

An Introduction to Tax Incidence Analysis

Everyone agrees that tax “fairness” is important—even though there is often disagreement on what fairness means. A well-informed debate on who *should pay* the most taxes must start by assessing who actually *does pay* the most—and the least. Tax incidence analysis answers these basic questions by measuring how taxpayers at different income levels are affected by the current tax system and various tax reform alternatives. This policy brief provides an basic introduction to using tax incidence analyses.

Understanding ITEP’s Income Groups

The first step in incidence analysis is to divide a population into income groups. ITEP’s analyses usually divide the population into five groups based on income—ranging from the poorest 20 percent to the richest 20 percent. Each of these groups is called an “income quintile.” Each quintile usually includes both married and single taxpayers, and both elderly and non-elderly taxpayers.

ITEP’s analyses also split the richest 20 percent into three subgroups: the lowest-income 15 percent of the quintile, the next 4 percent and the richest one percent. This is done because families in the top 20 percent have more than half of all personal income nationally. Within this quintile, there are substantial differences in income levels and tax burdens between the “poorest” members and the richest members. Incomes in this group range from what might be called upper-middle class, to the richest families in the country. The example at the bottom of this page shows the income quintiles for Massachusetts in 2002. The analysis shows that the poorest 20 percent of Massachusetts residents were those earning less than \$17,000 in 2002. The average income in this group was \$10,000. The wealthiest 1 percent of taxpayers, with incomes over \$367,000, earned an average of \$1.3 million.

Measuring Fairness: Effective Tax Rates

The next step in tax incidence analysis is to measure the impact of a tax change on different income groups. The most common approach is to use the “effective tax change,” the total tax change experienced by an income group as a percentage of that group’s income. This approach measures each group’s ability to pay most accurately. The table below shows the impact of a one cent increase in the Massachusetts sales tax rate. The table shows that if this change were enacted in 2002, the poorest twenty percent of state residents would pay, on average, an additional 0.6 percent of their income in sales tax, while the wealthiest 1 percent would see, on average, a tax hike of 0.1 percent of their income. The table also shows the average dollar tax change for each income group and the percentage of the total tax hike paid by each income group. So, for example, the poorest quintile pays, on average, \$63 more in sales taxes under this plan, and this group as a whole would pay 6 percent of the tax hike on Massachusetts taxpayers.

Impact of Increasing Massachusetts Sales Tax By One Cent: All Taxpayers in 2002

2002 Income Groups	Lowest 20%	Second 20%	Middle 20%	Fourth 20%	Next 15%	Next 4%	Top 1%
Income Range	Less Than \$17,000	\$17,000 – \$34,000	\$34,000 – \$51,000	\$51,000 – \$85,000	\$85,000 – \$171,000	\$171,000 – \$367,000	\$367,000 Or More
Average Income in Group	\$10,000	\$25,500	\$42,100	\$66,700	\$114,000	\$246,000	\$1,337,000
Tax Change as a % of Income	0.6%	0.5%	0.4%	0.3%	0.3%	0.2%	0.1%
\$ Average Tax Change	\$ +63	\$ +133	\$ +174	\$ +231	\$ +302	\$ +447	\$ +1,254
Share of Total Tax Change	6%	13%	17%	23%	23%	9%	6%

It is important to note that because these statistics describe the overall averages for taxpayers in each income group, the actual impact on any individual in each quintile may differ somewhat from the overall average for that income group. For example, a low-income taxpayer in the bottom income group who spends more on taxable items may see a sales tax hike higher than the \$63 average for that income group. Conversely, an individual who spends relatively little on taxable items may see a tax hike of less than \$63.

Describing Fairness: Regressive, Proportional and Progressive Taxes

From a fairness perspective, there are three broad types of taxes. A **regressive** tax makes middle- and low-income families pay a larger share of their incomes in taxes than the rich. The sales tax change shown in the table on the previous page is a regressive tax increase, falling most heavily on low-income taxpayers. A **proportional** tax takes the same percentage of income from everyone. A flat-rate income tax is proportional. A **progressive** tax makes the wealthy pay more of their income in tax than those with lower incomes. Increasing a graduated personal income tax would be a progressive tax change.

Initial Incidence and Final Incidence

The concept of tax incidence is used in two ways: *initial incidence* and *final incidence*. Initial incidence tells us who is legally responsible for paying a tax to the government. Final incidence tells us to whom the burden of these taxes is ultimately passed on.

Sometimes the initial incidence and the final incidence of a tax are very different. For example, the property tax on residential apartment buildings is paid initially by the landlords who own the buildings. From an initial incidence perspective, this tax does not affect renters who live in these buildings at all. However, landlords pass some of these taxes through to renters in the form of higher rents. So from a final incidence perspective, this business property tax is a tax on individuals. In fact, all business taxes ultimately end up coming out of people's pockets. For this reason, ITEP's analyses look at final incidence. This means that ITEP's analyses always include an estimate of taxes (if any) paid initially by businesses that are passed through to individual taxpayers. In the example on the previous page, part of the Massachusetts sales tax hike at each income level is business sales taxes that have been passed through to individual consumers.

How Taxes Are “Exported” to Other States

While all taxes are ultimately paid by individuals, some state taxes are paid (directly or indirectly) by residents of other states. For example, the Massachusetts sales tax example assumes that about 20 percent of the retail sales tax increase is ultimately passed through to consumers in other states. ITEP's state tax incidence analyses generally estimate how much of a tax increase (or tax cut) is exported to residents of other states.

Tax Incidence Analysis: An Important Tool for Evaluating Tax Fairness

Accurate tax incidence analysis is an important building block for an informed debate on issues of tax fairness. Regular reporting of tax incidence effects can help state lawmakers to understand the impact of potentially complicated tax changes. Very few states currently require a comprehensive, regular analysis of the tax incidence of the overall tax system and of proposed changes—but states such as Minnesota and Texas have created a permanent capacity for regular tax incidence analyses, and most other states could build a similar capacity at a relatively low cost. In the many states lacking this capacity, lawmakers will continue to make important tax policy decisions affecting tax fairness without knowing basic information about how their constituents are affected by these decisions.

In the many states that lack the ability to conduct tax incidence analyses, lawmakers are making important tax policy decisions with no clear understanding of how their constituents are being affected by these decisions.

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