SOME BASIC PROBLEMS IN ACCOUNTING SYSTEM FOR PUBLIC ENTERPRISES
——WITH SPECIAL EMPHASIS UPON THE CONCEPTS OF CAPITAL AND PROFIT——

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The modernization of public enterprises in Japan has gradually been promoted by an application of some effective management methods of private enterprises to public enterprises.

In the field of accounting for public enterprises, the conversion from a government accounting system to a general business accounting system has been intended and carried out by accepting basic principles represented in a statement of Business Accounting Principles. Because of speciality of public enterprises, however, an application of a general business accounting system to public enterprises may need some modifications. The purpose of this paper is to discuss some basic problems arising from this process of modernization of the accounting system for public enterprises by taking Japanese National Railways as an example.

Accounting Entity of Public Enterprises

When some basic assumption of modern business accounting are discussed, accounting entity is one of the most controversial problems. Theories on accounting entity, which means a viewpoint from which accounting is done, have evolved from a creditorship theory to a proprietorship theory, and then to a business entity theory. The business entity theory regards business enterprise itself as a social organization for reconciliation of different interests of several interest groups in a business enterprise or as a going concern rather than as an agent of each interest group such as creditors, proprietors, employees, or government. The business entity theory emphasizes economic relationships of a business enterprise in a complex society rather than legal relationships.

It would well be applied to big businesses which possess huge fixed assets and produce a large amount of goods and sevices. It would also be applied to privately-owned utilities.

Which theory on accounting entity is adequately applied to public enterprises? If public enterprises are viewed from their legal ownership point of view or legal control point of view,

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a proprietorship theory seems to be applied to public enterprises since the national or local government is usually an owner of public enterprises or has strong power to control them through their budgets. Most typical, modern enterprises such as public corporations, however, are operated based upon a principle of self-supporting going concern from economic point of view. If these public enterprises are viewed from economic point of view, a business entity theory may well be applied to them, since a function of public enterprises as a social organization for reconciling many different interests of interest groups in products and rates (fares) is emphasized for further development of public enterprises.

Foundation of Business Accounting

Each accountant could identify several characteristics of business accounting theory based upon his own definition of accounting. The first characteristics of business accounting (1) classifying financial data (figures) of a business entity by accounts and (2) comparing classified financial data since a system of accounting could not exist without concept of account. The whole process of accounting, from recording original data through preparing financial statements, consists of classification of financial data by accounts and comparison of accumulated data in accounts. The most fundamental classification of accounts in business accounting system is that of accounts into "capital" and "profit" accounts. Without this primary classification of accounts, periodic income could not be determined. Could this fundamental principle of business accounting, a classification of accounts into "capital" and "profit" account be applied to an accounting system for public enterprises without any question ? This principle may not necessarily be applied to an accounting system for public enterprises since the separation between capital and profit in public enterprises is not so significant as in business enterprises. A report of the Research Committee on Accounting and Finance of Japanese National Railways, which was presented to President of Japanese National Railways on October 28, 1966, does not necessarily accept the concept of separation between capital and profit prevailing in business accounting system. Some standards for fair accounting treatment and for determination of transportation costs are developed in this report. The discussion on "capital and profit in the Japanese National Railways" and "determination of transportation costs" in the report are especially full of suggestions for the improvement in an accounting system for public enterprises, such as public corporations.

A Concept of Capital in Public Corporations

The Comittee Report states on the concept of capital in the Japanese National Railways (JNR) as follows:

> "For the precise determination of periodic income, a concept of capital should be established. Standards for fair accounting treatment applicable to general private enterprises, especially to stock companies, are theoretically established based upon a general concept of capital derived from the characteristics of stock company. The fact that the accounting standards for JNR are almost same as those for Japanese stock companies

means that the income determination of the JNR is based upon the concept of capital of stock companies. The straight application of the concept of capital of stock companies to the JNR as a public corporation, however, would not be justified. A proper concept of capital should be established for the JNR and then periodic income corresponding to that concept of capital is determined."

Capital of JNR, according to the currently employed classification, consists of (1) capital stock, (2) capital reserve, and (3) profit reserve. This classification of capital corresponds to the classification of capital for stock companies: (1) capital stock, (2) capital surplus, and (3) earned surplus. The Committee Report suggests a new classification of capital taking the characteristics of JNR into consideration:

Capital:
1. original capital
2. donated capital
3. adjusted capital by revaluation
4. earned capital
   a) earned capital carried forward from the previous period
   b) earned capital for the current period

Since capital stock in JNR does not function like legal capital in stock companies, capital stock may be restated as "*original capital*" to disclose the amount of contribution from the Japanese government. The separation of capital reserve from capital stock is no longer necessary unless the necessity of presentation of capital stock is recognized. As for capital reserves, the disclosure of their sources is required not to include them into income determination. Both "*donated capital*" and "*adjusted capital by revaluation*" are not distinguishable from original capital in their function as capital.

One of the most interesting suggestions in the report is abolishment of the concept of profit. The term "profit reserve" was replaced by a newly coined term "*earned capital*". The Committee Report explains the reason for this suggestion as follows:

"It is quite significant to define "profit" in JNR and to separate it from "capital" as precisely as possible. If "profit" is to be a certain type of surplus distributable to outside parties, it should be rigidly separated from "capital". All profit in JNR, however, is to be retained and could not be distributed outside. This is a highly important reason why the nature of profit does not necessarily differ from capital or capital surplus. That is, it seems adequate to regard "profit" as a type of earned capital. This concept of profit may clearly be explained when causes or situations by which profit in JNR is earned are disclosed. The primary reason why periodic revenues exceeds periodic expenses in JNR is that cost of capital is included in the calculation of rates as a cost element.

In this case, cost of capital is nothing more than surplus to be reinvested in JNR in order to meet social requirements for improvement and expansion of services of JNR. The profit as the difference between revenues and expenses is not a distributable surplus but a source of funds to be appropriated to improvement and expansion of facilities or to redemption of bonds and other long term debts.

"Profit reserve" in the currently employed accounting system of JNR may be regarded as an accumulated amount of reinvested funds which were financed through rate (revenues).

Therefore, it might be adequate to consider this amount of funds as "earned capital" rather than "profit"."

The first reason for employing a new concept of "earned capital" is that profit in JNR, a public corporation, is not disposable for dividends or other purposes by law.[1] The Committee Report does not approve the distribution of profit of JNR and insists that public corporations such as the JNR have no disposable profit and profit reserves including profit for the current period do not differ from "capital" in their nature since they are originally constrained to be used as capital.

The second reason is that cost of capital is included in the calculation of rates as a cost element as cited above. Is this new concept of earned capital, which does not separate profit from capital, acceptable?

Capital Structure in Public Corporations

Before the discussion on substantial separation of profit from capital, some problems arising from the newly proposed classification of capital will be examined. The currently employed classification of capital in the accounting system of JNR corresponds to that of stock companies.

The same classification scheme of capital is employed not only in JNR, but also in Nippon Telegraph and Telephone Corporation, Japan Monopoly Corporation, and other public corporations in Japan. This implies that accounting system for public corporations in Japan was founded based upon a Statement of Business Accounting Principles, which was originally established for stock companies in Japan in 1949.

It would not be proper to apply the same classification scheme of capital as that of stock companies to public corporations for the following several reasons. The first reason is concerned with replacement of term "capital stock" by term "original capital". The Committee Report states the nature of "original capital" as follows:

> "The nature of original capital is extremely different from capital stock in stock companies, since it does not function as a base for the calculation of distributable profit and it is not required for JNR to maintain certain amount of assets corresponding to the amount of original capital. Therefore, the original capital in JNR does not function as legal capital in stock companies and is only one class of capital."

If the term "capital stock" employed in JNR is confusable with that of stock companies despite the difference in their nature, the term "capital stock" may be replaced by the term "investment from government" in order to show the amount of capital invested by the Japanese Government. But the Committee Report proposed the use of term "original capital" in relation to other classes of capital, especially "*earned capital*".

The second reason is related to the abolishment of term "capital reserve" or "capital

[1] Japanese National Railways Law, Art. 61 par. 1: "In case profit is realized by the settlement of accounts for each business year, the Corporation shall appropriate such profit for covering the loss carried over from the preceding business year, and if there is still a balance left, such balance shall be disposed of as profit reserve."

surplus". The concept of capital reserve or capital surplus can exist only when the concept of capital stock is employed and the separation of capital surplus from capital stock is required to maintain a given amount of legal capital for the protection of creditors' interests. The maintenance of legal capital is not significant in the accounting system for public corporations. The abolishment of the term "capital surplus itself" is acceptable but the usage and explanation of term "donated capital" in the Committee Report are not necessarily adequate. The Report states that the donated capital does not differ in its nature from capital invested by the Japanese government. However, the donated capital is usually contributed by special groups of users of services produced by JNR and its nature is different from that of original capital or "investment" by the government.

The third reason is concerned with "adjusted capital by evaluation". The old term "revaluation reserve", which is one element of capital reserves, is replaced by a new term "adjusted capital by revaluation" emphasizing its function as capital. If its function as capital is emphasized, as the Committee Report states, the "adjusted capital by revaluation" should be reclassified into original capital and donated capital. The Committee Report, however, treats it as an independent item because of the practical difficulty in separation. The Committee Report also took the position that the formal capitalization of revaluation reserve was not necessary. If the "adjusted capital by revaluation" is to be presented as a separate item, the term "adjusted amount of assets by revaluation" may show the fact of revaluation of assets better than the term "adjusted capital by revaluation".

Profit in Public Corporations

As discussed earlier, one of the most interesting suggestions in the Committee Report was the replacement of "profit reserve" by *"earned capital"*.

The first reason for employing the concept of "earned capital" is that there exists no "distributable profit" in public corporations. This reason seems to be insufficient. As far as a matching process of periodic revenues and periodic expenses based upon the accrual basis is employed in the accounting system for JNR, it is not justifiable to disapprove "periodic profit" as the difference between periodic revenues and periodic expenses. Even though the primary reason why profit is earned in JNR is that cost of capital is included in cost elements of rates, it is the problem of pricing and the difference between revenues and expenses should be recognized as profit for the financial accounting purposes. If this difference between revenues and expenses is regarded not as profit but as earned capital or diminished capital, as indicated in the Committee Report, this difference should theoretically be regarded as capital receipts or capital disbursements of JNR.

From the practical point of view, the nature of cost of capital in the case of JNR is different from customer's contribution to the cost of constructing facilities in the privately owned utilities. As far as the cost of capital is included in rates as revenues, it should not be excluded from the calculation of periodic income. Otherwise, the confusion among basic concepts used in public corporation accounting would be arisen. Primary function of business accounting is the precise determination of periodic profit by separating it from capital which was originally invested to make profit. This function or process of business accounting could not be neglected even by the characteristics of capital in the public corporations. This means that the existence of profit concept in the public corporations could not be denied by the concept of "earned capital".

The problem of business profit is other side of the problem of business capital. Recognition of business capital could not be achieved without recognition of business profit. The Committee Report recognizes the concept of "business capital" with special character and then it cannot but recognize an accounting concept of profit. If the special character of capital in JNR is interpreted as funds, as often indicated in the report, the accounting system for JNR should be a fund accounting system based upon receipts and disbursements of cash and should be distinguished from regular accounting system based upon the accrual basis. The currently employed accounting system for JNR is still based upon the accrual basis. Since the proposal of replacing the concept of "profit" by the concept of "earned capital" is placed somewhere between fund accounting and business accounting based upon the accrual basis, the author hesitates to accept this proposal.

The second reason for replacing "profit reserve" concept by "earned capital" concept is that those part of rates which profit are cost of capital. From the financial accounting point of view those part should first be treated as profit. The Committee Report tried to justify the "earned capital" concept from the viewpoint of "cost compensation principle", which is a basic principle of fare pricing for general public corporations, by stating that:

> "The cost compensation principle as a basic principle of fare pricing for public corporations approve publicly necessary surplus. Fair pricing of rates for public corporations should not only guarantee sound development of public corporations but also be appropriate to national economy as a whole. Fair rates should compensate not only operating cost in a narrow sense but also other type of cost including publicly necessary surplus for survival of public corporations. The term "publicly necessary surplus" does not mean distributable profit to investors but means surplus as a source of capital which should be reinvested in public corporations in order to meet social requirement for improvement and expansion of services of public corporations."

The cost compensation principle, according to the Committee Report, is a principle to determine a price of rates which can compensate all cost of production of services by a public corporation based upon a self-suporting assumption.

The Committee Report states the nature of cost compensation principle in relation to "self-supporting accounting system" as follows:

> "Two types of concept of self-supporting accounting system should be identified. The first type of concept is understood as a guiding principle for public corporation to maintain economic autonomy as a business enterprise and to promote more efficient management. The second type of concept is usually understood as a principle for balancing cash receipts and cash disbursements—operating only or including capital receipts and disbursements. The cost compensation principle is supported by the first type of concept of self-supporting accounting system. It aims principally at balancing operating cash receipts (revenues) and operating cash disbursements (expenses) from financial accounting point of view, and then approves the inclusion of publicly necessary surplus into cost elements of rates for public corporations from pricing point of view."

In this statement, the relationship between cost compensation principle and "earned capital" is quite vague. If a certain amount of publicly necessary surplus is included into rates, operating receipts (revenues) would exceed operating disbursements (expenses) by that amount of surplus as far as cost compensation principle is followed. Why is this difference interpreted not as profit but as "capital" from financial accounting point of view?

Periodic Income Determination and Pricing of Rates

The foregoing discussion on profit and capital in public corporations contained two theoretically distinguishable, though practically interrelated, accounting problems. The one is periodic income determination for financial accounting purpose and the other is pricing of rates. These two have their own purpose even though they may be closely related to each other at some points through the mechanism of costing.

In the system of public corporations based upon the cost compensation principle, the rates are determined by actual cost of services produced. That is, rates of services produced by public corporations are generally determined based upon historical or actual cost incurred for the current period or prior periods. In this sense, the pricing of rates for public corporations is fundamentally different from that for private enterprises where prices of products are dependent upon many factors other than actual costs.

In addition to actual costs or expenses incurred to produce services, some other cost elements, such as cost for future expansion, are often charged to rates under the cost compensation principle. If it is believed to be appropriate, practically and theoretically, that funds for improvement, expansion, and refund of old debt used for expansion be financed through fare revenues, or if it is difficult to finance such fund through other channels, it would be accepted to finance such funds through special group of customers or general customers. The application of publicly necessary surplus (profit from financial accounting point of view) to improvement or expansion of facilities of public corporations would theoretically be justified only when it is justified from the viewpoint of national economy—optimal allocation of national economic resources.

When a special group of customers enjoys benefits directly from the expansion of facilities such as new construction of railways, the funds for expansion are often financed through the special group of customers in order to balance burden of other general customers. The acquisition of fixed assets or receipts of funds from the special group of customers for expansion purpose should not be included into the periodic income determination. This type of assets acquired should be treated as "donated facilities", and this treatment would be consistent with a "Statement of Business Accounting Principles".

When rates are determined by charging publicly necessary surplus to the general customers, however, funds for expansion are financed through fare revenues unless the separation between proper rates and special part of rates for expansion is possible. The publicly necessary surplus for expansion financed through rates should not be treated as capital for the financial accounting purpose. It constitutes profit. Two accounting problems—periodic income determination and pricing of rates—would be solved without any inconsistency, if such part of profit as the publicly necessary surplus contributed by general customers is retained in the public corporation for expansion purpose through the process of profit appropriation. Therefore, contribution from the special group of customers, whether in terms of cash or other assets, is presented as "donated facilities" on the credit side of the balance sheet and contribution from general customers through rates is first presented as profit in the income statement and such part of profit that is reinvested (or appropriated for expansion) is then transferred to "contribution in aid of construction" through the process of profit appropriation. These two "donated facilities" and "contribution in aid of construction" accounts constitute a larger account "capital contribution from customers". If all profit for the current period is reinvested, the amount of profit would equal to the amount of "contribution in aid of construction" for the current period. The author insists on the replacement of term "earned capital", which is employed in the Committee Report, by the term "capital contribution from customers", which emphasizes the fact that the funds for construction are financed from customers through direct donation of facilities or rates. In order to disclose both features of this type of contribution from customers, that is "capital contribution from customers" are subdivided into:

1) donated facilities (capital surplus),
2) accumulated contribution in aid of construction (retained earnings), and
3) contribution in aid of construction for the current period (profit for the current period).

The thought of accounting treatment embodies in the above classification may tentatively be called "capital construction from customers" theory.

A Review of Cost Compensation Principle and Publicly Necessary Surplus (Cost of Capital) Theory

The "Capital Contribution from Customers" theory might be criticized or doubted in several points. The first criticism is that the "capital contribution from customers" theory emphasizes the formal aspect of financial accounting. When new accounting concepts and financial principles are to be established for public corporations based upon their unique characteristics, the currently employed structure of accounting should not be reinformed so radically as far as new concepts are compatible with existing concepts. Even when completely new concepts and principles are developed, the basic structure of accounting should be maintained or modified as slightly as possible in the area where business accounting is applicable.

The second criticism is that the "capital contribution from customer" theory employs the concept of profit for public corporations. The third one is that there is no process of profit appropriation in public corporations. Since these two criticisms are interrelated, they are reviewed together. The question whether the concept of profit is applicable to public enterprises, such as public corporations has long been discussed by many researchers.

The Committee Report denies the concept of profit by stating that:

> "The principle of pricing for public corporations should not be based upon "profit-making-principle" which is usually applicable to general business enterprises. The public corporations could not apply "fair-return-principle" employed by privately owned utilities. The general principle of pricing for monopolistic public corporations should be "cost compensation principles".

This report seems to imply that "profit-making-principle" is incompatible with "cost compensation principle" which emphasizes the public aspect of public corporations. However, that public corporations do not usually seek profit-making should theoretically be distinguished from that public corporations can generate accounting profit in the process of operations.

Even when rates are determined based upon "cost compensation principles", public corporations might or might not earn profit. The "cost compensation principles" are applied to public corporations in order to avoid undue monopolistic profit-making by public corporations. However, certain amount of profit as publicly necessary surplus must be earned by public corporations for their survival and sound development. The Committee Report limits this amount of publicly necessary surplus to the amount of cost of capital. From the viewpoint of national economy, the inclusion of cost of capital into rates is justified. But the cost of capital could not be treated as expense from financial accounting point of view. Since the amount of cost of capital is collected through fare revenue, it should be treated as accounting profit first and it should be transferred to ("capital contribution from customers") account through the process of profit appropriation.

Capital Contribution from Customers Theory and Cost Compensation Principle

The relation between the capital contribution from customers thory and the cost compensation principle will be discussed in this section. The capital contribution from customers theory approves that a part of funds for expansion is financed by customers through direct donation or rates (including publicly necessary surplus) because of the special characteristics of public corporations. The cost compensation principle is that the rates of public corporations should be determined based upon the production cost of services rendered by public corporations. The Committee Report approves the inclusion of publicly necessary surplus into rates by recognizing it as cost of capital. The cost compensation principle is a principle for pricing of rates of public corporations and the capital contribution from customers theory is a principle for accounting treatment of publicly necessary surplus which is contributed by customers through rates.

W. Arthur Lewis, for example, points out several theoretical reasons why the cost compensation principle based upon production cost is employed for the determination of rates in relation to the pricing policy for public corporations in England.[2] The first reason is related to the stabilization of price level and the equitable charge of expenses from the viewpoint of national economy. The second reason is concerned with the maintenance of the same production level of public corporations. Actually, however, public corporations in England charge rates to customers which exceed production cost. The difference between rates and actual production cost is equivalent to publicly necessary surplus discussed earlier and its inclusion into rates and its reinvestment are approved under some conditions from the viewpoint of accumulation of national capital. Some scholars approve the inclusion of fund applicable to the refund of old debts into rates in order to reduce future burden of interest payment. This thought implies the possibility of ownership of public corporations by customers.

[2] W. Arthur Lewis, The price policy of public corporations; in "Problems of Nationalized Industry" edited by William A. Robson, (London, George Allen & Unwin Ltd. 1955), pp. 181-190.

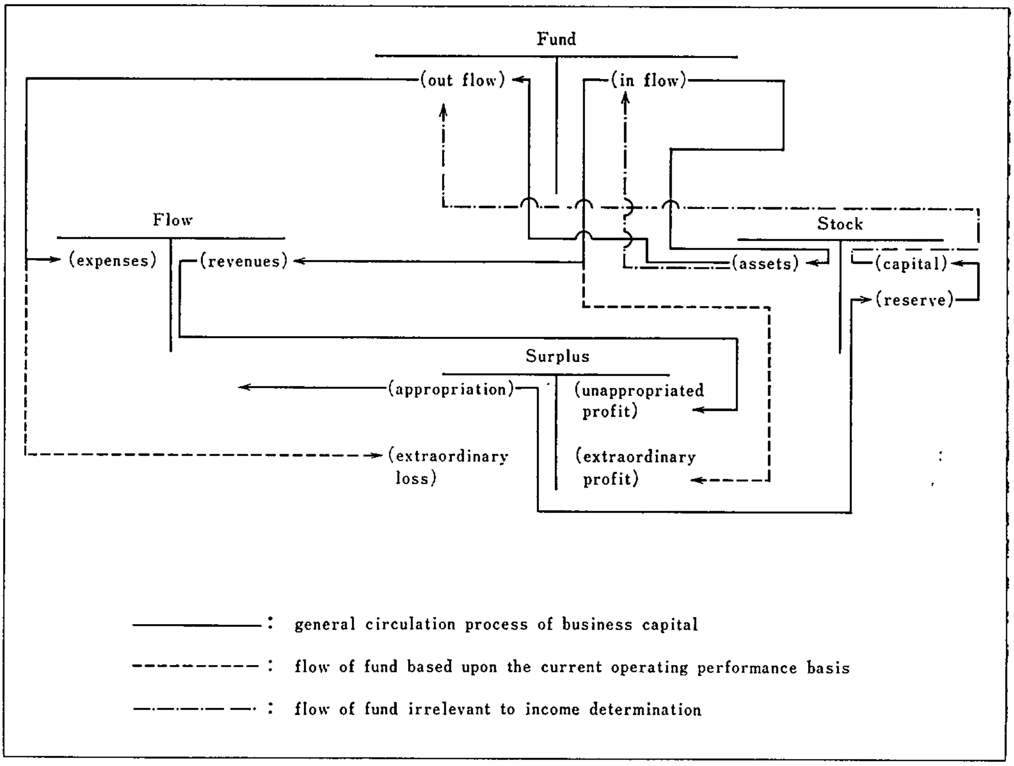
Thus, the cost compensation principle for pricing of rates which admits the inclusion of some portion of funds for expansion into rates is related to the capital contribution from customers theory by the mechanism of compulsory saving by customers (reinvestment of profit into public corporations) or of alternative ownership by customers.

The modern management of public corporations must meet two functional imperatives of introduction of efficiency principle and promotion of economic welfare of society. The public corporations must integrate two characteristics of being economical and being public in their productive operations. However, it seems to be difficult to establish one basic principle for public corporation management by integrating two those characteristics. The principle of business economy may be considered as the primary principle, but it should be restricted by the principle of being public to the extent that the interests of customers are protected against unlimited execution of the principle of business economy.

The cost compensation principle for pricing of rates of public corporation is based upon the principle of self-supporting in addition to the principle of compensation of production cost. Therefore, the major function of accounting for public corporations is to separate between production cost portion of rates and publicly necessary surplus portion of rates which would be reinvested for future development of business.

Concluding Remarks

When productive activities of public corporations are emphasized, taking their special characteristics into consideration, the separation between capital and profit is significant for accounting purpose. If, socio-economic aspect of public corporations such as public welfare is emphasized, the concept of profit would disappear. The structure of fund accounting may be employed for public corporations to replace the income determination accounting. Under the system of fund accounting, the concept of "Business capital" would be replaced by the concept of "Fund". The basic structure of fund accounting may be simply diagramed as follows:



As the above diagram indicates, the structure of fund accounting is composed of three accounts: "Fund", "Flow" and "Stock". The "Surplus" account connects "Flow" account with "Stock" account and functions as a complementary account for adjustment of the periodic amount of flow. In the structure of fund accounting where "Flow" account is connected directly with "Stock" account, there is no need for keeping "Surplus" account.

The term "Fund" is interpreted here rather broadly than usual usage and includes all means available for payment. The "in-flow" of the "Fund" account represents any increases in cash on hand, cash in bank, and accounts receivable and the "out-flow" of the "Fund" account represents any decreases in cash on hand, cash in bank, and accounts payable. In short, the "Fund" account shows all processes of settlement of short-term credit transactions in the enterprise. The "Fund" account usually has its debit balance, but occasionally has its credit balance. The "Fund" account for public corporations shows not only the matching process of cash receipts with cash disbursements, both theoretically and practically,[3] but also

[3] Under the assumption of "Totalrechnung" in the German dynamic theory of accounting, where whole life of enterprise from its opening through its closing business is considered to be one accounting period, the results of business operations, namely profit, is calculated as the difference between total cash receipts and total cash disbursements. The "matching process of cash receipts and cash disbursements" here has some relationships to this type of cash calculation.

all increases and decreases in short-term credit.

The "Stock" account shows capital, long-term liabilities, and other capital receipts out of cash receipts on the credit side and shows uncollected amounts of the cash disbursement by the end of the current period, that is capital disbursement, on the debit side. The most part of assets is composed of fixed assets, unexpired portion of inventories is also included in the assets. The amount of "capital", representing sources of funds, is not necessarily equal to the amount of "assets", representing applied forms of funds. The structure of this "Stock" account bears a slight resemblance to that of "capital" account under the double account system in that the "Stock" account shows the matching process of capital receipts with capital disbursements. The "Stock" account employes here, however, is fundamentally different from the "capital" account under the double account system because the assets in the "Stock" account are related to expenses in the "Flow" account and reserve in the "Stock" account are related to the appropriation of surplus in the "Surplus" account.[4]

In the "Flow" account, the matching process of periodic revenue receipts (revenues) with periodic revenue expenditures (expenses) is shown. The matching process of revenues with expenses is generally regarded as one of the most important processes in the business accounting for the following three reasons: Firstly, the degree of attainment of business objectives or the results of business operations is judged by the amount of business income which is determined through the matching process of revenues with expenses. This is supported by a rather fundamental idea that the business accounting must serve principally for the income determination as far as the business enterprise is profit seeking organization.

Secondly, the accurate income determination for a certain accounting period is guaranteed by the accurate matching of periodic revenues with periodic expenses. The measurement of periodic revenues and periodic expenses, which is a central problem of accounting, is being done based upon the accrual basis. Although all revenues and expenses are eventually equal to fund in-flow and fund out-flow, as the diagram indicates, the timing of recognition of revenues and expenses is often different from that of fund flow. A part of fund out-flow, such as capital expenditure, is recognized as expenses during the later periods passing through the "Stock" account. Depreciation expense is an example of this type of fund out-flow. When the amount of income is regarded as a success indicator, only those revenues and expenses which are relevant to the operating performance for the current period are included in the matching process. Extraordinary profit and loss arising from disaster or prior period adjustments are excluded from periodic income determination. This viewpoint of income determination, which is usually designated current operating performance theory, has long been employed in the Public Utility Accounting in the United States. Under this viewpoint, extraordinary items and prior period adjustments are directly entered into the "Surplus" account without passing through the "Flow" account, as the diagram indicates.

[4] Under the double account system, capital receipts are matched with capital expenditures (fixed assets) in capital account and revenue receipts are matched with revenue expenditures in income account which is kept separately from the capital account. Working capital which represents the balance of capital receipt and expenditure items, and each balance of revenue receipt and expenditure items are shown in the general balance sheet.

Thirdly, income determination is regarded as an important function of accounting for obtaining some indices of maintenance and future development of the enterprise, when the total amount of revenues is not sufficient to cover the total amount of expenses, the enterprise cannot expect its survival. The more margin of revenues over expenses the enterprise has, the more it could expect its further development in the future. The amount of income functions not only as an index of past performance but also as index of future development. This function of income figure is not so direct in the general private enterprises, but has very important influence upon pricing of rate in public enterprises.

The "Surplus" account connects the "Flow" account with the "Stock" account. It shows the amount of extraordinary items and prior period adjustments and the amount of profit appropriation. Some portion of profit is disposed outside as dividends and the residual portion of profit is retained in the enterprise. The latter, which is usually designated "reserve", represents the amount of reinvested amount of profit through self-financing process.[5] In public enterprises, most portion of profit is retained as reserve.

In public enterprises, various types of financial information, both for external use and internal use, are prepared through the accounting system based upon the four basic concepts: "fund", "flow", "stock" and "surplus". One of the discriminating characteristics of accounting system for public enterprises is how to keep the organic relationship between the accountability for application of funds in public enterprises and the public budgets in addition to the regular financial reporting.

[5] In addition to retained earnings as reserve, accumulated depreciation expenses are often regarded as a source of fund through self-financing process. From the viewpoint of fund flow, accumulated depreciation expenses increase fund of the enterprise through revenue receipts, but the value of fixed assets decreases correspondingly from the viewpoint of asset stock. For accounting purpose, self-financing of additional capital should be limited to retained earnings. In the case of accelerated depreciation, however, those portion of depreciation expenses which exceeds regular depreciation expenses could perform substantially self-financing function in the same sense as reserve.