

---

# An Estimation of Tax Expenditure in Japanese Income Tax from the Viewpoint of the Fiscal Transparency<sup>\*</sup>

---

Toshiyuki UEMURA<sup>\*\*</sup>

(Visiting Research Fellow, Board of Audit of Japan)  
(Associate Professor, School of Economics, Kwansai Gakuin University)

---

## 1. Fiscal Transparency and Tax Expenditures

In recent years, awareness of the importance of financial transparency has become common in pursuing sound financial conditions, a stable and growing economy, and improvement of governance of the government by the nationals. Naturally enough, the waste of public finance, which offends the sensibilities of the people, is totally unacceptable; transparency of public finance is indispensable in checking for the waste of public finance. Disclosure of information on finance to nationals should be guaranteed in order for the people to dominate the government well, and to alleviate what is called the “common pool problem” and “agency problem”<sup>1)</sup>. IMF manuals and OECD guidelines involve a list of various methods to improve the nationals’ governance by making financial conditions transparent<sup>2)</sup>.

These manuals and guidelines recommend that tax expenditure budgets be incorporated in a budget document<sup>3)</sup>. The concept of tax expenditures are thought to be important for the current public finance of Japan, as well in the future. As mentioned below, tax expenditures may have the same effect as direct expenditures by public finance. However, tax expenditures do not appear in a regular budget, which makes it difficult for the nationals to grasp. Disclosing tax expenditure budgets enables the nationals to recognize for the first time that “hidden subsidies” are distributed as resources by tax expenditures. A tax expenditure budget is a means to improve the efficiency of the resource allocation function of public finance, and to expose the income redistribution function by tax expenditures through making up of the budget. This paper discusses tax expenditures based on such awareness. Tax expenditures are

---

<sup>\*</sup> This paper is based on hearings on persons in charge of special taxation measures of the Ministry of Finance. I would like to express my gratitude to the fellows for precious information.

<sup>\*\*</sup> Born in 1972. Graduated from the School of Economics, Kwansai Gakuin University in 1994, and completed the first half of the doctoral course of the Graduate School of Economics, Kwansai Gakuin University in 1996. Acquired the requisite credits for the latter half of the doctoral course and left the Graduate School of Economics, Kwansai Gakuin University in 1999. Worked as a research fellow for the Japan Society for the Promotion of Science in 1998 and 1999. Became a full-time lecturer at the Faculty of Economics in 2000, an assistant professor in 2003, and an associate professor in 2007 of Toyo University. Became an associate professor at the School of Economics, Kwansai Gakuin University in 2008. Has been a visiting research fellow at Board of Audit of Japan since 2007. Worked as a visiting fellow at the University of Warwick in the UK, a visiting fellow at the Planning Coordination Office, the House of Councillors, The National Diet of Japan, an expert member at the Tax Commission, the Government of Japan, a visiting fellow at the Economic and Social Research Institute, Cabinet Office, Government of Japan etc. Obtained a doctor’s degree in economics at Kwansai Gakuin University in 2000. Major publications include, “Economic Analysis of Public Burden: Evaluation of Tax Reform and Pension Policy” (K. G. University Press, sole author, 2001), etc. Email: uemuratoshi@hotmail.com

<sup>1)</sup> Regarding the “common pool problem,” see a book written and edited by Aoki and Tsuru (2004). The “agency problem” is caused when a government as an agent takes an action that differs from the will of the nationals as a principal (clients).

<sup>2)</sup> Regarding transparency of public finance, IMF manuals and OECD guidelines, see Allen and Tommasi (2001) and the Ministry of Finance, Policy Research Institute (2002). According to OECD (2002), principles necessary for governance of the government are “fiscal responsibility,” “transparency,” and “openness.”

<sup>3)</sup> In particular, see OECD (2004).

normally reported in a number of advanced countries, which is, however, not the case in Japan. This paper adds concreteness to discussions by measuring tax expenditures in income tax in particular, and emphasizes the necessity of creation and disclosure of tax expenditure budgets.

This paper is composed as follows: Paragraph 2 explains the concept of tax expenditures. Paragraph 3 shows the viewpoints to be considered when policy evaluation of tax expenditures is carried out. Paragraph 4 explains a method to measure tax expenditures. Tax expenditures in the income tax of Japan are estimated in paragraph 5, while analytical results are presented in Paragraphs 6 and 7. Paragraph 8 summarizes the analytical results of this paper and concludes with an emphasis on the necessity of tax expenditure budgets.

## 2. What are Tax Expenditures?

The ultimate goal of tax is to secure financial resources which cover expenditures, while the government may implement special policies using tax. Tax expenditures are positioned in such a context.

Most government policies are implemented by direct expenditures, which are incorporated into the democratic budget process to be budgeted with a national consensus. However, tax expenditures are, in some cases, treated off the regular budget (off budget). Direct expenditures that are incorporated into the budget are more transparent than tax expenditures. Therefore, the necessity to clarify tax expenditures as a budget is emphasized from the standpoint of financial democracy.

The concept of tax expenditures has a long history. Surrey (1973), the advocate, emphasized that various exemptions, deductions and special measures incorporated into the tax system were “hidden subsidies,” which had the same effect as direct expenditures, and that it was necessary to grasp them as tax expenditures. As for the evaluation of public expenditures, it is understood that it should be carried out while considering the economic effects of not only direct expenditures but also tax expenditures. To this end, it is essential to grasp tax expenditures quantitatively.

Ideologically, in order to measure tax expenditures, it is necessary to assume the role of tax and regard tax expenditures as deviations from it. A tax system considered to be standard includes tax rate structures, accounting procedures, structure of deductions, handling of taxation in tax procedures and international taxation obligation. To be more specific, tax expenditure includes deductions from taxable income, tax credits, reduced tax rates and various special measures.

In the United States, tax expenditures were clearly written in the Congressional Budget and Impoundment Control Act of 1974. This Law obliged the Office of Budget to prepare and submit tax expenditure budgets to the Congress. According to the definition in the Law, tax expenditures are “revenues losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral tax liability.”

Originally, on the basis of tax that forms the foundation of a comprehensive income concept, Surrey regarded tax expenditures as a tax system deviated from the standard. However, whether comprehensive income tax is appropriate or not is left to value judgment. There is no need to peruse the controversy on the ideal role of tax, such as expenditures tax and the theory of optimum taxation. Therefore, it is becoming more common to realistically regard various exemptions, deductions and special measures as tax expenditures in recent years, but not as a deviation from the

comprehensive income concept.

For example, for which taxes each country measures the tax expenditures depends on their each country. Table 1 indicates that for which taxes the countries report tax expenditures, where they create and disclose tax expenditure budgets<sup>4)</sup>. Moreover, some regard deductions from taxable income as tax expenditures and others do not include the income deductions in tax expenditures as appropriate tax. That is, items of tax expenditures change depending on which items are treated as “special” ones. Accordingly, items of tax expenditures vary depending on each country<sup>5)</sup>.

In the case of Japan, the Ministry of Finance annually discloses the “estimation of the amount of drop in revenues by Special Taxation Measures Laws” and submits it to the Diet as a reference. Although the Special Taxation Measures Law is a kind of tax expenditures, its concept is narrower than that of tax expenditures. Historically, the Special Taxation Measures Law has been enacted to promote industries and savings, so that the law is mainly related to industry. On the other hand, as shown in Table 1, tax expenditures generally include taxes related to household budgets.

**Table 1: International comparison of range of tax expenditure budget**

Country	Coverage		Classification
	Types of tax	Level of government	
Australia	Personal income tax, retirement benefits tax, fringe benefits tax, business tax, excise tax.	Commonwealth government (Central Government)	By broad economic function, by type of taxpayer affected, and by the particular benchmark to which they relate
Austria	Direct and indirect taxes.	All levels of governments	By type of tax and by beneficiary.
Belgium	Personal income tax, corporate income tax, excise taxes, mortgage registry fees, VAT, and insurance policies.	Federal government	By whether the treatment constitutes a expenditure, by type of tax, by intended purpose
Canada	Personal income tax, corporate income tax, goods and service tax.	Federal government	Personal income tax by budgetary functional category: corporate income tax and VAT by type of tax provision: for example, rate of reductions, exemptions, deductions, deferrals, rebates and credits
France	Personal income tax, corporate income tax, registry fees and stamp duty, VAT, payroll tax, and internal tax on the consumption of petroleum products	Central government	By type of tax, by main purpose and by beneficiary.
Germany	Personal income tax, corporate income tax, net worth tax, business tax, turnover tax, insurance tax, motor vehicle tax, excise taxes, betting and lottery tax, property tax, inheritance tax	Federal government	By industrial sectors, within these sectors, by type of tax
Italy	Personal and corporate direct taxes, VAT, excise taxes, customs duties, and other indirect taxes	Both federal and local governments	By type of tax, by main sector involved, by aim, by beneficiaries and their locality.
Netherlands	Wage and income taxes, corporate tax, VAT, excise taxes, energy tax, motor vehicle tax, estate and gift tax, and social insurance contributions	Central government	By purpose of tax expenditure (direct taxes) and by type of tax (indirect taxes).
United Kingdom	Personal and corporate income tax, capital gains tax, inheritance tax, stamp duty, national insurance contributions, and VAT	Central government	By tax expenditures, by structural relief, of by relief, with tax expenditures and structural components under each tax if possible by budgetary functional category
United States	Personal income tax, corporate income tax, estate and gift taxes, and social security contributions	Federal government	By budgetary functional category.

Note: Quoted from Bixi, Valenduc and Swift ed. (2003)

<sup>4)</sup> See Craig and Allan (2003) for an international comparison of tax expenditure budgets including developing countries.

<sup>5)</sup> It is difficult to make an international comparison because each country has different methods of calculation and definitions of tax expenditure. In the case of the U. S., the Office of Management and Budget and the Joint Committee on Taxation create tax expenditure budgets. As the definitions of tax expenditure by these entities are slightly different, the amounts of tax expenditure do not agree with each other. According to GAO (2007), the amount of tax expenditure of the Federal Government is on the increase, and is reported to have doubled in the past 30 years.

### 3. Policy Evaluation of Tax Expenditures

Although it is difficult to define tax expenditures, it is becoming more important in recent years because of financial transparency and political demands. It is a political choice to decide which one is better, direct expenditures or tax expenditures. In order to make this decision, information on tax expenditures is essential. Moreover, there is a possibility that tax expenditures have caused invisible conflicts of interest and redistributive effect among the people. For the viewpoint of combining the tax system and tax expenditure system, grasping the current status of tax expenditures is to be the first step. Tax expenditures hold great importance especially in Japan where an integrated reform of tax and social security systems is needed<sup>6)</sup>.

Assume that there is a policy purpose, and that both tax expenditures and direct expenditures are available in order to achieve the purpose. Normally, it is necessary to check which serves the policy purpose properly; tax expenditures or direct expenditures. To that end, it is beneficial to understand positive and negative aspects of tax expenditures<sup>7)</sup>.

Firstly, there are such opinions about positive aspects of tax expenditures as follows: 1) it has an effect of raising economic incentive of the private sector under the government's initiative, 2) decision making of the private sector is prioritized than that of the government, and 3) it has an effect of reducing direct expenditures. Tax expenditures should be actively utilized in a case that these factors are positively evaluated.

On the other hand, there are such opinions about negative aspects of tax expenditures as follows: 1) it becomes vested interests departing from the original needs, 2) it inhibits horizontal equity and vertical equity, 3) it is not neutral with respect to economic activities, 4) low-income earners who do not bear the tax burden cannot benefit from tax expenditures, 5) tax expenditures give priority to high-income earners and weakens income redistributive effect, 6) it complicates the tax system and raises tax collection costs, causing tax evasion and tax avoidance, 7) it becomes difficult to estimate tax revenues due to the decrease in tax revenues, and 8) it is difficult to be a target of policy evaluation. Tax expenditures should not be used when these would be bottlenecks.

It is necessary to evaluate tax expenditures taking the above-mentioned positive and negative aspects into consideration. As specific evaluations, the following common examples are listed<sup>8)</sup>:

#### (1) Ability-to-pay Taxation Principle and Redistributive Effect

Tax expenditures give priority to high-income earners in many cases. For example, tax exemption for dependents is a major example. Therefore, it may be necessary to review the ability-to-pay taxation principle when tax expenditures are considered. It is important to check whom tax expenditures give preferential treatment to from the viewpoint of each income class.

It is difficult to grasp the actual status in the case of tax expenditures to firms, depending on how incident should be treated. Tax expenditures to firms affect consumers, employees, shareholders and creditors depending on market conditions an enterprise faces. Normally, it is impossible to analyze tax expenditures by class without considering tax expenditures to firms. However, assuming that the ratio of incidence to shareholders is relatively high, tax

---

<sup>6)</sup> See Uemura (2008)

<sup>7)</sup> Positive and negative aspects of tax expenditure are also summarized in the Commonwealth of Australia (2006).

<sup>8)</sup> Regarding individual evaluations on tax expenditures, see Howard (1997) and Datta and Grasso (1998).

expenditures give preferential treatment to high-income earners as most shareholders are most likely high-income earners.

## (2) Analysis of Effect on Economic Activities of Economic Agents

Tax expenditures change economic activities of economic agents such as households and firms. It is necessary to analyze whether changes in economic activities by tax expenditures is desirable in the light of neutrality and fairness of tax.

## (3) Comparison of Direct Expenditures with Tax Expenditures

It is necessary to analyze and evaluate to decide which is better; direct expenditures or tax expenditures. In doing so, it should be noted that tax expenditures only affect economic agents that pay taxes. Benefits of tax expenditures do not extend to low-income earners who do not bear the tax burden. Therefore, direct expenditures may be more desirable than tax expenditures as an income redistribution policy. As described above, the concept of tax expenditures is important to accurately grasp redistributive effect of direct expenditures and tax expenditures.

## (4) Efficiency of Tax Expenditures

Without tax expenditures, the taxation base becomes wider so that other tax rates fall. Moreover, distortion of economic activities caused by the existence of tax expenditures decreases. As such, tax expenditures have a high possibility of inhibiting efficiency. Thus, it is necessary to evaluate tax expenditures from the viewpoint of efficiency.

# 4. Measuring Methods of Tax Expenditures

As tax expenditures are not actual expenditures, it is necessary to measure them from data. It is said that there are three major methods to measure tax expenditures<sup>9)</sup>.

### - The revenue forgone approach

This is a method of measuring the amount of tax expenditures by measuring how much tax revenues decreased from the taxed state comparing to a reference tax system. In this case, economic activities of taxpayers are assumed to be unchanged. For example, it is a method of regarding an amount of tax credits as that of tax expenditures. Alternatively, it is a method of regarding the amount of deduction from taxable income multiplied, just to be applied, by a marginal tax rates as the amount of tax expenditures.

### - The revenue gain approach

This is a method of measuring the amount of tax expenditures by measuring how much tax revenues increase when a specific tax system is removed. In this case, changes in economic activities of taxpayers are also considered. This method requires data of elasticity concerning economic activities of taxpayers. For example, in Europe, as for the reduced tax rate on food of a common value-added tax, an increase in tax revenues is measured considering how taxpayers act in a case that there is no reduced tax rate. However, such estimation method is not straightforward.

<sup>9)</sup> The three methods of measuring tax expenditures are reported in the Commonwealth of Australia (2006)

### - The outlay equivalence approach

This is a method of measuring the amount of tax expenditures by measuring how much “tentative” direct expenditures to taxpayers as much as benefits of tax expenditures are needed. Measurement of tax expenditures applying this method makes it simple to carry out comparative analysis with direct expenditures.

An amount may change by adopting one from the above-mentioned methods. Moreover, the reason the revenue forgone approach is adopted in several cases is because its calculation is relatively simple.

In measuring tax expenditures, how much database the government possesses becomes a problem. Currently, the most ideal method is using a micro simulation model. Micro simulation is a model based on real individual data so that loss of tax revenues, that is tax expenditure, can be measured with high accuracy. In order to establish a micro simulation model, a database of taxpayers including households and firms is required.

As for Japan, it may be possible to construct a database of tax files owned by the National Tax Agency using electronic media and to utilize it for measuring tax expenditures. However, consideration should be given to privacy because individual data is involved. Moreover, the system must not be easily accessed by hackers or such. It might not be impossible for the Ministry of Finance to construct a model which measures tax expenditures because the Ministry of Health, Labor and Welfare has constructed a detailed pension finance model of the public pension system.

Nevertheless, it is most likely impossible to cover the data of households and firms all over the country. Therefore, it is necessary to predict the amount of tax expenditures based on samples collected thoroughly and to correct it to macro numbers. It should be recognized, therefore, that the amount of tax expenditures is not definite but includes a certain margin of error.

There are few studies which measure loss of tax revenues in Japan. Hashimoto (2002) estimates tax privileges derived from tax-exemption and relief measures of consumption tax using an input-output table. The tax privileges are “hidden subsidies” for small businesses and a kind of tax expenditures. According to Hashimoto (2002), the highest amount of tax privileges that consumption tax has in 1999 is estimated to be about 1.75 trillion yen. The amount of profit tax is equivalent to that of tax expenditures consumption tax has. Moreover, Morinobu and Maekawa (2001) estimate the degree of how exemption in income taxation erodes the taxation base. However, as it is an approach from macro statistics, it cannot present tax expenditures per taxpayer. In the following sections, let us capture the tax expenditures in national income tax from macro and micro aspects.

## 5. Estimation of Tax Expenditures in Income Tax

Measuring tax expenditures of all taxes is a work beyond the capacity of one researcher. However, it is possible to estimate a part of tax expenditures using currently disclosed statistics. In this section, tax expenditures by deductions from taxable income of national income tax are estimated<sup>10)</sup>.

Measurement of tax expenditures in this paper uses the revenue foregone approach introduced above. Accordingly, economic activities of taxpayers are assumed to be unchanged before and after taxation of income tax.

<sup>10)</sup> Tax credits of income tax (e.g. tax credits for dividends and special deductions of housing loan) are not subject to estimation herein as the tax expenditures have been calculated in the “estimation of the amount of drop in revenues prescribed in the Special Taxation Measures Law” of the Ministry of Finance.

Materials used for the estimation include tax statistics by the National Tax Agency titled “the Statistical Survey of Actual Status for Salary in the Private Sector (actual status of salary in the private sector from the perspective of tax statistics)” and “the Results of Sample Survey for Self-assessed Income Tax (actual status of self-assessed income tax from the perspective of tax statistics).” The former covers income earners in the private sector (salaried workers) working in firms subject to tax withholding, and the latter covers those who must file their tax returns (business income earners, farm income earners and other income earners)<sup>11)</sup>.

These tax statistics contain data such as the amount of deductions from taxable income and people who used such deductions by income class or by the total income class. Tax expenditures by deductions from taxable income of income tax by industrial and by income class are estimated in this section. Analyses were made subject to the 6 years from 2001 to 2006. A method of estimating tax expenditures in deductions of income tax is described below on the basis of the tax statistics in 2006.

First of all, “the Statistical Survey of Actual Status for Salary in the Private Sector” shows the number of income earners who are divided into 12 income classes from under 1 million yen per year to over 20 million yen per year. Income classes are based on employment income before deductions from taxable employment income. Each median of twelve income category types is assumed to be employment revenues representing each income class<sup>12)</sup>.

Based on the individual employment revenues, deductions from taxable employment income are calculated according to the income tax system. As for exemption for spouse, etc., the number of those subject to deductions is indicated in the “Table 17 Various Deductions by Income Class.” Regarding deduction for social insurance premiums, the amount and the number of those who used it are shown. The amount of deductions from taxable income per person in employment revenues representing the respective income class is calculated using such data. Deductions from taxable income considered as tax expenditures in this section are as shown in Table 2.

Table 2: Deductions from taxable income considered as tax expenditures<sup>13)</sup>

(Basic deduction) Exemption of handicapped person, exemption of heavily handicapped person, exemption for widow, exemption for specified widow, working student allowance, deduction for social insurance premiums, exemption for spouse, exemption for heavily handicapped spouse living together, exemption of aged spouse, exemption of heavily handicapped and aged spouse living together, exemption for dependents, exemption for specified dependents, exemption for aged dependent living together, exemption for other aged dependent, exemption for handicapped dependents living together, exemption for handicapped dependents not living together, deduction for small-scale business enterprise mutual aid premiums, deduction for life insurance premiums, deduction for damage insurance, special exemption for spouse, deduction for medical expenses (only taxpayers by self-assessment), deductions for donation (only taxpayers by self-assessment)

<sup>11)</sup> Some may be counted in both statistics. However, such duplication is ignored herein as it is impossible to eliminate them as a matter of data processing.

<sup>12)</sup> For example, if one belongs to an income class over 5 million yen and less than 6 million yen, employment revenues are considered to be 5.5 million yen for convenience.

<sup>13)</sup> Casualty loss deduction was omitted because not many applied to it and the amount was small. As for basic deduction, it is difficult to decide whether it should be included as tax expenditure because all taxpayers are subject to this deduction. Therefore, both cases that include and do not include it as tax expenditure are considered herein.

Employment income is derived by deducting deductions for employment income from individual employment revenues. The marginal tax rate, which is applied when a certain deduction from taxable income is used, is derived by deducting basic deduction and deduction for social insurance premiums applicable to any taxpayers from employment income, and then by applying the income tax system to income from which a certain deduction from taxable income is deducted. Basically, tax expenditure per person is calculated based on the following formula:

Tax expenditure per person at a certain deduction from taxable income

= the amount of deduction from taxable income per person × marginal tax rate which is applied to the case when a certain deduction from taxable income is used

Moreover, tax expenditure can be derived by multiplying tax expenditure per person by the number of taxpayers or the number of users of the relevant deduction. Then, the total amount of tax expenditure can be derived by adding up the tax expenditures related to these deductions from taxable income.

Tax expenditure at a certain deduction from taxable income

= Tax expenditure per person of a certain deduction from taxable income × the number of tax payers (or the number of users of the relevant deduction)

A data processing method in “the Results of Sample Survey for Self-assessed Income Tax” is the same as that of employment income earners. In this case, tax expenditures are estimated by industrial classification of business income earners, farm income earners and other income earners. As for taxpayers by self-assessment, the total amount of income in which data of deductions from taxable income is recorded is divided into 18 income classes ranging from 350,000 yen to over 50 million yen per year. There are more types of income classes compared to those of employment income earners. The total amount of income herein is a concept of the amount from which expenses are deducted, and corresponds to employment income (= employment revenues - deductions from taxable employment income) for employment income earners<sup>14)</sup>. Moreover, in the case of taxpayers by self-assessment, deductions for medical expenses and donation are taken into consideration as shown in the following table.

The total tax expenditures in income tax can be derived by adding up tax expenditures related to each deduction from taxable income derived from the above-mentioned process.

## 6. Analytical Results of Tax Expenditures in Income Tax

In this section, analytical results of the estimation in the previous section and their interpretation will be shown.

First of all, Figure 1 shows transitions of income tax revenues for the government and the total amount of tax expenditure of income tax. As for basic deduction, a case that is included in tax expenditures and a case not included

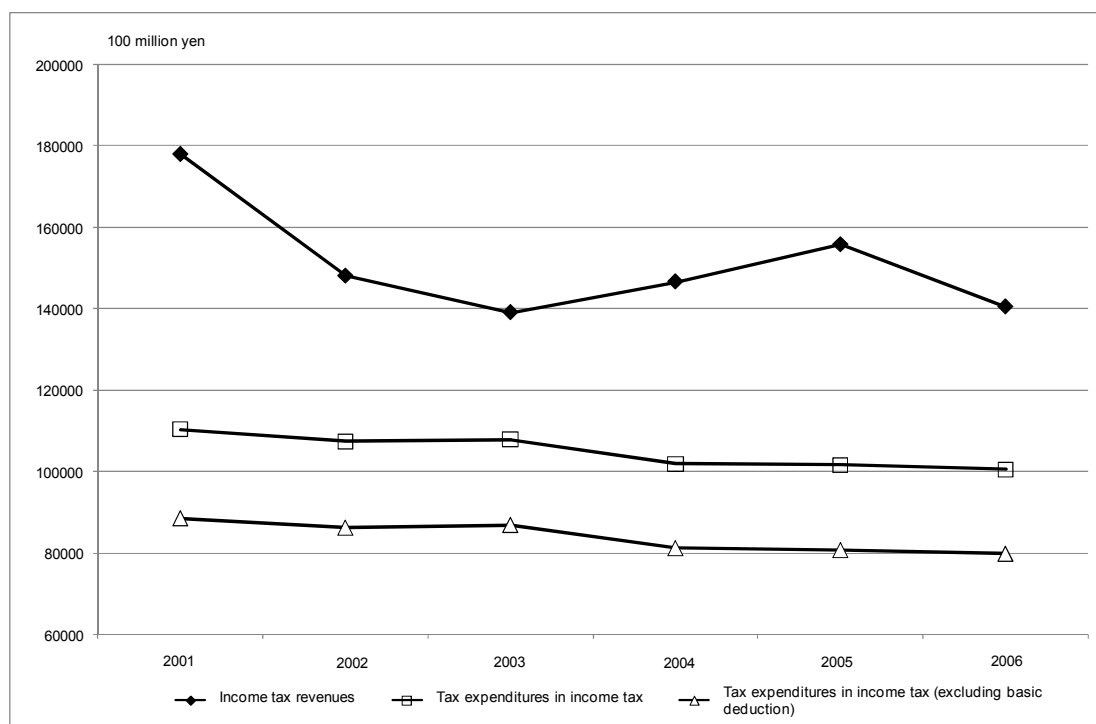
---

<sup>14)</sup> In this paper, deductions from taxable employment income are not considered to be tax expenditure. This is because the total amount of income of self-employed individuals is an income concept from which necessary expenses are deducted. Also in the case of employment income earners, employment income derived by deducting deductions from taxable employment income from employment revenues is used as reference. In that manner, income concepts of them are matched.



are presented. Figure 1 shows transitions from 2001 to 2006. During this period, there had not been major changes concerning the income tax system in such areas as the tax rate structure and the amount of deductions from taxable income except for special exemption for spouse. Special exemption for spouse has been abolished in cases where employment income is over 10 million yen since 2004.

Figure. 1: Transitions of income tax revenues and tax expenditures in income tax



Note) Income tax revenues are the total of withholding tax on income and self-assessed income tax in the “National Tax Agency Annual Statistics Report” by the National Tax Agency.

Figure 1 shows that fluctuations of the total amount of tax expenditure are smaller than those of income tax revenues. The effect of reform of special exemption for spouse was one of the causes why income tax revenues turned to increase in 2004. Economic cycles and the declining birthrate combined with the aging population are considered to be other factors; however, tax expenditures are stable with respect to these factors.

Subsequently, Figure 2 shows transitions of breakdowns of tax expenditures in income tax. It was difficult to show all breakdowns of deductions from taxable income in this figure so that ones with the bigger amount are extracted. The breakdowns of tax expenditures do not show significant time-series fluctuations as same as the total amount mentioned earlier. The only thing to be noted is that tax expenditures of “other deductions” dropped in 2004 due to the effect of the reform of special exemption for spouse.

Figure. 2: Transitions of breakdowns of tax expenditures in income tax

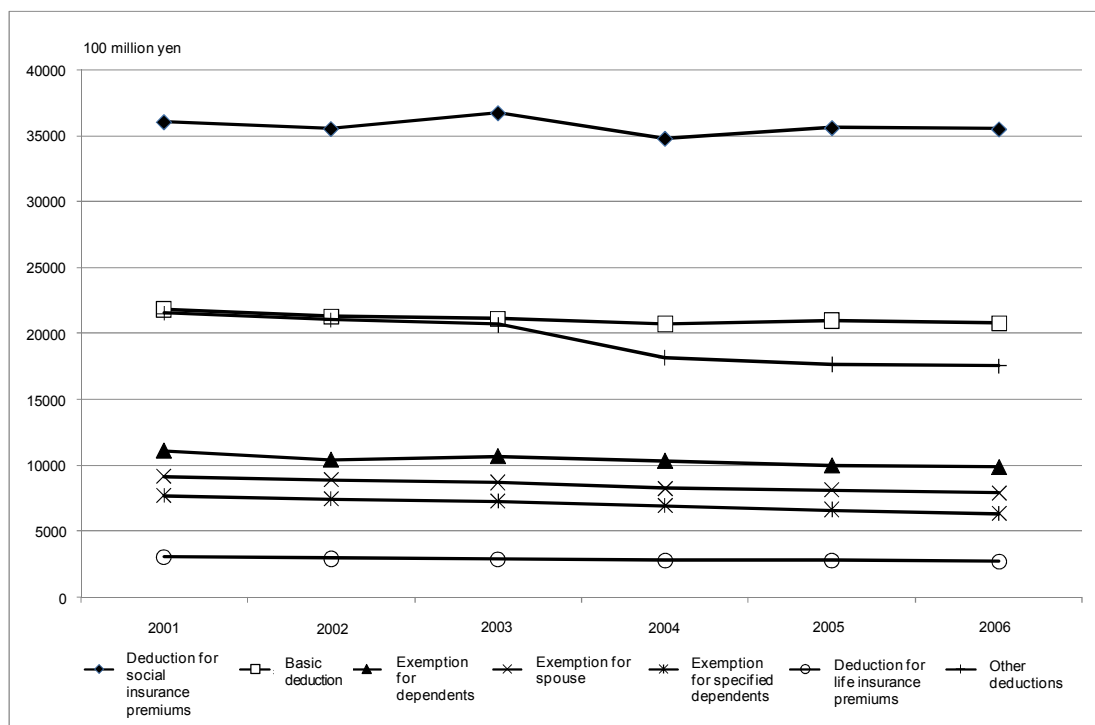


Figure 3 shows proportions of breakdowns of tax expenditures in income tax in 2006. Deduction for social insurance premiums occupies the highest share in tax expenditures of income tax, followed by basic deduction, exemption for dependents, exemption for specified dependents and deduction for life insurance premiums.

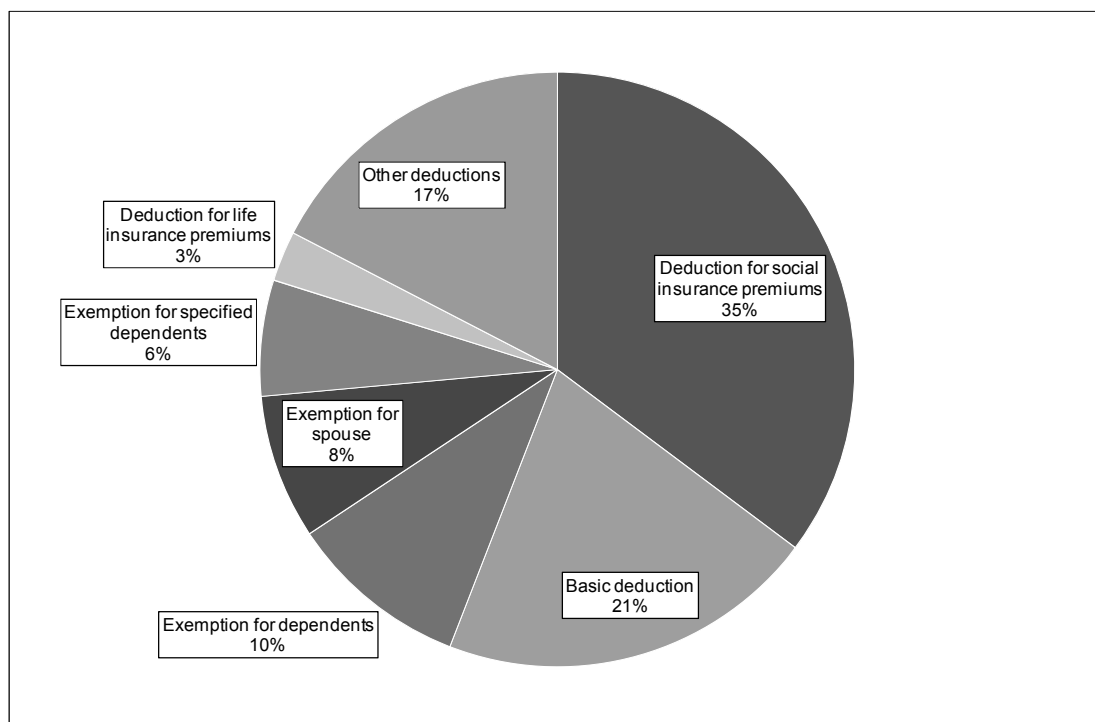
Deduction for social insurance premiums, exemption for dependents, exemption for spouse and deduction for life insurance premiums function as “hidden subsidies” in terms of social policy. Therefore, whether or not the standard of these tax expenditures is reasonable should be carefully considered in relation with social policy for ordinary direct expenditures.

In particular, if declining birthrate combined with the aging population continues to progress, tax expenditures due to exemption for dependents will be on a decline. It is necessary to discuss a trend of declining tax expenditures due to exemption for dependents in the future, in association with countermeasures against the falling birthrate. Moreover, tax expenditures due to exemption for spouse are “hidden subsidies” for full-time housewives, etc. Appropriateness of the standard of tax expenditures due to exemption for spouse will no doubt be open for discussions in considering utilization of female workers against the shortage of workforce according to declining population in the future.

On the other hand, tax expenditures in deduction for social insurance premiums will likely increase in the future. This is because it was decided in the public pension reform in 2004 that the pension premium rate will be raised by 2017, raising tax expenditures in deduction for social insurance premiums<sup>15)</sup>. If tax expenditures due to deduction for social insurance premiums are regarded as “hidden subsidies” for maintaining social insurance, it should be known that the social insurance system and tax expenditures are inseparable.

<sup>15)</sup> However, tax expenditure in social insurance premiums may decrease if the number of workers decreases due to the declining birthrate.

Figure.3: Proportions of breakdowns of tax expenditures in income tax (2006)



## 7. Analytical Results of Tax Expenditures per Taxpayer

In the preceding section, tax expenditures of income tax were considered from a macro aspect. In this section, analytical results of tax expenditures in income tax from a micro aspect and their interpretation will be shown. In order to analyze tax expenditures from a micro aspect, economic agents will be divided by specific attributes. Tax expenditures related to households can be divided by attributes such as income class, generation and region, and tax expenditures related to firms by capital class, industrial class and region. Analysis from a micro aspect increases factors for considering tax expenditures as theories of policy<sup>16)</sup>.

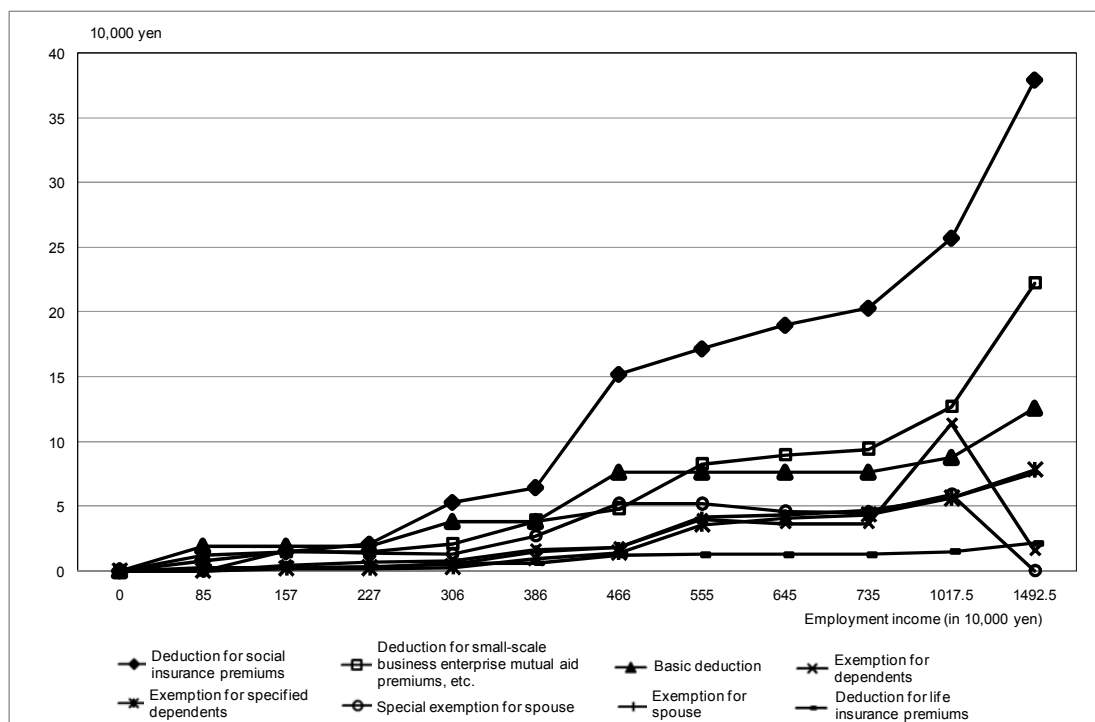
In this section, analytical results of tax expenditures in income tax are shown by income class and industrial class. Tax statistics of the National Tax Agency show data by income class and industrial class, making it simple to estimate tax expenditures by such data. Analytical results based on the tax statistics data of 2006 are shown herein. Tax expenditures shown in the following figure grasps “hidden subsidies” as tax expenditures per person, which can be received by a taxpayer when he/she uses the relevant deduction system.

First of all, Figure 4 shows tax expenditures per employment income earner. The horizontal axis indicates employment income and the vertical axis does the tax expenditures. It can be read in Figure 4 that the bigger income is, the bigger tax expenditures related to deductions from taxable income are. Tax expenditures are zero in the case of the lowest-income class.

<sup>16)</sup> In tax expenditure reports in the United States, tax expenditure is measured by type of taxpayers (e.g. employee, employer, hospital, retiree, land owner, student, etc.)

That is, tax expenditures in income tax are considered to pay out a relatively large amount of “hidden subsidies” for high-income earners<sup>17)</sup>. In particular, tax expenditures in deduction for social insurance premiums increase significantly depending on income. Moreover, Figure 4 suggests that higher-income earners are given priority in a relative sense also in exemption for dependents.

Figure. 4: Tax expenditures in income tax per employment income earner (2006)



Generally, the younger generation has children, and it is thought that their income is not so high. It is necessary to discuss the current status of tax expenditures in exemption for dependents in considering countermeasures against the falling birthrate. In addition, it is necessary to ensure consistency of tax expenditures due to exemption for dependents with the current allowance for dependent children<sup>18)</sup>. In other words, this is a matter of the balance between direct financial expenditures for an allowance for dependent children and indirect tax expenditures for exemption for dependents, and it is indispensable to have a viewpoint of analyses on how effective each expenditure is.

Figure 5 shows tax expenditures per taxpayer by self-assessment<sup>19)</sup>. Although the trend of analytical results is similar to that of employment income earners above, it is necessary to pay attention to deductions from taxable income which did not appear in the case of employment income earners.

<sup>17)</sup> FY2006 Audit Report of the Board of Audit of Japan (2007) also points out in “Section 3: Situations of Audit Concerning Specific Audit Subjects” that deduction for life insurance premiums gives priority to high-income earners in a relative sense.

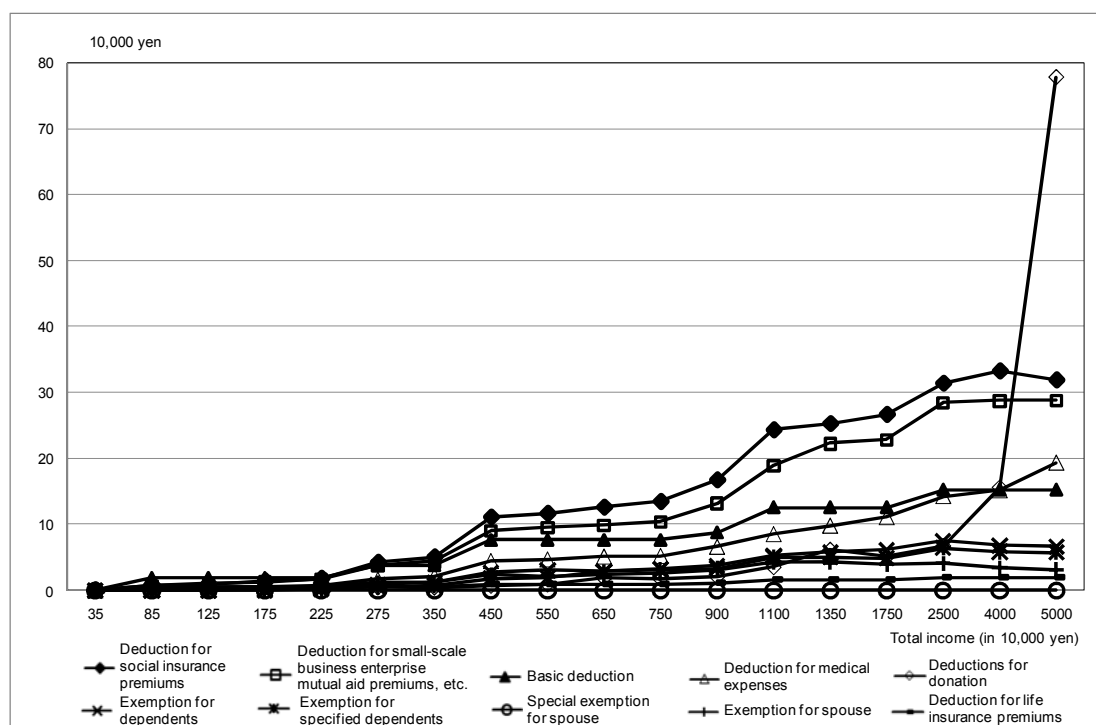
<sup>18)</sup> In this sense, it may be necessary to further the analysis in this paper and analyze it with social security plans based on cash benefits such as allowance for dependent children and welfare benefits.

<sup>19)</sup> Taxpayers by self-assessment are divided into business income earners, farm income earners and other income earners, and tax expenditure per person of each classification can be calculated. However, analytical results did not show clear differences so that they are integrated as taxpayers by self-assessment herein. Tax expenditure for taxpayers by self-assessment in 2006 was estimated to be 297.1 billion yen for business income earners, 28.3 billion yen for farm income earners, and 1.336 trillion yen for other income earners.

For example, in the case of tax expenditures by deduction for medical expenses, a relatively great number of “hidden subsidies” are paid out for high-income earners. This should also be discussed in connection with medical policies.

Moreover, it is interesting that tax expenditures for top taxpayers are also covered in the case of taxpayers by self-assessment. In particular, taxpayers by self-assessment with the total income of 50 million yen showed extremely high tax expenditures by deduction for donation. This should be reviewed in connection with our country’s donation tax system or tax avoidance acts.

Figure. 5: Tax expenditures in income tax per taxpayer by self-assessment (2006)



## 8. Conclusion

This paper pays attention to tax expenditures from the viewpoint of fiscal transparency, and tax expenditures in deductions from taxable income of income tax was estimated as a specific example. A major characteristic of this paper is that tax expenditures per taxpayer are shown by using tax statistics as basic data.

It is important to grasp tax expenditures from a macro aspect. However, grasping tax expenditures from a micro aspect adds political significance to tax expenditures in considering the relationship between tax expenditures and other policies. From such a viewpoint, it is possible to reach an idea that which is more effective in a political sense; direct financial expenditures or indirect tax expenditures, and policy debates including tax expenditures will be developed.

The following political implications can be derived from the analysis of tax expenditures in this paper. The

first implication is strengthening of taxation on pensions. Households with relatively high pension income have benefited from tax expenditures by deduction for social insurance premiums before retirement so that strengthening of taxation on their pensions should be considered. The second implication is the introduction of child tax credit. Tax expenditures by exemption for dependents give preference to high-income earners, while they do not lead to child-care assistance for the generation with more children. Thus, exemption for dependents does not bring in benefits for households that do not bear tax burden. From viewpoints of countermeasures against declining birthrate and social policies, it should be necessary to abolish exemption for dependents, and instead to discuss the introduction of tax exemptions according to the number of children<sup>20</sup>.

The current financial policy tends unavoidably to focus on financial reform. Attention tends to be paid to how direct financial policies such as those for public works and social security benefits should be cut from a simple viewpoint. However, when recalling that tax expenditures are “hidden subsidies,” it is possible to look for the direction of the financial reconstruction to be aimed at by organizing tax expenditures and increasing tax revenues. Certainly, it is essential to discuss policies after judging the economic effects of tax expenditures, not to lead to easy increase in taxes.

However, it is unfortunate that tax expenditure budgets have not been created in our country’s budget while many of other industrialized countries have as a matter of course. In some countries, tax expenditure budgets may be created not only in the central governments but also in local governments. Creation of a tax expenditure budget and its disclosure are essential to increase fiscal transparency of Japan, to recover reliability on finance, and to openly discuss tax expenditures as policies.

---

<sup>20</sup> In this case, allowance for dependent children should be integrated into tax exemptions.

## Reference

- Allen, R. and D. Tommasi (Ed.). (2001). *Managing Public Expenditure: A Reference Book for Transition Countries*. OECD.
- Aoki, M. and K. Tsuru. (2004). *Fiscal reform of Japan: Redesigning the Frame of the State*. Toyo Keizai Inc.
- Bixi, H.P., C. M.A. Valenduc and Z. L. Swift ed. (2004). *Tax Expenditures: Shedding Light on Government Spending through the Tax System*. the World Bank.
- Board of Audit of Japan. (2007). *FY2006 Audit Report*. Board of Audit of Japan.
- Commonwealth of Australia. (2006). *International Comparison of Australia's Taxes*.
- Craig, J. and A. William. (2004). "Fiscal Transparency, Tax Expenditures, and Budget Processes: An International Perspective." IMF paper.
- Datta, L. and P. G. Grasso. (1998). *Evaluating Tax Expenditures: Tools and Techniques for Assessing Outcomes*. Jossey-Bass Publishers.
- General Accounting Office. (2007). "21<sup>st</sup> Century Challenges: How Performance Budgeting Can Help." GAO-07-1194T.
- Hashimoto, K. (2002). "Tax Privileges of Consumption Tax and its Measurements." *Zeiken* Vol.18, No.2.
- Howard, C. (1997). *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States*, Princeton University Press.
- Joint Committee on Taxation. (2007). *Estimates of Federal Tax Expenditures for Fiscal Years 2007-2011*
- Ministry of Finance. "Estimation of the Amount of Drop in Revenues by Special Taxation Measures" (published in *Handbook of Industrial Tax System*, edited by the Ministry of Economy, Trade and Industry).
- Ministry of Finance, Policy Research Institute. (2002). *Transparency of Japanese Budget and Financial Systems: From the Viewpoint of Comparison with Other Countries*.
- Morinobu, S. and S. Maekawa. (2001). "Estimation of Japanese Income Tax Base using Macro Statistics." *Financial Review* Vol.57.
- OECD. (2002). *Public Sector Transparency and Accountability: Making it Happen*. OECD.
- OECD. (2004). "Best Practice Guidelines: Off Budget and Tax Expenditures." OECD.
- Office of Management and Budgets. (2007). *Analytical Perspectives*. Budget of the United States Government
- Surrey, S.S. (1973). *Pathways to Tax Reform: the Concept of Tax Expenditure*. Harvard University Press.
- Uemura, T. (2008). "A Necessary Viewpoint for Integrated Reform of Tax and Social Security." *Taxation Business Review (April Issue)*, Chuokeizai-Sha, Inc.