

## Background

What criticisms are levied against standard distributional analysis?

DISTRIBUTION OF TAX BURDENS  
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### Q. What criticisms are levied against standard distributional analysis?

**A. Economists disagree on which taxes to include, how to measure tax burdens, what to assume about tax incidence, how to measure income, what period of analysis to use, and whether to include outlays in the calculations.**

Distributional analyses of tax burdens across income groups play an important role in debates over the tax system and how to reform it. Differences in the conceptual framework, underlying theoretical assumptions, and empirical implementation can all significantly affect the results of these analyses.

Here are some of the criticisms that have been levied against standard distributional analyses prepared by the Urban-Brookings Tax Policy Center (TPC), the Joint Committee on Taxation (JCT), Treasury's Office of Tax Analysis (OTA) and the Congressional Budget Office (CBO).

#### **TAXES INCLUDED**

Analyses often omit certain taxes. For example, TPC previously omitted excise taxes, and JCT and CBO omit estate and gift taxes. Many analyses make no provision for the impact of state and local taxes.

#### **HOW TAX BURDENS ARE MEASURED**

Households may adjust their behavior to avoid some of the burden of tax changes. JCT uses actual tax payments, which reflects avoidance behavior. But this measure understates the true tax burden because it ignores welfare loss. Conversely, TPC and OTA use a "static" (no behavior) assumption, which overstates true burdens. All groups use projected tax receipts to measure the burden of current-law taxes, and these receipts reflect households' behavioral responses, so these burdens are understated. Further, the inclusion of payroll taxes for Social Security and Medicare has been criticized on the grounds that the distributional impact of the associated benefits is omitted.

#### **INCIDENCE ASSUMPTIONS**

Uncertainty over the economic incidence of some taxes, especially the corporate income tax, leads some economists to criticize the specific assumptions made in distributional analyses.

#### **INCOME MEASURE**

Income is used in distributional analyses to rank households by their "ability to pay"; it is also used to provide measures of tax burdens such as taxes as a percent of income by income group. These methods are often criticized because different definitions and measurements of income can significantly affect distributional results.

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In theory, a broad definition of income may appropriately rank families and measure tax burdens, but this definition can be too far removed from common understandings of income and difficult to employ because of gaps in available data.

Conversely, even a quite broad definition of income, such as TPC's "expanded cash income," can be criticized as being too narrow because it omits in-kind benefits such as Medicare, Medicaid, and housing assistance, which can significantly improve recipient households' well-being.

Some argue that consumption, rather than income, should be used to rank households and measure tax burdens. Income is either consumed currently or saved for future consumption. A household's current consumption measures current well-being. Savings, meanwhile, are included in the measure of future well-being, when the household withdraws savings to finance consumption. Focusing on current income overstates current savers' well-being and understates the well-being of current dissavers.

#### PERIOD OF ANALYSIS

Most distributional analyses focus on a single year, but some tax provisions have effects over multiple years. For example, contributions to a traditional individual retirement account (IRA) are deductible when made but taxable when withdrawn, and the earnings IRAs accrue are not taxed. An annual measure of tax burdens would only capture the effect of the contribution in one of these years, rather than measure the multiyear consequences of the IRA contribution. TPC and OTA use alternative annual measures for some multiyear provisions in their distributional analyses, but these measures rely on uncertain assumptions, such as when taxable withdrawals begin and the rate at which to discount taxes paid in the future.

In addition, a tax proposal may have provisions that phase in or phase out over time, or that are only temporary. Standard distribution tables have represented such temporal issues in various ways. Economists have prepared analyses for each year (or perhaps the beginning and end year) of a phase-in, phaseout, or temporary provision, or have developed methods that reflect the present value of the provision over the budget period. These approaches are all open to criticism.

All four groups use annual income measures, which can be problematic because income is volatile: some normally high-income households will be counted among low-income households in a particular year, while some normally low-income households will appear to have higher incomes. Further, income for most individuals follows a "life-cycle" pattern—generally rising through about age 50 and then declining—so in any particular year, the distribution will underestimate the welfare of the young and old and overestimate the welfare of the middle-aged.

#### TAXES VERSUS SPENDING

The federal budget counts amounts paid as refundable credits on the expenditure side of the ledger, but all standard distributional analyses classify those amounts as (negative) taxes. Similarly, all analyses effectively reduce tax burdens by the special exemptions, deductions, tax rates, and credits that represent "tax expenditures," which arguably should be counted as budget outlays rather than as tax reductions. Including these outlays in the analyses understates the true burden of taxes.

Moreover, because standard distributional analyses omit the benefits from most government spending programs, these analyses do not reflect the overall effect of the federal budget on the well-being of

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households.

#### EFFECTS ON THE DEFICIT AND SPENDING

All four groups ignore the effects of financing a tax cut, be it through reductions in current outlays, higher deficits, or higher debt (which eventually will require future tax increases or reductions in spending to repay). They also omit the opposite effects of a tax increase.

#### MACROECONOMIC EFFECTS

All four groups assume for purposes of distributional analyses that any tax change leaves economic aggregates (gross domestic product, employment, the price level, etc.) unchanged. Critics argue that tax reform could improve economic performance and thereby raise revenues while improving the well-being of many (if not all) households.

#### OTHER DIMENSIONS OF TAX POLICY

A frequent criticism of distributional analyses is that they focus on only one dimension of tax policy: vertical equity (fairness across income groups). Less attention is therefore paid to horizontal equity (fairness within income groups), simplification, economic efficiency, and how the tax system may finance worthy federal spending.

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#### Further Reading

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