted these two theories with his Fund Theory. See, Vatter (1947).

(10) See, for example, Finney (1921, 1923)

defined as deferred charges.

"In fact, almost all the assets of manufacturing, transportation or public service undertaking which have not had their financial status fixed beyond the probability of being influenced by future operations, meaning by this latter class such as cash and receivables, are in reality but deferred charges to operating." (Staub, 1909, p. 401)

From that time, Staub's idea, not the cash theory, gained wide support. It, as well as the cost basis of accounting and the concept of matching, was adopted to the accounting principles by authoritative accounting bodies.⁽¹¹⁾

There was one exception to the prevailing tendency of this era. In 1933, W. M. Cole tried to introduce the English double-account system to American financial reporting. Cole explored the idea of a balance sheet which shows the history of the company rather than the financial conditions at a certain point of time. Underlying his argument, there was a philosophy that the balance sheet shows the source and use of funds.

(2) Re-appearance of the Funds Flow view of the balance sheet

It was not until 1940 that the Funds Flow view of the balance sheet reappeared in American accounting literature. By that time, the cost basis of valuation had become recognized as a generally accepted accounting principle. This provided a favorable background for the proponents of the Funds Flow view of the balance sheet; although a value oriented balance

(11) See, for example, Paton and Littleton (1940), p. 67 and AICPA, Accounting Research Bulletin, No. 9, pp. 68~69.

sheet is inconsistent with the Funds Flow view of the balance sheet, the cost basis balance sheet is not.

In 1904, W. Whitney asked "What is the balance sheet?", and he concluded:

"Essentially, a corporation balance sheet is an accounting of management to shareholders for expenditures made in acquiring properties owned and for unconsumed benefits properly chargeable to future operations." (Whitney, 1940, p. 303)

It should be noted, however, that by referring to "expenditure not charged to profit and loss", Whitney was relying in part on the Revenue and Expense view in describing his funds flow view of the balance sheet.⁽¹²⁾

Whitney not only described the balance sheet in terms of funds but also illustrated a balance sheet based on his fiduciary oriented view. The most important characteristic of his balance sheet is its separation into two sections: the working capital and the long term capital. This idea of "fiduciary accounting" is consistent with the Funds Flow view of the balance sheet. According to this, the responsibilities and the duties of corporate management to shareholders are actually fiduciary in character, and the balance sheet is viewed as the accounting which corporate managements should render to shareholders.

The English double-account form balance sheet might have influenced his balance sheet. Whitney believed this segregation clearly disclosed the

(12) It is evident from the phrase "expenditure not charged to profit and loss".

source of funds retained in the form of working capital and answered the question "What has become of the profits that were not paid out in dividends?" The reason for this separation was that "accounting can be better understood when segregations are made." (Whitney, 1940, p. 304~305). This idea was further developed in the Fund Theory by W. J. Vatter in 1947.⁽¹³⁾

There is no doubt that the Funds Flow view of the balance sheet was strongly enhanced by increased attention to the funds statement. Before 1940, the funds statement was thought of as the product of the analysis of the balance sheet and the income statement. After 1940, however, the situation began to be reversed; the balance sheet and the income statement started to be viewed in terms of the funds statement.

When C. N. Sellie wondered why the funds statement was neglected by accountants at that time, he seemed to be aware of the relationship between the funds statement and the view of the balance sheet and the income statement (Sellie, 1943). He wrote:

"The chief function of the balance sheet is to reflect the investments of funds on the assets side and the source of funds on the equity side, and the chief function of the profit and loss statement is to show sources of funds on the revenue side and application of funds (current and past) on the expense side.

It seems strange then, in view of what appears to be the present function of the two most familiar financial statements, that accountants should neglect that statement which would show the total movement of funds, movements which are only reflected in the balance sheet and shown only in part by the profit and loss statement." (p. 160)

(13) See Vatter (1947), p. 57 and 58.

This shift may be due to the accumulated knowledge of funds flow analysis; the argument revolving around the funds statement had matured to a point where theorists began to view the funds statement as an important tool of financial accounting theory construction.

A. B. Carson clearly showed the direction of this funds flow oriented approach (Carson, 1949). He wrote that the funds statement was the starting point from which he got the idea to explain financial accounting in terms of funds. According to him, the "source and application of the funds statement embodies a viewpoint that provides the seeds of a philosophy of financial accounting" (p. 159). He explained the balance sheet in terms of funds flow.

"The balance sheet is usually regarded as a statement of the assets and equities of a business organization at a specified date. If it does not show appraised values and does not reflect the results of recapitalizations, and "quasi-reorganizations", it may also be viewed as a statement that shows the working capital of the company, the unamortized portion of various past applications of funds, and the sources of these elements. When the source and application of funds philosophy of accounting is adopted, the balance sheet takes on the latter nature." (Carson, 1949, p. 163)

Further, he suggested several modifications of the balance sheet which could logically be obtained if the Funds Flow view of the balance sheet were to be adopted. These include accounting procedures to show the amount of net working capital on the balance sheet in order to "tie in" with and accompanying funds statement, procedures to avoid treating the bond discount as an asset since it does not represent any applications of funds, and procedures to use the term "Source to Funds" instead of "Liabilities".

Today, many accounting writers have adopted the Funds Flow view of the balance sheet.⁽¹⁴⁾ However, it is clear that the idea of this view can be traced back to the turn of this century.

3 . *Funds Flow View of the Income Statement*

(1) Funds Flow approach to income determination

Another important aspect of the Funds Flow view is how to interpret the Income Statement in terms of funds.

The intent of the Funds Flow view coupled with fiduciary accounting such as Whitney's was to interpret only the balance sheet in terms of funds, while the Funds Flow view coupled with the funds statement was an attempt to explain the income statement as well as the balance sheet. For the latter approach, the concept of funds was the common denominator of the three financial statements.

Sellie was the first to present this approach, but he mentioned only briefly the income statement in terms of funds. Carson described the

(14) See, for example, Anthony (1970) and Hawkins (1968). Anthony argued "It is not possible to define the whole balance sheet in anything other than vague terms. The AICPA definition of the balance sheet is a 'list of balances in the asset, liability, or net worth accounts'. A more meaningful statement is the following: the balance sheet shows the sources from which funds currently used to operate the business have been obtained (i. e., liabilities and owners' equity) and the types of property and property rights in which these funds are currently locked up (i. e., assets). The statement regards the balance sheet as essentially a report of management's stewardship; that is, what management has done with the funds entrusted to it" (p. 227). Hawkins adopted the funds flow view of the balance sheet and argued that the deferred income tax credit should be shown on the balance sheet because it shows the important source of corporate funds.

Funds Flow view of the income statement in more detail and suggested a form of income statement consistent with the Funds Flow view.

Carson's idea was "not to cloud the feature of funds flow" (Carson, 1949, p. 162). Although he did not deny the importance of the concept of matching cost with revenue, he did regard it as secondary. Under the Revenue and Expense framework, matching revenue and expense is the most important concept. Thus, in order to achieve the best matching of revenue and expense, the proponents of this view overlook the fact that the flow of funds are separated into different statements. Contrary to the Revenue and Expense view, since the concept of funds flow plays the most important role, the concept of matching becomes second under the Funds Flow view of financial accounting.⁽¹⁵⁾ In order to avoid obscuring the features of funds flow in the income statement, the items that constitute the income figures are divided into two groups: funds flow items and non-funds items. First of all, in order to get funds provided by operations (FPO), revenues which involve funds inflows are matched with the expenses which involve funds outflows. To reach net profit, revenues which do not involve funds inflows are added to this amount, and expenses which do not involve funds outflows are subtracted (See the diagram below). This way of calculating net profit can be called "Shikin-hou" in Japanese, which means the "funds flow approach" to income calculation or the "funds flow method" of income calculation.

(15) Carson writes, "In the source and application of funds view of the accounting process, the problem of periodic income determination, involving the matching of cost and revenue, becomes secondary" (Carson, 1949, p. 161).

Funds Revenues	xxxxxxx
Funds Expenses	(xxxxxxx)
FPO	xxxxxxx
Non-Funds Revenues	xxxxxxx
Non-Funds Expenses	(xxxxxxx)
Net Income	<u>xxxxxxx</u>

The significance of this form is that it shows the important aspect of the nature of corporate accounting income; accounting income is determined through additions and subtractions of revenues and expenses that have at least two different quality—hard and soft. In relation to this, Carson wrote:

“When depreciation and other nonfund expenses and income items are added back or deducted from the amount shown as net profit in the income statement, their special nature becomes apparent.” (Carson, 1949, p. 162)

He also recognized the limitations in this form of the income statement. First, when we attempt to prepare it, we are unable to obtain a statement which clearly shows the performance of the company. Operating activities are not clearly shown; they are reported in two separate sections. For example, one part of the selling or the administration expenses may be reported in the section of funds provided by operations, while the other part of these expenses may be reported in the non-funds adjustment section. Second, in the case of a manufacturing company, it is quite difficult to treat adequately the depreciation expenses which are allocated to inventories; a clear separation of funds expenses from non-funds expenses is not feasible in the above income

statement form for manufacturing companies.⁽¹⁶⁾ However, we can get some fruitful results if we use the method suggested by Carson only to analyze and interpret the standard income statement, not to try to prepare the income statement in his way.

In 1955, Horngren discussed the "funds flow thinking" used by professional financial analysts (Horngren, 1955). According to him, the financial analysts interpret the income statement the way Carson suggested.

"Income is the difference between revenue from customers and the current costs of obtaining the revenue (materials, wages, utilities, advertising). Then the depreciation allocation is separated from this difference and should be devoted to capital expenditures or to the payment of debts arising from prior capital expenditures. (Depreciation is 'something special' which is related to fixed asset outlays.) The residual is available for dividends, further capital expenditures, payment of long-term debts, or expansion of working capital. Earnings as reported under conventional accounting, therefore, do not connote distributable earnings and are not thought of as such." (p. 579)

According to Horngren, this approach provides financial analysts with the basis for investment decisions under inflationary conditions. The profit predictions based on such a funds flow analysis are more accurate than those based on the simple extrapolation of past income figures.

As can be noticed, the most important characteristic of this approach is to grasp income in relation to various sources and uses of funds. The amount of funds provided by operations functions as a bridge between

(16) In relation to this problem, see Zannetos (1962).

the reported accounting income and the funds flow, because accounting income is defined in terms of funds flows: $FPO \pm \text{Accounting adjustment}$. In this sense, if we assume that such a calculation exists "between the lines" of the usual income statement, it becomes possible to understand income calculation in relation to financial aspects of corporations.

(2) Funds Flow approach under various concepts of funds

Since the term "funds" can be defined in several ways, the idea of the funds flow approach to income determination could have been elaborated upon in terms of the different definitions of funds. Sellie apparently overlooked this need. Although Carson noted that there are at least three concepts of funds—working capital, net short term monetary assets and cash—he did not take this into consideration when he discussed the funds flow approach to income calculation in 1949.⁽¹⁷⁾ Horngren described the "funds flow thinking" of financial analysts, but he did not specify the meaning of the term "funds".⁽¹⁸⁾

Because income determination in current practice is based on accrual accounting, income determination according to the Funds Flow approach

(17) Although Carson was aware of cash and the net short term monetary concept of funds as well as working capital, he thought that the working capital concept was the best at that time; "With the possible exception of the inclusion of inventories in working capital, there is little objection to considering working capital as funds" (Carson, 1949, p. 162). However, he changed his attitude from working capital to net monetary assets, (Carson, 1954) and then, finally, to cash (Carson, 1965) in relation to income determination.

(18) It seems that Horngren did not have to specify the meaning of "funds" because approximate figures were acceptable to the security analysts if these figures were reliable.

must show the process of reconciliation between accrual income and “funds” or “cash” income. Although these processes are not very difficult, they are complex and troublesome. Advocates of the Funds Flow approach appear to have avoided these complexities.

G. J. Staubus discussed a general relationship between accrual income and various funds incomes (Staubus, 1966). His position on the importance of income flow and funds flow was neutral. He compared four accounting flows—accrual income, working capital from recurring operations (WFO), net quick assets from recurring operations (QFO) and cash from recurring operations (CFO)—and concluded that every asset flow has significance.

“Inherent in these four definitions and the accompanying analysis of them are the reasons why earnings may not be the one and only useful asset flow concept.”
(p. 404)

He demonstrated that the more subtle the measurement (i. e., the measurement to achieve a better matching between revenue and expense), the more accounting judgements are involved, and the more judgements involved, the more difficulties accountants will confront in accounting measurement.

Although he did not show that these flows are mutually reconcilable, the relationship between these four accounting flows can be summarized as follows:

The more important point—a point which Staubus did not see—is that the above relationship can be used to explain, in another way, the Funds Flow approach to income calculation under every concept of

Items which require accounting judgements in measuring alternative asset flows			
<u>CFO</u>	<u>QFO</u>	<u>WFO</u>	<u>Earning</u>
none	accrued liabilities receivables	accrued liabilities receivables prepaid expenses deferred revenue inventories	accrued liabilities receivables prepaid expenses deferred revenue inventories depreciation, etc.

funds; accrual income is obtained by systematically deferring and accruing various cash flows according to accounting principles. During this process, the amount of CFO, QFO and WFO is influenced by these accrual and deferral procedures.

Reconciliation between alternative accounting flows

Cash inflow from operations	\$ 12,050		
Cash inflow from operations	<u>10,700</u>		
CFO	<u>\$ 1,350</u>	\$ 1,350	
Increase in accounts receivables		400	
Decrease in accrued revenue		(50)	
Increase in accounts payables		(300)	
Increase in accrued liability		<u>(300)</u>	
QFC		<u>\$ 1,100</u>	\$ 1,100
Increase in inventory		<u>700</u>	
WFO		<u>\$ 1,800</u>	\$ 1,800
Depreciation			(600)
Pension			(200)
Amortization			(100)
Income tax deferred			<u>(100)</u>
Earning			<u>\$ 800</u>

When the amount of CFO is given, QFO can be derived by adding or subtracting the increase or decrease of trade receivables and payables. WFO can be derived by adding or subtracting the QFO to or from the increase or decrease of inventories, prepaid expenses or deferred credit to income. Accrual income can be drawn by subtracting the depreciation charges and other similar charges from WFO.

(3) Characteristics of the funds flow approach

The funds flow approach to income calculation is different from the equity change and the transaction approach, even though all of these approaches result in the same net income. Because a distinction must be made between funds transactions and non-funds items are added or subtracted to get net income. The separation of income calculation into two parts in terms of funds is the main characteristic of this approach under the accrual basis of accounting.

In the traditional approach to income calculation, out-of-pocket expenses and non-cash expenses such as depreciation are deemed to be the same when they are subtracted from revenue. Paton and Littleton in *An Introduction to Corporate Accounting Standards* write:

“In their essential relation to revenues, as in their relation to assets, all costs are homogeneous and rank abreast; this is a basic principle in the development of a reasonable scheme of matching charges and revenues. Costs, in other words are not recovered through revenues in preferential order.” (Paton and Littleton, 1940, p. 67)

Proponents of the funds flow approach, however, do not agree with this position. To them, the depreciation expense is not the same as other

expenses such as wages and salaries. A. B. Carson writes:

“Accountants have taken great pains to convince everyone that depreciation is just as much an expense of a period as, for example, sales salaries. Their efforts have had considerable success. It is suggested, however, that they may have oversold the idea a bit. There is much to commend the process of attempting to charge the cost of an asset to the periods it benefits. Such treatment is the very core of conventional accrual accounting. That, however, is no reason to suggest or imply that depreciation and similar write-offs are exactly the same as most other expenses. Business people know that such is not the case.” (Carson, 1949, p. 162)

The most pure form of the funds flow approach to income determination only requires the calculation of FPO by subtracting funds expenses from funds revenues. When the funds flow approach to income determination is used to interpret how accrual income is determined, the concept of non-funds items becomes necessary.

The funds flow approach to income calculation also differs from the equity change approach. Since the concept of operating activities is essential to the funds flow approach in calculating the FPO, it is strongly implied that the balance sheet items are classified according to this concept of operating activities. However, the balance sheet items are not necessarily classified when income is calculated according to the equity change approach. Rather, it can be said that the homogeneity of the balance sheet items in terms of the comprehensive income is supposed in the equity change approach.

4. *Funds Flow View of Financial Accounting and the Funds Statement*

As is shown above, a limited number of theorists directed their interests in seeing the income statement in terms of funds: Sellie, Carson and Horngren. Among them, only Horngren clarified the objective of viewing the income statement in terms of funds. He emphasized the financial analysts position, which is that a knowledge of the relationships between the amount of the profit, FPO and other sources and uses of funds is helpful in getting insight into the financial aspects of a corporation.

It should be noted here that when these theorists discussed the Funds Flow view of the income statement, they also took the funds statement into consideration. Sellie thought that the purpose of the funds statement was to explain “why, despite large profits and/or large depreciation allowances, there are no funds available with which dividends may be paid or new equipment purchased.” (Sellie 1943, p. 161). Carson thought that the purpose of the funds statement was to supply an answer to the question: “what happened to the profit?” “how was the loss absorbed?” and to give “an overall picture of financial changes occurring between two points of time” (Carson, 1949, p. 160).

Indeed, one of the purposes of the FASB’s Statement of Cash Flows is to evaluate the difference between net income and the related cash receipts and disbursements (FASB, November 1978, para. 7, c). The supporting schedule which reconcile net income and CFO is now required when the Statement of Cash Flows is prepared according to the direct method. This reconciliation should be highlighted when we analyze the

structure of accounting system.

The funds statement is commonly viewed as a statement of corporate financing and investing activities. A careful examination, however, reveals that one type of income calculation exists in the funds statement.

Let us suppose the traditional funds statement which uses the indirect method in calculating the FPO and which interprets funds as working capital (or circulating capital). The structure of this form of the funds statement can be briefly shown as follows.

Net income	E
+	
Depreciation etc.	D
=	FPO
FPO	
+	
Long term financing	C
-	
Investment	B
=	
Changes in working capital	A

Naturally we read this type of the funds statement in this order:

$$E + D = \text{FPO}, \text{ then } \text{FPO} + C - B = A$$

If we start from the bottom line, however, and read up, an unexpected result can be seen: $A + B - C = \text{FPO}$, and $\text{FPO} - D = E$.

In the first equation, it is shown that the amount of external financing transactions which directly increases the amount of working capital is subtracted from, and the amount of investing transactions which directly

decreases the working capital is added to the net changes in working capital. The resulting amount indicates the changes in working capital caused by the operating activities. This amount is actually nothing but the FPO; the “funds increases” which do not come from external sources are derived from internal sources. The second equation ($FPO - D = E$) itself shows nothing but the funds flow method of income calculation, a method which was explained in the above sections. Therefore, a more general form of income calculation according to the funds flow method is in the whole funds statement.

There is no doubt that this relationship holds under every concept of funds. The following chart shows a brief structure of the typical funds statement which uses the indirect method in calculating the FPO and which interprets funds as cash.

Net income	xxxx
Deprecitation etc.	(+) <u>xxxx</u>
Increase or decrease in inventories and prepaid expenses	(⊖) <u>xxxx</u>
Increase or decrease in account and note receivables	(⊖) <u>xxxx</u>
Increase or decrease in account and note payables	(±) <u>xxxx</u>
CFO	xxxx
Long term and short term financing	(+) <u>xxxx</u>
Investment and payment of debts	(-) <u>xxxx</u>
Changes in cash	<u>xxxx</u>

When we read this statement from the bottom line up again, we can see that the CFO is obtained by adding the amount of investing and debt paying transactions to, and subtracting the amount of financing transactions from the net changes of cash during a given accounting period, and then we can see that the net income figure can be obtained by adjusting (adding and subtracting) the non-funds items to the CFO.

The funds statement prepared in the direct method shows FPO, without any adjustments, as a result of income calculation according to cash basis or funds basis. However, it is possible to say that the funds statement prepared in the indirect method shows net income figures by adjusting FPO according to the Funds Flow method. This type of funds statement can be said to be articulated with the balance sheet and the income statement in the sense that it can show the same measurement level of profit that is shown in the balance sheet and the income statement.

5 . *Conclusion*

According to the Funds Flow view, the balance sheet is interpreted as the static funds statement which shows the sources of corporate funds and their applications at a certain point of time. The income statement is viewed as the flow statement, behind which the funds flow method of income calculation is processed. Furthermore, it can be illustrated that the funds statement shows this funds flow method of income calculation as a statement which articulates with other major financial statements.

The Funds Flow view exists in the history of accounting. The Funds Flow view of the balance sheet appeared just after the turn of this

century. Although this view became overshadowed by the Revenue and Expense view of the balance sheet and therefore remained underdeveloped, it reappeared after 1940. The increased attention to the funds statement coupled with the accumulated knowledge of this statement was the most important factor in the reappearance of the Funds Flow view in 1943. At the same time, the Funds Flow view of the income statement began to be realized in terms of the funds statement.

Since accounting practice has developed in a rather desultory manner, one accounting view may not be enough to explain the whole aspect of financial accounting. Therefore, even if the FASB creates a conceptual framework of financial accounting according to the Asset and Liability view, as long as the funds statement is included in its framework, there will be a significant blank area which can be explained only by the Funds Flow view of financial accounting.

However, any time one view is used to explain accounting based on another conceptual framework, these deficiencies will always arise. For example, deferred charges and revenues can be defined easily according to the Revenue and Expense view but they can not be explained without difficulty according to the Asset and Liability view. Similarly, the valuation of assets such as marketable securities are explained well by the Asset and Liability view, but are not explained well by the Revenue and Expense view. And, of course, the accounting practices that prepare the funds statement are easily described according to the Funds Flow view, but they can only be inadequately described by the Asset and Liability view and poorly described by the Revenue and Expense view. In other words, one single view can not adequately describe financial accounting.

For the same reason, the Funds Flow view can not explain every facet of financial accounting. However, because it is able to explain the balance sheet, the income statement and the funds statement consistently in terms of funds, the Funds Flow view of financial accounting can provide one prospective framework in interpreting financial accounting.

Reference

- AAA, *Standards of Disclosure for Published Financial Reports*, Supplementary Statement No. 8, 1953.
- , *Accounting and Reporting Standards for Corporate Financial Statements*, 1957.
- , "An Evaluation of External Accounting Practice: A Report of the 1966-68 Committee on External Reporting," *The Accounting Review* Supplement to Volume XLIV, 1969, pp. 78~123.
- AICPA, *Objectives of Financial Statements: Report of the Study Group on the Objectives of Financial Statements*, 1973.
- , *Objectives of Financial Statements*, Volume 2, Selected Papers, 1974.
- Anthony, Robert N., *Future Directions for Financial Accounting*, Dow Jones-Irwin, 1984.
- Anton, Hector R., *Accounting for the Flow of Funds*, Houghton Mifflin, 1962.
- APB, Opinion No. 3, *The Statement of Source and Application of Funds*, October 1963.
- , Opinion No. 9, *Reporting Changes in Financial Position*, March 1971.
- ASB, Financial Accounting Standards No. 1, "Cash Flow Statement," September 1991.
- Carson, A. B., "A 'Source and Application of Funds' Philosophy of Financial Accounting," *The Accounting Review*, April 1949, pp. 159~170.
- , "Cash Movement: The Heart of Income Measurement," *The Accounting Review*, April 1965, pp. 334~337.
- Cole, W. M., *Accounts: Their Construction and Interpretation*, Houghton Mifflin, 1908.
- , *The Fundamentals of Accounting*, Houghton Mifflin, 1921.
- , "Our Outdated Accounting," *Harvard Business Review*, July 1993, pp. 478~489.
- Corbin, D. A., "Proposals for Improving Funds Statements," *The Accounting Review*, July 1961, pp. 398~405.
- Esquerré, Paul Joseph, *Applied Theory of Accounts*, Ronald Press, 1914.

- , *Practical Accounting Problems Part II*, Ronald Press, 1922.
- FASB, Discussion Memorandum, *An Analysis of Issues Relating to Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurement*, December 1976.
- , Statement of Financial Accounting Concepts No. 3, *Elements of Financial Statements of Business Enterprises*, December 1980.
- , Statement of Financial Accounting Concepts No. 6, *Elements of Financial Statements*, December 1985.
- , Statement of Financial Accounting Standards, No. 95, *Statement of Cash Flows*, November 1987.
- Finney, H. A., "Students' Department," *The Journal of Accountancy*, July 1921, pp. 59~67.
- , "The Statement of Application of Funds," *The Journal of Accountancy*, December 1923, pp. 460~472.
- Hawkins, David F., "Controversial Accounting Changes," *Harvard Business Review*, March-April 1968, pp. 20~41.
- , "Deferred Tax: Source of Non-Operating Funds," *Financial Executive*, February 1969, pp. 35~44.
- Heath, Loyd C., *Financial Reporting and the Evaluation of Solvency*. AICPA, 1978.
- , "Let's Scrap the Funds Statement," *The Journal of Accountancy*, October 1978, pp. 94~103.
- Hendriksen, Eldon S., *Accounting Theory*, 3rd ed., Irwin, 1977.
- Horngren, Charles T., "Security Analysts and the Price Level," *The Accounting Review*, October 1955, pp. 575~581.
- , "The Funds Statement and Its Use by Analysts," *The Journal of Accountancy*, January 1956, pp. 55~59.
- , "Increasing the Utility of Financial Statements," *The Journal of Accountancy*, July 1959, pp. 39~46.
- IASC, IAS No. 7 (revised), "Cash Flow Statement," October 1992.
- Littleton, A. C., *The Structure of Accounting Theory*, AAA, 1953.
- McCarthy, G. D., "Funds Statement Can Make Financial Statement Easier to Understand," *The Journal of Accountancy*, April 1948, pp. 309~311.
- Marple, Raymond P., "The Balance Sheet—Capital and Their Composition," *The Journal of Accountancy*, November 1962, pp. 56~60.
- Martin, Chester, "Do We Need a Balance Sheet?" *The Journal of Accountancy*, April 1943, pp. 343~347.
- Mason, Perry, *"Cash Flow" Analysis and the Funds Statement*, AICPA, Accounting Research Study No. 2, 1961.
- Moonitz, Maurice, "Inventories and the Statement of Funds," *The Accounting Review*,

- July 1943, pp. 262~266.
- , *The Basic Postulate of Accounting*, AICPA, Accounting Research Study No. 1, 1961.
- Paton, William A., *Accounting Theory*, Ronald Press, 1922.
- Paton, W. A. and A. C. Littleton, *An Introduction to Corporate Accounting Standards*, AAA, 1940.
- Rappaport, Alfred, "Discussion of 'The Balance Sheet—Embodiment of the Most Fundamental Elements of Accounting Theory'," in Zeff and Keller ed., *Financial Accounting Theory I: Issues and Controversies*, 2nd ed., McGraw-Hill, 1973, pp. 157~182.
- Rosen, L. S. and Don T. DeCoster, "Funds' Statement; A Historical Perspective," *The Accounting Review*, January 1969, pp. 124~136.
- SEC, Accounting Series Release, No. 117, *Adoption of Article 11A Amending Regulation S-X Relating to Content of Source and Application of Funds*, 1970.
- Seed, III, Allen, *The Funds Statement, Structure and Use*, Financial Executives Research Foundation, 1984.
- Sellie, Clifford N., "Fund Statement Terminology," *The Accounting Review*, April 1943, pp. 159~161.
- Sorter, George H., "An 'Events' Approach to Basic Accounting Theory," *The Accounting Review*, January 1969, pp. 12~19.
- , "The Partitioning Dilemma", *Objectives of Financial Statement*, Volume 2, AICPA, 1974, pp. 117~122.
- , "The Emphasis on Cash and Its Impact on the Funds Statement—Sense and Nonsense," *The Journal of Accounting, Auditing & Finance*, Spring 1982, pp. 188~194.
- Sprague, Charles E., *The Philosophy of Accounts*, New York, 1907. (reprinted by Scholars Book Co. in 1972)
- Sprouse, Robert T., "The Balance Sheet—Embodiment of the Most Fundamental Elements of Accounting Theory," in Zeff and Keller ed., *Financial Accounting Theory I: Issues and Controversies*, 2nd ed., McGraw-Hill, 1973, pp. 164~174.
- , "The Importance of Earnings in the Conceptual Framework," *The Journal of Accountancy*, January 1978, pp. 64~71.
- and Maurice Moonitz, *A Tentative Set of Broad Accounting Principles for Business Enterprises*, AICPA, Accounting Research Study No. 3, 1962.
- Staub, W., "Deferred Charges to Operating," *The Journal of Accountancy*, October 1909, pp. 401~418.
- Staubus, George J., *A Theory of Accounting to Investors*, 1961. (reprinted by Scholars Book Co. in 1971)
- , "Alternative Asset Flow Concepts," *The Accounting Review*, July 1966,

pp. 397~412.

Vatter, William J., "*Fund Theory and Its Implications for Financial Reports*," University of Chicago Press, 1947.

Whitney, William H. "What is a Balance Sheet?" *The Journal of Accountancy*, October 1940, pp. 293~308.

Zannetos, Zenon S., "Depreciation and Fund Statements", *The Accounting Review*, April 1962, pp. 300~307.