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Tax Revenues Could be a Big Swing Factor: Potential Exists for Accelerated Improvement in Fiscal Balance

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One of the measures for advancing fiscal consolidation, which have been set out by the Japanese government in the Basic Policies 2006 announced in July, required the fiscal balance to improve by 16.5 trillion yen. This appears to be a formidable challenge but recovery in tax revenues could potentially lead to greater-than-expected fiscal improvement. This article examines the future of the public finance of Japan by use of a macroeconomic model.

An interim target in fiscal consolidation is to achieve primary balance. If general expenditures, which exclude public debt service costs, are covered by tax revenues, the government can finance its public policy spending without incurring additional borrowings. The Japanese government aims to achieve a surplus in the primary balance of the national and local governments combined by FY2011. The deficit is estimated to have decreased by half in FY2006 to 14 trillion yen from 28 trillion in FY2003, due to unexpected increases in tax revenues, as well as expenditure cuts.

Then, why is the improvement of 16.5 trillion yen in the fiscal balance necessary? The amount is based on two assumptions – one on tax revenues, where the elasticity of tax revenues to nominal GDP is conservatively assumed to be 1.1, and the other on fiscal expenditures, where discretionary spending including public investments is estimated to grow at an equal rate with nominal GDP. Let us now investigate whether these assumptions are realistic.

Three Surprises Boosting Tax Revenues

On tax revenues, personal and corporate incomes are GDP components, and it seems natural to assume that tax on these incomes will grow in line with GDP. Over the next five years, however, there could be three surprise factors that will potentially boost tax receipts of the government. Specifically, they are interest income, dividend income and, in relation to corporate tax, losses carried forward (NOLs).

Household interest income, which exceeded 36 trillion yen in FY1990, decreased to less than 5 trillion yen in FY2004. This income and taxes levied on it could potentially multiply by two, three or more as interest rates begin to rise. Dividends are already growing rapidly. Household dividend income doubled over the three years from FY2001. Instead of the reduced rate of 10% currently in effect, withholding tax rate on dividends will be increased to 20% as from FY2008, which will most likely lead to a boost in tax revenues. Tax on wages and salaries will also likely grow in response to income growth. Its elasticity is relatively high due to progressive taxation and the author estimates the value at 1.25, exceeding the government assumption.

The largest swing factor is corporate tax. Losses incurred in the recession have been carried forward as NOLs and used to offset current period profits, if any, thereby reducing taxable income. Consequently, corporate tax payments will increase even if corporate profits should remain stagnant, as the balance of NOLs decreases in the coming years. The case of the six major banking groups is a typical example, where no corporate tax was paid on over 3 trillion yen of net income recorded in the year ended in March 2006. Given an effective tax rate of 40%, those major banks are forecast to be paying two-thirds of their profits in corporate tax over the period of FY2009-11.

The chart shows the estimated effects when targeting all industries (private sector). Estimation Formula 1 assumes that the vintage and IT capital ratio remained fixed throughout the entire period, while Estimation Formula 2 considers the possibility that effects will change during certain time spans, with the overall period divided into three sections.

Table 1: Income elasticity of tax revenues estimated at 1.5 over the next five years

(FY)	1990	2005	2011	2005–2011	
	Actual amount (in trillions of yen)			Annualized percentage	GDP elasticity
GDP	446.0	505.5	619.3	3.4	—
Tax revenues (national and local)	97.7	88.3	120.3	5.3	1.5
Personal income taxes	36.1	26.6	42.0	7.9	2.3
*tax on wages and salaries	13.2	12.9	17.0	4.8	1.4
*tax on interest income	4.9	0.8	3.4	28.6	8.3
*tax on dividends	1.1	1.4	3.7	17.8	5.2
Corporate tax	24.5	17.4	25.0	6.2	1.8
Indirect taxes	34.9	42.6	51.7	3.3	0.9
Excise tax	5.8	12.8	14.8	2.5	0.7

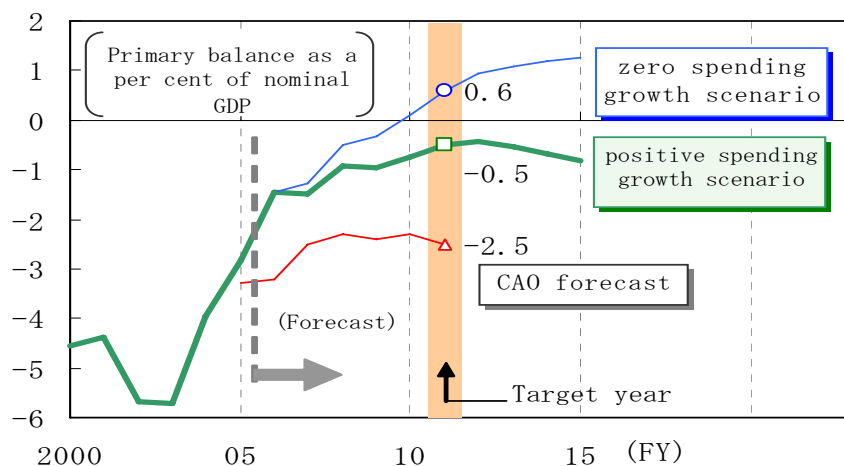
Note: Based on modeled forecasts by the author. Elasticity values reflect the effects of the abolition of fixed-rate income tax reduction and other structural reforms. Tax revenues are on an SNA basis and include both national and local taxes. * denotes a personal income tax component that is assessed by the National Tax Agency as national income tax withholding. Tax on dividends reflects an increase of withholding tax rate to 20% in and after FY2008 (from the current rate of 10%). Figures for FY2005 are estimates except for nominal GDP. Figures for FY2006 and beyond are forecasts, based on the positive spending growth scenario as shown in Figure 1.

With these factors affecting tax revenues incorporated in the model, public sector finance variables up to FY2015 are then forecast. In order to facilitate comparison with government projection, exogenous variables are adjusted so that the model's forecast of nominal GDP growth rate will closely approximate that published by the government. Taking into consideration the impact of the abolition of fixed-rate income tax reduction as well, the results show GDP elasticity of 2.3, 1.8 and 1.5 for personal income tax, corporate tax and total tax revenues, respectively.

Now let us turn to the spending side. Over the past five years, national and local government spending excluding social security expenditures and public debt service costs have decreased at an annual average rate of 2% and public investment expenditures alone have been cut by 8% a year. Against this backdrop, the assumption that discretionary spending will grow at an equal rate with nominal GDP represents a rather generous policy. Furthermore, even under that assumption, our model forecasts a primary deficit in FY2011 at 3.2 trillion yen, or less than 0.5% of GDP (positive spending growth scenario in Figure 1).

The next case considered embodies public spending that is less generous but not so austere as the actual policy has been over the past five years, where discretionary spending and total personnel costs for government employees are held flat (zero spending growth scenario in Figure 1). Under this assumption, primary balance would rapidly improve and attain the target of a surplus in FY2011 without tax increases

Figure 1: Surplus possible with lower investment and personnel outlays



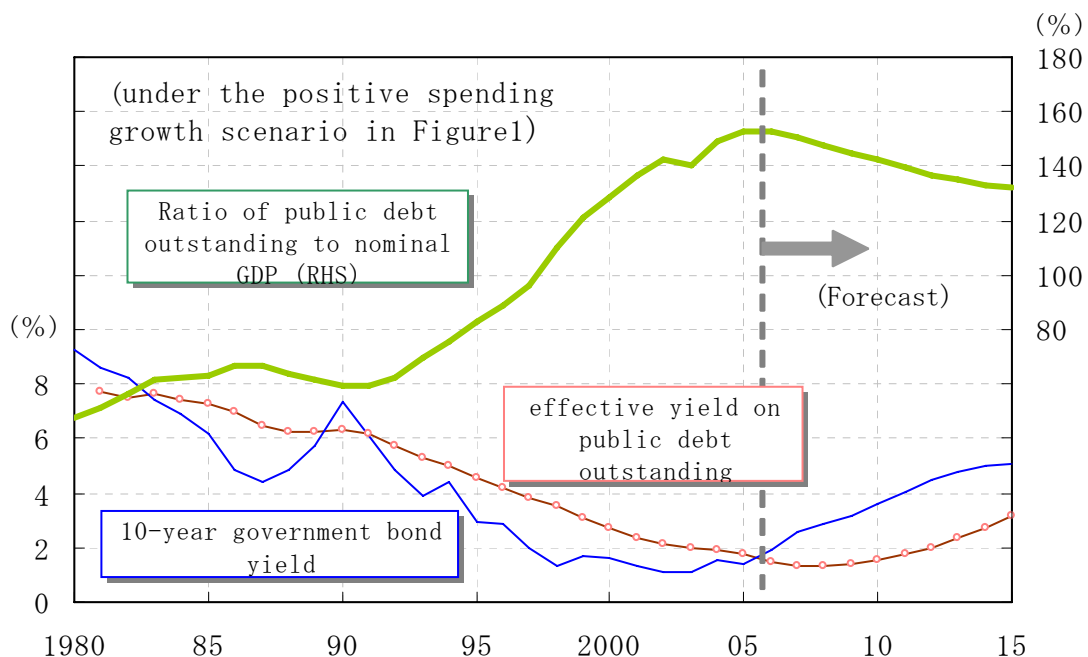
Note: Based on modeled forecasts by the author. CAO forecast is based on “the scenario with no additional effort to improve primary balance” described in a discussion material presented to CEFP on January 18, 2006. The 2005 figure is an estimate. Forecasts by the author fully reflect the near-term growth in tax revenues and therefore vary significantly from CAO forecast.

Debt Ratio Likely to Decrease

The true test of progress in fiscal consolidation is whether the ratio of public debt outstanding to nominal GDP is decreased. A primary surplus, it has been argued, is a necessary condition for achieving the objective.

Our model, however, predicts the debt ratio will start decreasing soon even if a primary deficit were to persist under the positive spending growth scenario. The key to understand this phenomenon is interest rates paid on government debt. Net increase in outstanding debt is equal to the sum of the primary deficit and interest payment cost and not only the former but also the latter could have a meaningful impact. Interest rates on government debt that had been incurred during the years of ultra-low interest rates are in the range of 1.5% to 2% (see Figure 2), and net interest payment in FY2006 is estimated to be approximately 8 trillion yen. By adding another 8 trillion yen of an estimated primary deficit to this, net increase in debt will be about 16 trillion yen, representing a growth of a little over 2%. A nominal GDP growth rate higher than this would cause the debt ratio to fall.

Figure 2: Interest payment of the government to stay low



Note: Public debt outstanding is represented by the combined long-term debt of the national and local governments. Effective yield is calculated by dividing property income payable of the national and local governments by public debt outstanding.

The Council on Economic and Fiscal Policy (CEFP) has apparently spent significant time discussing its growth rate and interest rate assumptions. In the understanding of the reality, however, it is misleading to focus on long-term market interest rates as the only interest rates to consider. A rise in market interest rates will bring along a bonus of higher tax revenue on interest income and should not have a significant adverse impact on public finance in a time frame of five years or so.

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