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The Institutional Relationship between Tax Accounting and Financial Reporting in Japan: Consideration of the Principle of the Definite Settlement of Accounts

Kazumi Suzuki

I. Introduction

While the purpose of financial accounting is the provision of useful information to those external, related groups who make decisions about a firm, the number of profits calculated in financial accounting is also utilized as the basis for the assessment of taxable income. In Japan, the accounting system under the Commercial Law (ASCL) is a typical financial accounting system. ASCL is closely combined with tax accounting through the principle of the definite settlement of accounts (PDSA) in Japan. PDSA requires that a firm should make the closing accounts in accordance with the Commercial Law as a basis for preparing its tax return.

There have been controversies over the interactions between financial reporting and tax accounting in Japan. The main issue in these discussions has been the negative effects of PDSA on financial reporting. In particular, recently, the relation between financial reporting and tax accounting has been discussed from the viewpoint of the harmonization of international accounting in Japan. But opinions as to the most suitable relation between them vary. One of the reason for this is that the traditional normative approach cannot make clear why PDSA exists in the tax accounting system in Japan.

In this paper, I consider PDSA from a different perspective, that of contract theory, instead of using the traditional normative approach. First, I show that the taxation costs, including tax collection costs, tax payment costs and political costs, influence the behaviors of both firms and the tax authorities as well as the system structures. I argue here on the supposition that a firm is a set of contracts. Secondly, I define the contents of PDSA. Thirdly, I identify the influences of the

combination of PDSA and the taxation costs, and analyze the criticisms of its effects. Finally, I consider the factors that cause the existence PDSA and point out those potential problems with PDSA which have not previously been discussed.

II. Background

Since a firm is a subject of accounting behavior, we cannot avoid the issue of how to view a firm in discussing the matter of financial accounting or tax accounting. We have discussed this issue as the accounting entity controversy in accounting theory. Similarly, in traditional tax accounting research, we have contrasted the fictional theory of corporation with the real entity theory of corporation. The former views a corporation as an aggregate of the shareholders, and sees its income as an integration of each individual shareholder. From such a viewpoint, corporation tax is seen as a payment in advance of the individual income tax of the shareholders. However, the latter views a firm as an entity independent from the shareholders, and asserts that we should recognize the unique ability to pay tax in its income and levy a tax on it separately from its shareholders. This argument, however, have not been concluded.

I adopt neither the fictional theory nor the real entity theory as the premise of the discussion in this paper. This is because it is difficult for a limited fixed view of a firm, such as that of the fictional theory or the real entity theory, to uniformly explain the tax accounting behaviors of various firms, from very small family firms to very large publicly-held firms, which exist in reality.

Accordingly, I present a new view of a firm that is available for various firms. This view of a firm does not see a firm as having an organic existence, which has a personality, but as a set of contracts¹. Shareholders, creditors, managers, employees, vendors, customers, and so on make various contracts with a firm. If we do not recognize a personality in a firm, the contracts with a firm can be translated into the contracts with each interest group through the firm. In other words, a firm can be seen as a nexus of the contracts between the various stakeholders.

1. For a detailed discussion of the contract model of a firm, see Sunder (1997).

Following this approach, a firm itself does not have a purpose such as the maximization of profits. It is an individual stakeholder who has a purpose. When we suppose that the purpose of individual stakeholder is the maximization of their own utility, the individual shareholder of a firm makes contracts in order to maximize that utility.

How the income of a firm is assessed greatly affects the utility of the stakeholders. As the performance of a firm belongs not only to shareholders but also to other interest groups, the corporate tax burden is also distributed among the stakeholders. An actual distribution way of the profits and taxes of a firm is defined through the contracts between the interest groups. It is possible that corporation tax might be perfectly shifted to the shareholders, or that most corporation tax might be virtually imposed on the other interest groups. Therefore, this view of a firm is different from that of the real entity theory in the respect that an independent personality is not recognized in a firm. It is also different from the fictional theory in the respect that corporation tax is not supposed to be a burden on only shareholders.

The tax authorities can be seen as one of the interest groups. The tax laws and regulations can also be seen as the types of contracts. Thus, a contract model of a firm can be introduced into tax accounting research. This analytical framework can involve very varied firms. An effective analysis in this framework needs to specify clearly the extent of the interest groups, the utility function of each interest group, and the forms and the contents of the contracts between them. In this paper, in order to simplify the analysis, I limit the extent of the interest groups to shareholders, creditors, managers and the tax authorities, and suppose that the purposes of shareholders and creditors are the maximization of the value of a firm, the purpose of managers is the maximization of their own compensations, and the purpose of the tax authorities is the maximization of the amount of tax collected, to the extent of the tax laws and regulations, and the minimization of the amount of tax collection costs.

The behavior of a firm is an equilibrium situation that results from the decisions by the stakeholders on the basis of the contracts. The contents of a contract through a firm depend on the power balance or other factors, involving laws and regulations. Thus, we cannot uniformly define the behavior of a firm. We have to take the contents

of the contracts between the interest groups, and the costs of enforcing them into consideration, in order to analyze the behavior of a firm, in particular the taxable income assessment, in the approach based on the contract model of a firm.

A contract among the interest groups can be understood as an agency relationship². An agency relationship can also be found in taxation. We can see taxation as the process of shifting the wealth from the shareholders to the state, because corporation tax is paid from the residuals after subtracting the expenses, interest payments to the creditors and the compensation to the managers from the revenues³. When we suppose that an executive manager assesses taxable income and the amount of tax on behalf of the shareholders, a relationship that the shareholders are principals and the executive manager is the agent is formed. This is the relation in the tax payment aspect. We can also find an agency relationship in the tax collection aspect. An executive manager substantially has the authority to assess taxable income and the amount of tax, and to prepare the tax return in a self-assessment system. Therefore, when we suppose that an executive manager collects tax on behalf of the tax authorities, a relationship that the tax authorities are the principals and the executive manager is the agent in the tax payment aspect is formed.

In the tax payment aspect, we can suppose that the shareholders and creditors might require the manager to assess less the amount of tax, permissible to the extent of laws and regulations, with the costs of tax payment as low as possible. The tax payment costs involve the costs of monitoring the taxable income assessment of the manager by the shareholders and the creditors. However, in the tax collection aspect, we can suppose that the tax authorities want the manager to assess the largest amount of tax, permissible to the extent of laws and regulations, with the costs of tax collection as low as possible. The tax collection costs involve the costs of monitoring taxable income assessment of the manager by the tax authorities. Therefore, it seems reasonable to suppose that the shareholders, the creditors and the tax authorities require a mechanism that can minimize the monitoring costs

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2. For a detailed discussion of agency relationship, see Jensen and Meckling (1976).
 3. Strictly speaking, because managers can shift some tax burdens from the shareholders to the creditors, the employees, the vendors, the customers and so on through the tax planning, taxation is understood as the process of shifting the wealth from every stakeholder except the tax authorities to them.

in the accounting system of a firm.

Managers can be also supposed to have a motive to set a mechanism that can justify their own taxable income assessment and can minimize the bonding costs in the accounting system. This is because, if the shareholders and the creditors have suspicions about the taxable income assessment process conducted by a manager, his position will become unstable. Similarly, if the tax authorities have suspicions about the process and they investigate the firm, a lot of difficulties will arise in the work of the manager.

Moreover, the political costs are important in addition to the costs of tax payment and collection. It can be thought that taxation is a kind of political process because it is redistribution of wealth through the intervention of a government. It is inevitable that information costs, lobbying costs, appeasement costs and so on will occur. The interest groups can be supposed to have a motive to minimize these costs. Thus, the composition of a mechanism to minimize these costs in the accounting system is also an important problem.

In this paper, I consider why PDSA exists as the institution in reality on the basis of the critical ideas mentioned above.

III. The content and effects of PDSA

There are two different definitions of the concept of what is called PDSA. The purpose of this section is to explain the content of each definition and clarify the effects brought about by both definitions in common.

III.1. PDSA in a broad sense

Both the Corporation Tax Law (CTL) and the Commercial Law (CL) require that the assessment of income should be based on the generally accepted accounting principles (GAAP) in Japan. The provision of Article 22 of CTL prescribes the method of assessment of taxable income as follows: "The amount of income of a domestic corporation in each accounting period shall be the amount obtained by deducting expenses from gross revenue in the accounting period (Clause 1)." ; "The amount to be reckoned as gross revenue in the accounting period shall, unless otherwise provided for, be the amount

of revenue in the accounting period (Clause 2).” ; “The amount to be reckoned as the amount of expenses in the accounting period shall, unless otherwise provided for, be the amount of costs, expenses and losses in the accounting period (Clause 3).” ; “The amounts of revenues, costs, expenses and losses shall be computed in accordance with GAAP (Clause 4).” Incidentally, CL requires that financial reporting shall be in consideration of GAAP (Article 32, Clause 2). It can be concluded, from what has been said, that both the assessment of taxable income and ASCL are required to follow GAAP.

CTL prescribes the relationship between income assessment both for tax purposes and for financial reporting purposes as follows: A domestic corporation shall file a return based on the definitely settled closing of accounts with the district tax director within two months of the day after the end of each accounting period (Article 74, Clause 1). It is generally agreed that “the definitely settled closing of account,” as mentioned above, means “the defined settlement of accounts in conformity with CL.”⁴ Thus, Japanese CTL mentions the framework of taxable income assessment, where the amount of taxable income is indirectly computed by return-adjusting (adding or deducting) in compliance with some unique requirements of CTL from the reported profit settled in accordance with CL, assuming that it is calculated based on GAAP. We call this framework of taxable income assessment, that is that taxable income must be assessed based on the closing accounts settled through the procedures in compliance with CL, PDSA in a broad sense. This principle is adopted not only in Japan but also in France, Germany, Italy, Portugal and other countries (OECD 1987).

It should be noted that tax accounting practices are not completely bound to the definite settlement of accounts. The taxable income assessments of the objective facts do not depend on the definite settlement of accounts. For instance, even though any records of sales or expenses are omitted from the definite settlement of accounts, the taxable income assessments should be based on the facts, aside from the definite settlement of accounts (Takeda 1985).

4. The fundamental directives of CTL (1950) had provided that “the definitely settled closing of accounts” means that the settlement of the said accounting period is accepted by the general meeting of stockholders (number 314).

III.2. PDSA in a narrow sense

PDSA in a narrow sense can be defined as a basis that requires transactions, to which alternative accounting methods could be applied or of which accounting treatments are likely to be influenced by the discretionary judgments of managers, to be treated in consistent with the methods adopted or judgments in the definite settlement of accounts, so that it binds taxable income assessment to the contents of the accounting treatments in ASCL. In other words, it means the conformity rule.

In Japan, the items to which PDSA in a narrow sense is applied are the following:

- (A) Items to which alternative accounting methods could be applied
 - (a) Items related to internal transactions
 - (1) Application of cut-off method⁵ contained in lower cost or market price method to inventory assets and securities (Cabinet Order 28(2) and 34(2))
 - (2) Depreciation of depreciable assets (Article 31(1))
 - (3) Amortization of deferred assets (Article 32(1))
 - (4) Recording appraisal loss of assets (Article 33(2))
 - (5) Advanced depreciation of fixed assets and the like (Article 42(1), 45(1), 47(1), 50(1) and 51(1))
 - (6) Crediting to allowance (Article 52(1), 53(1), 54(1), 55(1), 56(1) and 56-2(1))
 - (b) Items related to specific external transactions
 - (1) Application of the method of the installment basis (Article 62(1))
 - (2) Application of the method of the deferred payment basis (Article 63(1))
 - (3) Application of the method of the percentage basis completion of construction work contract (Article 64(1))
 - (4) Inclusion in expense of petty sum depreciable assets and small sum deferred assets (Cabinet Order 133 and 134)
- (B) Items related to the judgment of recording expenses

5. A method of regarding the appraised value based on the current market price at the end of term as the acquisition costs, and carrying forward this acquisition costs to the next term.

- (1) Reckoning the amount of bonus for the work of the officers under duty as employees into expenses (Article 35(2))
- (2) Reckoning the amount of bonus to the employee as expenses (Article 35(3))
- (3) Reckoning the amount of retirement allowances paid to retired officers as expenses (Article 36)
- (4) Reckoning the amount of donations as expenses (Article 37(1))

The above (A) items are items to which alternative accounting methods are allowed to be applied. Moreover, because those of (a) are involved in internal transactions, they are not based on certain and objective facts. The characteristics of the above (B) items are so ambiguous that we can not distinguish between expenses and distribution of profits. Managers of a firm have discretion to some extent in the accounting treatments of all of these. PDSA in a narrow sense compels such treatment in taxable income assessment to be bound to the firm's intentions expressed in its definite settlement of accounts.

However, there are various ways by which this can be bound. Item (A)(a)(1) requires that the treatment in taxable income assessment must virtually conform to the treatment in ASCL. This can be explained by the requirement of the records subject to the lower of cost or market method in the book on which the definite settlement of accounts is based. The same may be said of items (A)(b) and (B)(2)(3)(4) because these items are required to be reckoned as expenses in the definite settlement of accounts.

Conversely, in items from (A)(a)(2) to (6) and (B)(1), the treatment in taxable income assessment is not explicitly required to conform with the treatment in ASCL. CTL provides that, out of the amount reckoned as expenses in the definite settlement of accounts, only the amount fixed in the regulations or limited in the way chosen by the firm for tax purposes is permitted to be reckoned into expenses for tax purposes in these items.

As a result, it is theoretically possible that the treatments for financial reporting purposes and for tax purposes are different. Depreciation is an example. CTL provides just that the amount to be reckoned as expenses of depreciation for tax purposes should, out of the amount reckoned by a domestic corporation as expenses of

depreciation in the said accounting period, be the amount up to the amount computed, as prescribed by Cabinet Order, on the basis of the depreciation method chosen by the company, as regards the said assets (Article 31 Clause 1). As a result, when a firm gives notice of the application of the declining balance method for tax purposes to the district tax director, it can apply the straight line method for financial reporting purposes, but the declining balance method for tax purposes. However, when the amount reckoned as expenses of depreciation in the definite settlement of accounts in ASCL is usually lower than the deductible limit of depreciation computed through the method applied for tax purposes, a firm can reckon the sum up to the amount for financial reporting purposes and cannot adjust the margin for deduction on the return form, so that the amount reckoned into expenses in the definite settlement of accounts for financial reporting purposes is virtually reckoned as expenses for tax purposes.

It was mentioned in the preceding section that managers have incentives to save the costs of both financial reporting and tax payment. Because the above parallel treatment which makes tax accounting independent of financial reporting increases such costs, it seems reasonable to suppose that a firm does not actually practice such dual treatments, even though it is possible.

On the contrary, it is possible that a firm applies the declining balance method for financial reporting purposes and the straight line method for tax purposes. In this case, the amount reckoned as expenses in the definite settlement of accounts is likely to exceed the deductible limit of depreciation for tax purposes. This excess amount cannot be reckoned as expenses for tax purposes so that a firm must additionally add it to the reported profits in return-adjustment on the return form. Although this return-adjustment on the return form increases not only the tax payment costs but also the amount of tax, the financial reported profits do not vary. We cannot find an inducement for a firm that dares to apply the declining balance method which does not increase the financial reported profits, in spite of the increase in costs of return-adjustment on the return form and the amount of tax. Therefore, a firm can separately apply a method to tax accounting from financial accounting institutionally, but it does not actually need dual treatment, due to the saving of tax payment costs. As a result, a treatment applied for tax purposes is likely to coincide

with one applied for financial reporting purposes.

As mentioned above, PDSA in a narrow sense has various ways to bind taxable income assessment to the definite settlement in ASCL. However, the minimization of tax payment costs causes the contents of taxable income assessment to be bound to the treatment of the definite settlement of accounts.

III.3. Consequences of PDSA

PDSA allows two interpretations. We can understand that PDSA in a narrow sense requires correspondence between taxable income assessment and ASCL on the specific items in substance, considering that a firm has a motive to minimize its tax payment costs. However, we can also understand that PDSA in a broad sense is the basic and comprehensive framework concerning the whole procedure of taxable income assessment. It requires drawing taxable income from reported profits which are determined in the definite settlement of accounts for financial reporting purposes.

However, the interpretations of PDSA in a broad sense differ as to the extent of the binding to the definite settlement of accounts. One would understand that PDSA in a broad sense only provides that "the amount of current profits or losses" on the attachment schedule No.4 of the return form of corporation tax should be the amount of profits for financial reporting purposes determined in the definite settlement of accounts. In this interpretation, since the purposes of ASCL and tax accounting are different, it may be considered that reported profits can be added some adjustments on the return form within the range of GAAP. Conversely, others could consider that taxable income assessment should be bound to the treatments in the definite settlement of accounts in the range of GAAP as long as CTL does not prescribe a special rule for those. However, the question of which interpretation is appropriate is not important here. As a matter of fact, a firm has little incentive for adjustment in the way which the former interpretation is maintained because of the minimization of tax payment costs. Accordingly, it seems reasonable to suppose that the treatments of items for which CTL does not provide any special rules in the definite settlement of accounts are taken over to the taxable income assessment, assuming that there are tax payment costs.

In such a way, PDSA in a broad sense, as well as in a narrow sense, is considered as bringing about the effects that a firm's decisions on the definite settlement of accounts are also effective on taxable income assessment. Therefore, both PDSA, in a broad sense and in a narrow sense, are the basis which makes taxable income assessment depend on CL formally and substantially.

The discussion above provides three points as substantial consequences of PDSA. First, PDSA provides the framework of taxable income assessment in which taxable income is determined through adjustments of the reported profits in ASCL, in compliance with the rules which reflect the tax purpose. Secondly, it makes taxable income assessment coincident with financial reporting in accordance with CL on the specific choice of accounting treatment methods and the particular expense items. Thirdly, it also makes taxable income assessment coincident with financial reporting in accordance with CL on the other accounting choices and judgments except for those items for which return-adjustment is required, because of saving tax payment costs.

IV. Criticisms of PDSA

PDSA has been criticized mainly from the side of financial reporting. Managers who attach importance to saving tax payment costs, containing calculation efficiency, might include many elements of taxable income assessment in the definite settlement of accounts in advance in order to omit the procedures of the return-adjustment. Such accounting behaviors of managers likely result in a phenomenon that the accounting rules in CTL and other regulations on taxation become the standards for financial reporting purposes. Moreover, the managers' motives for tax saving combines with calculation efficiency so that the amount of reported profits determined in accordance with CL might be reported lower. The motives of managers are dependent on the contents of the contracts made among the managers and the interest groups. Accordingly, under PDSA, the intervention of the rules for tax purposes into accounting practices for financial reporting purposes tends to distort the amount of profits in ASCL (Suzuki 1991). Thus, PDSA includes the problem of inconsistency. That is, although PDSA has an ideal that taxable income assessment should depend on

ASCL, in fact, the tax rules dominate ASCL and financial reporting.

The requirement of consistency between ASCL and tax accounting under PDSA have been criticized on two points. One is the difference between the purpose of ASCL and tax accounting. The other is that the requirement of the two kinds of accounting system gives rise to intervention into accounting practices by governments and the Congress so that there is interference with the sound development of the accounting conventions (Kato 1994).

From the viewpoint of the difference in the purposes, there are two main criticisms. One is that legislation of accounting methods in respect of the requirement of the correspondence between ASCL and tax accounting would tend to debase accounting standards and greatly impair confidence in published financial statements. The reason is that the concepts of taxable income have been shaped largely by social and economic considerations that are incompatible with the objectives of financial reporting in properly matching of costs and revenues (Lent 1962). The other is that requiring the same procedure for financial accounting purposes as allowed for tax purposes would either defeat taxation policy objectives or make financial statements less useful (Arnett 1969).

On the other hand, there is a criticism in respect of the process of setting accounting standards as follows. If the same concept of profit (or income) is adopted in taxable income assessment and in financial accounting, it is to be expected that financial accounting will be completely dominated and regulated by the government. In other words, since the amount of tax varies depending on the alternative accounting method chosen, not only managers but also the government come to have an interest in setting accounting standards. On the assumption that taxable income assessment should be completely based on the reported profits measured by GAAP, it is possible that the government would exert strong influence on the determination of these standards. As a result, there is a fear that the establishment of GAAP will be ruined (Arnett 1969).

For instance, in the U.S., the last-in first-out method (LIFO) can be adopted for assessment of taxable income only on condition that LIFO is adopted for financial reporting. Moonitz describes the reason for adopting PDSA in a narrow sense to LIFO application as the desire to avoid decreases in the revenues of the government, as can be seen in

the following quotation (Moonitz 1974, p.33):

Throughout the 1920s, the "base-stock" method of inventory pricing was used extensively in the nonferrous metals and petroleum products industries. In 1930 the United States Supreme Court knocked out the use of base stock for income tax purposes in the *Kansas City Structural Steel Company* case. The search for a substitute started almost immediately. In 1934 the American Petroleum Institute formally recommended the use of the last-in, first-out method (LIFO). In 1936 a special committee of the AICPA endorsed the recommendation of the API. Prominent accountants, such as Maurice Peloubet, were active spokesmen for LIFO, and appeared before congressional committees to advocate its legitimization. The United States Treasury resisted the use of LIFO in order to "protect the revenues," but the Congress finally amended the income tax law in 1938 and 1939 to include the new formula.

The accounting profession had to pay a price for its partial sponsorship of LIFO, a price many members regret to this day. Mainly at the insistence of the Treasury, consistently opposed to LIFO, the tax law included a requirement that the "elective method" (i.e., LIFO) was available to a taxpayer only if he used it in all of his published financial statements.

It will be clear from this extract that, though it was believed that just those firms which are theoretically suited to LIFO would also adopt LIFO for tax purposes at first, in reality, the tax advantages of LIFO shortly led accountants to develop a theoretical justification for the adoption of LIFO in most cases (Arnett 1969).

In the next section, I will examine the reason why PDSA still continues to exist in spite of the criticisms against it as mentioned above.

V. Re-examination of PDSA

Shareholders can be seen as the principals, and the managers can be seen as the agents, from the perspective of tax payment. In this context, shareholders, as the principals, might desire the managers to increase the value of their firms as much as possible through the

assessment of taxable income. For an increase in firm value in the process of taxable income assessment, it is necessary to adopt those accounting treatments which can result in tax saving and can reduce the costs of tax payment.

However, the agency relationship in which the tax authorities are the principals and the managers are the agents comes into existence from the perspective of tax collection. In this relationship, the tax authorities, as the principals, might desire an increase in the amount of tax, as permitted by the law, and a decrease in the costs of tax collection.

A conflict of the interests comes to be generated between the shareholders' demand for the maximization of the value of a firm through tax saving and the tax authorities' demand for the maximization of the amount of tax. For the stability of society and economy, a system is needed as an institution that controls such conflicts of the interests. In addition, the occurrence of political costs with taxation causes losses not only to the managers and the tax authorities who have to deal with them but also the shareholders through a decrease in the value of their firm. For this reason, a social system that can reduce such political costs is necessary. I consider why PDSA forms as an institution from the critical view described in an earlier section.

V.1. Saving of tax payment costs

A firm is under an obligation to take two kinds of accounting practice, especially for measuring income, in accordance with CL and CTL in Japan. Each law has its own objective, different from that of the other. Therefore, it is possible that a firm would prepare two kinds of books, one for financial reporting purposes and the other for tax purposes. A transaction would be recorded and measured twice, and each would be reported independently, in order to put the relevant accounting system into practice.

However, since both ASCL whose purpose is to determine appropriable profits, and tax accounting whose purpose is to assess income with tax bearing capacity, measure recovery residuals of invested capital in common, the area of the calculation of each overlaps in many parts in practices. Therefore, from the viewpoint of the

efficiency of records and calculations, it is more advantageous in the sense of reducing both costs of financial reporting and tax payment to carry out either ASCL or tax accounting during the stage of making records in the books and accounting treatments and to adjust the differences between them during the reporting stage. In Germany, which adopts PDSA as in Japan, the thoughts of PDSA had already been adopted by the end of nineteenth century due to the desires of merchants. The reason for this is said to be that the merchants complained about repeating the accounting records and treatments based on the Tax Law in addition to those contained in preparing the financial statements in accordance with the General Commercial Law (Bauch und Pfitzer 1984, S.152). The adoption of PDSA can make it possible for merchants to omit the overlapping accounting records and treatments over a wide range of taxable income assessment. But it is indifferent which should be base, ASCL or tax accounting.

V.2. Saving of tax collection costs

Parallel accounting records and treatments of ASCL and tax accounting would impose much of the burden of tax legislation and tax audit on the tax authorities. Let us consider the each aspect in this sub-section.

V.2.1. Saving of the costs of tax legislation

The tax authorities need to prescribe the concrete rules for each actual transaction in detail in order to make independent accounting records and treatments of taxable income assessment possible. However, if CTL uses the rules of accounting records and treatments in CL for the overlapping areas and legislates the original rules which require the return-adjustment on the tax return for only those areas different from ASCL, tax legislation costs are reduced.

V.2.2. Saving of the costs of tax audit

The tax authorities audit taxpayers in order to monitor whether or not they file their returns correctly. However, the tax authorities cannot, in fact, help but apply sampling tests only to some selected firms because it is not feasible to test every firm in detail. For this reason, they need to establish a mechanism which can prevent the

discretionary behaviors of the managers in those firms omitted from the tax audit or on the transactions omitted from the sampling tests and can lead firms to make file the correct returns.

We can consider PDSA to be an institution which has been devised as a mechanism for controlling managers' discretionary behaviors. In general, when a principal is not able to observe the behaviors of an agent, the first best contract for inducing the agent to carry out the best service is to share the results of the agent's behaviors with the agent. Because consistency between the process of determining profits in ASCL, which imply the residual results, and the process of assessing taxable income makes the tax authorities share the results with stakeholders, so that PDSA might be useful for decreasing agency costs. These reduced amounts of costs contain not only the costs of tax audits but also the declining amount of tax paid through tax evasion with the result that the tax authorities can not completely observe the behaviors of a firm.

When managers are requested to save tax by the shareholders, they are expected to choose the accounting methods which decrease in profits and also to estimate the future accounting events as conservatively as possible. For example, Kunimura (1986) observed that firms with good results tend to adopt the declining balance method for depreciation and to plan to increase their value through tax saving. Sakurai (1988) examined the relationship between the change in depreciation methods and the change in stock prices. He observed that the increase in the tax amount that results from the increase in the reported profits due to the change from the accelerated method to the straight line method decreases the stock price, and, in contrast, the tax saving that results from the decrease in the reported profits due to the change from the straight line method to the accelerated method increases the stock price. In short, tax saving through a decrease in reported profits actually increases the value of a firm.

However, tax saving is not the only matter for managers to take into consideration in choosing the accounting method or in giving accounting judgments. Tax is not the only factor of contracts made with a firm. The contracts on the compensation of managers between shareholders and managers or the debt contracts between managers and creditors are the samples of contracts which affect the choice of accounting method or accounting judgments by managers.

The bonus plans hypothesis has been presented concerning the effect of the manager's compensation upon the choice of accounting method. This is a hypothesis that "Ceteris paribus, managers of firms with bonus plans are more likely to choose accounting procedures that shift reported earnings from future periods to the current period (Watts and Zimmerman 1986, p.208)." Since shareholders as the principals are not able to observe the behaviors of managers completely, in designing the conditions of a manager's compensation plan, shareholders are considered to make compensation contracts in which the results of the manager's behaviors are to be shared between shareholders and managers. If the compensation of managers and reported profits move together, the managers are induced to choose the accounting methods which increase reported profits. In Japan, the bonus of executive managers are paid through the appropriation of retained earnings. Accordingly, managers have a motive to increase reported profits, which turns out to be the resource of the appropriation of retained earnings, in order to increase their own bonus. In addition, the improvement of profitability leads managers to gain their reputation and also to stabilize their positions. Similarly, managers have a motive to increase reported profits in accounting judgments. Therefore, PDSA is able to restrain the desire of shareholders to reduce taxable income unreasonably through connecting taxable income assessment to CL regulations by which managers are required to report appropriable profits in order to get a bonus.

The leveraged hypothesis has been presented with regard to the effect of debt contracts upon the choice of accounting methods. This is a hypothesis that "Ceteris paribus, the larger a firm's debt/equity ratio is, the more likely the firm's manager is to select accounting procedures that shift reported earnings from future periods to the current period (Watts and Zimmerman 1986, p.216)." Managers become sensitive to accounting methods and judgements when the items which use accounting numbers are included in debt contracts. For instance, the amount of the reported profits is used in the restrictions on dividends in the covenants on issuing debts. In this case, managers have a motive to increase reported profits. Suzuki (1994) examined the average leverage in a group of the firms adopting the cost basis to evaluate securities as well as in a group of the firms adopting the

lower of cost or market basis. As a result, the average leverage of the cost basis group was higher significantly (5%) than that of the lower of cost or market basis group. This result suggests that firms tend to increase reported profits if their leverages are high and their creditors have strong bargaining powers.

Shareholders put pressure on managers to decrease the reported profits from the viewpoint of tax saving. However, managers might be motivated to increase the reported profits due to their compensation plans or the debt contracts. That is to say, managers do not always report profits unreasonably low in consideration of tax saving. The definite settlement of accounts based on CL can be interpreted as the equilibrium result of income assessment among shareholders, creditors and managers under given contracts. To put this another way, the amount of the profits determined in the definite settlement of accounts is neither overstated nor understated under the situation where the firm is placed. Thus, consistency between the amount of profits determined in ASCL and the amount of taxable income can restrain the discretion of managers in taxable income assessment. This is important for the tax authorities. This is due to the fact that they can prevent firms from reduction of taxable income intended to save tax to some extent, without any particular regulations, by means of placing taxable income assessment on the basis of ASCL.

Moreover, since the contents of ASCL are audited by comptrollers and also by certified public accountants in large companies, the tax authorities can have some confidence in them. As a result, they can put the emphasis of their tax audit on the contents of return-adjustments. This decreases tax audit costs. Therefore, PDSA has the advantage of a decrease in tax collection costs.

As mentioned above, if PDSA is useful for decreasing agency costs with the tax authorities, it is expected that managers will be willing to accept this system. The reason for this is that, in general, an agent has a motive to seek the methods that the principal expects the agent to do his best in order to decrease the agency costs. An agent is willing to pay the expenses for that. Such incentives bring about the development of institutional regulations which can reduce the agency costs. Therefore, concerning the relationship between the managers (agents) and the tax authorities (principals), it is considered that PDSA was invented as an institution to reduce the agency costs and has been

adopted by mutual positive agreement.

V.3. Saving of political costs

PDSA can also be supported from the viewpoint of the political costs. Tax saving increases the wealth of shareholders, managers and so on through an increase in the value of the firm or its dividends. However, the nation might criticize the phenomenon that firms do not pay taxes in spite of increases in their values or the amount of dividends paid. The costs of dealing with such national sentiments can be seen as a political cost.

For example, Citizens for Tax Justice, which is a private group sponsored by labor unions insisting on tax reform, have been criticized that many large firms have been given the tax benefits from investment tax credit or accelerate cost recovery system in its report, called McIntyre Reports, including McIntyre and Dean (1983), McIntyre and Folen (1984) and McIntyre and Wilhelm (1985). McIntyre and Dean (1983) points out that about 80 percent of the ACRS cut in corporate taxes was targeted to the country's largest 2,000 firms --- the top 0.1 percent of America's businesses, and that ACRS gave rise to "tax leasing," the procedure allowing corporations already off the tax rolls because of too many shelters or genuinely low profits to sell excess tax credits and deductions to other firms by entering into phantom "safe-habor leases," as a result, a number of large firms had not paid federal taxes through tax leasing, in spite of their high reported earnings. And McIntyre and Folen (1984) criticizes that 123 of the examined 250 major corporations between 1981 and 1983 paid no federal income taxes or less (i.e., they received rebates of taxes paid in earlier years or sold excess tax benefits) in at least one of the three years, while reported profits of \$57.1 billion, particularly 17 of these 128 companies paid zero or less all three years, gaining net rebates and benefits of \$1.2 billion despite reported profits of \$14.9 billion over the three years, and another 48 firms paid zero or less in two of the three years, claiming rebates and benefits totalling \$2.9 billion on reported profits of \$20.1 billion. Similarly, McIntyre and Wilhelm (1985) shows that 129 of the 275 major companies in the survey managed to pay absolutely nothing in federal income taxes, or to receive outright tax rebates, in at least one of the four years from 1981 to 1984, though

they earned \$66.5 billion in pretax domestic profits in the years, especially 74 companies had at least two years and 26 companies had at least three of the four years of paying nothing or less in federal income taxes. These criticisms were appeared in the newspapers⁶.

This kind of criticisms in the U.S. arise from lack of the strict PDSA. On the contrary, such criticisms probably do not occur because of PDSA in Japan.

The approval of the alternative minimum tax (AMT) in the Tax Reform Act in 1986 (TRA86) is a typical example of the influences of such national sentiments. AMT was established in order to soothe the criticisms by Congress and the mass media that there are many firms that do not pay taxes but report profits and pay dividends.

With the AMT system, firms must additionally calculate alternative minimum tax income (AMTI), excluding tax favorite items, separately from the ordinary taxable income assessment. Moreover, in the case that the reported profits are more than the sum of the amount of deferred tax resulting from tax advantage and the ordinary taxable income, half of the excess has to be added to AMTI as book-income adjustment. In the case that AMTI is more than ordinary taxable income, this system imposes tax of 20% of the excess. And it is deducted from the ordinary corporation tax in the following years when the deferred income tax items resulted from tax advantage are paid. As a consequence, the amount of AMT increases in portion to the amount of reported profits.

The reason why the AMT system was introduced in the first place is that the criticisms by Congress and journalists that those firms which distributed profits as dividends without paying tax were accepted. Depreciation procedure was especially the object of the criticisms. In the U.S., the use of two different methods for financial reporting purposes and for tax purposes in depreciation is accepted. Firms are able to adopt the straight line method for financial reporting and the accelerated depreciation for taxation. Accordingly, it is possible for firms to go into deficit in taxable income and to make reported profits increase at the same time. The new system, AMT, was introduced to deal with the criticisms to the difference between the

6. *The Washington Post* (October 6, 1984), *The New York Times* (November 4, 1984) and *The Washington Post* (August 30, 1985). On this point, see Nakata (1989) pp.145-147.

determination of reported profits and the assessment of taxable income.

Under the AMT system, a firm has to calculate AMTI in addition to the ordinary calculation of taxable income. This additional AMTI calculation procedure imposes additional tax payment costs on firms. The amount of increasing costs can be seen as one of the political costs caused by the criticisms to the differences between reported profits and taxable income.

PDSA can avoid the occurrence of such political costs through consistency between ASCL and taxable income assessment. It may be due to PDSA that the establishment of an AMT system has actually not been advocated in Japan.

VI. Implication of the formation of PDSA

We can recognize, as mentioned above, the economic rationality in the adoption of PDSA. We can observe a similar phenomenon under a similar condition beyond a border of tax jurisdiction as far as this economic rationality is recognized. That is to say, it is possible to put the calculation of taxable income and the financial reporting together in practice by putting tax considerations into the definite settlement of accounts in ASCL, in order to save the costs of tax collection and payment and the political costs, even though PDSA is not explicitly adopted as an institution.

Even in the U.S., where PDSA is said not to exist, earnings management in financial reporting in consideration of tax saving has been observed. TRA86 decreased the corporate tax rate. If firms recognized the future decline in the tax rate, they were expected to shift their taxable income from the higher tax rate period to the lower period for tax saving. And it is possible that they manage income during the stage of the definite settlement of accounts in financial reporting to save tax payment costs and political costs. Guenther (1994) analyzed the influence of the decline in the tax rate on financial accounting practices. This analysis points out that large firms and firms whose leverages are low have a motive to shift taxable income from the higher tax rate period to the lower period for tax saving, and found the accounting practices which defer financial reported profits to the future through the management of the accounting accruals, even

though PDSA is not adopted.

VII. Summary

This paper is intended as an investigation of the reason why PDSA is accepted as an institution in Japan. We considered this issue from a new viewpoint, that is, that a firm is a set of contracts among interest groups. Under this view of a firm, it is supposed that a contract among the interest groups is accompanied by contract costs and political costs. As a result, the interest groups wish to make such contracts with low costs or to form such institutions that can decrease these costs.

Thus, when we understand PDSA as the means of minimizing tax payment costs, tax collection costs and political costs, we can point out the possibility that consistency between financial reporting and taxable income assessment naturally occur even though this is not compelled by regulation. In fact, we can observe such phenomena in the U.S. This means that the problems which are pointed out regarding PDSA potentially exist even in the countries where it is not institutionally accepted. Therefore, the criticisms that PDSA, in combination with the tax saving consideration, decreases reported profits and they are likely to be low relative to the international standard so that we can not internationally compare accounting information in Japan, are fallacious.

This suggests that the problems pointed out with regard to PDSA could not be removed even though the institutional PDSA system would be abolished. We had better make it clear under what conditions tax saving considerations influence the process of financial reporting on the premise that financial accounting is likely to be consistent with taxable income assessment, rather than argue for the elimination of PDSA.

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