

Budget Formulation Process and Local Autonomy in Japan
-- The Role of the Council on Economic and Fiscal Policy
and Modeling Analysis --

by

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Introduction

The Economic and Fiscal Model, which is expected to serve as a useful tool when the Council on Economic and Fiscal Policy discuss economic and fiscal perspectives, has been developed by the Cabinet Office. This paper explains how the modeling analysis is utilized in the budget formulation process as well as the development background and the essence of model structure.

The salient feature of this model is that four sectors are integrated in the model, *i.e.* macro-economy, central government finance, local government finance and social security. Thus one chapter is devoted to the fiscal relationship between the central and local governments. Some historical implications for developing countries, which might be different from the present Japanese situations, are also explained for the training use.

I hope that this paper might be useful to understand not only the modeling work but also the public finance system in Japan.

1. Budget formulation and the Council on Economic and Fiscal Policy

In January 2001, the central government of Japan was reorganized. The major objective of reorganization is to strengthen the functioning of the Cabinet or the Prime Minister's leadership especially in the areas of basic policies. For this purpose, the Cabinet Office (CAO) was created¹ and four councils were newly established to assist the Cabinet and the Prime Minister by serving as "knowledge forum" for them. One of them is the *Council on Economic and Fiscal Policy* (CEFP). CEFP is headed by the Prime Minister and is composed of five senior ministers (Minister for Economic and Fiscal Policy, Finance Minister, Industry Minister², Home Affairs Minister, and Cabinet Secretary), central bank governor, and four private sector experts (two university professors and two business leaders).

1-1. Chronological process of budget formulation (Figure 1)

It is natural that the Ministry of Finance (MOF) has been a pivotal player in the budget formulation process, but the CEFP has played a very important role since it was established in 2001. The CEFP is held to discuss the economic and fiscal policy more than 30 times a year.

Annual budget formulation process starts from the *Basic Policies for Economic and Fiscal Policy Management and Structural Reform* (hereafter referred to as *Basic Policies*), which is discussed in the CEFP for the first half of the year and is decided by the Cabinet in June. The *Basic Policies* shows what policy should be taken, and identifies priority areas where next fiscal year budget should

¹ The CAO has gathered and strengthened the coordinating functions in basic policies, formerly dispersed in several institutions, such as the Economic Planning Agency (EPA) and the Science and Technology Agency.

² To be precise, Industry Minister is the Minister for Economy, Trade and Industry and Home Affairs Minister is the Minister of Public Management, Home Affairs, Posts and Telecommunications.

focus on. Then the CEFPP discusses some important figures of budget with reference to the medium-term outlook, and the MOF prepares the Guidelines for Budget Request in August. Each ministry / agency prepares and submits her budget request in accordance with the Guidelines, and then the MOF engages in hearing and examination of budget requests from September to December. In parallel with this, the CEFPP continues to discuss on structural reforms and budget planning, inviting ex-member ministers like welfare if necessary. One of the innovative methods initiated by the CEFPP is *Policy Package*, which aims at combining the budget with efforts such as regulatory reform designed to make maximum use of private sector potential and to attain policy targets through inter-ministerial efforts.

In mid-December the CAO presents the annual Economic Outlook, which becomes the underling assumption to estimate tax revenues and so on, and then the MOF proposes the draft budget. After minister level negotiation and checking detailed figures, the Cabinet submits the budget document to the Diet in January. In parallel with this process, the CEFPP prepares the *Structural Reforms and Medium-term Economic and Fiscal Perspectives* (hereafter referred to as *Reform and Perspectives*), where economic and fiscal outlook for the coming five years is presented just like the budget documents in the United States. The reason why the CEFPP introduces such a system is that we should have insight and perspectives over a medium term behind the annual budget.

1-2. Role of modeling analysis

In order to make a medium-term outlook, the CAO have developed a new model, *i.e.* Economic and Fiscal Model (Appendix 1). Economic and Fiscal Model is characterized by detailed budget sectors incorporated into a conventional macro econometric model, which is necessary to discuss about budget and institutional reforms.

Figure 2-1 and 2-2 show the outlays and revenues of the Japanese general government by sub-sectors. Now that the social security sector (*e.g.* health care and old-age pension) accounts for about half of public expenditures and one third of revenues, it is necessary for the model to describe the social security system precisely. As regards the financial relation between the central government and the local governments, while the central government raises more taxes than the local governments, the local governments spends more than 70% of government consumptions and government investments. Consequently, transfer expenditures to other government sectors occupy more than a half of the national budget. We have to understand these complex relations among government sectors even if our interest is the national budget.

When the CEFPP discusses on *Reform and Perspectives* in January, the CAO presents the Reference Estimates (Appendix 2). These estimates are simulation results of the model on the assumption that discretionary expenditures would be continuously restrained and mandatory expenditures would reflect the planned social security reforms. They show a macro-economic outlook for five years and budget projections of both central and local governments. The graph in the last page shows that the primary deficit of the central and local governments, whose ratio to GDP

stood at 5.4% in FY2003, could be cleared away and would turn to the primary surplus in the early 2010s through the continuous effort of steady fiscal consolidation and sustainable economic growth led by private demands. They are often referred when the CFP discusses on the next fiscal year budget.

1-3. Development planning (right side of Figure 1)

Japan formerly had a planning system focusing on economic development. The Economic Plan³ coordinated public work programs of 15 areas, e.g. road, airport, housing and farmland improvement. While ministries in charge of those areas have planned the quantitative targets usually for five years, the EPA coordinated their amounts in the Economic Plan. As regards longer-term plan, there is the Comprehensive National Land Development Plan⁴, which has, in collaboration with the Economic Plan, drawn the grand design of socio-economic development for 10 to 15 years. It has listed up such big projects like Shinkansen bullet train and highway network to achieve the equitable development of the Japanese archipelago. Targeted figures that these plans and programs have presented are not annual ones but total amounts for five years. In this sense, they could not directly link to the annual budget, but they have been respected as reference by both requesting ministries and the MOF through the annual budget formulation process.

However, the Economic Plan ceased such functioning in the early 1980s partly because of the deteriorated fiscal conditions after the oil crises. In addition, the Japanese economy went through the catching-up period and infrastructures were improved to a large extent, and inefficient resource allocation was found in some parts of public works. Public interests have also shifted their emphasis from improving infrastructures to enhancing the quality of life. The Economic Plan closed its brilliant history in the catching-up period and became a mere composition of dry sentences. Finally, the conventional economic plan was replaced by a new rolling system of medium-term outlook (*Reform and Perspectives*) in January 2002. Public work programs have also changed their targets from the quantitative amount to the qualitative outcome.

Although the conventional planning system has been disappearing in Japan, social capital development or infrastructure building would be very important for developing countries to catch up or for their private sectors to improve their productivity. Of course you should take care on the macro-economic balance, but you should not consider it an objective function but a constraint condition, to which they are subject, on maximizing the national welfare. Indeed local autonomy would be an important value, but equitable development would also be necessary for the national

³ The Economic Plan was prepared by the EPA and was discussed in the Economic Council, which was composed of about 30 experts. The first plan is “Five-year Plan for Economic Self-Support” decided in 1955. “Doubling National Income Plan” decided in 1960 is very famous, which aimed at doubling incomes for 10 years (annual growth rate 6.5% for 1961-70). That target seemed too ambitious at that time, but the actual growth rate surpassed the projected one and reached around 10%.

⁴ The Comprehensive National Land Development Plan was prepared by the National Land Agency (NLA), which was merged into the Ministry of Land, Infrastructure and Transport (MLIT) in 2001.

integration of all regions and all peoples.

Box 1. Simplified Example of Constraints for the Indonesian economy

Constraint 1: balance of payment

$$X - M = DR - NL - FDI$$

Constraint 2: budget balance

$$T - G = DR - NL$$

X: export, M: import

DR: debt repayment, NL: new loan, FDI: foreign direct investment

T: tax revenues, G: public expenditures

Debt repayment will increase for the time being. If FDI or new loan does not increase or if manufacturing export does not increase, Indonesia will have to export more natural resources (oil, gas and woods) to finance debt repayment. FDI and manufacturing growth would depend in part on infrastructure improvement. If new loan does not increase or if tax revenues do not increase, she will have to allocate tax revenues just for financing repayments and cut down government expenditures. Tax revenues will depend on economic growth. Donors will lend money not for repayment, *i.e.* refunding loan, but for future growth, *i.e.* investment. Thus it would be very important to present a plan or vision that investment could create a virtuous cycle of expanded balance, that is, growth could raise the ceiling of balance of payment and fiscal constraints. If you regard constraints as objective, it might bring about a vicious cycle of balanced contraction.

2. Local autonomy and budget allocation in Japan

The *Basic Policies 2004* have declared the principle of “from Public Sector to Private Sector” and “from the State to the Region” and to construct a socio-economic system led by the wisdom of the private sector and the regions. Recently popular thinking is decentralization; it would be the most efficient if people in the region could determine the quantity and quality of locally provided public services in accordance with their tax burden at the local level.

While the ratio of the local budget to the central one in tax revenues is about 2:3, the ratio in budget expenditures is about 3:2. Local governments provide most public services but the financial resources have ever been concentrated in the central government.

On the premise of the present imbalance in budget resources, some allocation or transfer mechanisms are necessary. In Japan there are two transfer mechanisms; one is a general transfer, the Local Allocation Tax (LAT), and another is an earmarked one, state subsidy or programmed grant money.

2-1. Local allocation tax

The LAT was introduced in 1954 and is supposed as general resources that local governments can use autonomously.

The LAT has dual functions. First is the adjustment function. The level of local tax revenues varies among local governments according to their economic conditions. However, if basic public services should be provided equally to every people, there should be a system to adjust the difference in tax revenues between rich regions and poor regions. Second is the revenue guarantee function. The LAT fills the gap between the total expenditures and the total revenues of the local governments without the LAT.

Then how is the amount of the LAT determined and how is it allocated? It can be explained from three sides.

1) Legal basis

The LAT is a portion of taxes collected by the central government, and the LAT Law designated the ratio: 32% of Individual Income Tax and Liquor Tax, 35.8% of Corporate Income Tax⁵, 29.5% of Consumption Tax, and 25% of Tobacco Tax.

2) Macro basis

The Ministry of Home Affairs (MoHA)⁶ formulates the Local Public Finance Program (LPFP)⁷ every fiscal year in close consultation with the MOF, in which the MoHA estimates the total revenues and expenditures of local governments as a whole (Table 1). Subsidies and subsidized expenditures are linked with the national budget, and local tax revenues and unsubsidized expenditures are estimated by year-on-year change. Reflecting the fiscal reforms, unsubsidized investment is cut about 10%. As the legal basis resources do not always meet the necessary amount estimated in the LPFP, Special Account for LAT is set up and it can temporarily borrow money if necessary. However, recently the legal basis is constantly insufficient due to the stagnant economic conditions and borrowings have been accumulated. Thus complex calculation measures to add on the legal basis are introduced for the time being. The basic idea is that the shortage of ordinary balance should be shared between the national government and the local governments, that is, increase in the LAT and local bond issue (see section 2-3 of Appendix 1).

3) Micro basis

The last is the allocation rule to an individual local government. The amount of LAT that an

⁵ The ratio of Corporate Income Tax is 32% in the main article of the LAT Law, but it is set at 35.8% for the time being due to the tax reduction implemented from 1999.

⁶ The precise name is the Ministry of Public Management, Home Affairs, Posts and Telecommunications.

⁷ The LPFP is a virtual program estimated just for the national budget. It is necessary for the national budget to calculate the total amount of LAT. As the local governments formulate their budgets individually and autonomously, the summation of actual local budgets differs from the LPFP. In addition, as they formulate their initial budgets usually in January-February before LAT and state subsidy are distributed, they often submit revised budgets to their local assemblies, whose regular sessions are held in March, June, September and December.

individual local government receives is calculated as the difference between her *standard financial needs* and *standard financial revenues*. *Standard financial revenues* are defined as 75% or 80% of normalized local tax revenues. The rest 20% revenues are reserved for her voluntary expenditures. *Standard financial needs* are the summation of various expenditures that LAT Law designates necessary for the local government activities. Their calculation formulas are composed of such objective information like population and area (unit cost & measured unit number) in basic. In addition, various correction factors, adjustment coefficients, are introduced to consider regionally specific circumstances, e.g. cold climate, mountain area and island area. Thus calculation rules become very complex and the volume of that manual reaches about 1,000 pages.

Standard financial revenues

= Normal local tax revenues × reserved rate [75-80%]

Standard financial needs

= Unit cost × Measured unit number × Adjustment coefficient

It might be ideal that the summation of micro-basis figures all over Japan would become the macro-basis amount. However, the real process is that macro-basis amount is fixed first in the budget formulation process and then micro-basis parameters are prepared to meet the macro one. Such a process, first macro and then micro, is often found. Another case is medical care cost.

2-2. State subsidy (Programmed grant money)

Another transfer mechanism is the state subsidy: earmarked grant or programmed grant money in the term of economic literature.

Some kinds of expenditures are subsidized and distributed by the individual ministry of the central government. One case is a subsidy for compulsory education, which subsidizes half of teachers' salary costs of elementary and junior high school in order to ensure the national minimum level all around Japan. Subsidies for social security (e.g. health care and public assistance) are also based on the same idea. Public works like road, local airport and sewage are also subsidized, not only to ensure the national minimum but also because investment expenditures in individual regions differ from year to year -- while large amount of budget is needed when a big-scale project starts, less needed when it completes.

Although there are above reasons in state subsidies, there is a critic that the excessive control by the central government ministries over local governments might hinder local initiatives and bring about inefficiency.

2-3. Local bond

In addition to public transfer mechanisms, local governments can borrow money from the private sector, i.e. local bond issuance or bank borrowing, but such deficit financing is strictly controlled by the central government. Legally, local bond issuance is permitted only to finance the investment

expenditures, and the MoHA determines bond issuance ratio of each program. Local governments with very severe financial conditions are capped on their borrowing. The public financial systems (Fiscal Investment and Loan Program, FILP⁸) have ever taken a fairly share of local borrowing, and the MoHA formulates the Local Bond Issuance Program in line with the LPFP and the FLIP. This fact shows that local bond issuance has been lack of market discipline. However, the reform to harmonize the FILP with market principles has started in 2001, which revised the FILP system from a scheme with compulsory deposit⁹ of postal savings and pension reserves to a scheme that FILP agencies raise the necessary funds in the market. Thus local bonds will also have to shift to the market disciplined system gradually.

2-4. Relation to the national planning

Two transfer mechanisms and local bonds are interlinked, and have closely linked to the national planning and public work programs. Figure 3 is the conceptual diagram of both subsidized project and unsubsidized project. Needless to say, state subsidies for local public works link to public work programs. In addition, *standard financial needs* include the local burden of subsidized projects. While a part of local burden is counted by unit cost or adjustment coefficient in the current year, local bond issuance is excluded in the current year but local bond repayment expenses are added to the *standard financial needs* by adjustment coefficient in future years.

Unsubsidized local projects are also link to the national programs in part. The targets in public work programs have included the unsubsidized local investments as well as the national investments and the local investments subsidized by the central government. In case that unsubsidized local projects have been included in the national public work programs, those investment expenditures have been reflected in the calculation of the *standard financial need* by using a similar scheme for the local burden of subsidized projects.

Such complex tools have functioned as incentive for local governments to implement those projects listed in public work programs decided at the central level. However, recently they are criticized to become improper incentive to spend on inefficient investments.

2-5. Three in one reform

Reflecting the current trend of local autonomy (decentralization), it is on top of the structural reform agenda to reform the fiscal relationship between the central and local governments. It is called “Three in One Reform”, because the Reform Package includes three areas:

⁸ The FILP has been mainly financed by government-operated postal savings and public pension reserves, and has lent or invested to FILP agencies, such as government financial institutions, public corporations and local governments to achieve public policies. FILP agencies have carried out projects which seem difficult for the private sector to carry out, and have provided long-term and fixed rate funds which seem difficult for the provide banks to provide.

⁹ As the deposit term to the FILP fund is seven years, reimbursement of existing deposits prior to reform will be completed in 2007.

- 1) Subsidy Reform,
- 2) Local Allocation Tax Reform, and
- 3) Transfer of Tax revenue sources from central to local.

The basic direction of the reform is to expand budget resources that can be autonomously used by local governments, *i.e.* from subsidy to local tax, and in turn it will also require the present LAT system modified to meet a new order. *Three in One* reform is to be steadily advanced by the end of FY2006, and in the FY2004 budget the central government eliminates or reduces state subsidy by one trillion yen and creates an income transfer tax (425 billion yen) as a temporary measure in order to transfer part of national income tax to local governments. The *Basic Policies 2003* has set a goal to reduce state subsidy by about four trillion yen, and the *Basic Policies 2004* has set a target of about three trillion yen to transfer tax resources from the central government to the local governments. In addition, the *Basic Policies 2004* says that more detailed blueprint and timetable of the *Three in One* reform shall be presented this autumn.

3. Structure of the Economic and Fiscal Model

We have designed the economic and fiscal model for a pragmatic usage that CEFPP can discuss both of the economy and the budget effectively. For this purpose, four sectors are integrated in this model, *i.e.* macro-economy, central government finance, local government finance and social security, and we have tried to describe the complicated relations among government sectors as precisely as possible.

3-1. Macro-economic sector

As regards the macro-economic sector, it depends on economic conditions what kind of theory and specification we should adopt. The Japanese economy was on the edge of deep depression in 2001-02. The Japanese economic downturn in 1997-98 and the IMF first therapy to the Asian Crisis gave us lessons that too hasty fiscal consolidation might harm the sick economy further, especially when the monetary system malfunctions because of the banking sectors troubled with non-performing loans. Indeed it is important to restore the healthy public finance and it is urgent for Japan to show prospects for future financial reconstruction because of her huge public debt outstanding over 600 trillion yen, but fiscal consolidation should be carried out at a pace to be measured so as not to induce a fiscal drag by too hasty attempts.

Thus we have paid appropriate attention to the demand side, introducing in part the Keynesian feature. The actual GDP is determined by the demand side, but there exists dynamic adjustment mechanism toward equilibrium between demand and supply. In addition, business start-up rate has a positive impact on private investment in order to reflect the effect of structural reforms.

Now that the Japanese economy seems to make a breakthrough from its long-lasting downturn, it

might be better to place more emphasis on the supply side. If we could make sure that the economic rebirth is solid, fiscal consolidation might be accomplished at a little faster pace considering the accumulated huge public debts.

3-2. Topics in budget sectors

1) Tax revenues (section 2-1 of Appendix 1)

Taxes are categorized largely into three types of taxation: direct taxes on personal incomes, direct taxes on corporate profits and indirect taxes. Indirect tax revenues like consumption tax would increase proportionally in tandem with tax base like GDP as long as tax rates are not changed, whereas taxation on incomes is computed in the following manners¹⁰.

Personal income taxes, composed of the national individual tax and the local residential tax, are estimated on a method that incorporates the progressive structure of tax rates and several tax deductions. Figure 4-1 shows the progressive tax rate structure and proportional tax credit is additionally introduced for the time being due to the tax reduction implemented from 1999. In the model, progressive tax rates and several deductions are applied based upon the income distribution profile of the latest year, and then tax revenue is estimated by multiplying the total personal income by the calculated average tax rate. Figure 4-2 presents the income distribution. While the income class of 3-4 million yen is the largest in number, the income class of 10-15 million yen contributes the largest to tax revenues reflecting the progressive tax rate structure. On the premise of this tax rate structure and income distribution, income elasticity of personal tax revenues would become around 1.8-2.0. As the share of personal income tax in the total tax revenues is about 30%, the weighted elasticity of tax against nominal GDP growth becomes around 1.2.

Another merit of adopting such estimation method is that we can estimate the impact of fundamental tax reform.

2) General expenditure classification (section 2-2 of Appendix 1)

The general expenditures of the national government are roughly divided into “social security expenditures,” “investment expenditures (public works and other construction expenditures),” and “other general expenditures.” Those of local governments are also classified into the same three categories in the model.

Social security expenditures are mostly mandatory ones that cannot be controlled without system reforms. Investment expenditures are discretionary ones. While personnel expenses included in other general expenditures are affected by the wage level determined in the macro-economy, other expenses are discretionary.

From the viewpoint of economic function, investment expenditures are tied to the government investments (IG) of the macro-economy, and personnel expenses and intermediate inputs in other

¹⁰ Corporate tax also has a proportional tax rate feature, but corporate profits fluctuate more sensitively than the GDP and thus the fluctuation of corporate tax revenues is large.

general expenditure are tied to the government consumption (CG). State subsidies are sub-items of those expenditures and interlock the national budget with local budgets.

For this purpose, we have compiled a cross-tabulated table by program purpose and economic function (Table 2).

3) Debt management

Public bonds are issued just to make up the difference between revenues and expenditures in the model. Thus they are consequence of budget planning how to control expenditures and how to raise tax revenues.

As regards the national government bonds (JGBs), debt service payments in the general account include both of interest payments and redemption expenses. Redemption expenses are in basic a fixed-rate of 1.6% of total JGBs outstanding at the beginning of the previous year upon the 60-year redemption rule. As the actual redemption schedule of already-issued bonds differs, the Special Account for JGBs management is set up to pool reserve funds. Detailed redemption schedule of already-issued JGBs is reported in the attachment of the budget document. Thereby the issuance of refunding bonds is determined by a simplified formula:

< the amount of matured bonds – transfers to the SA for JGBs as redemption expense >.

Interest payment depends on the interest rate at the year when each JGB was issued. In the planned JGBs issuance for FY2004, refunding bonds will be 84.5 million yen in contrast with new financial resource bonds of 36.6 million yen. Therefore, if the interest rate rises by 1% point, interest payments will increase by about 1.2 million yen in the current year, and this impact will continue in future years.

As to the local government bonds, debt service repayment schedule of already-issued local bonds is reported in the annual Local Finance Statistics. Thus the problem is how to calculate the costs of newly issued bonds from now. Although they are called “local bonds”, more than half of them are loans and fairly part of financial resources come from the FILP, public financial system. Thus we assume that the standard case is the following: the principal and interest equal repayment method over a period of 20 years with 3 years’ grace.

4. Concluding remarks

Quantitative fiscal consolidation is rather a consequence of the fiscal reform, whose real objective is a structural and qualitative one to make the public sector more efficient. Although a macro-economic model is useful to assess a consequence, it is difficult to answer the latter objective. Micro-base analyses, both of qualitative studies and quantitative analyses using panel data etc., are also essential. They would, in turn, help the macro analysis to present more informative perspectives if information from micro-base analyses is available to be incorporated in some exogenous parameters like TFP growth.

Besides modeling analysis, the CAO presents various analyses to the CEFP, one of which is the Structural Reform Evaluation Report. The first report was published in November 2003 and the second in April 2004.

Lastly, it is true that there exist both favorable organization change and the Prime Minister's leadership, but successful launch of the CEFP could not be realized without steady efforts like modeling analysis and other studies. The documentary TV program "Project X" is popular in Japan these days, which sheds light on the efforts of ordinary people, *e.g.* engineers and businessmen, rather than superstars. Economic development could not be attained without efforts of ordinary people.

References

"Basic Policies for Economic and Fiscal Policy Management and Structural Reform 2004 (Cabinet decision on June 4, 2004)", "Structural Reform and Medium-Term Economic and Fiscal Perspectives - FY 2003 Revision (Cabinet decision on Jan. 19, 2004)." These documents and information on the Council on Economic and Fiscal Policy are available on the website: <http://www.keizai-shimon.go.jp/en/index.html>

Ministry of Finance, "Understanding the Japanese Budget 2004," Available via the Internet: <http://www.mof.go.jp/english/budget/brief/2004/2004.pdf>

Figure 1. Planning and Budget Process in Japan

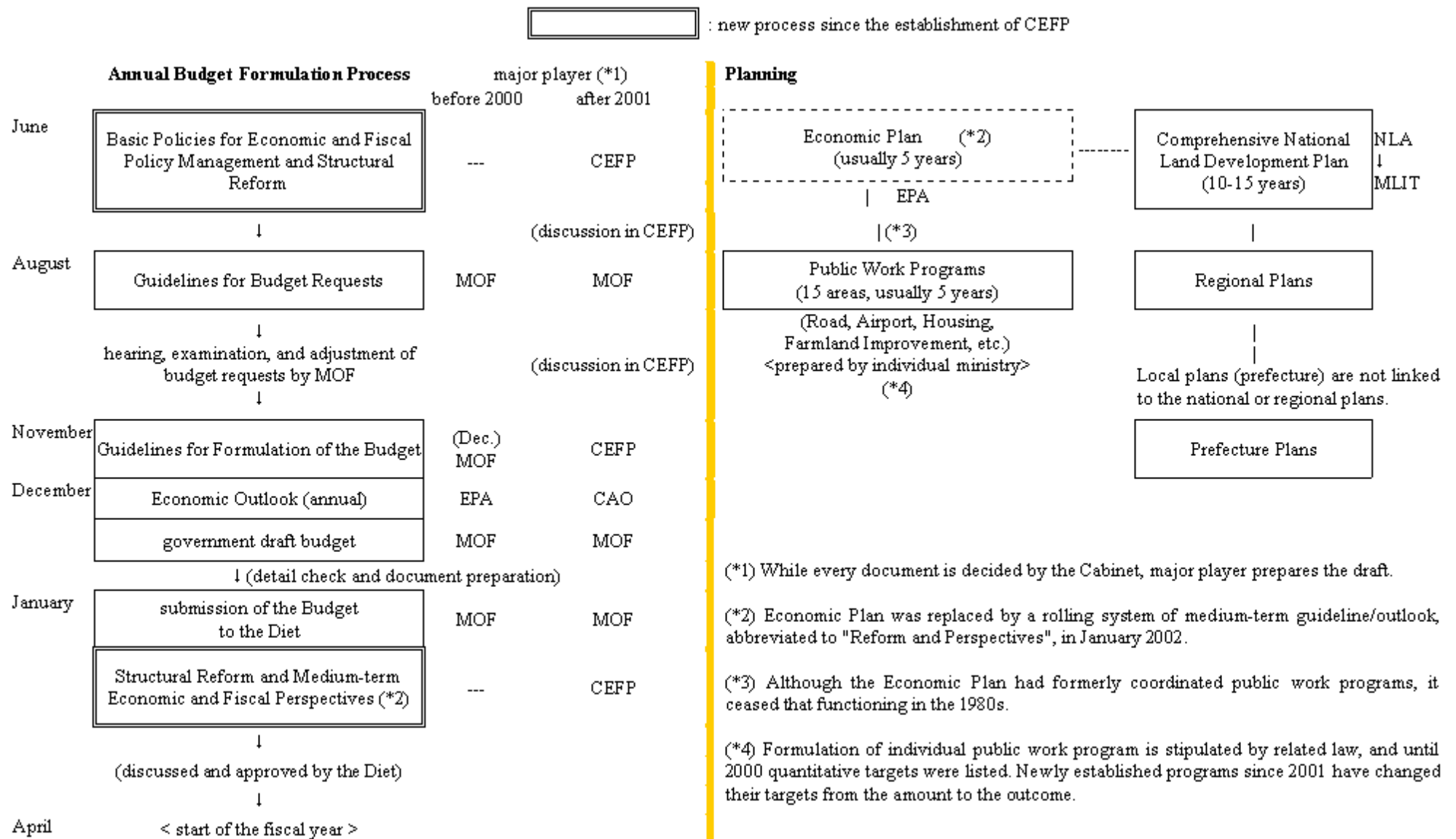


Figure 2-1. Government Revenues and Outlays by Sub-sectors (FY-2002, trillion yen)

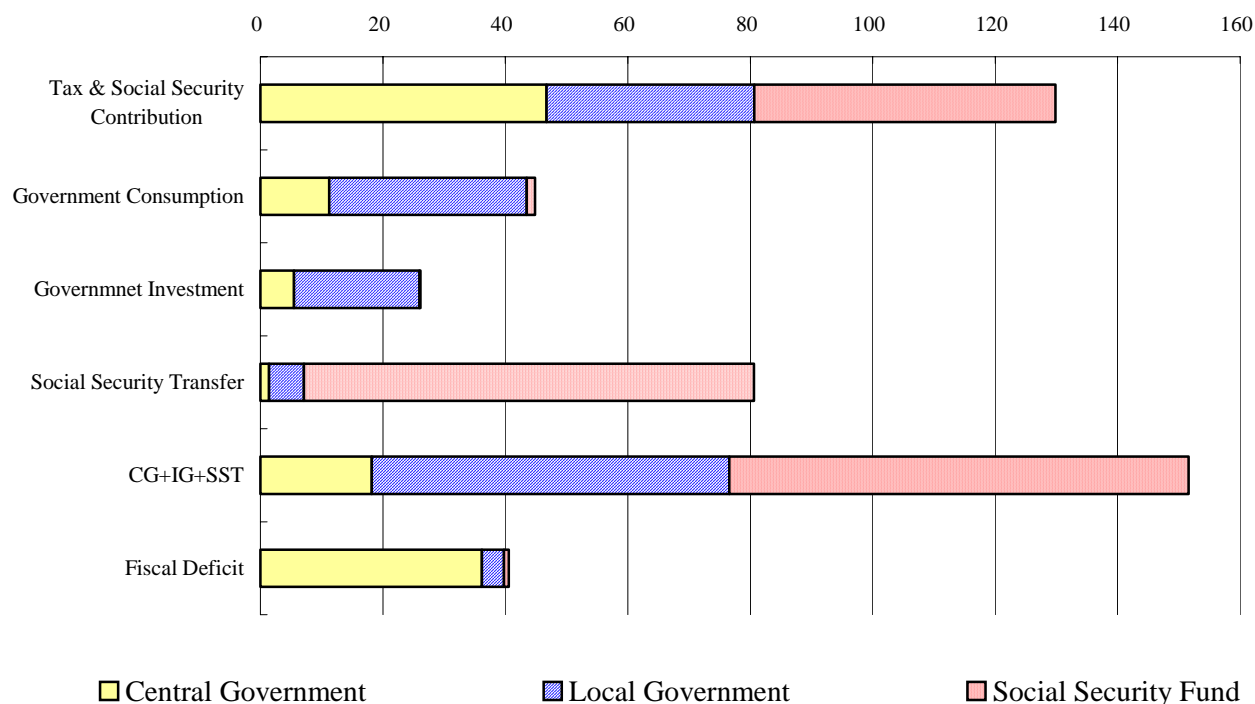
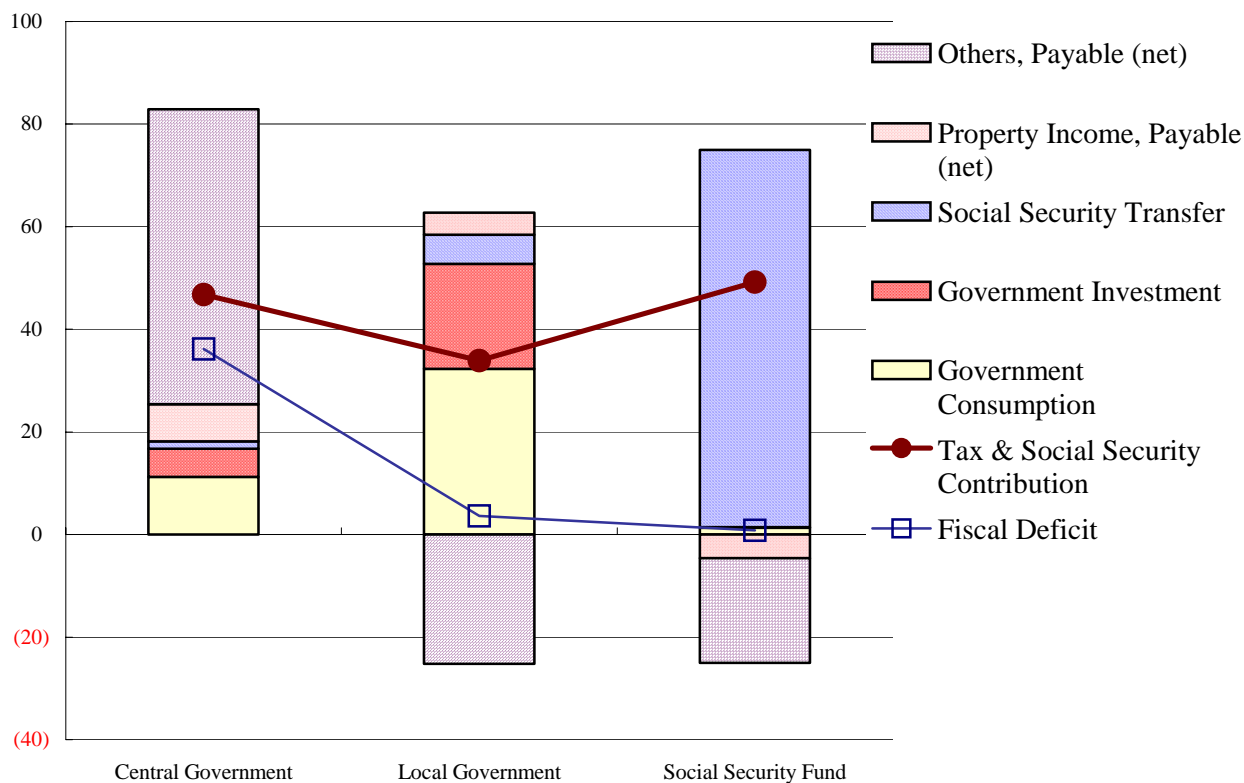


Figure 2-2. Government Expenditure Composition of Each Sub-sector (FY-2002, trillion yen)



Source: "Annual Report on National Accounts 2004", Economic and Social Research Institute, Cabinet Office

Table 1. Local Public Finance Program

(billion yen)

	FY2003		FY2004			
		Growth rate		Difference	Growth rate	Ratio
Local Tax	32,172.5	-6.1%	32,323.1	150.6	0.5%	38.2%
Local Transfer Tax	693.9	11.2%	1,145.2	451.3	65.0%	1.4%
Special Local Grant	1,006.2	11.4%	1,104.8	98.6	9.8%	1.3%
Local Allocation Tax	18,069.3	-7.5%	16,886.1	-1183.2	-6.5%	19.9%
National Subsidies	12,260.0	-3.6%	12,123.8	-136.2	-1.1%	14.3%
Local Bond	15,071.8	19.2%	14,144.8	-927.0	-6.2%	16.7%
(including: Deficit Bond)	5,869.6	81.9%	4,190.5	-1679.1	-28.6%	-4.9%
Rent and Fees	1,638.6	1.3%	1,642.0	3.4	0.2%	1.9%
Miscellaneous	5,298.4	0.9%	5,297.1	-1.3	0.0%	6.3%
Revenues in Total	86,210.7	-1.5%	84,666.9	-1543.8	-1.8%	100.0%
Salary Related Cost	23,438.3	-1.1%	22,999.0	-439.3	-1.9%	27.2%
General Administration	21,026.3	1.1%	21,883.3	857.0	4.1%	25.8%
Subsidized	9,841.4	2.7%	10,118.3	276.9	2.8%	11.9%
Unsubsidized	11,184.9	-0.3%	11,147.5	-37.4	-0.3%	13.2%
FY2004 Reform	-----	-----	617.5	617.5	-----	0.7%
Debt Service	13,767.3	2.5%	13,677.9	-89.4	-0.6%	16.2%
Repair and Maintenance	1,006.8	-0.6%	998.7	-8.1	-0.8%	1.2%
Investment Cost	23,286.8	-5.3%	21,328.3	-1958.5	-8.4%	25.2%
Subsidized	8,406.8	-5.0%	7,858.3	-548.5	-6.5%	9.3%
Unsubsidized	14,880.0	-5.5%	13,470.0	-1410.0	-9.5%	15.9%
Local Public Enterprise	3,205.2	-0.4%	3,079.7	-125.5	-3.9%	3.6%
Debt Service	2,243.3	1.8%	2,184.1	-59.2	-2.6%	2.6%
Others	961.9	-5.2%	895.6	-66.3	-6.9%	1.0%
Miscellaneous	480.0	-40.0%	700.0	220.0	45.8%	0.8%
(General Expenditures)	69,720.1	-2.0%	68,104.9	-1615.2	-2.3%	80.4%
Expenditures in Total	86,210.7	-1.5%	84,666.9	-1543.8	-1.8%	100.0%

Source: MOF, "Understanding the Japanese Budget 2004," page 66

Figure 3. Financial Resources for Local Project (Image)

Subsidized Investment Expenditures

national burden	local burden		
subsidy (programmed grant)	local bond (*)	general resources	
		SFN-LAT (adj.coeff.)	SFN-LAT (unit cost)

↓

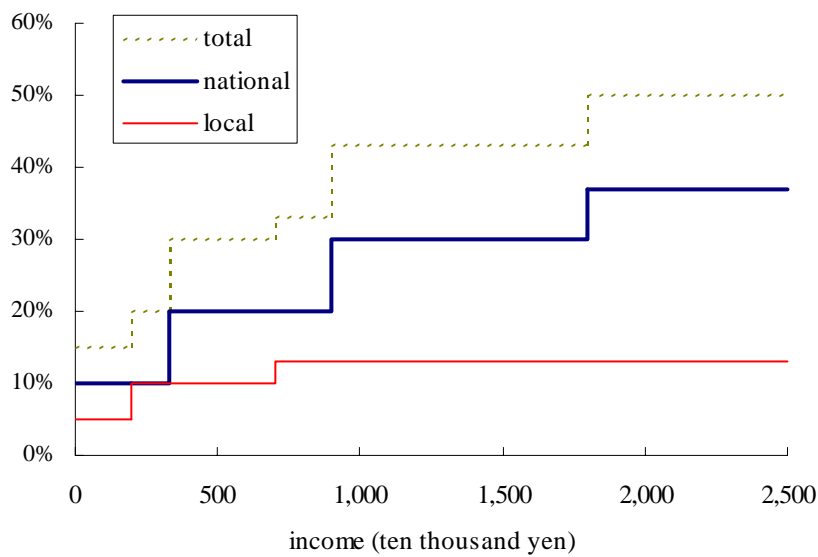
Designated portion of repayment cost is added to SFN-LAT by adjustment coefficient in future years.

Unsubsidized Investment Expenditures

local burden		
local bond (Designated portion of repayment cost is added to SFN-LAT by adjustment coefficient in future years.)	general resources	
	SFN-LAT (adjustment coefficient)	SFN-LAT (unit cost)

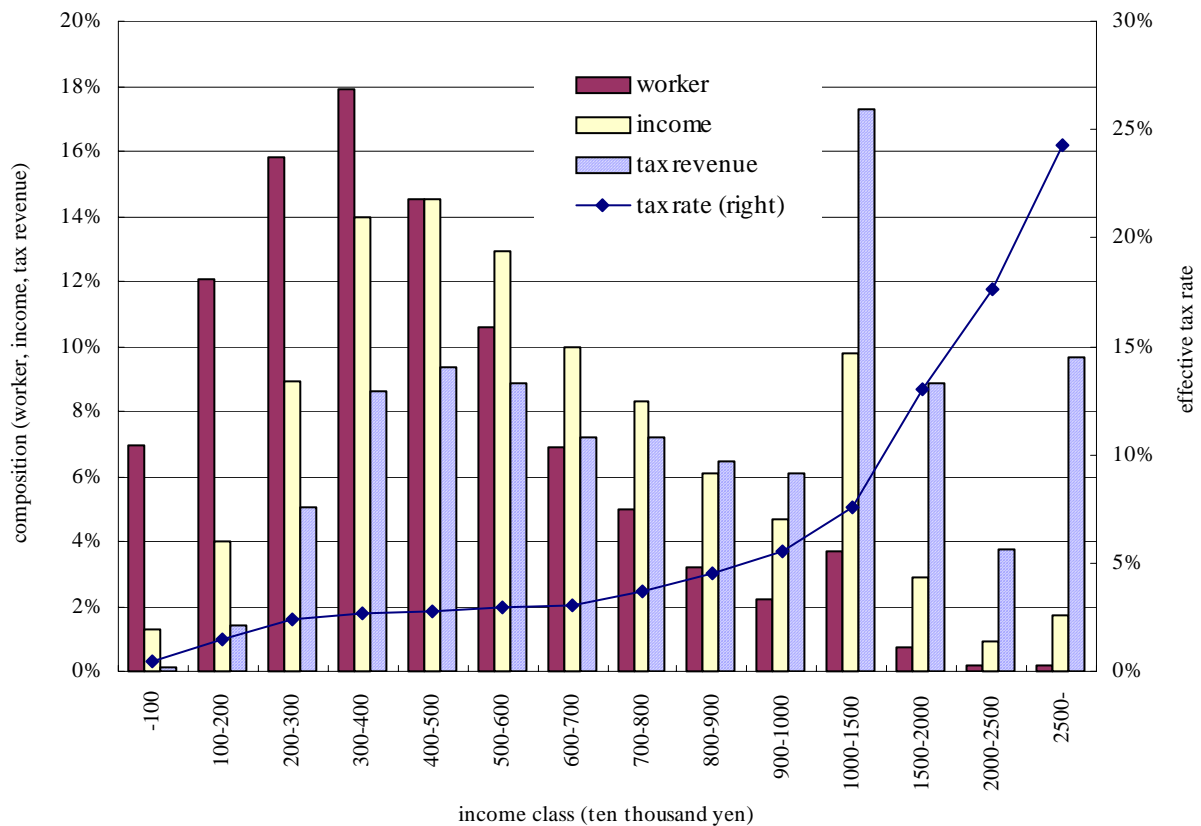
- Note:
1. general sources = local tax + local allocation tax (LAT)
 2. SFN-LAT: standard financial needs for local allocation tax
 3. Adjustment coefficient is applied only to the local government who carries the relevant project.

Figure 4-1. Tax rate structure of Personal Income Tax in Japan



+ Proportional tax credit
 national: 20% of the tax amount (upper limit 250,000yen)
 local: 15% of the tax amount (upper limit 40,000yen)

Figure 4-2. Distribution of withholding tax on personal income (2002)



Source: National Tax Administration Agency, "Earnings in the Private Sector Viewed from Tax Statistics"

Table 2. National Budget Expenditures (General Account) classified by Purpose and Economic Function (FY-2002, initial)

(billion yen)

	total	CG (central)		SUB◎	BSS◎	IG (central)		transfer to local government	transfer to other accounts	others	
		employees compensation	intermediate inputs	subsidies	social assistance benefits	capital formation (by central gov.)	other construction expenditures				
							capital formation				transfer to local gov.
Debt Service	16,671								16,548	123	
Local Allocation Tax	17,012								17,012		
General Expenditures	47,547	4,902	3,450	2,056	1,449	506	331	498	9,707	21,810	2,839
Social Security	19,552	37	39	49	1,356	1	15	163	3,196	14,664	33
Social Security Insurance	14,158		1		0				51	14,090	16
Other Social Welfare	3,633	35	27	35	87	1	15	163	3,131	124	16
Unemployment Measures	488		6	14	5				14	450	
Annuities for Veterans etc.	1,273	2	5		1,264				0		1
Public Works	8,424	0	1	420		220			2,819	4,571	392
Other General Expenditures	19,571	4,865	3,409	1,588	93	285	316	335	3,691	2,575	2,414
Compulsory Education	3,056								3,056		
Education & Science	3,643	21	233	374		4	142	154	99	1,761	856
Defense	4,956	2,288	2,026	5	77	231			118	17	194
ODA	857		18	17			1		1	169	650
SMEs Promotion	186	0	12	61				6	44	26	37
Energy	569	0	3	86		1	13		0	461	6
Food Supply	730	0	23	555			6	51	90		4
Industrial Investment Special Account	146										146
Others	5,078	2,556	1,094	490	16	49	153	124	284	141	171
Reserve	350										350
Expenditures Total	81,230	4,902	3,450	2,056	1,449	506	331	498	9,707	55,370	2,962

investment expenditures 9,253 = Public Works + other construction expenditures

wage related expenditures 7,921 = employee compensation + Compulsory Education (subsidy for local teachers wage)

transfer to local government 10,205 = transfer to local governments + other construction expenditures (transfer to local)

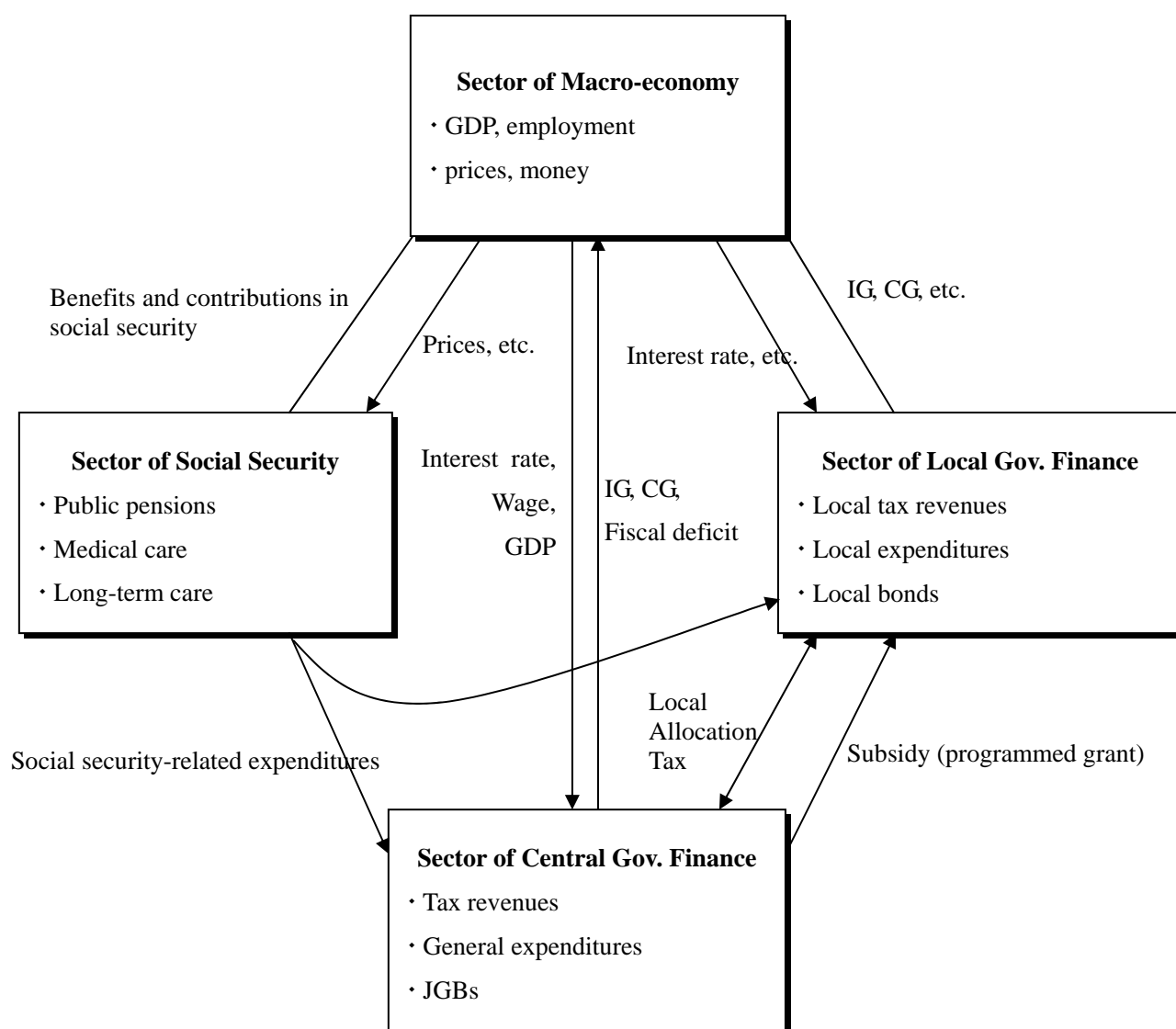
transfer to other accounts: transfers to Special Accounts for Social Security Insurance (pension, healthcare, etc.), Public Works (road, airport, etc.), LAT, JGBs management, etc.

Appendix 1

Note on the Economic and Fiscal Model¹¹

The Economic and Fiscal Model, which is expected to serve as a useful tool when the Council on Economic and Fiscal Policy (CEFP) discuss economic and fiscal perspectives, has been developed by the council secretariat¹² in collaboration with the Economic and Social Research Institute. Four sectors are integrated in this model, *i.e.* macro-economy, central government finance, local government finance and social security.

[Flow chart of the Economic and Fiscal Model]¹³



¹¹ This note is an excerpt translation from the document presented at the Council on Economic and Fiscal Policy dated November 2, 2001. Some descriptions are updated.

¹² Director General for Economic, Fiscal and Social Structure, Cabinet Office was in charge of developing this model.

¹³ Arrow does not mean a direction of money flow but a direction which sector affects the other sector.

1. Main aspect of each sector

1-1. Sector of Macro-economy

- 1) The macro-economic sector is constituted of goods and services, money and labor markets. Supply-demand equilibrium in each market is formulated as a set of simultaneous equations.
- 2) Demand and supply in goods and services are interdependent. For instance, while an increase in capital investment yield multiplier effect of creating demand, it brings an effect of raising output capacity through an increase in capital stock. In addition, a rise in output capacity through TFP growth has a positive effect on consumption through an increase in permanent income. There exists dynamic adjustment mechanism towards equilibrium, *i.e.* adjustment of investment and external balance through the real interest rate.
- 3) On the demand side, private consumption is determined by the present household disposable income and the permanent income, *i.e.* output capacity as a proxy to the long-term income level and fiscal deficit as a proxy to the future tax burden. Private investment is determined by capital output ratio, user cost of capital and business start-up rate.
- 4) Output capacity is expressed in a Cobb-Douglas type function with TFP, capital stock and labor.
- 5) Prices depend upon money supply and supply-demand gap.
- 6) Unemployment rate moves together with an economic growth rate as the Okun's Law states. The number of employed persons is determined by unemployment rate and labor force that reflects population by age.
- 7) As regards the income distribution, labor share converges toward the equilibrium level, *i.e.* the coefficient of the Cobb-Douglas output function, over the long run, although it varies cyclically subject to the business climate.

1-2. Sectors of the Central government finance and the Local government finance

- 1) Government budgets consist of two sectors that deal with the central government finance and the local government finance. These two sectors are interlocked through the Local Allocation Tax (LAT) and subsidies (programmed grant). While such endogenous variables like tax revenues are determined by other sector variables like employee compensations and corporate profits, the macro-economic sector receives feedback through government investment and government consumption.
- 2) Tax revenues: Individual income tax revenues are decided by a personal income and an average tax rate that reflects the progressive taxation structure. Corporate tax revenues depend upon the corporate profits after adjusting red-ink companies' losses and the proportional tax rate.
- 3) General expenditures, *i.e.* the expenditures except debt service payments and LAT, are divided into social security-related expenditures, investment expenditures and other general expenditures. Social security-related expenditures like public pension and medical care are interlocked with the social security sector. The portion of personnel expenses in other general expenditure is affected by wages of the macro-economic sector. Investment expenditures and other general expenditure

excluding personnel expenses are exogenous.

- 4) Subsidies (programmed grants) to local governments are sub-items of the general expenditures of the central government. They become the revenues of local governments, thereby deciding the amount of spending for subsidized local public works.
- 5) The core portion of LAT is calculated based upon the legally stipulated ratio for five national taxes. However, recently a certain amount is added to fill the gap in the local government finance under the basic concept that the central government and the local governments share the shortage in revenue resources.
- 6) Debt service payments: While payments for the national government bonds (JGBs) are computed based upon the 60-year redemption rule, those for the local government bonds are standardized with the principal and interest equal repayment method over a period of 20 years. Payments of interest are subject to interest rate endogenously determined in the macro-economic sector. Furthermore, the issue of refunding bonds is incorporated based upon the amortization schedule of JGBs, whereby refunding bonds as well as newly issued bonds are affected by the present interest rate.

1-3. Sector of Social security

The social security sector is constituted of three sub-sectors, which address public pension, medical care and long-term care respectively.

(1) Public pension

- 1) The public pension sub-sector is divided into three accounts, the National Pension including the Basic Pension, Employees' Pension and Mutual Aid Pension for government employees.
- 2) The pension reform package is incorporated. For instance, the 2000 reform includes a change from the net wage indexation to the consumer price indexation for adjusting benefit levels and a gradual rise in the pension eligibility age.¹⁴
- 3) Revenues of each pension plan basically consist of pension insurance premiums (social security contributions), transfers from the national budget, receipts from the Basic Pension Fund, yields on accumulated fund. Outlays are constituted of payments of pension benefits, contributions to the Basic Pension Fund. Its surplus is added to the fund each year.
- 4) Insured persons are divided into Category-1 (self-employed, etc.), Category-2 (employees) and Category-3 (spouses being supported by employees of Category-2). Population per age bracket and the numbers of employees and self-employed persons explain the number of the insured in each category.
- 5) Social security contributions depend upon standard annual remuneration, contribution rate and the number of the insured. The standard annual remuneration is interlocked with wages in the macro-economic sector.

¹⁴ The 2004 reform introduces the automatic adjustment system of benefit levels by the contribution level fixing method and the macroeconomic-indexation method.

- 6) Pension benefits are determined by benefit amount per capita and the number of beneficiaries, which reflects the composition of population. The benefit level of the Basic Pension is indexed to the consumer price index. As for the benefit of the employee's pension plan, while the benefit to be newly paid is calculated through payment multiplier and cumulative standard annual remuneration which depends on subscription period and net earnings, the consumer price indexation is applied to adjusting the benefits for beneficiaries who have already been paid.
- 7) Transfer from the national budget is a legally specified ratio of the contributions to the Basic Pension Fund and is interlocked with social security-related expenditure in the sector of the central government finance.

(2) Medical insurance

- 1) Medical expenses per capita by age bracket, separately for hospitalization and other medical care, are determined by co-payment rates etc. Those expenses in turn determines, together with changes in population by age bracket, the national medical care costs and those for the elderly.
- 2) The medical insurance system is divided into two programs: employees' insurance program and regionally managed program (national health insurance program). Medical care expenses excluding for the elderly are paid out of these two programs in accordance with the ratio of subscribers.
- 3) Revenues of the two insurance programs consist of premiums, transfer from the national budget and the transfer from the local governments. Outlays are composed of payments of medical care expenses and transfers to the medical plan for the elderly. In addition, there are contributions of retirees' medical care expenses from the employees' insurance program to the regional social insurance program.
- 4) Transfers from the national budget and the local governments are computed based on the rates legally specified for the elderly medical plan and two insurance programs each other. They will, in turn, be interlocked with social security-related expenditure in the central and local government sectors.

(3) Long-term care insurance

- 1) As for the amount to be paid, first, the number of persons in need of care is estimated from the composition of population etc. Then, care expenses are calculated through multiplying the number thus obtained by prices extrapolated from the unit costs of the base year at inflation rate.
- 2) Based upon the long-term care insurance plan, each person shall pay the ten percent of expenses and the insurance plan shall cover the rest, 90%. The half of the benefits paid under the plan comes from premiums, while one quarter derives from the national budget and another quarter from the local governments.

2. Structure of the central and local government finance

The government finance sectors consist of two budget systems – the national budget and the local government budget. On the revenue side, tax revenues are determined in coordination with the macro-economic sector. On the expenditure side, social security-related expenditures greatly depend on institutional factors and are endogenously decided through the social security sector. While personnel expenses are subject to the influence of wages in macro-economy, investment expenditures and general expenditure excluding personnel expenses and are exogenously treated as discretionary expenditures. The issuance of JGBs is determined to fill the gap between revenues and expenditures, while local bonds issue depends on the Local Public Finance Program (LPFP). Then debt outstanding and the interest rates of macro-economy decide debt service payments in future years. Transfer mechanisms from central to local, *i.e.* local allocation tax (LAT) and state subsidy (programmed grant), are nodes to link the national budget and the local government budget.

2-1. Tax revenues

Taxes are categorized largely into three types of taxation: direct taxes on personal incomes, direct taxes on corporate profits and indirect taxes. Indirect tax revenues like consumption tax would increase proportionally in tandem with tax base like GDP as long as tax rates are not changed, whereas taxation on incomes and profits is computed in the following manners.

(1) Taxation on personal income

Personal income taxes, composed of the national individual tax and the local residential tax, are estimated on a method that incorporates the progressive structure of tax rates and several tax deductions. More specifically, progressive tax rates and several deductions are applied based upon the income distribution profile of the latest year¹⁵, thereby computing the average rate of taxation. Then, tax revenue is estimated by multiplying the total personal income by the average tax rate. It should be reminded that taxable income is the current year's one for the national tax and the previous year's one for the local tax.

$$\text{Average tax rate} = \frac{\sum(T1i * T2i * T3i)}{\sum(T1i * T2i)}$$

T1i : Average income of each income bracket

T2i : The number of persons in each income bracket

T3i : Average tax rate of each income bracket

* There are 32 income brackets in total, 14 for withholding taxation and 18 for self-assessed taxation.

¹⁵ Basic data are taken from annual statistics compiled by the National Tax Administration Agency (NTA), *i.e.* "Earnings in the Private Sector Viewed from Tax Statistics" and "Self-assessed Income Tax Viewed from Tax Statistics."

Average tax rate of each income bracket $T3i$: To apply the tax table to taxable income ($T5i$) and then to incorporate the fixed-rate tax cut introduced in 1999.

Taxable income ($T5i$) : Employment income - 1. Employment income deduction¹⁶
 - 2. Basic deduction - 3. Exemption for spouse - 4. Exemption for dependent(s)
 - 5. Special exemption for spouse - 6. Additional exemption for dependent(s)
 - 7. Deduction for social insurance premiums

- 1: Employment income deduction is obtained from the Table of Deduction Rates based upon employment income
- 2: Basic deduction is a flat amount: ¥380,000 for the national individual tax and ¥330,000 for the local residential tax.
- 3-6: Average number of persons to whom relevant exemption is applied in each bracket group × each exemption amount
- 7: Deduction for social insurance premiums is calculated based upon the MOF formula, a proportional portion of income with upper bound.

(2) Taxation on corporate profits

The tax base of corporate taxes, composed of the national corporate tax, the local corporate tax and the local business tax, is the income of black-ink companies. It differs in two aspects from the corporate profit income of the national account statistics (SNA) that is used in the macro-economic sector:

1. While the profit of SNA is net income after deducting losses of red-ink companies, the tax base is gross income of black-ink companies.
2. While SNA data is ordinary profit that excludes extraordinary profit and loss, tax base considers extraordinary profit and loss in which losses derived from non-performing loans are included.

Therefore, we first estimate the tax base of corporate tax from the SNA corporate profit income by adding such adjustment items as extraordinary loss ratio to ordinary profit. Then corporate tax revenue is estimated by multiplying that tax base by the proportional tax rate.

1. Tax base of corporation tax

$$\log(YCV@S) = -0.58 + 1.05 \cdot \log(YCV / (1 - \exp(1/0.048)^{-x})) + 1.06 \cdot RYCV\$S$$

$YCV@S$: Income of black-ink companies¹⁷

YCV : Corporate profit income of SNA, $x = YCV / \text{nominal GDP}$

$RYCV\$S$: Extraordinary profit (net) / Ordinary profit (net)

2. National Corporate tax

$$\log(ZTXB + TCSV) = 0.104 + 0.989 \cdot \log(TT1 * YCV@S)$$

$ZTXB$: National corporate tax, $TCSV$: Cumulative amount of special tax relief,

$TT1$: corporate tax rate

3. Local corporate tax

¹⁶ In case of self-assessed taxation, total personal income is the amount from which necessary business expenses are already deducted.

¹⁷ NTA compiles the corporate tax statistics from a sample survey on corporations.

$$\log(\text{TXCLW}) = 0.54 + 0.958 \cdot \log(0.173 \cdot \text{ZTXB})$$

TXCLW: Local corporate tax, determined to be linked with the national corporate tax:
17.3% (standard tax rate) of the national corporate tax.

4. Local business tax

$$\log(\text{TXFL}) = -0.508 + 1.075 \cdot \log(\text{TT3} \cdot (\text{YCV} @ \text{S} \cdot 0.5 + \text{YCV} @ \text{S} \cdot -1 \cdot 0.5))$$

TXFL: Local business tax, TT3: Local business tax rate
Taxable income is lagged behind half a year.

2-2. General expenditure

The general expenditures of the national government are roughly divided into “social security expenditures,” “investment expenditures (public works and other construction expenditures),” and “other general expenditures.” Those of local governments are also classified into the same three categories in the model. “Investment expenditures” are tied to the government investments (IG) in the macro-economy. On the other hand, personnel expenses and intermediate inputs in “other general expenditure” are tied to the government consumption (CG). For this purpose, we have compiled a cross-tabulated table by program purpose and economic function.

(1) Social security-related expenditures

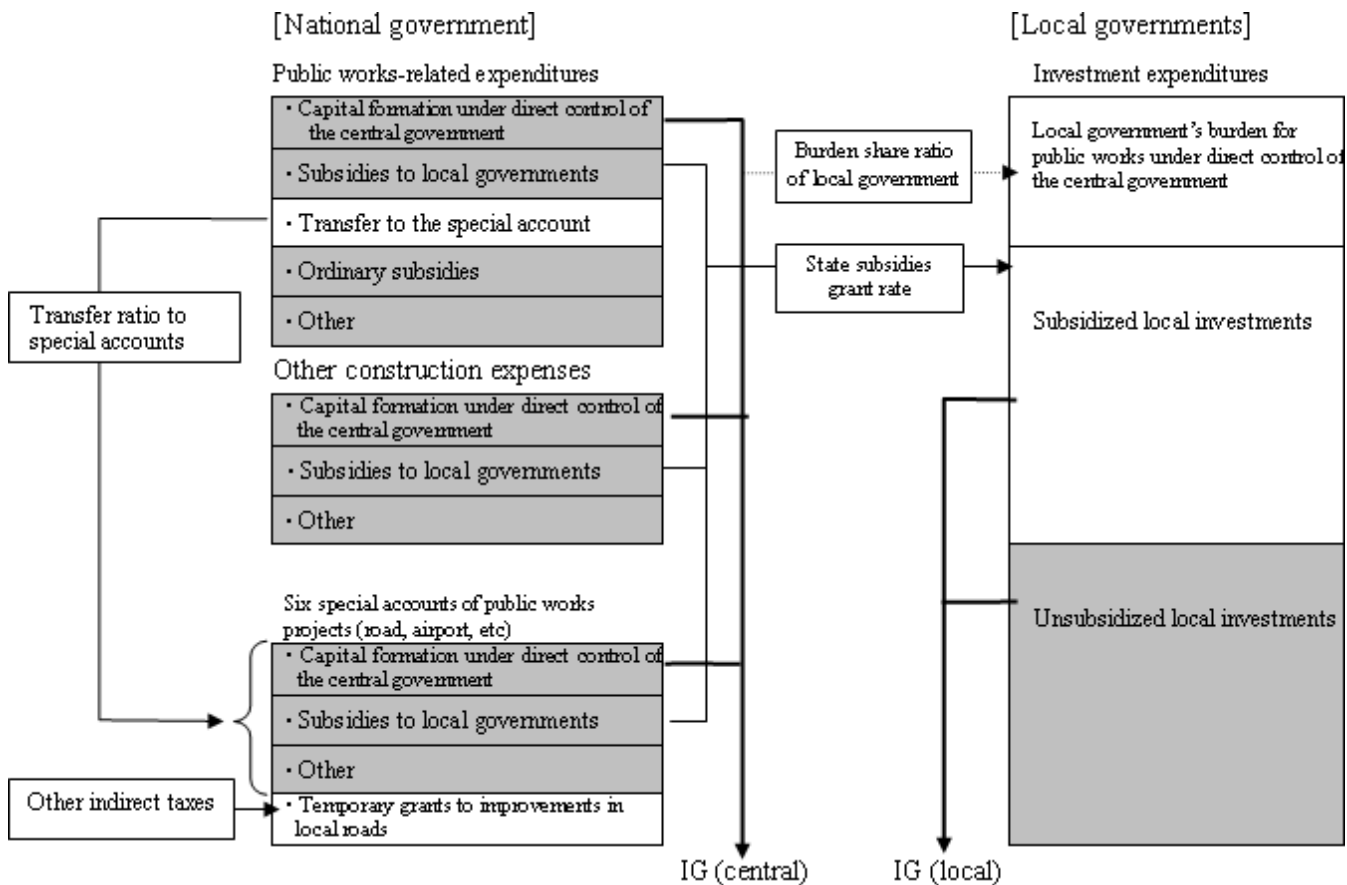
Social security-related expenditure is classified into the expense items listed in the following table. They are extrapolated at the increase rates of correlative variables in the social security sector.

Variables of the government finance	Correlative variables of the social security sector
National budget	
1. Social insurance expenses	
1) State contribution to the employees' pension insurance plan (for basic pension benefits)	Receivable from the general account of employees' pension
2) State contribution to the national pension plan (for basic pension benefits and welfare annuity)	Receivable from the general account of National pension + welfare annuity
3) Other pension-related expenses	Expenses for pension benefits
4) State contribution to employees' health insurance plans	State contributions to medical care expenses (employees' insurance program)
5) Subsidy to the national health insurance plan	State contributions to medical care expenses (regional social insurance)
6) Contributions to the healthcare for the elderly	State contributions to healthcare program for the elderly
7) Contribution to long-term care insurance plan	State contributions to the long-term care insurance plan
8) State contribution to the child-support allowance	Population of children aged under 5
2. Expenses for measures for the Unemployment	
1) State contribution to the employment insurance plan	Unemployment benefits, estimated by unemployment rate etc.
2) Other expenses for measures for the unemployment	(Exogenous)
3. Other social welfare expenses	
	Social assistance benefits, explained by unemployment

(subsidy for public assistance, etc.)	rate, aged population, etc.
4. Expenses related to annuities for veterans, etc.	(Exogenous)
Local government budget	
1. Expenses related to the national health insurance special account	Local government's contributions to the medical care plan (regional social insurance)
2. Expenses related to the elderly healthcare program special account	Local government's contributions to the health insurance plan for the aged
3. Expenses related to the long-term care insurance special account	Local government's contributions to the nursing care insurance plan
4. Other social welfare expenses (public assistance, etc.)	Social assistance benefits, explained by unemployment rate, aged population, etc. (link to 3. other social welfare expenses in the national budget)

(2) Investment expenditures

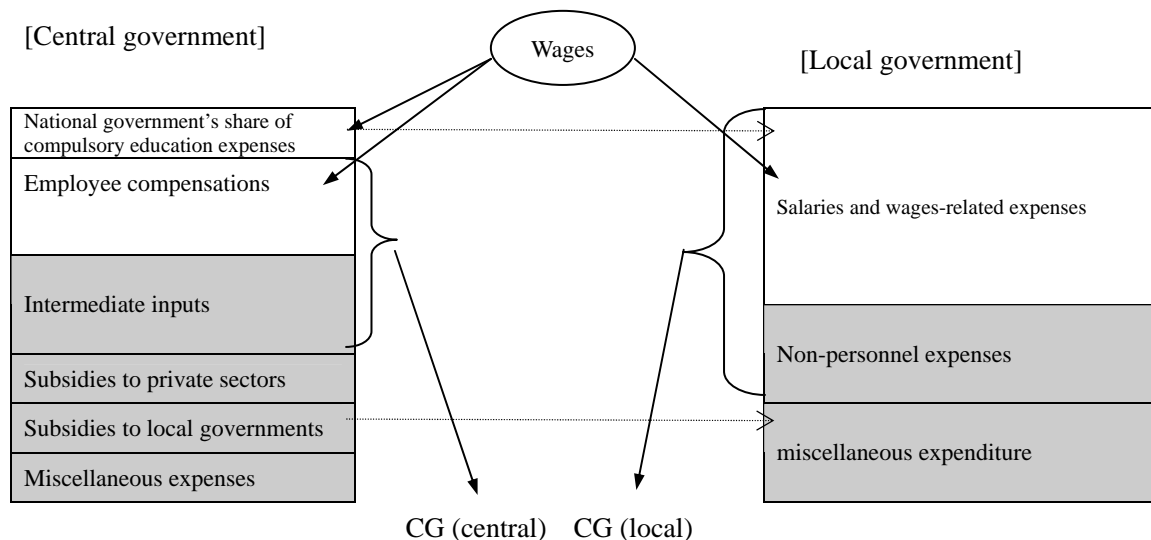
Investment expenditures are classified into the expense items, which are listed in the following figure, so as to interlock the national government with local governments and the macro-economy through government investments. The shadowed expense items are exogenous.



(3) Other general expenditures

In other general expenditure, portions pertinent to personnel expenses, *i.e.* employee compensations in the national budget, the national government's share of compulsory education expenses, salaries and wages-related expenses in the local governments, are subject to the movement

of wages in the macro-economy. They are explained by multiplying wage level by the number of government employees and schoolteachers exogenously given. Other expenses are extrapolated at exogenously assumed increase rate.



2-3. Local allocation tax

The Local Allocation Tax (LAT) is a portion of 5 national taxes stipulated by the LAT law. However, in recent years local governments suffer a severe scarcity of revenue resources. As the LAT has dual functions of adjustment and revenue guarantee, the national government has been taking various measures to remedy the shortages when it prepares the Local Public Finance Program (LPFP) in parallel with the national budget. The basic idea is that the shortage should be shared evenly between the national budget and the local budget.

(1) Shortage in the local budget

Shortage in the local budget

= Total expenditures of local governments estimated in LPFP

+ Debt service payments of the Special Account for LAT

– Usual local government revenue resources

[local tax revenue, local transfer tax, state subsidy (programmed grant), LAT based on the legally stipulated portion of national taxes, local government bond based on the usual permission standard]

– Specially guaranteed local resources for a time being

[measures to compensate for the effects of the recent tax deductions, special local construction bond, and temporary borrowing in the Special Account for LAT]

(2) Measures to compensate the shortage

The estimated shortage in the formula (1) is compensated by an increase in LAT and issuance of local bonds named Temporary Fiscal Measure Bond. Basically, the central government and the local governments share the burden evenly.

(3) LAT in the national budget and the local budget

The LAT expenditures in the national general account differ from the LAT revenues in the local government budget. The reason why this difference arises is that there is a buffer fund, the Special Account for the LAT, and it can borrow money and in turn need to repay later. Thus the LAT revenues in the local budget are calculated by the formula:

- LAT based on the legally stipulated portion of national taxes
- + measures to compensate for the effects of the recent tax deductions
- + additions as the national budget share for the debt service payments of the SA for LAT
- + increase in LAT to compensate for the shortage
- + temporary borrowing in the Special Account for LAT
- the debt service payments of the SA for LAT

2-4. Debt service payments ¹⁸

(1) National government bonds (JGBs)

Debt service payments in the general account include interest payment and redemption expense, 1.6% of the JGBs outstanding at the end of the year before last based upon the 60-year redemption rule. As the actual redemption schedule of already-issued bonds¹⁹ differs, the Special Account for JGBs management is set up to pool reserve funds. Thereby the issuance of refunding bonds is determined by a simplified formula:

< the amount of matured bonds – transfers to the SA for JGBs as redemption expense >.

Interest payment depends on the interest rate at the year when each JGB was issued.

(2) Local government bonds

Debt service repayment schedule of already-issued local bonds is reported in the annual Local Finance Statistics. On the other hand, as regards newly issued bonds, we assume the following case is standard, the principal and interest equal repayment method over a period of 20 years with 3 years' grace.

¹⁸ Fiscal deficit means net borrowing in the National Account. Thus it is defined not as public bond issues in the budget table but as debt redemption expenses minus issuance of public bonds. Primary deficit is defined as marginal balance to extract net interest payment from fiscal deficit.

¹⁹ Detailed redemption schedule of already-issued JGBs is reported in the attachment of the budget document.

Appendix 2

Reference Estimates

(Presented to the Council on Economic and Fiscal Policy on January 16, 2004)

Cabinet Office

(These estimates are carried out by the Cabinet Office and presented to the Council on Economic and Fiscal Policy for discussion on Structural Reform and Medium-Term Economic and Fiscal Perspectives-FY2003 Revision. The reference estimates are not part of Structural Reform and Medium-Term Economic and Fiscal Perspectives-FY2003 Revision, which was decided by the Cabinet on January 19, 2004. These estimates are based on calculations from the “Economic and Fiscal Model.”)

Character and Assumptions of Estimates

1. Character

- The following figures are estimated by the Cabinet Office for reference to discuss *Structural Reform and Medium-Term Economic and Fiscal Perspectives-FY2003 Revision* (hereafter referred to as “*Revision*”) in the Council on Economic and Fiscal Policy. Thus, they do not show the government’s policy targets.
- Figures with regard to local governments include unsubsidized expenditures and others decided solely by local governments, which also suggests that the estimated figures are not the government’s policy targets.
- Figures should be interpreted with considerable range because estimation necessarily includes errors. Regarding especially the balance of revenue and expenditure, it is necessary to take into consideration that many uncertain elements tend to exist, such as future tax revenues.

2. General Assumptions

- (1) These estimates are carried out on the following specific assumptions, which are based on the policy that “*Revision*” presents with respect to reductions in central and local governments’ expenditures, among others, such that “the goal for the size of government will be to hold it at or below its present level.”

Each assumption is provisionally set up by the Cabinet Office, and does not show the plan of the government for each fiscal year. Each year’s budget will actually be decided through its formulation process, and will consider economic and fiscal conditions.

With regard to “Reform of the Three Major Policies” (for the allocation of financial resources, including state subsidies, local allocation taxes, and the transfer of tax sources to local government), based on “Basic Policies for Economic and Fiscal Management and Structural Reform 2003,” the policies realized in the Budget Plan for FY2004 are taken into consideration.

Furthermore, it should be taken into account that actual expenditures related social security and other areas tend to change passively as a result of economic conditions and of people's behavior, such as the frequency of hospital visits.

Reductions in government expenditures are assumed to continue from FY2007 on as well, although “*Revision*” stipulates that “the government aims at holding the size of government (ratio of general government expenditure to GDP) at or below its FY2002 level,” “by FY2006, with the continuing efforts of both central and local governments to reduce expenditure, based on assessment of necessary public services and expenditure levels, as well as the status of economic revitalization and fiscal conditions, the government will judge what tax measures are required.” and “Beyond FY2007, the government continues the same level of effort as before to improve the fiscal balance.”

(2) Specific Assumptions

1) Investment Expenditures

It is assumed that investment expenditures will be cut by three percent each year from FY2005, except that unsubsidized investment expenditures by local government will be cut by five percent in FY2005, based on the paper presented to the Council on Economic and Fiscal Policy (November 28, 2003) by the Minister for Public Management, Home Affairs, Posts and Telecommunications.

2) Social Security Expenditures

<Pensions>

- From October, 2004, it is assumed that contribution rates will be raised by 0.354 percentage points each year.
- By FY2009, the state subsidy ratio of the basic pension is assumed to be raised gradually to one half, with stable financial resources being ensured.

<Medical Care>

- In FY2004 and FY2005, based on the revision in December, 2003, medical expenses (drug prices) are to be reduced by one percent. From FY2006, the increase in medical expenses is assumed to be equal to the rate of inflation.

3) Personnel Expenditures

- From FY2005, it is assumed that personnel will be reduced by about 0.5 percent each year.

4) Other

- Expenditures for general materials are assumed to be cut by one percent each year from FY2005.
- Percentage changes in other expenditures are assumed to be equal to the rate of inflation from FY 2005.

5) Tax Reform

- It is based on *FY2004 Tax Reform*.

[Macro-economy]

(%), [percent of GDP, %], trillion yen

FY	2003	2004	2005	2006	2007	2008
Growth rate of real GDP	(2.0)	(1.8)	(2.0)	(2.0)	(2.1)	(2.1)
Growth rate of nominal GDP	(0.1)	(0.5)	(1.4)	(2.1)	(2.5)	(2.9)
Nominal GDP	497.9	500.6	507.6	518.3	531.4	547.1
Inflation rate (CPI)	(▲0.2)	(▲0.2)	(0.5)	(1.2)	(1.5)	(1.9)
(DCGPI)	(▲0.7)	(▲0.4)	(0.2)	(0.8)	(1.0)	(1.2)
(GDP Deflator)	(▲1.9)	(▲1.3)	(▲0.6)	(0.1)	(0.4)	(0.8)
Unemployment rate	(5.2)	(5.1)	(5.1)	(4.9)	(4.8)	(4.6)
Nominal long-term interest rate	(1.1)	(1.3)	(1.5)	(1.8)	(2.3)	(2.8)
Balance of Savings and Investment						
General Government	[▲8.1]	[▲7.4]	[▲6.8]	[▲6.0]	[▲5.5]	[▲5.1]
Private Sector	[11.0]	[10.4]	[9.7]	[8.8]	[8.5]	[8.2]
Rest of the World	[▲2.9]	[▲3.0]	[▲2.9]	[▲2.8]	[▲2.9]	[▲3.1]

[Fiscal Conditions]

FY	2003	2004	2005	2006	2007	2008
Balance of Savings and Investment						
Central Government	[▲6.7]	[▲6.3]	[▲6.0]	[▲5.6]	[▲5.1]	[▲5.0]
Local Government	[▲1.0]	[▲0.5]	[▲0.2]	[0.0]	[▲0.1]	[0.0]
Total	[▲7.7]	[▲6.9]	[▲6.2]	[▲5.6]	[▲5.2]	[▲5.0]
Primary Balance						
Central Government	[▲5.2]	[▲5.0]	[▲4.7]	[▲4.1]	[▲3.6]	[▲3.2]
Local Government	[▲0.1]	[0.3]	[0.6]	[0.7]	[0.6]	[0.7]
Total	[▲5.4]	[▲4.6]	[▲4.1]	[▲3.4]	[▲2.9]	[▲2.5]
Debt Outstanding	639.6	674.2	706.0	736.0	764.6	791.5
(Percent of Nominal GDP)	[128.4]	[134.7]	[139.1]	[142.0]	[143.9]	[144.7]
Size of Government	182.1	181.4	182.5	185.5	190.0	195.8
(General government expenditure)						
(Percent of nominal GDP)	[36.6]	[36.2]	[36.0]	[35.8]	[35.8]	[35.8]

Note:

1. The Consumer Price Index, excluding fresh food, is estimated on a nationwide basis.
2. Primary Balance is estimated on an SNA basis, which includes expenditures carried over from the previous year and includes special accounts in addition to general accounts in both central and local government.
3. With regard to Balance of Saving and Investment and Primary Balance, borrowing and debt redemption in the special account on local allocation taxes are included in central government.
4. Debt outstanding is the sum of national straight bonds outstanding, local bonds outstanding and debt in the local allocation tax special account.

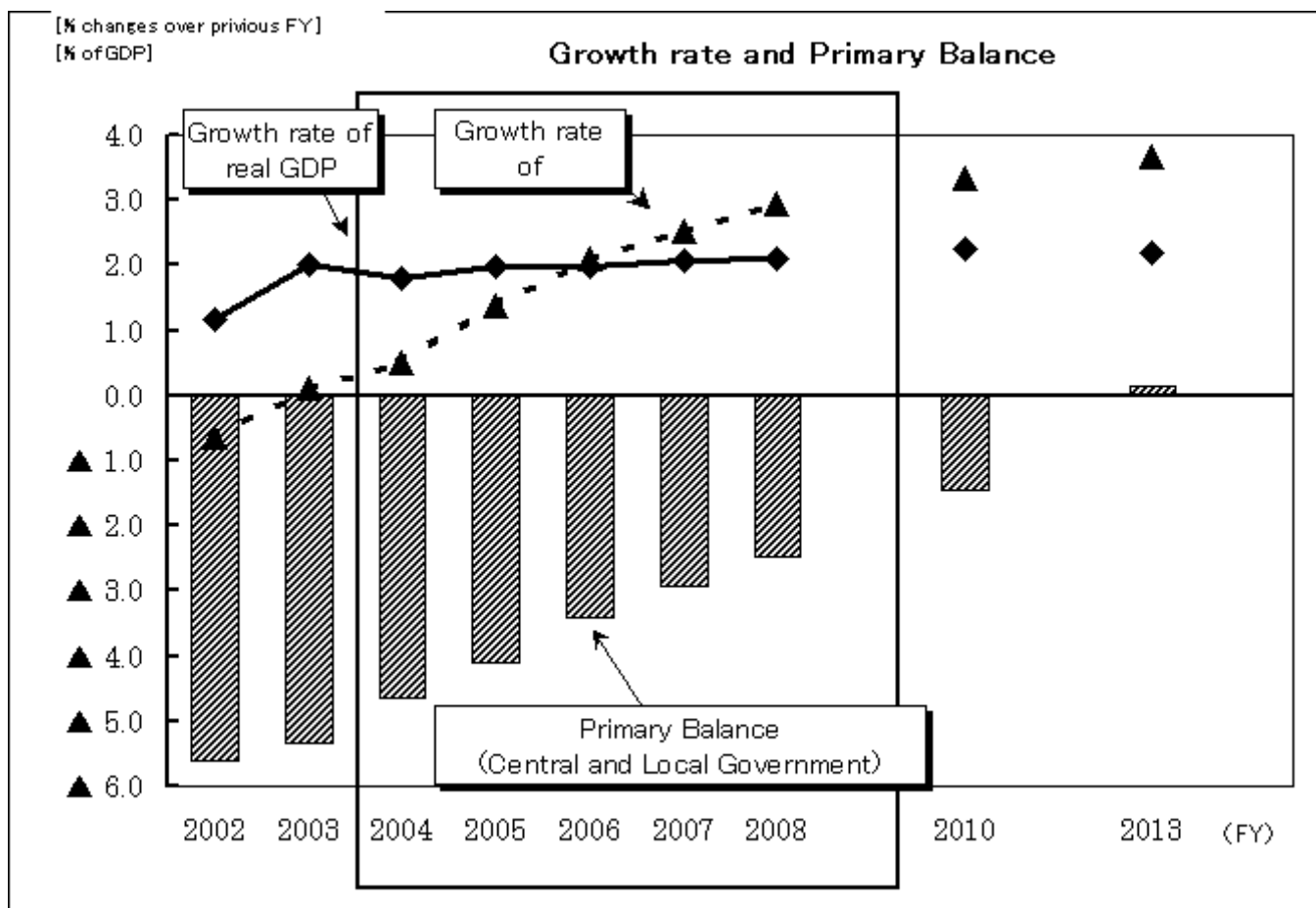
[General Account Budget in Central Government]

trillion yen

FY	2004	2005	2006	2007	2008
Expenditures	82.1	84.8	86.5	90.7	92.6
General expenditure	47.6	48.8	49.8	50.9	52.4
Social security	19.8	21.2	22.4	23.8	25.3
Public works	7.8	7.6	7.4	7.1	6.9
Other	20.0	20.0	20.0	20.0	20.1
Local allocation taxes	16.5	17.0	16.9	19.4	19.5
National debt service	17.6	18.3	19.1	20.1	20.7
Subsidies for redemption due to NTT interest-free loans (B-type)	0.4	0.8	0.8	0.4	
Revenues	82.1	84.8	86.5	90.7	92.6
Tax revenues	41.7	43.5	46.4	48.4	50.7
Non-tax revenues	3.8	4.2	4.3	3.9	3.7
Bond issues	36.6	37.1	35.8	38.4	38.3

[General Account Budget in Local Governments]

FY	2004	2005	2006	2007	2008
Expenditures	97.4	96.7	95.4	95.4	95.6
General expenditure	78.4	77.9	77.9	78.2	78.7
Revenues	97.4	96.7	95.4	95.4	95.6
Local tax revenues	32.8	34.0	35.2	36.3	37.6
Local allocation tax and special local grants	18.0	17.7	17.4	16.1	15.6
National government disbursement	12.1	12.3	12.3	12.1	11.9
Bond Issues	16.0	13.3	12.0	12.1	11.3



Note:

Figures should be interpreted with considerable range because estimation necessarily includes errors.

Especially, it is necessary to take into consideration that uncertain factors are likely to increase, as the term of estimates is longer.