B Appendix B: General Description of the Budgetary Process[1]

The federal budget is produced through the cooperation of many offices in the government. Within the executive branch, the Office of Management and Budget (OMB) is officially responsible for the overall projection of the budget, although numerous agencies and departments play important roles. At the basis of all budget estimates is the macroeconomic forecast produced by OMB, the Council of Economic Advisers, and the Treasury Department, which is represented for this purpose by the Office of Economic Policy. The group is informally referred to as the "Troika."

On the expenditure side, OMB must perform many more functions than in the revenue process, where it mainly takes the numbers provided by Treasury and collates them into the overall budget. Because OMB has expertise in many of the expenditure functions, it generally collects, collates, and checks for consistency on the expenditure numbers (gathered from numerous agencies) in the budget process. OMB even directly forecasts a few expenditure items. The process is a two-way street. Specific departments such as Defense, Health and Human Services, and Education, for instance, provide various levels of input into the macroeconomic assumptions. To a large extent, the expenditure forecasts are developed within each department and the information is collected and integrated by OMB.

Given a particular forecast, receipts are estimated by the Office of Tax Analysis in Treasury. Payroll tax estimates are developed in conjunction with the Social Security Administration (social insurance payroll taxes) and the Department of Labor (unemployment insurance). OMB does not change the revenue estimates provided by Treasury. These forecasts can be changed indirectly, however, by modifying the underlying macroeconomic assumptions.[2]

In Congress the budget estimation process is a bit different. The Congressional Budget Office (CBO) and the Joint Committee on Taxation (JCT) dominate the estimating process in the same

[1] This appendix is adapted from the appendix in an OTA contractor paper for this project by Steuerle and Wallace (24).

[2] The forecasts may Present a more or less positive view of the future. For example, a decrease in the forecast for inflation can lead to a forecast of lower government spending .On the revenue side, a change in the forecast for interest rates can significantly alter the forecast of investment and consumer spending.

way that OMB and Treasury do in the executive branch. Revenue estimates for bills generally are made by JCT, just as the Treasury provides such estimates for the executive branch. CBO is responsible for the congressional estimates and analysis of the federal budget. CBO often derives its expenditure estimates from data provided by the expenditure departments of the executive branch and OMB. Because CBO's staff is relatively small, it relies mainly on JCT and Treasury data for the revenue aspect of the budget estimates. In point of fact, all of the estimators at Treasury, JCT, OMB, CBO, and relevant executive departments communicate closely with each other, and their estimates of federal receipts and outlays are usually quite similar.

One difference between the executive and legislative branches is the macroeconomic forecast. This forecast is at the heart of many budgetary forecasts. The Troika and CBO each uses its own sense of the future and interpretation of the output from macroeconomic models to produce the forecast. These models, in turn, are based on historical relationships among aggregate indicators and forecasted trends in certain indicators. These forecasts become crucial for estimating future changes in expenditures and taxes as a result of a bill. In large part, the estimates are based upon past growth trends, modified slightly for economic cycles and demographic changes.[3]

OMB produces its budget near the beginning of the calendar year mainly under "proposed services" for the fiscal year in question. OMB'S budget baseline, therefore, *includes* any presidential proposal for tax or expenditure changes in the budget year. CBO, on the other hand, emphasizes a "current services" budget—a budget that assumes services will be maintained under the current tax and expenditure code—since it does not want to presume what would be enacted (or favored) by Members of Congress.[4] OMB's macroeconomic forecast, budget estimates, and revenue estimates, therefore, could end up very different from those of CBO and JCT.

COMPONENTS OF BASELINE BUDGET ESTIMATES

The revenue and expenditure forecasting methodologies of both branches of government are complex, and many of the components of revenues and expenditures are interrelated. Table B-1 provides a summary of the major inputs of the budget forecasting process. Changes to any of these components can significantly alter the resulting budget projection. The first column of the table presents the main components of the budget forecasting process.[5] These inputs include: 1) the macroeconomic forecast, which is produced under various assumptions about the outlook for the economy; 2) the baseline of the government programs, health expenditures, income subject to tax, and other variables that are developed using the macro forecast and other models and analyses; 3) current tax laws; 4) current law on expenditures; and **5)** the rules regarding debt financing.

The second column of the table indicates which office produces the components, and the period covered by the information. A number of agencies and offices provide input to OMB and CBO for all types of analyses. The third column shows the use of the inputs in the overall budget process. The last column contains commentary on each input.

Expenditure and revenue forecasting depend on assumptions about the distributions of income and employment. Many of these assumptions in-

[3] Despite adjusting for past cyclical patterns of economic growth, macroeconomic forecasts by tradition contain no future recessions.

[4] It is not always easy to figure out what to include in either budget. This has been especially true in recent years because Congress has adopted requirements to *reach certain aggregate targets* for discretionary and other spending. CBO estimates current services, for instance, by assuming that new legislation is enacted to meet these targets.

[5] Other agencies and analysts in the private sector may produce budget forecasts for their own uses. The discussion here focuses on the methods used by OMB and CBO.

TABLE B-1: Overview of Baseline Budget Projection Components

Component (output)	Supplier of component and period covered	uses	Comments
Macroeconomic forecast including: **Income by sector** **Prices (health/general iCPI)** **Employment by sector** **Population** **Consumption** **Investment, etc.**	**OMB, CBO, private, and other forecasting firms.** **OMB and CBO make 5-year projections, other firms and offices vary, SSA makes 75-year projections.**	As an input to produce estimates of baseline components of expenditures and taxable income, as an instrument to project changes in expenditure and tax policy.	Macroeconomic forecasts are of various levels of sophistication, from econometric models to relatively simple growth models. Forecasts are made under some assumption regarding policy, current law, or proposed law.
Baseline of: **National health expenditures** **Health care needs** **Income distribution** **Distribution of age** **Number of families in poverty** **Income subject to tax** **Capital income** **Wage and salary income** **Corporate profits** **Other income**	**Individual models and analysis.** **Within the Clinton Administration these include models in individual departments, CBO, private, academic, and other modelers. Forecasted baselines are projected for 1 to 5 years (except SSA).**	**Used as** the baseline for many policy simulations and budget projections. Provides an overview of the current status of various facets of the economy and status under proposed legislation.	The development of baseline involves estimation of behavioral responses, hitting targets of actual data from a variety of sources including the CPS, Statistics of income (IRS). Projecting the baseline typically includes use of some macroeconomic forecast. Baseline models also include number of users of various services (e.g., Medicaid) and number of tax filers.
Current law and proposed law tax code **Definition of AGI,** taxable income Tax preferences, deductions, exemptions Taxable income by source Tax liability	**IRS tax code, OMB.** **Budget tax components developed by OMB, CBO, private models.**	**Used as** the basis for the revenue component of the budget forecast.	This component is used interactively with some form of tax calculator, and includes behavioral components for capital gains realizations, deductions, and compliance. The code provides definitions for taxable income, etc.
Current law rules on nondiscretionary and discretionary expenditures Participants in programs (Medicaid, Medicare, AFDC, etc.) **Total spending by type of program** **Budgeted expenditures by type**	**OMB, CBO, private models.**	**Used as** the expenditure basis of the budget forecast.	This component is used Interactively with specific models and analyses for each component of expenditure. In health, these estimates are correlated closely with estimates of national health expenditures.
Debt financing	OMB, **CBO, private models.**	Listed as a separate expenditure component of the budget.	This component uses, among other items, the macroeconomic forecast components related to Interest rates and investment.

KEY: AFDC = Aid to Families with Dependent Children program, AGI - adjusted gross income; CBO = U S Congress, Congressional Budget Office; CPI = consumer price index; CPS = current population survey; OMB = U.S Executive Office of the President, Office of Management and Budget. SSA = U S Department of Health and Human Services, Social Security Administration, IRS = U.S. **Department of** Treasury, Internal Revenue Service

SOURCES: Sunley, E., and Weiss, R., **"Revenue** Estimation," **Tax** *Notes* (June 10, 1991), pp458-472, U SCongress, Joint Committee on Taxation, "Discussion of Revenue Estimation and **Methodology"** (Washington, DC: Aug 13, 1992), U.S. Department of Treasury, Office of Tax Analyses, *Compendium of T= Research 1987* (Washington DC US Government Printing Off Ice, 1987); U S. Department of Treasury, Office of Tax Analysis, "Estimating **the** Impact **of Health Reform on Federal Receipts, " Washington,** DC, Dec 9, 1993

teract. Note also the crucial role played by the actual rules, regulations, and procedures under which taxes are collected and expenditures are made. A slight change in what is viewed as permissible under, for example, income tax or Medicaid regulations can change estimates of the budget deficit by billions of dollars. Furthermore, a change in any component of the macroeconomic forecast or other more "narrow" parameters, such as effective marginal tax rates, can change the budget forecast.

Many of the items listed in table B-l—for example, distribution of income by adjusted gross income (to determine taxes), distribution of income relative to eligibility criteria in income-tested expenditure programs, tax preferences, and program participants—are estimated by using household survey data and microsimulation models. Differences in the calibration due to use of different data sets will lead to different baselines of income and expenditures. Tax code and expenditure rules are also put into models—i.e., these rules are approximated by computer language—to be able to simulate the outcomes of changes in rules on baseline revenues and expenditures. Finally, changes in debt financing rules and interest rates will influence the debt finance expenditure.

AN ESTIMATING CONVENTION

The Constancy of GDP and Other Macroeconomic Variables

Within both the executive branch and Congress, estimators often make estimates for bills under an assumption of constancy for gross domestic product (GDP) and other large-scale macroeconomic variables, such as employment and total income. Estimators within and outside the government are influenced differently by this convention, and their estimates vary accordingly.

OMB and CBO typically treat proposals during the year under a constant GDP assumption, meaning that the total change in GDP under any proposal is usually assumed to be zero. Thus, even if there are decreases in output by one sector, they are offset by increases in another sector. This convention is adopted for a variety of reasons, among them the impossible task of estimating the change in national output that would result from every bill and amendment that comes before Congress. Another rationale is that every bill put forward by an Administration or Member of Congress is intended to do some "good." To the proponent, therefore, it must have a positive effect. In fact, though, whether a bill is good or bad from a macroeconomic standpoint often goes beyond 'what can be determined scientifically.

This estimating convention has led some to criticize the estimates as being static and to argue that no behavioral adjustments are incorporated. While the estimates assume that the overall level of economic activity is not influenced by a particular proposal, the estimates do allow for such behavioral changes as sectorial shifts in employment, the composition of income, the allocation of savings and investment, the recognition of capital gains and other income for tax purposes, and participation rates in programs. The estimates thus are hardly static.[6]

[6] For a description of the dynamic elements of revenue estimating, see Nester (15).