

Tax Incidence: Who Bears the Tax Burden?

The study of *tax incidence* is the economic study of which taxpayers bear the burden of a tax. This question is of considerable importance to policy makers, who want to know whether the distribution of the tax burden (between rich and poor, capital and labor, consumers and producers, and so on) meets their criteria for fairness.

Distributional tables showing the tax burdens borne by different income groups are an important application of incidence analysis. The Joint Committee on Taxation (JCT) and the Department of the Treasury prepare distributional tables for the existing tax system and for some proposed and adopted tax changes. The Congressional Budget Office (CBO) prepares such tables for the existing tax system. In addition to these official analyses, some private groups also publish distributional tables.

When used properly, distributional tables can contribute to informed decision making on the part of citizens and policy makers. Unfortunately, mainstream economic analysis suggests that these tables do not always accurately describe who bears the long-run burden of certain taxes. This problem does not arise from bias or lack of economic knowledge on the part of the economists who prepare these tables. Instead, it reflects resource and data limitations, uncertainty about some of the economic effects of taxes, and variations in the time frame considered by the analyses. Nevertheless, the shortcomings of distributional tables can lead to misperceptions of the impact of tax changes.

This chapter discusses some of the ways in which distributional tables can be improved. The key points in this chapter are:

- The actual incidence of a tax may have little to do with the legal specification of its incidence. Official distributional tables recognize this fact in many contexts, but not in all of them.
- In the long run, a large part of the burden of capital taxes is likely to be shifted to workers through a reduction in wages. Analyses that fail to recognize this shift can be misleading, suggesting that higher income groups bear an unrealistically large share of the long-run burden of such taxes.

To begin, it is useful to review the basic economic principles of tax incidence and apply them to different types of taxes.

Theory of Tax Incidence

One crucial finding in the study of tax incidence is that the *economic incidence* of a tax (the identity of the person who bears the burden of the tax) can be completely different from its *statutory* or *legal incidence* (the identity of the person upon whom the law officially imposes the tax). In other words, the person who is legally responsible for paying the tax may not be the one who actually bears the burden of the tax. As explained below, the incidence of a tax depends upon the law of supply and demand, not the laws of Congress.

Another crucial principle is that only people can pay taxes. Businesses and other artificial entities cannot pay taxes. Although the corporate income tax is legally imposed on firms that are organized as corporations, the actual burden of the tax can fall only on people—perhaps the firm’s owners, or its employees, or its customers—but certainly not on a legal artifact such as a corporation. Similarly, although the estate tax is legally imposed on the estate, the burden of the tax can fall only on people—perhaps the decedent who left the estate, perhaps the heirs, perhaps other people—but not the estate, which is merely a legal construct established to sort through the ownership of the decedent’s assets.

It is simplest to first discuss the incidence of a simple *excise tax*, a tax levied on a specific good or service. As explained below, the key insights from this analysis can be extended to apply to other types of taxes.

Incidence of an Excise Tax

Consider a tax on apples. Suppose that when there is no tax, the price of apples is \$1. Now, suppose that the government imposes a 10-cent excise tax on apples and that the producers are legally responsible for paying this tax. Do producers actually bear the economic burden of the tax?

The answer depends on what happens to the price of apples. If the price remains unchanged, producers bear the economic burden (the economic incidence of the tax is the same as the legal incidence). Consumers pay \$1, the same as before, and suffer no burden. Producers, after collecting \$1 from the consumers, must pay 10 cents to the government, so they clear only 90 cents. Alternatively, if the price rises by the amount of the tax, from \$1 to \$1.10, consumers bear the burden. Although they do not send any money to the government, they pay 10 cents more per apple than they did without the tax. The producers bear no economic burden, even though they are legally responsible for paying the tax. After collecting \$1.10 from consumers and sending 10 cents to the government, they still clear \$1, as they did without the tax. In this case, economists say that the producers *shift* the burden of the tax to consumers. To consider another possibility, if the price of apples rises by 5 cents, to \$1.05, consumers and producers share the

burden equally. Consumers bear a 5-cent burden because they pay \$1.05 for each apple, compared to the \$1 that they paid without the tax. Producers bear a 5-cent burden because they clear only 95 cents per apple, compared to the \$1 they cleared without the tax: they collect \$1.05 from consumers, but send 10 cents to the government.

As these examples show, the division of the tax burden between consumers and producers depends on what happens to the price of apples. When prices are free to adjust, they are likely to be determined by the law of supply and demand. If the price of apples was \$1 with no tax, then the number of apples consumers wanted to buy at that price must have equaled the number of apples that producers wanted to sell at that price.

What happens when the 10-cent excise tax is imposed? It depends on how responsive consumers and producers are to changes in the prices they pay or receive. The relevant questions are: How many fewer apples do producers sell if the amount they clear per apple declines? How many fewer apples do consumers buy if the amount they pay per apple rises?

For example, suppose that producers are four times more responsive to price changes than consumers. Then, producers face a price change that is one-fourth as large as that faced by consumers. The 10-cent tax causes the price to rise from \$1 to \$1.08, putting an 8-cent burden on consumers and a 2-cent burden on producers. At that price, the number of apples consumers want to buy falls by the same amount as the number that producers want to sell. Alternatively, if consumers were four times more responsive than producers, then producers would bear 8 cents of the burden and consumers would bear only 2 cents.

The group that is less responsive bears more of the burden of the tax. The group that is more responsive escapes much of the burden because it responds to the tax, abandoning the taxed activity when threatened with a tax burden. The price-responsiveness of each group depends upon its flexibility. Do producers have good alternatives (in the form of other industries in which they can produce)? Do consumers have good alternatives (in the form of other products they can buy)?

The answers vary across products, types of producers (such as workers and owners of capital), and time frames. If the excise tax applied only to Granny Smith apples, consumers could switch to other, untaxed, kinds of apples. If it applied to all apples, consumers would have somewhat less flexibility. Some workers may have skills specific to the apple industry. Other workers may be more flexible because their skills are more general; they could avoid bearing the tax burden by finding a job in another industry. The owners of capital employed in a taxed industry may bear a significant short-run burden because the buildings and equipment in the industry may be designed specifically for its use and the owners may have little ability to move those

resources elsewhere. In the long run, though, capital can leave the taxed industry: as buildings and equipment depreciate in the taxed industry, *new* buildings and equipment are constructed in other industries.

A similar logic applies if the product is subsidized rather than taxed. The group that is more responsive receives the smaller benefit because the subsidy prompts new members of that group to enter the market and compete away the benefits of the subsidy. Conversely, the group that is less responsive receives the greater benefit from the subsidy because little entry occurs.

Because the incidence of an excise tax depends upon the relative flexibility of consumers and producers, the burden may not always fall where the Congress intends. When the Congress imposed a “luxury” tax on yachts in 1991, for example, it intended the wealthy purchasers of yachts to bear the burden. Such purchasers, however, may be quite responsive to price because there are many alternative goods that they can purchase (expensive cars and jewelry, for example). If this is so, then a significant part of the burden of a yacht tax may fall on workers in the industry, who may be less well-off than owners of yachts. Indeed, after the tax was introduced, production and employment in the boat industry fell, leading some observers to claim that workers were bearing much of the burden of the tax. Although the validity of this claim cannot be conclusively determined (the industry’s decline may have been caused by the 1990-1991 recession rather than the tax), the Congress responded to these concerns by repealing the tax in 1993.

Legal Incidence Is Unimportant

As long as prices can freely adjust, the economic incidence of a tax does not depend on the legal incidence. Suppose that, in the above example, the government imposes the 10-cent excise tax on apple consumers rather than apple producers. Consumers then must make the tax payment to the government, in addition to the price they pay to producers.

Because producers are four times more price-responsive than consumers, the price received by producers must still fall by 2 cents and the price paid by consumers must still rise by 8 cents. Despite the legislative change, that is still the only outcome that keeps the number of apples producers want to sell equal to the number that consumers want to buy. If the tax is legally imposed on producers, they shift 8 cents of the burden to consumers. If it is legally imposed on consumers, they shift 2 cents of the burden to producers.

Given that the price can freely adjust, it should not be surprising that the final outcome is unchanged. It is irrelevant whether the tax collector stands next to consumers and takes 10 cents from them when they buy an apple or stands next to producers and takes 10 cents from them when they sell an apple. It does not matter whether the consumer puts a dime in a bowl marked “taxes” or hands the dime to the producer who puts it in the same bowl.

Applied Distributional Analysis of Excise Taxes and Subsidies

The legal incidence of Federal excise taxes is sometimes placed on consumers, sometimes on manufacturers, and sometimes on other producers or importers. In most cases, this legal incidence rightly receives little attention. In accordance with the economic theory of tax incidence, the JCT and Treasury economists preparing distributional tables uniformly ignore the legal incidence of conventional excise taxes. The JCT generally allocates excise tax burdens to consumers. Treasury follows a similar, but more elaborate, approach.

These approaches are reasonable, since consumers are likely to bear much of the long-run burden of most excise taxes. In the long run, most producers are flexible, or price-responsive, because they can switch to other industries. Consumers are likely to have less flexibility, except in special cases where there are good substitutes for the product being taxed.

The theory of incidence also applies to more-subtle excise subsidies, such as those included within the individual income tax. The income tax law grants tax reductions for purchasers of various products—for example, an itemized deduction for medical expenses, a credit for electric cars, and the Hope and Lifetime Learning credits for the costs of higher education. The economic benefits of these provisions are likely to be divided between consumers and producers, with the greater benefit going to the group that is less price-responsive. The long-run benefits are likely to go largely to consumers, because they are likely to be less price-responsive than producers. Official distributional analyses generally allocate these income tax reductions to the consumers.

The basic insight that tax burdens fall more heavily on groups that are less flexible can be applied to a wide range of taxes. The remainder of this chapter applies this framework to payroll taxes, taxes on capital, and estate and gift taxes.

Payroll Taxes

The largest Federal payroll tax, earmarked to finance Social Security and Medicare Part A, is imposed at a 15.3 percent rate on the first \$87,900 of earnings and at a 2.9 percent rate on earnings above that amount. A much smaller Federal payroll tax, earmarked to finance unemployment compensation, is imposed at a 0.8 percent rate on the first \$7,000 of earnings. The legal incidence of the Social Security-Medicare tax is divided equally between employers and employees. The legal incidence of the Federal unemployment compensation tax is placed entirely on employers.

With a payroll tax, the product being taxed is labor and its price is the wage rate. Applying the insights obtained from the analysis of excise taxes, the relevant question is whether firms' demand for labor or workers' supply of labor is more responsive to changes in the wage rate. In the long run, it is likely that firms are more responsive, or flexible, particularly in a global economy in which they can relocate abroad. This conclusion implies that employees bear most of the payroll tax burden, a result supported by empirical studies. In other words, wages paid to employees are lower by an amount roughly equal to the employers' part of the payroll tax. In accord with this conclusion, official distributional analyses generally assign the full burden of payroll taxes to employees. The primary controversy in this area concerns whether the distributional analysis should also include the Social Security benefits that are financed by the payroll tax (Box 4-1).

Much of the individual income tax is also imposed on labor income. Based on the above discussion, the burden of the individual income tax on labor, like that of payroll taxes, should also fall on workers. Official distributional analyses generally allocate the individual income tax on labor income to workers.

Some taxes on and subsidies to labor income are more subtle. The income tax laws deny firms their normal business-expense deductions for some payments of labor income. For example, under certain circumstances, firms cannot deduct salaries greater than \$1,000,000 per year paid to senior executives or some "golden-parachute" payments made to executives in connection with corporate takeovers. Because of this denial of deductibility, the firm pays a tax on these labor income payments, in addition to the regular tax on its owners' net income. This tax operates as an additional payroll tax legally imposed on employers, although of a much narrower scope than the payroll taxes discussed above. On the other hand, the income tax laws allow firms to claim tax credits for some other payments of labor income. Examples include the work opportunity tax credit, the welfare-to-work credit, the empowerment zone employment credit, and the Indian employment credit. (The work opportunity and welfare-to-work credits expired on December 31, 2003, but may be reinstated by future legislation.) In economic terms, these credits are subsidies to labor.

The fact that these taxes and subsidies are implemented as changes in the employer's (rather than the employee's) income tax does not change their economic incidence. The fact that they apply only to employees in specific jobs or in specific locations or to those receiving specific forms of compensation, however, may change their incidence. Because employees can, to some extent, change their jobs, locations, and forms of compensation, the flexibility of the employee may be greater than was assumed in the discussion of general taxes on labor income. As a consequence, the division of the burdens

Box 4-1: Social Security and Transfer Payments in Distributional Tables

In addition to collecting taxes, the government makes transfer payments to households. The net burden that the fiscal system imposes on households is better measured by looking at tax payments minus transfer payments received rather than by looking at tax payments alone. Official distributional tables, however, usually show only tax payments. They do not tabulate the distribution of transfer payments, except sometimes the refundable tax credits that are administered through the individual income tax, such as the Earned Income Tax Credit. For example, if a household has \$20,000 of wage income, pays \$5,000 in taxes, and receives transfer payments of \$2,000, the distributional table would report that the household bears a \$5,000 tax burden, overlooking the fact that its net burden imposed by the fiscal system is only \$3,000. In some tables, transfer payments are included in the income measure that is used to classify households into different income groups—in this example, the household might be classified as having income of \$22,000 rather than \$20,000. But, the transfer payments are not netted against the taxes in measuring the household's burden.

This practice induces a potential political bias because policy makers receive “distributional credit” for helping the poor only if they do so through the tax system rather than through transfer payments.

The omission of government benefits from distributional tables may provide a misleading picture of Social Security. Official distributional tables generally show that the Social Security payroll tax imposes a smaller burden, as a fraction of income, on high income groups than on lower and middle income groups. However, if the analysis were expanded to include the Social Security benefits financed by the payroll tax, it would likely reveal that high income groups bear a larger net burden, as a fraction of income, than some other groups. Thus, distributional tables might be more accurate if these benefits were included in some manner. One possibility would be to treat the present value of the future benefits accrued by a worker each year as an offset to his or her payroll tax liability.

or benefits between employees and firms is not clear. Official distributional analyses generally allocate the burdens and benefits of these provisions in the same manner as firms' other income tax payments. (As discussed below, these analyses differ in their treatment of the corporate income tax.)

Taxes On Capital Income

The Federal tax system imposes taxes on capital income. Capital income generated by corporations is generally subject to the corporate income tax. Capital income received by individuals is generally subject to the individual income tax.

Many observers view capital income taxes as highly progressive because capital income is highly concentrated. However, economic analysis suggests that capital income taxes are particularly likely to be shifted, especially in the long run. Taxes imposed on owners of capital in one sector of the economy may be shifted to the owners of capital in other sectors. More importantly, capital income taxes may be partly shifted to workers through a reduction in wages. The extent of shifting differs across time horizons because savers (who provide capital and earn capital income) are more flexible in the long run than in the short run.

Shifting Across Sectors

Even if a tax is imposed on capital income in one sector of the economy, it is likely that owners of capital in all sectors bear the same economic burden in the long run. To see why, note that if capital is mobile across sectors, after-tax rates of return must be equalized across sectors, after adjustment for risk. Suppose that an economy contains two sectors and that, when there are no taxes, capital earns a 6 percent rate of return in each sector. Now, suppose that a 50 percent tax is imposed on capital income in one sector, while no tax applies in the other sector. In the very short run, capital in the taxed sector earns an after-tax return of only 3 percent, while capital in the tax-exempt sector earns an after-tax return of 6 percent. At this point, only the owners of capital in the taxed sector bear the burden.

This state of affairs cannot continue. Owners of capital in the taxed sector will move their money out of that sector and begin investing in the tax-exempt sector. As they do so, two things happen. First, the before-tax rate of return rises in the taxed sector as capital becomes more scarce. Second, the before-tax rate of return falls in the tax-exempt sector as capital becomes more plentiful. This movement continues until investors are indifferent between the two sectors, which happens when after-tax rates of return are once again in balance. For example, after a certain amount of capital has relocated, the before-tax rate of return in the taxed sector may rise from 6 to 8 percent, while the before-tax rate of return in the tax-exempt sector may fall from 6 to 4 percent. At this point, investors in both sectors earn the same 4 percent after-tax rate of return. Because all investors initially earned 6 percent and now earn 4 percent, they all bear the same burden from the tax, even though the tax legally applies to only one sector.

For example, the corporate income tax is likely to be shifted across sectors. This tax applies only to the corporate sector, but the above analysis suggests that the burden is shared by owners of capital in both the corporate and noncorporate sectors. Similarly, tax provisions that apply to only a single industry are likely to ultimately affect owners of capital in all industries.

Shifting to Workers

Shifting across sectors may not be the most important way in which the burden of capital income taxes is shifted. In the long run, much of the burden of capital income taxes (whether imposed at the firm or individual level) is likely to be shifted to workers. The reason is that such taxes reduce investment, which diminishes the capital stock. With a smaller capital stock, the before-tax rate of return to capital is higher, offsetting part of the burden that the owners of capital would otherwise bear. Also, workers are less productive because they have a smaller capital stock to work with and earn lower real wages. Part of the tax burden is therefore shifted to workers.

In accordance with the insights obtained by studying the incidence of excise taxes, owners of capital bear less of the burden if the supply of capital is more responsive to changes in its after-tax rate of return. This responsiveness, and hence the extent to which capital income taxes are shifted, depends upon several factors, including the amount of time that has elapsed since the tax was imposed, the willingness of consumers to substitute between current and future consumption, and the extent to which capital can escape the tax by relocating abroad.

The time frame is very important. The shifting of the tax burden to workers is likely to occur slowly because it takes time for large changes in the capital stock to occur. In the short run, the tax causes little change in the capital stock, because most of the capital on hand was already in existence when the tax was adopted. With little change in the capital stock, very little of the burden is shifted from owners of capital to workers. Over time, however, the tax has a greater impact on the capital stock as it discourages the accumulation of new capital. As a result, more of the tax burden falls on workers and less falls on owners of capital.

Under certain assumptions, the entire burden of the capital income tax is shifted to workers in the long run, although owners of capital bear much of the burden in the short run. A textbook model of economic growth, called the Ramsey model, provides an illustration of this effect. (The Appendix to Chapter 5, *Dynamic Revenue and Budget Estimation*, explains the basic features of this model.) Using plausible values for the key inputs to the Ramsey model demonstrates that the economy adjusts only gradually to a capital tax increase. Initially, 100 percent of the burden of a capital tax increase is borne by the owners of capital, since they have already invested

in the capital currently in place. Five years after the tax increase, about a quarter of the tax burden has shifted to workers. Ten years after the tax increase, workers have taken on over 40 percent of the burden. It takes 50 years for the burden to shift nearly completely—by that time, capital owners bear only 6 percent of the burden and workers bear 94 percent.

If consumers are more willing to substitute between present consumption and the future consumption made possible by their savings, saving is more responsive to the after-tax rate of return and more of the capital income tax is shifted. The responsiveness of saving to the after-tax rate of return also depends on consumers' planning horizons. The Ramsey model assumes that consumers consider the impact of their saving decisions on their descendants. If, instead, consumers plan only for their own lifetimes, saving is less responsive to changes in its after-tax rate of return and less of the capital income tax burden is shifted to workers.

International capital flows also play a role. If the tax applies only to capital located in the United States and capital is mobile across international boundaries, the tax is more likely to be shifted to workers. The above example assumes that there are no international capital flows; incorporating such flows would increase the speed at which the tax is shifted.

Empirical work provides some evidence that capital income taxes are shifted to some extent: studies find that the before-tax return to capital income is higher when the tax rate on capital income is higher. However, the picture is not entirely clear, because other factors may cause tax rates and before-tax rates of return to move together.

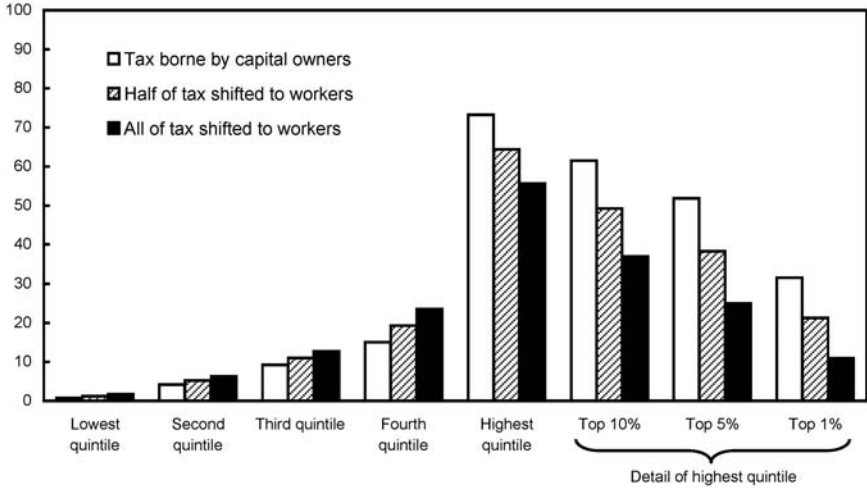
The belief that a large portion of the capital income tax burden is shifted in the long run is common in the economics profession. In a 1996 survey, public finance economists were asked to state “the percentage of the current corporate income tax in the United States that is ultimately borne by capital.” The average response was 41 percent, and three-quarters of the respondents gave answers of 65 percent or less. This survey indicates that the average public finance economist believes that more than half of the tax is eventually shifted from the owners of capital to workers or other groups.

Because labor income is more evenly distributed across taxpayers than capital income is, recognizing that part of the burden of capital income taxes is shifted to workers reveals that high income taxpayers bear a smaller share of the burden than is often assumed. Chart 4-1 classifies households by their levels of total income and tabulates the share of national labor income and national capital income earned by different groups. The chart shows, for example, that the 10 percent of households with the highest total incomes receive 37 percent of labor income and 62 percent of capital income. If half of capital taxes are shifted to workers in the long run, the fraction of the burden falling on this high-income group is reduced from 62 percent to 49 percent; if all capital taxes are shifted to workers in the long run, the high-income share of the burden falls to 37 percent.

Chart 4-1 Distribution of Capital Income Tax Burden in the Long Run

High-income individuals bear less of the long-run burden if part or all of the tax is shifted to workers.

Percent of total tax burden



Note: Quintiles defined with respect to family economic income. Treasury model for 1989 extended to 2000.
 Source: Julie-Anne Cronin, "U.S. Treasury Distributional Analysis Methodology," Department of the Treasury, Office of Tax Analysis, OTA Paper 85, September 1999.

Applied Distributional Analysis and the Choice of Time Frame

Official distributional analyses differ in their treatment of the corporate income tax. The JCT previously distributed the burden to owners of corporate capital, but now does not distribute it on the grounds that the incidence of the corporate income tax is uncertain. The CBO and Treasury now distribute the corporate tax burden to owners of all capital. None of these analyses currently recognizes the shifting of the tax to workers. The CBO previously presented analyses that allocated half of the burden to workers and Treasury did the same in its January 1992 corporate integration study. Official analyses generally allocate individual income taxes on capital income to the persons who bear the legal incidence of the taxes.

The time frame plays a key role in how tax incidence is treated. When the JCT adopted its former practice of allocating the corporate income tax to corporate capital, it stated that its analysis was intended to refer to the very short run, when little shifting of any kind would occur. Similarly, Treasury has justified allocating the burden to owners of all capital by stating that this is the most reasonable assumption for incidence over a 10-year horizon. These analyses serve the useful objective of informing policy makers of how the current tax burden is divided between current workers and current owners of capital.

Nevertheless, presenting estimates only for short time frames leaves an incomplete picture. If a tax change is intended to be permanent, it is important to also inform policy makers how its long-run burden will be divided between future workers and future owners of capital. Answering that question requires additional distributional tables that recognize the significant shifting to workers that is likely to occur in the long run.

Estate and Gift Taxes

Capital can also be subject to estate and gift taxes when its ownership changes hands due to an inheritance or gift. The lessons from the analysis of capital income taxes can therefore be applied to estate and gift taxes.

The estate and gift taxes apply on a cumulative basis to an individual's lifetime gifts and to the estate the individual bequeaths at his or her death. An individual may make up to \$11,000 of gifts to any recipient per year, without counting them against the lifetime total. Bequests to surviving spouses are exempt, as are gifts and bequests to charitable organizations.

The taxes apply only when lifetime gifts plus the estate exceed an exemption amount, which was \$675,000 in 2001. Under the laws in place at the beginning of 2001, the exemption amount was scheduled to increase to \$1,000,000 starting in 2006. The taxes applied at rates of up to 55 percent.

The tax law adopted in June 2001 provides for further reductions in the estate and gift taxes for 2002 through 2009. This law increases the exemption amount to \$1 million for 2002 and 2003 and gradually increases it to \$3.5 million for 2009. The law reduces the top tax rate from 2002 to 2009, with top rates of 50 percent in 2002 and 45 percent in 2007 through 2009. For 2010, the law completely repeals the estate tax, but retains the gift tax with a top rate of 35 percent. It also increases, in some cases, the capital gains taxes paid by heirs who sell property that they inherit.

Because the 2001 tax law is scheduled to expire at the end of 2010, the estate and gift taxes are scheduled to return in 2011, at the levels specified by the previous laws. The President has proposed permanently extending the provisions of the 2001 tax law that are in effect in 2010, including the repeal of the estate tax.

The issue of who benefits from estate tax repeal has been a prominent one in the debate over repeal. Treasury allocates the burden of estate and gift taxes to the decedents (the individuals who have died) and donors. The JCT used to do

the same, but has now stopped distributing them due to uncertainty about the taxes' incidence. The CBO's recent distributional analyses have not included estate and gift taxes. Allocating the estate tax burden to decedents supports the common view that the tax is highly progressive, since (at the current exemption amount) the tax applies to only the largest 2 percent of estates.

It is virtually certain, however, that little of the economic burden of the estate tax is borne by the decedents. The burden of the estate tax is borne by them only if the tax prompts them to reduce their lifetime consumption and accumulate a larger estate, so that the tax can be paid without reducing the after-tax bequests left to their heirs. In other words, the estate tax must reduce lifetime consumption and promote estate accumulation for it to be borne by the decedents.

This condition is unlikely to hold. Because the estate tax makes estate building less attractive, it probably reduces the size of bequests. Empirical research confirms that the estate tax reduces the amount that decedents accumulate and pass on to their heirs. As a first step, it would make more sense to distribute the burden of the tax to heirs rather than to decedents.

Despite what one might expect, the heirs of wealthy decedents are not always wealthy. Economists have found that the correlation between the long-term labor earnings of successive generations is around 0.4 or 0.5. The correlation between long-term incomes (which includes the inheritances themselves) or between long-term consumption levels of successive generations has been estimated to be around 0.7. (Correlation is a number, ranging from -1 to 1, that measures the strength of the relationship between two variables. A correlation of 0.4 or 0.7 indicates that one variable tends to increase when the other increases, but that the relationship is not perfect.) Some bequests are left to grandchildren or nephews and nieces where the correlation between the incomes of decedents and the incomes of heirs may be even lower. Because heirs can be less wealthy than decedents, recognizing that the estate tax burden is more likely to fall on the former reveals that less of the burden is borne by the very wealthy.

A more important point, however, is that the reduction in estate building induced by the tax is likely to take the form of a reduction in capital accumulation. Because the estate and gift taxes are taxes on capital, part of their long-run burden is likely to be shifted to workers through a reduction in wage rates, as discussed above. Part of the burden is therefore likely borne by ordinary workers who never receive a bequest or taxable gift.

Conclusion

Distributional analysis can be a useful tool for policy makers. It is important, however, to recognize the limitations of existing analyses. Current analyses can be misleading, particularly with respect to the estate and gift taxes and other capital taxes. These taxes are likely to be shifted substantially to workers in the long run, reducing the extent to which their burden falls on high-income groups.