

A STUDY FOR
IMPROVING THE FINANCIAL
ADMINISTRATION OF THE GOVERNMENTAL
DEPARTMENT-TYPE ENTERPRISES
IN KOREA

by

Lee, Woong Keun

CONTENTS

CHAPTER I INTRODUCTION

1. Characteristics of the Government Enterprises in Korea	193
2. Necessity for Improvement of the Financial System	195
3. Circumstances of Adopting a Business Type Accounting System	196
(1) Necessity for Adopting a Business Type Accounting System	197
A. Adoption of Accrual Basis Accounting	198
B. Reformation into a Business Type Budgetary System	198
C. Proper Rate-making Based on the Establishment of a Cost Accounting System.....	198
D. Adoption of Reasonable Business Type Accounting Procedures	198
(2) Circumstances of Adopting a Business Type Accounting System	198

CHAPTER II RATE-MAKING POLICY

1. Principles of Rate-making.....	200
(1) Composition of Cost Factors.....	201
A. Operating Expenses.....	202
B. Depreciation Charges	203
C. Fund Procurement Expenses	203
D. Taxes and Similar Expenses	203
E. Reserves for Stabilization	203
F. Bond Redemption or Capital Amortization.....	204
G. Reserve for Facility Improvement.....	204
(2) Standards for Evaluation of Accurate Costs	205
2. Rate-making Organization	207
(1) Necessity of Rate Control	207
(2) Rate Control Organization	208
A. Administrative Rate-making Control	208
B. Legislative Rate-making and Control.....	208
C. Rate-making by the Public Enterprise Itself.....	208
D. Rate-making and Control by a Rate Controlling Tribunal	209
3. Direction of Improving the Rate-making Policy for the Government Enterprises.....	209
(1) Principles of Rate-making	209
(2) Organization for Rate-making.....	210

CHAPTER III FUND-FINANCING AND THE PROFIT AND LOSS DISPOSAL SYSTEM

1. Fund-financing System	211
(1) Principle of Self-financing	211
A. Definition of the Fund-financing	211
B. Financing External Funds	212
(2) Criticism on the Fund-financing System of the Governmental Department Type Enterprises	213

2. Profit and Loss Disposal System	214
(1) Principle of Self-disposal of Profit and Loss	214
A. Concept of Profit and Loss in the Public Enterprises	214
B. Source of the Public Enterprise Profit.....	214
C. Method of Profit and Loss Disposal in the Public Enterprises	215
D. Purpose of Profit Disposal	216
(2) Criticism on the Profit and Loss Disposal System of the Government Enterprises.....	217
CHAPTER IV BUDGETARY SYSTEM	
1. Characteristics of a Public Enterprise Budget.....	218
(1) General Characteristics of a Public Enterprise Budget.....	218
(2) Characteristics of the Governmental Department Type Enterprise Budget	219
2. Current Budgetary System of the Governmental Department Type Enterprises	220
(1) Formulation and Passage of the Budget.....	220
(2) Budget Flexibility.....	221
(3) Dual System of Budget and Closing Accounts	221
3. Directions of Improving the Budgetary System of the Government Enterprises.....	222
(1) Providing Budgetary Flexibility.....	222
A. Excluding the Internal Budget from Legislative Review	222
B. Providing Budgetary Flexibility by the General Provision of Budget	223
C. Providing Flexibility in the Execution of the Budget	223
D. Maintaining the Revolving Funds and Reserve Stocks	223
(2) Budgeting on Accrual Basis	224
(3) Adopting a Cost Based Budget	227
(4) Unification of Budgeting and Accounting.....	227
CHAPTER V CONCLUSION	
Bibliography.....	228

CHAPTER I INTRODUCTION

1. Characteristics of the Government Enterprises in Korea

The purposes of public enterprise activities and the varieties of ways in which government conduct them virtually defy classification. In some cases commercial-type activity may be so mingled with traditional departmental activity that its enterprise character is lost. Conversely, enterprise activity may be endowed with governmental authority but may in all other respects remain private in nature; without political control, without budgetary control, conducting programs with no discernible relation to other governmental programs.⁽¹⁾

At considerable risk of oversimplification, three organizational forms of public enterprise may be distinguished. First are the undertakings controlled by departmental administration, which may loosely be described as incidental commercial activities. These may be almost wholly integrated with departmental finances, or may be partially isolated and financed by means of a working capital fund.

A second organizational type is the joint stock company, which is established under general incorporation statutes with shares of common stock as evidence of ownership rights. The shares of stock may be owned by government, in whole or in part. Control over the company may be exerted through exercise of the ownership rights attaching to the common stock; or the government may refrain from exerting its ownership rights, and control may, for all practical purposes, remain in private hands. In the latter case the undertaking may be as wholly private as if government had simply loaned funds to a private corporation.

A third organizational form is the public corporation. In its pure form it has the following legal characteristics: (1) it is created by a specific statute for a specific purpose; (2) there are no shares of common stock and therefore no shareholders; (3) the government(administration) is ultimately responsible for its management; (4) a management group is appointed by the government and charged with its day-to-day affairs; (5) the corporation has an independent legal status, is a legal person in the eyes of the law; (6) the corporation is subject to specified standards of accountability, including financial accountability.⁽²⁾

The government enterprises in Korea, which are the subjects of this study, are mostly of to the first type in the above classification. Therefore, its organization is formed as a part of the general administrative branch structure, consisting of 1) railway, 2) communication, 3) monopolistic business, 4) grain control and 5) procurement and supply.

As is known, the government enterprises in Korea⁽³⁾ are not only large scale and hold a

(1) J. Burkhead; *Government Budgeting*, John Wiley & Sons Inc., New York, 1956, pp. 400-401.

(2) W. Friedman; *The Public Corporation*, Carswell Company, Ltd., Toronto, 1954, pp.164-165.

(3) The term "government enterprise" used to refers all governmental department type enterprises in accordance with "the Budget and Accounting Act for the Government Enterprise," January 1962.

large portion of the national financial resources, but also exert great influence on the national economy as well as the social welfare. Therefore, the efficient management of the government enterprises in Korea have great significance from that point of view. Looking back upon the past, it is true that the government enterprises in Korea have not been able to accomplish managerial improvement in spite of their great importance described above. And it is a fact that their managerial condition is identical to bureaucratic management, and consequently, inefficient management practices remain unchanged.⁽⁴⁾

In explaining why the government enterprises in Korea have not been able to achieve managerial improvement in their system, it can be summarized as: "lack of independence due to the bureaucratic control."⁽⁵⁾

The inefficiency of the government enterprises in Korea can be directly attributed to the following four factors: First, it has been impossible to maintain a consistency in the top management policy due to political interference. It has been influenced directly by legislative interference because, the enterprises are similar to the other administrative organizations. Accordingly, the top management policy has frequently been changed due to political replacement of the responsible minister. Under those circumstances, it is easy to understand why it was not possible to achieve managerial improvement in accordance with consistent policy.

Second, there is inefficiency due to the administrative "strait-jacket." Although enterprise characteristics are required for the government enterprises in Korea, flexible managerial activities have always been hampered due to their subjugation to government control over reorganization of internal structure in the same manner as government agencies. Furthermore, the managerial system has automatically been centralized, and consequently, the efficiency derived from decentralization and resultant initiative and ingenuity of local management can not be expected in these circumstances.

Third, lack of financial independence prevented flexible activities which are essential for efficient management of government enterprises. In the government enterprises in Korea, the activities represented by the three special budgetary accounts, (railway, communication, and monopoly) were provided with some business-like guidelines by the enactment of "the Budget and Accounting Act for Government Enterprise" on January 1, 1961. Still, funds necessary for the operations shall be approved by the legislative branch every year. Their independent decisions of rate-making, fund financing and appropriation of surplus are still restricted. Accordingly, actual financial autonomy is still far beyond realization.

Last, the personnel system in these enterprises is unreasonable. The officials and employees of the Korean government enterprises are subject to the restriction as general government

(4) Writer's manuscript; *"An Effective Way for Managerial Improvement of the Government Enterprise" Business Management*, Seoul, Feb. 1960.

(5) Writer's pamphlet; *"The Financial System of Public Enterprise in Korea,"* School of Public Administration, Seoul National University, Seoul, 1961, pp. 7-10.

officials due to the application to them of "the Civil Service Law". In other words, the appointment, termination, wages and the other service conditions of the officials and employees of government enterprises in Korea are treated as government employees under the provisions of "the Civil Service Law". Therefore, the personnel system does not satisfactorily provide the necessary flexibility for full utilization of the operational abilities and efficiency of the employees.

In review of the above important factors of unreasonable management system for the government enterprises in Korea, it is apparent that the governmental department type enterprises are inadequate for successful accomplishment of the economic task because of the organization or structure of government and autonomous public entities is always inflexible and bureaucratic. Originally, government and autonomous public entities are organized for political and judicial purposes, therefore governmental department enterprises are organized with entirely different purpose than their achievement of economic efficiency. Accordingly, it can be concluded that it is inadequate organization in the means of theoretically and also practically, especially for management of the socialized production means.⁽⁵⁾

As outlined above, it is necessary to correct those unreasonable factors in order to accomplish effective management and avoid the great cause of inefficiency caused by bureaucratic influence under present type of the government enterprise.

In summary, the government enterprises in Korea that have not yet advanced from bureaucratic management backwardness, shall be defined as an "anachronic existence" and it is needless to here again emphasize the necessity of improvement in this area.

2. Necessity for Improvement of the Financial System

The operational characteristics of the government enterprises in Korea especially the factors of irrational management has been previously reviewed, and therefore, it is urgent that those unreasonable factors should be eliminated for the rationalization of the government enterprises in Korea.

And then, how do we realize systematic improvement for the rationalization of the government enterprises in Korea? In regard to this problem, it is necessary to analyse methods from two sides considering the practical circumstances which the Korean government enterprises faced.

First, it is necessary to examine the method of transferring to the public corporation system by the harmonization of both public interest and the enterprise characteristic. In other words, the organizational form of the present governmental department type enterprise should be transformed to a form which combines both elements of rationalization and the elements of socialization, as stated by Professor Dimock.⁽⁶⁾

(5) H. Urabe; *The Management of Public Enterprise*, Kihodo, Ltd., Tokyo, 1954, p. 103.

(6) M.E. Dimock; *British Public Utilities and National Development*, Allen & Unwin, London, 1933, p. 303.

Second, it is necessary to examine the method of improving their financial system by establishment of financial autonomy by adoption of the business accounting system introduced since January 1, 1961.

It seems ideal to accomplish the above mentioned two improvements simultaneously because they are the most essential conditions for efficient management of the government enterprises in Korea. However, it appears proper to accomplish them in a long term program for the following reasons: 1) it may require a few years for the reorganization to achieve managerial independence because it calls for a complete systemic and personnel management reorganization, many legal problems will arise and time required for definition of the enterprise capital, in case the first method is adopted, 2) in numberable difficulties arise in any epoch-making systemic reformation.

Accordingly, the latter device is applicable for the government enterprises under present circumstances.

In order to accomplish managerial improvement of the government enterprises in Korea by enforcement of a business type accounting system in accordance with the promulgation of "the Budget and Accounting Act for Government Enterprise" of January 1, 1961, from a practical viewpoint, the most urgent task would seem to be the establishment of financial autonomy which is necessary for reorganization.

For the effective accomplishment of managerial improvement through flexible financial activities, it is necessary to adopt a business type accounting system that makes possible the obtaining of the data necessary to the management and operations by clarifying the financial conditions of management. This will contribute to effective managerial improvement by reforming a backward financial system, such as, former heteronomous and baseless rate-making policies, unreasonable fund-procurement policies and surplus disposal system, and non-productive economic base budgetary systems which neglect sound business principles and flexibility.

In summary, the proper reformation of the financial system, upon adoption of a business type accounting system, is most important, as it establishes the basic systemic conditions required for managerial improvement of the government enterprises.

Thus, the purpose of this thesis is to present guidelines for the managerial improvement of the government enterprises in Korea by studying and analyzing the relationship between a selfsupporting financial system for public enterprises after adopting a business accounting system incorporating rate-making policies, procurement of funds, and a surplus disposal system and the budget allocation system.

3. Circumstances of Adopting a Business Type Accounting System

In order to accomplish managerial improvement in the governmental department type enterprises in Korea, it is essential, as previously explained, to adopt a public corporation system with the independent managerial form. Both political and administrative factors based on public

interest and efficient management factors based on business principles should be harmonized in the above organizational form.

However, this requires considerable time and should overcome the various difficulties pertaining to reorganization. Firstly, a business type accounting system should be adopted for the budgeting and accounting of government enterprises as promulgated by "the Budget and Accounting Act for Government Enterprise" on January 1, 1961. This financial independence will pave the way for future reformation to a public corporation system. By adopting the self-supporting governmental department type enterprise form, practiced by the British Department of Communication or the public owned enterprises of the German, as well as Japanese local government, the public corporation image may be approached.⁽⁷⁾

Accordingly, it is necessary to review the circumstances of adopting a business type accounting system.

(1) Necessity of Adopting a Business Type Accounting System

Before studying the circumstances of adopting a business accounting system, it is desirable to present a brief explanation regarding the necessity for such a system.

The accounting system of the government enterprises in Korea, prior to 1961, was a cash basis and single-bookkeeping system following the general government office accounting system which is based on consumption-economic units.⁽⁸⁾ Therefore, it has been impossible to achieve numerical assurance of financial condition and operating results, which is an essential requirement for business management, and it was not possible, under this system of accounting, to manage properly the operations based on numerical control and to find the means of increasing operational efficiency, as it was impossible to establish the systems necessary for management, such as cost accounting and budgetary control. Accordingly, it is absolutely necessary to transform the past government office accounting system to a business type accounting system in order to assure managerial improvement through numerical control of government enterprise costs. In other words, it is necessary to adopt a business type accounting system to provide assurance of accurate financial condition and operating results of enterprises using the double entry, accrual bookkeeping method.

Adoption of the system will provide the following: 1) to be possible to realize accurate operating performance based on an accrual basis, 2) to be possible to reorganize flexible business type budgetary system, 3) to be possible to establish an adequate rate-making system, and 4) to be possible to take systemic accounting procedures in accordance with common

(7) The British Department of Communication, upon recommendation of report of Bridgeman Committee, in 1924, adopted the business type accounting system. It also established the "Postal Fund" as an independent revolving fund.

(8) Writers Pamphlet; *A Study for Managerial Improvement of Transportation Service in Korea*, published by the Bureau of Finance, Ministry of Transportation, Republic of Korea.

business accounting procedures and with closing accounts methods.

A. Adoption of Accrual Basis Accounting

Instead of the old government office accounting system of cash-basis accounting, which merely records, calculates and adjusts the receipts and payments of cash, a reorganization to an accrual basis accounting system will record, calculate and adjust all the increases or decreases and changes of economic values within the enterprises. This accounting control reflects not only the receipts and disbursement of cash, but records all claims and obligations accruing in the business transactions, production and consumption of commodities and services, and all increases or decreases of fixed assets, thereby contributing to the possibility of estimating a relatively accurate assurance of operating performance. Particularly, the calculation of depreciation will greatly contribute to an accurate evaluation of business operations.

B. Reformation into a Business Type Budgetary System

The old budgetary system, which was based on the economic units of consumption, had been lacking flexibility in the characteristics of the enterprises. It is necessary to reform into the elastic business type budgetary system in order to achieve managerial efficiency through flexible financial activities. This kind of elasticity of the budgetary system will be accomplished only by adoption of a business type accounting system.

C. Proper Rate-making Based on the Establishment of a Cost Accounting System

An accurate cost accounting system is the most fundamental indicator of an efficient management policy. A cost accounting system contributes to the proper control of the operational activities and increases the operating efficiency of managerial accounting. It is required for proper rate-making.

D. Adoption of a Reasonable Business Accounting Type Accounting Procedures

The government office accounting procedures are irrational when compared to the procedures of a business accounting system. Adoption of a business accounting system, will accomplish institution of reasonable fiscal practices, such as, internal account system, recording on ledger or voucher, adjusting process, form of financial statements and method of financial reports, under the principle of business accounting system.

(2) Circumstances of Adopting Business Type Accounting System

The following is a brief outline of the circumstances of adopting a business type accounting system which was undertaken preliminary to the reorganization of the government enterprise financial system in Korea.⁽⁹⁾

(9) Outline of the reorganizational work for the business type accounting system, prepared by the Finance Bureau, Ministry of Transportation, Finance Bureau of Ministry of Communication and the Controller Bureau of the Office of Monopoly, Republic of Korea.

The reorganization of the Korean government enterprise accounting system was earnestly started in the early part of 1960. The office in charge of the reorganization was the Bureau of Budget, Ministry of Finance. Its work began with the establishment of a committee for studying the application of a business type accounting system in the Ministry of Finance, in order to study possibilities of transferring special accounts of railway, communication and monopoly into the business type accounting system. This committee had been organized to study the reorganization of the accounting system. Forty meetings were held with representatives of the academic field and other concerned people at the working level, prior to adopting a business type accounting system on January 1, 1961.

The special accounts of railway, communication and monopoly had set two years of preparatory period for implementing the business type accounting system, ending 1960. During this period, they prepared for the new system by supplementing the organization and employees to conform with the task of reorganization. An outline of the work to be accomplished during the preparatory period is abstracted below:

Firstly, study and collection of data by dispatching an observation team to study the accounting system of foreign countries. They made several observation tours of similar facilities in the United States, Japan, Formosa and Philippines, and reviewed the accounting system of their government enterprises. It was recognized that the most adequate system under the present circumstances in Korea is the business accounting system of the postal service, government owned railway, telegram and telephone corporation and monopoly corporation in Japan. It was agreed to study and use the Japanese system as a standard for reorganization and the Formosan system as a reference guide.

Secondly, provision of legislation and regulations prior to establishing a business type accounting system. First, special account laws, and regulations relative to their application, were abrogated for railway, communication and monopoly. Temporary acts and regulations relative to their application to the special accounts of railway, communication and monopoly were promulgated on January 1, 1961. This transitional legislation made it possible to abolish the budgetary account system and assure operating results of the business during the interim period by classifying budgets into items based on the type of business accounts. In order to replace the above transitional legislation, "the Budget and Accounting Act for Government Enterprise" was promulgated as Law No. 928, on December 31, 1961, and the regulations relative to its application, were effected as Cabinet Decree No. 383, on January 22, 1962. Application of the above law limited to railway, communication, monopoly, supply and grain control. "The Budget and Accounting Act for Government Enterprise" provided a provision which deferred application of the Law to grain control and supply until the end of 1962. The principle objective of the "Budget and Accounting Act for Government Enterprise" was to contribute to the reorganization of the government enterprises through a unified regulation for both budgeting and accounting, by adoption of a business type accounting system.

Third, revaluation of fixed assets and inventories in order to determine the enterprise capital (net worth). In order to transfer the accounting system to a business type accounting system as of January 1, 1962, it was necessary to determine and record the amount of enterprise capital on the opening balance sheet of January 1, 1962. For this purpose it was necessary to revalue the fixed assets and real inventories of each business. It also called for a proper adjustment of any notable difference between the recorded value and the market value. Because of the magnitude of government enterprises, "the Budget and Accounting Act for Government Enterprise" determined the enterprise capital to be the total assets as confirmed as of December 31, 1962, after subtracting any outstanding indebtedness. The law provided arrangements so as to allow adjustment of the enterprise capital, by 1964, according to the result of a continuous revaluation of fixed assets and reality of inventories.

Fourth, on the job training program for employees. The employees in the accounting field of each special account were completely ignorant of business accounting procedures. Therefore the principles of a double-entry bookkeeping system were taught to them. In addition, demonstrations of accounting were shown based on the new business accounting system. There were many other preparatory processes besides the reorganizational process to a business type accounting system for the government enterprises outlined above.

The next step will be to discuss how the reorganization of the financial system will actually be accomplished.

CHAPTER II RATE-MAKING POLICY

In order to establish a self supporting system for improvement of the financial system of the government enterprises, the most important portion is the rate-making policy.

The goods and services of the public enterprises exert a great deal of influences on the national economy. Rate-making policy of the public enterprise is closely related with balancing revenue and expenditure of the enterprise, the welfare of the people as consumers and it will affect the national economy.⁽¹⁰⁾

Therefore, rate-making policy, which involves rate-determination and its public control, is the most important subject in the management policy of the public enterprises. Therefore, how should rate-making and public control of the government enterprises be accomplished in consideration of the importance of a rate-making policy? Below is a study directed to seeking a logical approach to rate-making policies of the government enterprises.

1. Principles of Rate-making

The principles of rate-determination are: a) Principle of cost-compensation, b) Principle of

(10) Writer's Pamphlet; *Finance of Public Enterprise*, School of Public Administration, Seoul National University, pp. 28-29.

service value, c) Principle of a fair return on capital, etc. But in reviewing the rate-making system of the advanced countries, such as the United States, England, Japan and Germany, it can be seen that the cost-compensation basis harmonizes a self supporting rate with the public interest.⁽¹¹⁾

As long as the financial principle of the Korean government enterprise is based on a self supporting system, the rate should be determined so as to compensate expenses with revenues. On the other hand, since the public enterprise rates greatly affect the consumer in prices and other national economic policies, the maximum limitation to the rate should not exceed the total cost expended to produce the goods and services. Therefore, the cost-compensation basis is generally accepted as the principle of rate-making policy. The various problems regarding rate determination under the principle of cost-compensation are discussed below.

(1) Composition of Cost Factors

If the cost-compensation principle is adopted as the rate-making basis for the governmental type enterprises, a problem arises in the extent of its cost accounting, which constitutes the basis of rate-making. Since cost, as a rate-making principle under the cost compensation principle, means the total cost which makes up rate income, it differs with the concept of expenses of "cost" as a principle of business accounting.

In the past, the rate was usually determined under the general business accounting principle, under which it was possible to compensate cost on the basis of each fiscal year. The recent concept concerning the limit of cost necessary for the business operation has been considerably broadened. Not only short-term expenses, such as operational expenses and depreciation charges, but all other items retained internally by the surplus appropriation of business accounting, are also recognized as necessary expenses for long-term business operations. Internally retained surplus is to be used for achieving long-term stabilization, modernization of the facilities corresponding to changes in economic conditions and unexpected future situations. The recent rate-making trend in the advanced countries is to determine the rate-making level at the point where it is possible to compensate both short-term and long-term expenses.⁽¹²⁾

For reference, the cost composition of the Chicago Transit Authority of the United States, made up as a rate-making basis, are reviewed.⁽¹³⁾ It consists of 1) operating expenses and supplementary expenses, 2) depreciation charges, 3) principal (original) and interest redemption of bonds, 4) reserve for pension, and retirement allowances, 5) reserve for damages, 6) reserve for facility modernization, 7) facility construction and replacement cost paid by fund sources other than bonds, and 8) payment to the city. The following items out of the above should

(11) T. Ichinose; *Finance of Public Enterprise*, Dobunkan, Tokyo, 1956, pp. 175-188.

(12) H. Urabe; *The Management of Public Enterprise*, Kihodo, Ltd., Tokyo, 1954, p. 193.

(13) H. Urabe; *op. cit.*, pp. 193-199.

be included in the operating expenses; namely, interest on bonds, reserves for pension and retirement allowances, reserves for damages, replacement of facilities, depreciation charges and the payment to the city. Reserve for facility modernization, reserve for repayment of principal of bonds and facility expenses by other sources than bond-income should be included in the portion of retained earnings by transferring the surplus into the costs. It is widely recognized to be a proper policy, not only from the stand point of the establishment of a self supporting system for the enterprises, but for the national economy, as well to expand the limit of cost accounting in rate-making to the above extent.

Referring to the theory of Prof. Arthur Lewis,⁽¹⁴⁾ the rate-making policy of the public enterprise shall achieve its objective in the national economy only when the rate is determined at the point where it keeps the balance between the enterprise cost, including total capital charges, and the enterprise revenues. Arthur Lewis further stated: 1) When the public enterprises are operating at a loss due to a low rate-making policy, it effects inflation or deflation. 2) When the public enterprises are operating at a loss or profit, it leads to either excess investment (over investment) or under investment in the public enterprises.

The public enterprises are paying out money in the appellation of procurement of raw materials and payment of wages and salaries, and on the other hand, are absorbing currency by imposing fees (rate). Therefore, when the public enterprises are operating at a loss because of a rate-making policy lower than cost, it will cause an inflation effect unless the loss is covered by savings in the government budget or by other means. This inflationary effect will be continually accelerated unless it is covered by increased taxes. Lowering the rate of public enterprises increases the profit of private capital, and this causes unnecessary stimulation to the private investment, which will also increase the inflationary effects. Lewis, also concluded by emphasizing that public enterprises should avoid operating at a loss or excessive profit:⁽¹⁵⁾ the rate of public enterprises should be determined at the level where it can compensate all the expenditure, including capital charges. A low rate leads to the over investment of public enterprises, as it stimulates an unnecessarily high demand, and contrary, a high rate causes under investment as it restricts demand; as long as the consumer's demand has an elasticity in price.

Next, will be a discussion of the items which constitutes the elements of cost in rate-making.⁽¹⁶⁾

A. Operating Expenses

Operating expenses, include all costs for labor, raw materials and other expenses necessary

(14) Arthur Lewis; The price policy of Public Corporation "in *Problems of Nationalized Industry*" edited by W.A. Robson, George Allen & Unwin, London, 1952, pp. 181-182.

(15) Arthur Lewis; *op. cit.*, p. 182.

(16) H. Urabe; *op. cit.*, pp. 195-199.

for the ordinary operation of the enterprise and maintenance of the properties, and refers to the variable expenses of Thompson and Smith.⁽¹⁷⁾ There is no question about this item being a component of cost.

B. Depreciation Charges

Depreciation of the fixed assets are on an accrual basis expenses under the business accounting system. Especially in the enterprises, where a greater portion of the facility or construction investment is involved, and depreciation accounts for a considerable amount. Appropriation of depreciation in the business operation constitutes not only an essential element of accurate asset evaluation and operating results, but also an indispensable component in regard to cost accounting. Depreciation charges are imposed on business revenue so that funds will be retained internally. These funds should be enough for replacement of the fixed assets. The basis for the depreciation must equal the price of procurement of assets. As depreciation charges are an estimation of future expenses, it is necessary to adjust the depreciation rate by actual inspecting on the assets and their operational condition from time to time.

C. Fund Procurement Expenses

This item includes all the expenses relating to fund procurement, such as payment of interest for loans and bonds, expenses pertaining to debenture issues or determined rate of dividends for the capital invested by the government.

D. Taxes and Similar Expenses

The public enterprises are generally granted the privilege of tax exemption, and it is unnecessary to include taxes in the cost component, but when imposed, it shall be considered as a cost component. One theory insists an amount equivalent to the taxes shall be added as a component of cost in rate-making in order to maintain fair competition between private enterprise and public enterprise.

E. Reserves for Stabilization

This comes under the legal reserve required for a joint stock company. Also in the public enterprises, operational surplus should be reserved as a profit reserve in order to maintain stabilization of business, and this reserve will be used mainly for covering a deficit. In this case, it is necessary to appropriate some amount among the reserve as a cost component in rate-making. This system is used in U.S. public enterprises. As long as it is desired to maintain balance of receipts and disbursements in rate-making, under the principle of cost

(17) Thompson & Smith; *Public Utility Economics*, McGraw Hill, New York, 1941, pp. 385-389. (Thompson and Smith insisted that the elements of cost may be classified into capital cost, indirect operating cost and direct operating cost in regard to the cost accounting, and then, insists that may classify as fixed costs and non-fixed costs in the business going concern.)

compensation, it is proper to count a reasonable amount of the reserves, which has the characteristics of the reserve for averaging the rate, as a cost component in rate-making to avoid frequent rate adjustments according to changes of cost.

F. Bond Redemption or Capital Amortization

Public enterprises are obligated to repay the bond principal within a certain period of time. In cases, such as the Tennessee Valley Authority of the United States, public enterprises are required to repay the capital invested by the government within a certain period of time. It is debatable whether the funds for repayment of the bond principal or capital amortization should be considered as a component of cost in rate-making in the above cases. 1) First, theory insists that they should not be included as a component of cost in rate-making: John Bauer, stated that it will duplicate cost calculation and will cause an unnecessarily high rate for a public corporation by including the funds for repayment of bond principal and capital amortization as long as a depreciation charges are maintained for the actual enterprise capital.⁽¹⁸⁾ Consequently, inclusion of capital amortization of more than a sufficient amount for depreciation and repair means that the present consumers are providing free facilities to future consumers. Therefore, he is opposed to including funds for repayment of bond principal or capital amortization as a cost component.

Contrary to Bauer's theory, a second theory insists that the both funds for repayment of bond principal and capital amortization should be included as a cost component. According to Prof. Urabe, Bauer's theory is reasonable only when an enterprise has enough depreciation reserve to maintain its real capital.⁽¹⁹⁾ In case depreciation funds are not sufficient for maintaining real capital, or when it requires the establishment of sinking funds for the unpaid amount of issued bonds, it is necessary to include the repayment fund for the original bond issue or capital amortization into the cost component in rate-making in order to meet the bond repayment obligation in a certain period of time. when it is impossible to replace the capital investment with a depreciation fund, it is understandable to include the repayment fund for bond principal or capital amortization as a cost component, as it is necessary to maintain real capital of the enterprise.

G. Reserves for Facility Improvement

When a public enterprise is improving its facilities with a substantial amount of profit reserve like a private enterprise, it is necessary to consider an adequate amount of the yearly installment as facility improvement reserve as a cost component in rate-making. However, the internal reserve of profit in public enterprises is unlike private enterprises. The reason is that the rate-making level of public enterprise is the point where revenue and costs are balanced

(18) John Bauer; *Public Organization of Electric Power*, 1949, pp. 213-214.

(19) H. Urabe; *op. cit.*, pp. 197-198.

according to the cost compensation principle, and the internal reserves are equivalent to the profits of private enterprises accruing only as an exceptional case. Therefore, it is desired that the reserve for large scale improvement of facilities be obtained through either supplemental government investment or by issuing bonds. Only small facility improvement reserves can be calculated as a cost component in rate-making. Financing small scale facility improvements through internal reserves complements of facility improvement plan. The internally obtained funds also lower the costs of the public enterprise as it lower or aboid the interest burden.⁽²⁰⁾

Recently, the extent of the costs which may be a standard for rate-making in public enterprise, as clarified by the above study, not only include short-term expenses, such as operating expenses and depreciation charges, but also include those internal reserves under various appellations long-term expenses.⁽²¹⁾

In summary, rate-making should be determined with the basis totaling short-term and long-term expenses. But the rate-making in the public enterprise must be determined at harmonious point of the characteristics of enterprise and public interest, regarding its characteristics of the public enterprise. Therefore, it should be considered that the rate-making of the public enterprise should be determined under the harmonized condition of the cost-compensation and the reasonable cost bases.⁽²²⁾

(2) Standards for Evaluation of Accurate Cost

A study as to how to evaluate the limit of the cost component was discussed above, analyzing each cost component under the cost compensation principle as a principle of rate-making. A study of the standards for evaluating accurate cost estimates and rates for public enterprises will be presented in this section. When public enterprises adopt the cost-compensation principle in the public enterprise rate-making, on the basis of a self supporting system, it is necessary to determine what is the accurate cost. If the public enterprises are considered to be a quasi private business, it is desirable to improve the managerial efficiency of the modern business.

A self supporting system, which is based on the principle that the expenditures of a public enterprise should be provided by the income from that enterprise, is a means of increasing enterprise income, and assuring efficiency in the operation of the enterprise. Therefore, under the cost-compensation principle, it is always necessary to consider business efficiency in evaluating cost. Because of it's monopolistic characteristics, public enterprise's rate is apt to neglect the relationship between costs, rates, and managerial efficiency, compared with the private enterprises. Therefore, when the public enterprise rate is being determined, it is necessary to

(20) In the Japanese Telephone and Telegram Service Corporation, a portion of the facility improvement reserve needed in the expansion and improvement of the facilities, in addition to the depreciation expenses, is included as a portion of the cost elements in rate-making.

(21) T. Ichinose; *op. cit.*, pp. 189-192,

(22) H. Urabe; *op. cit.*, pp. 199-203.

consider the relationship between cost and efficiency for both the short-term and the long-term. First, from a short-term view, it is necessary to maximize the profit (greater income vs. total expenses) by increasing managerial efficiency to the greatest possible extent within a evaluated rate.

The first evaluation of managerial efficiency of the public enterprise is to be made on the basis of operational surplus resulting from reduced expenses. Next, from a long-term view, it is necessary to approach the rate-making policy, so as to harmonize, under a macroscopic long-range plan, public interest and business principle, for the purpose of changing economic conditions such as inflation, improvement of quality of the goods and services of public enterprises, and supplying cheaper goods and services. The standards for evaluating managerial efficiency of the public enterprises are discussed below.

1) First, labor productivity, or cost per production unit, is used as a standard for evaluating the efficiency of the public enterprise management. Labor productivity is measured by the production quantity per working hour. Cost per production unit means the cost consumed to produce each unit of product. However, labor productivity is inadequate as a standard for evaluating managerial efficiency, as it is impossible to make an over all and general evaluation of the efficiency when the public enterprises produce various kinds and qualities of products. Unit cost of the products is also inadequate because disregarding its economic value.

2) The second method is to compare the plan and results. This method is useful only for analysing business results vs. plans, and does not enable determination of the rationality of the plan itself.

3) Thirdly, industrial morale can be mentioned as a standard. It is true that industrial morale greatly influences efficiency, but it only indicates social efficiency in human relations. Together with economic and technical efficiency, it constitutes standards for determining business efficiency. Therefore, it is necessary to evaluate operational efficiency of public enterprises by combining economic, social and technical efficiency into a combined general standard. Accordingly, it leads to a conclusion that the most proper method of evaluating managerial efficiency is to use a standard based on expenses vs. revenue or business surplus.

According to Florence and Walker, there are merits in using the concept of total expenses vs. total returns or business surplus as a standard for evaluating the efficiency of public enterprises;⁽²³⁾ These merits are:

- a. It is comparatively easy to compute.
- b. Business surplus directly indicates the importances of cost—a small amount of cost saving increases business surplus by geometrical progression.
- c. It is possible to evaluate the efficiency of an enterprise by comparing the total expenses

(23) S. Florence and G. Walker; *Efficiency under Rationalization and Its Measurement in Problems of Nationalized Industry*, edited by W.A. Robson, 1952, pp. 195-198.

and revenue for a certain period of time.

- d. Total returns (quantity of products x price) indicates the satisfying degree per demand of products—— in other words the volume of business surplus is a measure of how much the products of public enterprise is satisfying the demand of people.
- e. While the business surplus is a measure of efficiency, it can be an incentive means of efficiency at the same time.

As mentioned above, the improved efficiency of the public enterprises results in business surplus through cost saving, and business surplus is extremely sensitive to cost saving. It has also been explained that the total returns of public enterprises is a measured figure, to some extent, of degree of how much the public enterprise performed its function of satisfying personal demand.

The last method, it is to analyze the difference between business surplus of public enterprises and the commercialistic profit of private enterprises.

1) There is a difference in characteristics between the profit of the private enterprises and surplus of public enterprises because, the rate of private enterprise is determined by combining the portion for cost compensation and estimated profit, while the public enterprise rate is determined, in principle, under the cost compensation principle.

2) Private enterprise profit can be obtained even though an incomplete compensation for labor and other input, but public enterprises surplus should be obtained only through the complete compensation based on the principle of reasonable cost for all input.

With above mentioned two differences, we can easily understand that the formulation of a public enterprise rate has a fundamentally different characteristics from the determination of a rate for private enterprise as it has to harmonize (conciliate) two aspects ——protection of the consumers under the cost compensation principle, and the protection of the laborers under the principle of reasonable cost for labor input of the enterprise. Accordingly, it can be concluded that the concept of business surplus as a standard of evaluating the efficiency of public enterprises has validity as a measure of public enterprise efficiency only when it is considered under the condition of satisfying both the principle of cost compensation and reasonable cost.

2. Rate-making Organization

(1) Necessity of Rate Control

Even when the public enterprises are based on a self supporting system, the rate of the goods and services provided by the public enterprise exercises a great deal of influence on national economic policies, such as protection of consumers' interests and price policy. Therefore, the primary purpose of rate control is to harmonize the commercial profitability and the public interest related to the public enterprise.

Even when a public enterprise adopts the principle of cost compensation and reasonable cost

in its rate-making, in order to accomplish a self-supporting system, it is apt to infringe on consumers' interests or cause a detrimental effect on the national economy by incorporating an irrational element of inefficient management.

In the advanced countries of today, a rate control organization is needed to harmonize the public interests and commercial profitability (protect the interests of the consumers and the national economy by determining a public enterprise rate by inspecting and analyzing the operational status, service conditions, mechanization, working efficiency, accounting and cost accounting etc.) of the public enterprise. The following section will present a study of the rate making and control organization.

(2) Rate Control Organization

The present rate controlling systems for the public enterprises of various foreign countries are: a) a system of rate controlling by the administrative authority, b) a system of rate controlling by the legislative authority, c) a system of rate controlling by the public enterprise itself, and d) a system of rate controlling by the rate controlling tribunal.⁽²⁴⁾

a. Administrative Rate-making Control

In the example of Korea and Japan, the administrative organization itself determines and controls the public enterprise rate. Under this system the rate is apt to neglect the profitability of the enterprise. Based on the cost compensation principle, which is essential for establishment of a self-supporting system, rate making is likely to be influenced by political or financial need, and result in over emphasizing financial and economic policy rather than a self-supporting system of the public enterprise. Past experience in many countries shows the rate adopted by this system of public enterprise accounting is determined or adjusted freely at the will or need of the administrative authority in power. Therefore, this system is undesirable for the purpose of either protection of the consumers or for the establishment of the self-supporting system of public enterprise.

b. Legislative Rate-making and Control

Under this system the public enterprise rate is determined by the political representative body of the people. This system possesses the same defects of the above mentioned administrative rate-making and control system; in fact it has more potential for political abuse. This type of system should be avoided. Even in Japan, in spite of the Article 3 provision of the Financial Law, the major portion of the public enterprise rate is determined by the administrative branch in accordance with the Special Act.

c. Rate-making by the Public Enterprise Itself

Under this system the rate is determined by the public enterprise itself. This system is considered to be most flexible system of rate-making in view of establishing a self-supporting

(24) T. Ichinose; *op. cit.*, pp. 198-203.

public enterprise system, but the interests of the consumers can be sacrificed by this type of rate-making. It is possible through this type of system to hamper the public interests by imposing a rate to cover the burdens caused by an inefficient management or an irrational element of the consumer goods and services produced by the enterprise. Therefore it is extremely rare for this system to be adopted.

d. Rate-making and Control by a Rate Controlling Tribunal

This system of public enterprise rate control is practiced by independent and neutral, quasi-judicial organizations (tribunal). The Interstate Commerce Commission of the U. S. and the Transport Tribunal of England are examples of this system. Arthur Lewis, pointed out that the rate-making tribunal is the best system to insure due consideration of the rights and interests of the consumers.⁽²⁵⁾ First, every consumer has the right to be provided with the goods and services of the public enterprises as long as one is paying the cost. Second, consumers have the right of not being unfairly discriminated against. Third, they have the right of not being charged a rate exceeding all costs, including return on investment, capital depreciation, contingencies, etc.

Lewis states that the public interests of the public enterprise can be accomplished only when it is so systemized to allow any consumer, at any time, to institute a petition to the rate-making commission, in order to assure the above mentioned rights. The rate-making tribunal system, which determines the public enterprise rate, with an objective consideration of the business profit of the enterprise, the interests of the consumers, and the national economy, is considered to be the most proper system for public enterprise rate-making. Therefore, it is conceivable why the advanced countries are adopting this system.

As discussed above, the public enterprise rate is to be determined under the consideration of both the self-supporting system of the enterprises and the public interest of the national economy. In order to protect the interest of the consumers, it requires a system that can settle the consumer's dispute against this determination. The rate-making tribunal system is considered to be most adequate type to fulfill those two objectives.

3. Direction of Improving the Rate-making Policy for the Government Enterprises

The principles and the organizations of rate-making of public enterprises are studied in the above. Herewith, the direction of improving the rate-making policy for the government enterprise shall be studied below, with critical study of the current rate-making policy.

(1) Rate-making Principle

There is no written provision for rate-making principle of the government or public enterprises in Korea. The only thing found is the self-supporting principle of the government

(25) Arthur Lewis; *op. cit.*, pp. 193-194.

enterprises or public corporation, indirectly expressed in the Article 3, "Budget and Accounting Act for Government Enterprise", and the provisions that authorizes internal retention of the profit in each corporation law.

When it is supposed that a self-supporting system is adopted with the above foundation of legal provisions, the rate-making principle should automatically be interpreted as the cost compensation principle.⁽²⁶⁾ The reason being that the public enterprise rate should be determined at the level where the receipts and expenditures balance —cost compensation level if it is to maintain a self-supporting system. However, it seems that the Korean government enterprises generally neglect cost accounting based on the cost compensation principle. Especially in the case of governmental department type enterprises, it is true that rate-making is practiced through a baseless rough calculation. At best, they are determining the rate by comparing the price index from the rate of a certain time, or by converting the rate of a foreign country into official Won exchange rate.⁽²⁷⁾

The backwardness of the rate-making system of the government enterprises can be attributed to many things. However, the most important one is the incompleteness of the accounting system. Because the historical government accounting system has been using a single entry accounting system, which merely records and calculates receipts and payment of cash, it has been unable to accomplish cost accounting, or to accurately assure operating results and financial condition of the enterprises. Accordingly, it was impossible to determine the rate on the basis of cost. However, the public enterprise (governmental department type enterprises) began to adopt a business type accounting system in 1962. A self-supporting system of government enterprise accounting is to be established by using the cost compensation principle of rate-making, and by continuing attempts to lower cost by efficient management. In the future, various studies and analyses will be required to establish a proper rate-making system for the management of the Korean government enterprises. The adoption of a business type accounting system can be commended as a first step for improvement of the rate-making system; and in this sense, it is a means of providing a foundation for managerial improvement of the government enterprises in Korea.

(2) Organization for Rate-making

According to the past rate-making system of the public enterprises, the rate was determined by law or through approval of the legislative branch. However, in practice, the rate

(26) In the "Freight Rate Law" of the Japanese National Railway Transportation, the following items are prescribed as the principles for establishing freight rates; 1) fairness and appropriateness, 2) compensation of cost, 3) contribution to the industrial development, and stabilization of wages and prices.

(27) Explanation of the proposed amendment of the rail transportation freight rate of FY. 1962, Ministry of Transportation, Republic of Korea., pp. 9-12.

was determined through approval of the national assembly, as there has never been a law established for rate-making.⁽²⁸⁾

As explained earlier, under this system, rate-making is apt to be influenced by political consideration rather than sound management of the enterprises, and it has a defect of inflexibility. This is why the new system of rate-making by the administrative branch, which gives more flexibility, is replacing the past system.

In accordance with Article 3, "the Budget and Accounting Act", the public enterprise rate is to be determined by a cabinet meeting reviewed by the public rate reviewing commission.

Accordingly, an act to establish a rate reviewing commission for the public enterprise has been promulgated, and the commission has been organized. However, this system is not expected to contribute very much, as the commission is strictly an advisory group, and has no authority to determine a rate for a public enterprise. The ideal type of rate-making organization is the independent rate-making and controlling organization which can best harmonize public interest and enterprise profit through an independent determination and controlling of the public enterprise rate. Therefore, efficiency will necessitate the adoption of this type of system for public enterprise in Korea. In order to accomplish unification and rationalization of the rate-making policy, a special law should also be enacted for rate-making, which prescribes the principle of rate-making and the controlling procedure.

CHAPTER III FUND-FINANCING AND THE PROFIT AND LOSS DISPOSAL SYSTEM

1. Fund-financing System

(1) Principle of Self-financing

A. Definition of Fund-financing

Public enterprises that adopt a self-supporting system must finance the necessary funds for improving the facilities and techniques, and large scale construction. In principle, under a self-supporting system, the expenses of a public enterprise should be covered by the revenue from that enterprise. However, it is not proper to pay large scale facility expansion or improvement construction solely with the revenue of the enterprise; not only in view of the reasonable cost principle in rate-making. By doing so, the present rate payers are providing a free facility for the future users. That is why a great amount of expenses for these purposes should be provided by external funds.⁽²⁹⁾

(28) Article 3, old Financial Law which the precursor of "the Budget and Accounting Act."

(29) H. Urabe; *op. cit.*, pp. 212-123.

There are two means of financing funds, external fund financing and internal fund financing. There is no problem in financing internal funds because it is a matter of providing for expenditure through the internal accounting system. It is the financing of external funds that is being discussed under the self-supporting system. However, in a country like Korea, where business accounting experience is short, even financing internal funds is a matter to be studied carefully. Discussions in this thesis will be limited to external fund financing.

B. Financing External Funds

The methods of financing external funds are briefly outlined below:⁽³⁰⁾

a) Borrowing from the **General Fund**, such as a government type enterprise.

Because this type of system is influenced by the national financial and economic policy, it is impossible to finance funds which reflects enterprise autonomy. It is a general practice in most countries that only a part of the funds are financed by this method.

It is also necessary to consider the public enterprises that are operating at a loss. The above method is used for financial assistance for a deficit budget as the losses make it impossible to maintain a self-supporting balance. However, this can be classified as an exceptional case of public enterprise fund financing.

b) Financing external funds through public bonds.

As public bonds are issued on the basis of the public credit and are supported by the taxation authority of the nation or public agencies, it is impossible to escape from the jurisdiction and limitations imposed by national financial or political policies and other reasons.

c) Financing external funds through issuing enterprise bonds.

This system is not directly influenced by the national financial policy, as the enterprise bond has the same characteristic as that of the private corporation because it is issued on the basis of enterprise credit. Accordingly, the merit of this system is found because it allows the finance of necessary funds from the open financial market by issuing enterprise bonds and not subject to the limitations imposed by the national financial policies.

The characteristics of this system are fundamentally different from the public bond system. First, while a public bond is issued by the public agency and based on the taxation authority of the public agency, the enterprise bond is issued by the enterprise and based on the self-supporting system of the public enterprise. Second, while repayment of the principal and interest of the public bond is directly or indirectly imposed upon the taxpayer, the principal and interest of the enterprise bond is repayed with income of the public enterprise itself, similar to a private corporation. Therefore, the system of enterprise bonding has more flexibility than the public bond system in the financing of external funds. This is why the system is widely used by the public enterprises of the United States, British National Enterprises, Japanese Public Enterprises and other public enterprises of the advanced countries.

(30) H. Urabe; *op. cit.*, pp. 59-62.

The means of financing external funds of public enterprise have been discussed above. Each of above three methods has its own merits and shortcomings. Therefore it is desirable to use the method that gives the most flexibility and results in the most efficient utilization of funds.

(2) Criticism on the Fund Financing System of the Governmental Department Type-Enterprises

The system of financing funds for Korean governmental type enterprises requires a wide study and improvement, as it has not been able to escape from its backwardness.

The internal finance of the Korean governmental department type enterprises will be discussed first. Internal funds means the amount of funds obtained and retained from accounts such as depreciation expense of fixed assets and amortization of other assets. These funds are used for replacement of the fixed assets of the enterprise. The major portion of facility improvement can be paid by the depreciation expenses when the depreciation expense is sufficiently calculated to cover both the physical depreciation and functional depreciation. However, the application of this depreciation system for Korean governmental department type enterprises requires careful consideration, as lack of experience may result in unethical use of these funds.

Second, the external financing of the governmental department type enterprises in Korea will be discussed. Financing of external funds is entirely dependent upon borrowing from the **General Fund** or loan from the United States. In spite of the Article 18 of "the Budget and Accounting Act for Government Enterprise", which allows the issuance of public bonds for procurement of facility improvement funds, Korean governmental department type enterprise has never issued a public bond before the end of FY. 1961.

The first case was the issuance of the "Telephone Bonds" in early 1962 under the special account for national communication enterprise. However it is not clear whether this is a public bond or an enterprise bond; because the special account for the communication enterprise is not a legal person, it is not an enterprise bond. However the economic characteristic of the "Telephone Bond" is no different from an enterprise bond.

Therefore, a perfect system of enterprise bond financing can be used after the enterprise obtained a legal personality through reorganization of the enterprise to a public corporation.

However, it is recommended that the public bond system be utilized to the maximum extent even under the current special account system. By incorporating the characteristics of an enterprise bond into the public bond issued by the government enterprise, it will make it easier for an enterprise to finance external funds, and make it possible to measure consumers evaluation of the managerial improvement through the rate of bond consumption.

The provision of allowing government to invest additional funds, when necessary, for the government enterprise is expected to make another means of financing external funds for

governmental department type enterprises—Article 11, “Budget and Accounting Act for Government Enterprise.”

In conclusion, it is an urgent task for the governmental department type enterprise in Korea to establish a fund financing system similar to that of a self-supporting public enterprise; by improving the accounting system for finance of the internal funds, and by utilizing the public bond system.⁽³¹⁾

2. Profit and Loss Disposal System

(1) Principle of Self Disposal of Profit and Loss⁽³²⁾

The profit and loss disposal system of a public enterprise differs from that of the private enterprises, as it is a common policy of the modern government enterprises to maintain a self-supporting system under the principle of reasonable cost basis. The source of income and the method of disposing profit or loss is different than that used by private enterprises, as the rate of the public enterprises, which is the source of public enterprise revenue, is determined by the principle of compensating reasonable cost.

A brief review of the profit and loss disposal system by analyzing the concept of profit and loss, and the means of disposing them, is presented below.⁽³³⁾

a. Concept of Profit and Loss in Public Enterprise

Profit or loss, results from the settlement of the fiscal year's account. Under the past government office accounting system, the excess cash income, or shortage of cash receipts, was determined by a single entry accounting system on a cash accounting basis. In many cases under this type of accounting the business surplus was evaluated as a year of loss disposal because the investment for business expansion in the year of profit is also included into expenditures of that fiscal year. This is a good example of how the government accounting system is unreasonable for assuring operational results of the enterprise.

A business type accounting system that uses double entry book-keeping reflects the operational result of that fiscal year. Capital investment for business expansion, borrowed funds, or unexpected losses principally are not an element of profit and loss accounting. In this sense, the concept and method of calculating profit and loss for the public enterprise does not differ from that of a private enterprise.

b. Source of the Public Enterprise Profit

Public enterprises are not operated for the major purpose of making profit, but are operated to maintain a balance between receipts and expenditures, as the rate of the public enterprise

(31) Writer's pamphlet; *The Financial Systems of Public Enterprises*, School of Public Administration, Seoul National University.

(32) The term “Profit and Loss Disposal” is equivalent to the term “Surplus and Deficit Appropriation”.

(33) T. Ichinose; *op. cit.*, pp. 171-172.

is determined by the principle of compensating reasonable cost. How does profit occur in this type of public enterprise?

i) Even when the public enterprise rate is determined under the principle of reasonable cost compensation, it is practically impossible to maintain a perfect balance between the rate of revenue and business expenses.⁽³⁴⁾ While a fixed rate is continually collected for a certain period of time there is a possibility that this rate will exceed the business expenses of that period. This is one source of profit.

ii) When the public enterprises accomplished managerial improvement without conflicting with the public interest under a certain fixed rate, it results in a saving of expenses. This is another source of enterprise profit.

iii) In some cases the income rate exceeds the original estimation because of an increased demand for the goods and services of the public enterprise. In this case, the public enterprise will adjust its income by lowering the rate for the long term. However, in the short term, the enterprise will make a profit because the fixed rate will be changed until it is adjusted.

Several sources of public enterprise profit have been discussed. However, any combination of these reasons can result in business profit. In every country public enterprises are expanding and the managerial efficiency of these enterprises are being continually improved.

c. Method of Profit and Loss Disposal in the Public Enterprises

Profit and loss disposal of the public enterprise has a special characteristic when compared with the private enterprise. The types of the profit and loss disposal will be discussed first.⁽³⁵⁾

i) Total profits are deposited with the national treasury, and losses are subsidized by the treasury. This system is not used except in special cases.

ii) Part of the profits or losses are freely disposed by the public enterprise, and the deficit or surplus is either deposited with the treasury or compensated by the treasury. Prior to World War II the British Broadcasting Corporation and the current Russian Public Enterprises adopted this system of management. However, Soviet Russia's enterprises have quite different characteristics when compared with the public enterprises of the free world, as they are completely nationalized. However, some public enterprises in Soviet Russia, are granted to retain some internal operational reserves for facility improvement, and the long term enterprise funds, in consideration of autonomy and efficiency of the business management.⁽³⁶⁾

iii) Profit and loss disposal is entirely under the responsibility of the enterprise.⁽³⁷⁾ Many countries have adopted the system used by the Tennessee Valley Authority of the USA.

According to Article 26 of the TVA Act, the TVA board of directors is authorized to determine the amount of the business income to be retained within TVA before depositing any surplus

(34) T. Takenaka; *Management of the Public Enterprise*, Diamond Co., Tokyo, 1954, p. 298.

(35) T. Ichinose; *op. cit.*, pp. 163-170.

(36) Earnest Davis; *National Enterprise*, Victor Gollance, 1946, pp. 149-171.

(37) Herman Finer; *The TVA Lessons for International Application*, 1944, pp. 4-5.

to the general fund. The funds retained internally can then be used for the future development of the Tennessee Valley. Surplus funds are the funds remaining after covering the costs of operation, maintenance, and depreciation and the amortization of the original funds provided by the taxpayers of the United States.

TVA began to transfer its surplus funds to the national treasury in FY. 1945. The amount of this deposit with the national treasury was decided by the board of directors of the Tennessee Valley Authority.⁽³⁸⁾

Profit and loss disposal of TVA, as briefly outlined above, is considered to be the most advanced system of profit and loss disposal for public enterprises.

As outline of the three types of profit and loss disposal of the public enterprise was presented above. It can be pointed out that the autonomy of profit and loss disposal is common today. This autonomy is one of the most important requirements for a public enterprise under the self-supporting system of management. Self retained funds, obtained under this autonomy, are reinvested for business expansion and for improving the quality of products. It also stimulates the interests of the managers and the employees and improves working efficiency, thereby ultimately contributing to the benefits of the consumers of the goods and services of the public enterprises.

d. Purpose of Profit Disposal

Profit disposal of a public enterprise has special characteristics when compared with that of the private enterprise. In the private enterprise the long term goal is the maximization of the enterprise income. The purposes of the public enterprise profit disposal are: providing return on investment, facility expansion and improvement, the methods of productions, improving working conditions, increasing services, and lowering the rate. Each of these will be briefly analyzed below:⁽³⁹⁾

i) Return on investment.

It is debatable whether the return on investment for public enterprise capital should equal that of private enterprises. It is considered proper to pay a reasonable cost for the capital investment of the public enterprise since that capital constitutes an element of production input just like in the private enterprises. In the public enterprises of England and Taiwan, a specified amount of the return on the capital investment is deposited with the national treasury. The major differences between the private enterprise and the public enterprise concerns the rate of return which is fixed for the public enterprises. Charge for capital investment is reasonable as it is consistent with the principle of self-supporting system of the enterprise, and will help in maintaining an accurate accounting of the enterprise economy.

This will also provide a basis for equitable competition between the public enterprise and

(38) H. Urabe; *The Public Enterprise*, Moriyama Choten, Tokyo, 1949, pp. 233-239.

(39) H. Urabe; *The Management of the Public Enterprise*, op. cit., pp. 218-224.

private enterprise.

ii) Reserving for general reserve funds.

A public enterprise, like a private enterprise is required by law, to reserve some of its annual profit for compensation of losses, whenever they occur. These funds are necessary to stabilize and to avoid, to the maximum extent possible, adjustment of the rate to meet the business cycle of the public enterprise or other economic changes.

iii) Special reserve funds.

A special reserve fund is necessary for replacement, expansion, and improvement of the facilities or other technical improvement of the enterprise.

iv) Improving working conditions.

When improved efficiency results in a considerable amount of profit, the enterprise should use part of its profit for increasing wages and salaries, paying bonuses or for the expansion of welfare facilities for the employees.

This kind of profit disposal not only stimulates the employees' interest in increasing enterprise efficiency, but promotes industrial democracy and improves the workers' living standards.

v) Increasing services and lowering rate.

Since the ultimate objective of the public enterprise is providing better goods and services to the consumers at the lowest price, it is natural to use the profit resulting from the operation of the enterprise to increase services and or lower the rate, in order to maximize services to the consumer. Several kinds of profit management has been discussed for public enterprises.

Public enterprise will be confronted with the problem of deciding what portion of the profit to allocate for the above items, and the enterprise will have to autonomously choose them.

However, the government will coordinate this problem through the national economic planning policy.

(2) Criticisms on the Profit and Loss Disposal System of the Government Enterprises in Korea

According to Article 29 "the Budget and Accounting Act for Government Enterprise", the government enterprise is responsible for budgeting the enterprise to cover any losses resulting from settlement of accounts, and to reserve its profit as earned surplus when profits are realized. However a provision of this article allows the government to transfer all or a part of the government enterprise profit to the **General Fund** upon approval at the cabinet meeting. This is an exceptional provision to the principle of autonomy of profit and loss disposal. However this provision possesses a dangerous possibility of nominalizing the principle of autonomy of profit and loss disposal. Therefore, the government will have to be particularly cautious about this provision. In the case of the special account, such as monopoly, it is natural to transfer the total profit to the national treasury because the purpose of the government monopoly is to generate national financial income.

Article 30. "the Budget and Accounting Act for Government Enterprise" regulates the profit management of the special account for monopoly. According to this article, the profit surplus for a fiscal year is to be transferred to the national treasury with the exception of the funds earmarked for increasing the amount of the fixed assets and stored commodities for that fiscal year.

It is unpredictable how the profit and loss disposal system will work, as the government enterprises adopted this policy only recently. However, because of the importance of profit and loss disposal, the management of a public enterprise requires serious consideration and improvement in the rate-making system of the public enterprise. Particularly, providing the public enterprise with autonomy, and rationalizing the objectives of profit management will become necessary upon the adoption of the business type accounting system.

CHAPTER IV BUDGETARY SYSTEM

1. Characteristics of a Public Enterprise Budget

(1) General Characteristics of a Public Enterprise Budget

The budget of the public enterprise has the combined characteristic of both the public and private budget.⁽⁴⁰⁾

Private budgeting was developed originally from public budgeting, particularly government budgeting. A budgetary control system was adopted during 1920's by private enterprise as a management tool and is now commonly used by the enterprises.⁽⁴¹⁾

What is the difference between a public enterprise budget and a private enterprise budget?⁽⁴²⁾ The source of revenue for the public enterprise is the tax income based on national or public taxation. The public budget is for public or national expenditure. The objectives of a public budget are to provide the administrative branch with financial authority, and to control the administrative activities and prevent the waste of funds of the administrative branch.

Since the administrative branch is principally a spending agency, a strict legal restriction is given to the expenditure budget, in order to avoid misuse or waste of funds. There is no organic relationship between revenue and expenditure in the public budget, as it is operated under "the principle of separation of revenue and expenditure" and "the principle of an independent treasury." Therefore, a major characteristic of the public budget is found in its legal restriction on expenditure, as the primary purpose of a public budget is to prevent the waste of public funds. Accordingly, restrictive principles, such as principle of independency

(40) H. Urabe; *The Management of Public Enterprise*, op. cit., p. 225.

(41) G.A. Welsch; *Budgeting-Profit-Planning and Control*, Prentice-Hall, New York, 1957, p. 3.

(42) H. Urabe; *The Management of Public Enterprise*, op. cit., pp. 225-228.

of fiscal year, inflexibility of diversion of the budget or carry over the budget to another fiscal year, coincidence of budget and closing accounts, are emphasized in the public budget.

Characteristics of the public budget have less flexibility than the private budget.⁽⁴³⁾ The primary purpose of the private budget is to increase the efficiency and flexibility of the budget as a means of establishing the plan of operation, and coordinating and controlling the managerial activities of the enterprise. Planning of expense payments of the enterprise that produces products for the market, always has a close relationship with the income of the enterprise. Therefore budgetary planning should be given sufficient flexibility to adjust freely to the changes in market conditions, production techniques or production methods. Because of the flexibility required in the private enterprise budget, budget and closing accounts will not necessarily be coincident, like public enterprise budgeting.

As discussed above, the major differences between a public budget and a private budget are the restrictions of the former and flexibility of the latter. A short review of the characteristics of the public enterprise budget is presented below.

Public enterprise budget combines the characteristics of both the public and the private enterprise budget. Because of the two antinomic elements of public interest and profit making, its budget also reflects both the elements of public responsibility and business rationality.

While the public enterprise budget, because of its public interest, has to be approved by the legislative or a public administrative body of the government, it should also incorporate the flexibility of the private enterprise budget.

The public enterprise budget should be formed at the point where these two elements are best harmonized. According to the modern trends of a public enterprise budget, it is separated into two types — external budgets and internal budgets. The public enterprise is usually provided with budgetary flexibility in executing the budget by getting a lump-sum-appropriation of the external budget. Within amounts approved by the external budget, enterprises reformulate the execution budget in the form of an internal budget control in order to provide the necessary internal control of the budget.⁽⁴⁴⁾

(2) Characteristics of the Governmental Department-Type Enterprise Budget

As previously stated, management of the governmental department type enterprises, such as transportation (railway), communication and monopoly, still maintains the government type budgetary system. Modern governments are commonly operating their budgetary and accounting systems under an accounting system of general and special accounts (funds) in order to meet the expanded and complicated activities of the modern government.

(43) H. Urabe; *The Management of Public Enterprise*, op. cit., p. 226.

(44) T. Ichinose; *op. cit.*, pp. 55-58.

General account means the government accounting unit which includes general financial sector of the government. Special account is an independent accounting unit from the general account established when the government is operating a certain business, as the government is required to retain and manage a retain amount of funds. The governmental department type enterprise in Korea are directly managed by the government branches under the special account system. This is characteristic of the accounting system used by the governmental department type enterprises.

As long as the government enterprise is operated under the special account, which is a unit of the governmental accounting system, its budget will inevitably become part of the government budget. Accordingly, it is impossible to get away from the legal restrictions which are characteristics of the governmental budget. Therefore it is desirable to adopt the flexibility of the business type budgetary system, since the governmental department type enterprises are enterprise that produce goods and services the same as a private enterprise.⁽⁴⁵⁾

The characteristics of a Korean governmental department type enterprise budget can be briefly summarized as a combination of government budget and private enterprise budget systems. Consequently, improvement of the governmental department type enterprise budgetary system involves the problem of harmonizing these two elements. The following discussion concerns the method of improving the budgetary system of the governmental department type enterprise by analyzing the problem area.

2. Current Budgetary System of the Governmental Department-Type Enterprise

The current budgetary system of the governmental department type enterprise is regulated by the "Budget and Accounting Act for Government Enterprise" promulgated on December 31, 1961. Before studying improving the budgetary system of the governmental department type enterprises, it is desirable to review the current system used under this Law.

Since the "Budget and Accounting Act for Government Enterprise" is established to transfer the accounting system of the governmental department type enterprise to a business type accounting system, it has incorporated some elements of the business accounting system. The budgetary system regulations of the "Budget and Accounting Act for Government Enterprise" is outlined below.

(1) Formulation and Passage of the Budget

The governmental department type enterprise budget has to be formulated and passed by the national assembly (legislative branch) like all other general government budgets. As long as the governmental department type enterprise is operated within the form of government

(45) The public enterprises of the United States are required to submit business type budget to the Bureau of Budget in accordance with Government Corporation Control Act of 1945.

branch type enterprise, its budget constitutes a part of the government budget. Accordingly, the budgetary system of the general account will be applied to formulating and reviewing the governmental department type enterprise budget, and autonomy is inevitably restricted, as long as it has to follow the formal procedure of the government budget. Therefore, the only way of providing government enterprises with the characteristics of a private enterprise budget is to provide actual flexibility in the budget contents.

The explanation of how the "Budget and Accounting Act for Government Enterprises" established its provisions as an approach to adopt the principle of enterprise budget will be presented.

(2) Budget Flexibility

As discussed above, it is impossible to provide budgetary flexibility in the formal procedure of formulation and passage of the governmental department type enterprise budget. Therefore, it has to provide the necessary flexibility in content and execution of the budget in order to meet the business aspect of the enterprise. Listed below are the provisions of the current law:

a) Article 24 of "the Budget and Accounting Act for Government Enterprise" authorizes the governmental department type enterprise to use the excess, or estimated excess, income resulting from increased demand for the expenditures related to this revenue. This provision is established as an exception to the principle of independency of revenue and expenditure in accounting system, to provide the necessary flexibility for reasonable operation of the governmental department type enterprises.

b) This law has provided more flexibility, compared with the general account sector or the government budget, by classifying budgets for each work, in classification of budget items.

c) It has provided flexibility in the execution of budget by authorizing the head of the central office to divert budget items when necessary, without the approval of the financial minister.

d) The governmental department type enterprise is authorized to carry over any surplus budget funds to the next fiscal year. The government enterprise must prepare an estimate of the carry over budget by the end of each fiscal year, and submit it to the Economic Planning Board for approval. This system is adopted to provide flexibility to arrange that of the governmental department type enterprise that uses an accrual basis accounting system.

(3) Dual System of Budget and Closing Accounts

According to the article 27, "the Budget and Accounting Act for Government Enterprise," a governmental department type enterprise has to submit, in each fiscal year, the report of closing accounts with the balance sheet and an account of the government debt required by the budget and accounting law, and the financial statement, which is the balance sheet of the business accounting system, must be attached. In other words, the current system

requires a governmental department type enterprise to prepare both a report on the executed budget and the financial statements such as the profit and loss disposal, and a balance sheet which is used to assess the operational result and financial condition of the enterprise.

Because of this dual system for closing accounts, the governmental department type enterprise are faced with a complicated system of accounting.

The preceding study was a brief discussion on the governmental department type enterprise budgetary system compared with a general government accounting system. In order to improve the present system the irrational part of the current legal system must be changed, and a new system has to be adopted.

The next section will deal with the methods of improving the budgetary system of the Korean government enterprises.

3. Directions of Improving the Budgetary System of the Government Enterprises

Since the Korean government enterprises adopted the double entry book-keeping system based on accrual accounting in order to accomplish managerial efficiency, the budgetary system, which is the foundation of the accounting system and the tool for controlling business activity of the enterprises, should be accommodated with this accounting system.

The problem is to establish a budgetary system which best harmonizes the public interest and the business aspect of the public enterprise. The following discussion will be primarily concerned with suggestions for increasing managerial efficiency by adding the characteristic of a private enterprise budget to the present budgetary system of the government enterprises.

(1) Providing Budgetary Flexibility

As long as the public enterprise is directly managed by a ministry of the administrative branch, the budget has to go through approval of the legislative branch. In this case, it is impossible to provide budgetary flexibility in its formal procedure for budget approval.

Therefore, a budgetary system which reflects the private enterprise aspect can be only established by providing flexibility in the formulation and execution of the budget. How can the government enterprises in Korea be provided with the budgetary flexibility necessary for an efficient operation?

a. Excluding the Internal Budget from Legislative Review

Public enterprises of the United States and England are provided with budgetary flexibility by excluding internal the enterprise budget from review and approval of the legislative branch.⁽⁴⁶⁾

(46) TVA funds consists of corporation fund and appropriation fund. The former is funded by the corporation revenue which is excluded from the budget appropriation of the legislative branch, and the latter which is appropriated by the national treasury is subject to the budgetary approval of the house.

This system is most suitable to provide the maximum budgetary flexibility. However, this system can be used only in the public enterprises that have corporation type management with an independent legal personality. It will be extremely difficult for this type of system to be adopted by the Korean government enterprises. Therefore, the government enterprises will have to seek the other means of providing budgetary flexibility.

b. Providing Budgetary Flexibility by the General Provision of Budget

Provision for "Expenses for Increased Revenue" in the current "Budget and Accounting Act for Government Enterprise" should be adopted in the general provision of the government enterprise budget.⁽⁴⁷⁾

According to the article 24, "Budget and Accounting Act for Government Enterprise", a special account enterprise —such as communication and railway operated under the special account system are authorized to use the excess or expected excess revenue for the immediate expenses of acquiring that revenue. By establishing the general provision of the budget so as to allow the excess revenue to be used for immediate operational expenses, it can prepare for increased demand or other unexpected conditions, and also will make it possible to use the excess revenue for improving operational efficiency. A flexibility in the budget administration is necessary in order to inspire efficient and autonomous business operation of the government enterprises. However, the practical execution of this provision will require adequate check and balance because this provision can be abused.

c. Providing Flexibility in the Execution of the Budget

i) Budgetary flexibility can be provided in the budget allotment.

When the public enterprises adopt a self-supporting system to cover their expenses with revenue, the quarterly allotment system of a budget is meaningless except for the portion that relates to the general government account. Therefore, it is desirable to use a lump-sum-allotment system in budget allotment of the Korean government enterprises. For the deposit of a fund with the treasury or payment of the public rate, some restriction may be exercised as may be necessary.

ii) Providing a high degree of flexibility in budgetary reserves, diversion of budgetary items and budgetary carry over.

According to the present system, using budgetary reserves (contingent funds), diversion of budgetary items and budgetary carry over are subject to an unnecessarily complicated procedure. This should be changed to allow the head of the enterprise to freely exercise his discretion to secure the necessary liquidity of business operations.

d. Maintaining revolving Funds and Reserve Stocks

Even in private enterprise management, revolving funds and reserved stocks are necessary

(47) This system was adopted by the Japanese National Railroad Corporation in 1947, and by the Japanese Monopoly Corporation in 1952, respectively.

to maintain a smooth operation. Especially in the government enterprise, which is subject to a strict budgetary restriction, maintaining revolving funds and reserve stock is an essential requirement for constant operation of enterprise.

Strictly speaking, the problems of revolving funds and reserve stock are not included in the budgetary system. However these problems are discussed here with respect to; a) establishing revolving funds has to go through a budgetary procedure, b) maintaining a reserve stock is controlled by the budget, and c) the two systems unbind, to a certain extent the restriction in the process of budget execution.

The revolving funds will be discussed first. According to Article 20, "Budget and Accounting Act for Government Enterprise," a government enterprise is allowed to maintain a reserve stock sufficient for the operation of the enterprise, within the budgetary limitation.

This system, as a revolving fund system, is also a system which relieves the enterprise from equitation of time in execution of the budget, because a certain stock level is needed to be maintained for the normal operation of the enterprise. The maximum level of the stock needed to be maintained in the fiscal year or the maximum limit of stock at a certain point of time should be regulated by the general budgetary provision in each fiscal year, since an unnecessarily high level of reserve stock creates the possibility of checking the circulation of the enterprise finance.

However, the revolving fund system and maintaining reserve stock should be incorporated by the government enterprises in Korea to provide flexibility in executing the budget.

(2) Budget Based on Accrual Basis

Under the current budgetary system, a government enterprise budget is, as that of general government accounts, formulated on the cash basis. Accordingly a revenue and expenditure budget deals only with the total cash receipts and cash disbursement within a particular fiscal year.

This type of cash basis budgeting makes it impossible to accommodate a business type accounting system, and makes it impossible to relate closing accounts of budget execution with the closing accounts of business accounting of an enterprise, as these two must be dealt with separately. Therefore it is recommended the present system of formulating budgets be reformed to an accrual basis in order to incorporate the business type accounting system.⁽⁴⁸⁾

How can this be accomplished? First, the accrual expenses, such as depreciation charges and asset amortization, should be reflected in the budget by amending the current method of budget formulation and content of budget. In addition to the current budgetary system, separating the budget into profit and loss accounts and capital accounts (when necessary, profit and loss account, capital account, and construction accounts), it is possible to make a

(48) H. Urabe; *Public Enterprise*, op. cit., pp. 442-426.

profit and loss account budget the same as that of an estimated profit and loss statement.

As is shown on the following budget model, it is possible to accomplish this by including all of the revenues and expenditures related with profit and loss, including accrual expenditures such as depreciation charges, into the profit and loss account.

Capital accounting includes depreciation charges, internal funds, such as funds transferred from other loss accounts, repayment of debts, reserve funds and transfer to the construction accounts, with the funds obtained through borrowing or issuing of public bonds, or expenditures for increased amounts of reserve stock.

The construction account consists of expenses for construction, improvement or procurement of fixed assets by transferred funds from capital accounts. When a business is maintained at the same level, expenses of the construction account will be equal to the depreciation charges and capital amortization. When the expenses of construction account exceeds the depreciation charges and amortization, it means expansion of the capital assets.

The following is an example of the government enterprise budget discussed above.

Government Enterprise Budget Structure Model

PROFIT AND LOSS ACCOUNT

(Revenue)

(Chapter) x x x Program Revenue

(Section) x x x Project Revenue

(Item) x x x Activity Revenue

(Item) x x x Miscellaneous Revenue

Total _____

(Expenditure)

(Chapter) x x x Program Expenses

(Section) x x x Project Expenses

(Section) x x x Wages and Miscellaneous Expenses

(Section) x x x Facility maintenance Expenses

(Section) x x x Replacement Expenses

(Section) x x x Overhead Costs

(Section) x x x Expenses for Handling Interest and Debt

(Section) x x x Depreciation charges

(Section) x x x Amortization Expenses

(Section) x x x Expenses for Trusted Work

(Section) x x x Transfer to the Capital Account

Total _____

CAPITAL ACCOUNT

(Revenue)

(Chapter) x x x Internal Fund

(Section) x x x Allowance for Depreciation

(Section) x x x Transfer from the Profit and Loss Account

(Section) x x x Revenue from Asset Disposal by Sale

(Chapter) x x x External Fund

(Section) x x x Issuing Public Bonds

(Section) x x x Borrowed funds

Total _____

(Expenditure)

(Chapter) x x x Transfer to the Construction Account

(Chapter) x x x Repayment of Debt

(Chapter) x x x Investment (Contribution)

(Chapter) x x x Reserve Funds or Transfer to Other Accounts

Total _____

CONSTRUCTION ACCOUNT

(Revenue)

(Chapter) x x x Transfer from Capital Account

Total _____

(Expenditure)

(Chapter) x x x Construction Expenses

(Chapter) x x x Facility Expenses

(Chapter) x x x Expenses for Facility Improvement

(Chapter) x x x General Operational Expenses

Total _____

The second method is to formulate the budget as an estimated profit and loss statement, investment plan, and estimated balance sheet. When the budget is formulated by means of this method, it is based on the accrual basis, and will avoid duplication of the closing accounts because closing the business account will balance the budget.

A budget which contains an estimated profit and loss statement plan, and an estimated balance sheet will most accurately reflect the operating result and financial condition of the enterprise. This method makes it possible to control business management from the macro-

scopic view point, and facilitates managerial improvement, because it is possible to assure not only revenue and expenditures of cash, but the over all situation of commodities, fixed assets and other assets of the enterprises. The current system shows only revenue and expenditure of cash.

Two related methods of an accrual basis budget have been discussed. Of the two, it would be easier to adopt the first method and would require a considerable length of time to adopt the second method, as the general accounts of the government and the heterogeneity of this budgetary system has to be balanced with the governmental budget system.

(3) Adopting Cost Based Budget

The United States adopted, upon recommendation of the Hoover Committee, the performance budget system by amending the "Budget and Accounting Act" in 1950. An amendment of the above act implemented a cost based budget which improved this system.⁽⁴⁹⁾

The cost based budget is formulated on the basis of the cost of the manpower and the materials needed for carrying out a fiscal year work program of the government organization.

It is calculated by a mathematical formula, and can be briefly explained as:

Budget amount = work amount x unit cost. Therefore, the cost based budget makes it possible to compare budget and actual performance or to analyze the operating results. It also provides flexibility for expanding budget expenditure in accordance with increased work amount.⁽⁵⁰⁾

It is extremely difficult to adopt this cost based budget system in the governmental agencies with a single entry accounting system based on the cash basis accounting system in the Korean government agencies, as it is impossible to maintain accurate cost accounting. This is why some of the newly adopted cost based budgets in the Korean ministries of defence, health and social affairs, and agriculture and forestry are unsuccessful.

However, this kind of budget system should be adopted by government enterprises, as they are now using a business type accounting system based on the accrual basis of a double entry accounting system which enables the maintenance of accurate cost accounting. Adoption of the cost based budget will benefit the government enterprises and help to develop the Korean economy.

(4) Unification of Budgeting and Accounting

In summary, the importance of unifying the budgetary accounts and accounting accounts is emphasized, as the current inefficiency caused by the lack of coordination between the budgeting and accounting systems.⁽⁵¹⁾

The dual system of accounting for the government enterprises in Korea is as studied above, and it is not necessary to say again that the present budget and accounting system

(49) J. Burkhead; *op. cit.*, pp. 135-137.

(50) *Ibid.*, pp. 142-156.

(51) T. Ichinose; *Finance of Public Enterprises* *op. cit.*, pp. 114-130.

has to be improved for the efficient management of the government enterprises.

For the improvement of the government enterprises in Korea, the trend of "Budgetary Control through Activity Accounts"⁽⁵²⁾ of TVA should be a most sufficient model to adopt.

CHAPTER V CONCLUSION

In the preceding chapters a discussion was presented of matters for improving financial administration of the Korean government enterprises, at this moment of adopting the new business type accounting system in Korea.

In conclusion, managerial improvement of the Korean government enterprise can be accomplished by liberating the enterprises from bureaucratic control and inflexible policies. Financial autonomy of the government enterprises is the easiest way to provide this efficiency.

Providing autonomy in rate-making policy, funds financing, surplus appropriation, and the budgetary system of the government enterprises was recognized as an important problem at the moment government enterprises in Korea adopted a business type accounting system.

However, financial autonomy and managerial efficiency can not be realized until the management form of the enterprises are reformed so as to completely separate the supervisory administration from the enterprise. The most effective way of reforming these government enterprises would be to adopt a public corporation system for the government enterprises in Korea.

BIBLIOGRAPHY

BOOKS

1. Burkhead, J.; *Government Budgeting*, New York, John Wiley & Sons Inc., 1956.
2. Davies, E.; *National Enterprise*, London, Victor Gollancz Ltd., 1946.
3. Dimock, M.E.; *Business and Government*. New York, Henry Holt, 1949.
4. Dimock, M.E.; *British Public Utilities and National Development*, London, Allen & Unwin, 1933.
5. Friedmann, W.; *The Public Corporation*, Toronto, Carswell, 1954.
6. Hanson, A.H.; *Public Enterprise*, Brussels, International Institute of Administrative Sciences, 1955.
7. Hanson, A.H.; *Public Enterprise and Economic Development*, London, Routledge and K. Paul, 1959.
8. Ichinose, T. *Finance of Public Enterprise*, Tokyo, Dobunkan, 1959.
9. Ichinose, T.; *Financial Management of Public Corporation*, Tokyo, Shunshusha, 1961.
10. Robson, W. A.; *Problems of Nationalized Industry*, London, George Allen & Unwin, 1952.
11. Samuelson, P.A.; *Economics*, New York, McGraw Hill, 1960.
12. Takenaka, T.; *Management of Public Enterprise*, Tokyo, Diamond Co., 1954.

(52) Donald C. Kull; *Budget Administration in the Tennessee Valley Authority*, The University of Tennessee, Knoxville, 1948, pp.23-25.

13. Thompson & Smith; *Public Utility Economics*, New York, McGraw Hill, 1941.
14. Urabe, H.; *Management of Public Enterprise*, Tokyo, Kihodo, 1954.
15. Urabe, H.; *Public Enterprise*, Tokyo, Moriyama Shoten, 1949.
16. Welsch, G.A.; *Budgeting-Profit-Planning & Control*, New York, Prentise Hall, 1957.
17. Tenner, Irving; *Financial Administration of Municipal Utilities*, Chicago, Public Administration Service, 1947.

ARTICLES

1. Dimock, M.E.; "Government Corporations; a Focus of Policy and Administration, I," *American Political Science Review*, October, 1949.
2. Goldberg, S.D. and Harold Seidman; *The Government Corporation*; Elements of a Model Charter, Public Administration Service, Chicago, 1953.
3. Johnson, E.L.; "The Accountability of the British Nationalized Industries," *American Political Science Review*, June, 1954.
4. Pritchett, C.H.; "The Government Corporation Control Act of 1945," *American Political Science Review*, June, 1954.
5. Writer's Manuscript; "An Effective Way for Managerial Improvement of the Government Enterprise," *Business Management Magazine*, Seoul, February 1960.

PAMPHLETS

1. Kull, D.C.; *Budget Administration in the Tennessee Valley Authority*, The University of Tennessee, Knoxville, 1948.
2. Writer's Pamphlet; "*The Financial System of Public Enterprise in Korea*," School of Public Administration, Seoul National University, Seoul, 1961.
3. Writer's Pamphlet; *A study for Managerial Improvement of Transportation Service in Korea*, Published by the Bureau of Finance, Ministry of Transportation, Republic of Korea, 1960.