

# The Economics of Taxation



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Sure we need taxation—but how much?
An economist ponders the tradeoffs in tax system design.

America faces tough choices on fiscal policy. Pressures from years of deficits have been amplified by the Great Recession, which reduced taxable income and strained social safety nets. Nonpartisan agencies like the Congressional Budget Office report that our aging population and rising medical costs make current policy unsustainable. Add 40 years of worsening income inequality, which has raised cries for income redistribution, and our tax system is more burdened now than it has been for a long time.

Yet our tax code is less able than ever to meet these demands. Fresh exemptions and deductions shrink revenue and favor some households, often for no clear economic reason. Meanwhile, public debt keeps mounting. Although still manageable, it will grow substantially unless we address our projected fiscal imbalances. The current European crisis shows the grim result of ignoring imbalances.

Deficits can be closed by either raising taxes or cutting spending, or some combination of both. On the tax side, some basic economic principles can help get us there, and can even help ensure continued economic growth. But even though economics can tell us plenty about how to build a good tax code, the decision is ultimately political.

## Purposes of Taxation

Economists say taxation fulfills one or more of these purposes:

- to discourage/encourage behavior whose social costs/ benefits are not priced by a market
- to raise revenue to pay for government spending
- to redistribute resources

Sometimes market prices do not fully account for behavior's social costs, so people engage in behaviors that are suboptimal for the economy. Pigouvian taxation (named after the English economist Arthur Pigou) corrects market prices by raising people's costs. Take the carbon tax: People buy gas at a market price that reflects the pressures of supply and demand. But that price does not reflect externalities, the costs that drivers impose on society but do not bear directly or fully—in this case, air pollution and traffic congestion. Because drivers fail to internalize the costs of their behavior, we get more traffic and pollution than we would like to see. A carbon tax increases the price everyone pays and encourages people to reduce overall consumption by driving less, carpooling, or switching to vehicles with better gas mileage.

# **Understanding Efficiency**

Pigouvian taxes can take us only so far. They cannot be relied upon all by themselves to fully finance government spending.

We know that taxes change people's behavior, partly by reducing the income available for consuming and saving. This is unavoidable—if any given public project is desirable enough, people find it less painful to hand that income over to the government. But taxes can also change behavior another way. They may influence people to trade consumption for leisure by working fewer hours, or to consume more and save less. Theoretically, one way to raise revenue without imposing such distortion is through a lump-sum tax. Such a tax is best for a public project because everyone pays a fixed amount whatever their earnings, amassed wealth, or consumption. The amount they pay does not depend on their decisions, so they behave as they would in a perfect, distortion-free world.

Unfortunately for those not living in a stylized model (that is, everyone), a lump-sum tax is totally impractical. Setting aside the political blowback from taxing the very poor as much as the very rich, the numbers simply do not add up. Given the amount to be raised, the poorest individuals could not afford the required tax. Though impractical, lump-sum taxes provide a useful benchmark for judging how much an alternative tax scheme distorts the economy.

# Not All Tax Bases Are Created Equal

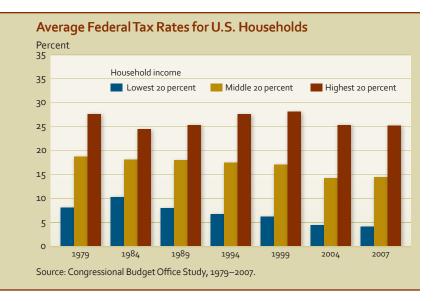
So how can we raise revenue while minimizing distortions? There are multiple options using different bases. The primary U.S. tax bases are general income, labor income, capital income, consumption, and wealth (like property and estate taxes). We also tax international trade, but this contributes relatively little to total revenue. Each tax incentivizes certain behaviors and discourages others, distorting the economy. Labor income taxes, like those for Social Security and Medicare, distort work decisions by making leisure more attractive. Consumption taxes (such as a sales tax) operate like a labor tax by reducing the consumption value of an hour of labor. Capital income taxes, based on returns from investments, discourage investment and saving and encourage consumption.

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Capital income taxes impose especially severe distortion because returns to capital accumulate over time, and distortion from capital income taxes is compounded (much like interest in a savings account). Small distortions are magnified over time.

Wealth taxes introduce yet another wrinkle—time inconsistency. What if the government decided to finance its operations by suddenly appropriating all automobiles in the country, selling them abroad, and then using the proceeds to pay for projects, redistributing the remaining revenue, and promising to never do it again? Does this introduce distortions? It depends.

The key idea is that the current stock of automobiles is what economists call *inelastic*, meaning that it cannot be changed in an instant. It takes time for people to sell their cars in response to changes in policy. However, if the government were to forewarn people that it was going to tax away 100 percent of all automobiles, drivers would attempt to sell their cars and convert them into other assets, or if possible, spend resources to hide their cars. That's why the last feature of the government's plan is critical: Unless it vows to never use this type of tax again, car ownership will shrink drastically and remain low.



Whether this scheme is distortionary depends on whether people believe the government's promise. If they do, incentives shouldn't be distorted. Nonetheless, the scheme is likely to be distortionary because rational people will recognize that if they believe the government's promise and buy new cars, they will give the government an incentive to repeat the appropriation process. So they will either reduce the effect of the tax by buying very low-quality cars or avoid the tax altogether by arranging for other transportation methods (such as public transit, for example). Either way, the value of the stock of cars in the economy will shrink.

Most taxes on wealth are very distortionary, but that doesn't put them off limits. Although the United States uses property and estate taxes, their effect on the capital stock may be less severe because these two types of asset aren't easily shifted. It's hard to move your house where the government can't find it, and a deceased person cannot hide her wealth (though she may have saved less or paid handsomely for advice on shielding it).

#### Redistribution

Redistribution is a politically charged issue, and fairness is a subject more suited for social philosophers than for economists; however, economists can help quantify the tradeoffs from redistribution.

For instance, there is a widespread misconception that income inequality, as measured by the share of before-tax income held by a small percentage of the people, should be corrected by taxes and transfers. Altering the before-tax

income distribution is a proper goal for policies designed to increase people's opportunities to generate income (through education reform, say). But it should not be the target when the subject is how to reallocate income. In fact, the extent to which redistributionary tax policy alters before-tax income distribution is actually a measure of the *cost* rather than the *benefits* of redistribution.

For tax policy to change the distribution in the before-tax income, the rich must respond to redistribution by working less and saving less. This would have two consequences: a loss of productive economic activity, since both capital and labor are reduced; and, because the rich have less income, less will be available for future redistribution. Instead, redistributionary policy should focus on changing the income distribution *after taxes and transfers have been applied*. Success is best measured by how the little before-tax income distribution is altered to meet the redistributionary target.

## **Policy Guidelines**

What should we look for in a tax policy? First, it should focus on the long run. Knowing what fiscal policy will be for years to come allows households and businesses to make long-term investment decisions. Frequent policy changes create uncertainty. Typically, economists think of optimal fiscal policy as setting the course for the long run, and monetary policy as stabilizing the economy over the business cycle.

The second general guideline is that, all else equal, a simpler code is preferable to a more complicated one. Because we are constrained to using distortionary taxes, good fiscal policy should err on the side of simplicity. Each caveat, exemption, and loophole encourages one behavior and discourages another. Most often these complications are rooted in short-term political calculations rather than long-term economic ones. And as the tax code becomes more complicated, it also becomes more confusing. This unnecessarily generates large industries where highly skilled labor is diverted toward helping people correctly file (and avoid) taxes and toward helping the government monitor taxpayers for compliance. Thus, a complicated tax code introduces a greater "deadweight loss" because the labor it requires could be better used to solve problems that government has no direct power to control.

## Two Types of Optimal Taxes

So what is the optimal tax? Yes, it's complicated. And even though economists have not discovered the perfect tax policy (and almost certainly never will), several schemes have proven optimal within wide classes of research efforts.

The first is a consumption tax. When constant over time, a consumption tax has the desirable quality of not distorting savings. It may seem counterintuitive at first, but consider a person who gets some income today and is weighing whether to spend it now or save it. If she spends it today, she pays a consumption tax of x percent, reducing the amount she can consume with the money. On the other hand, if she saves the income for tomorrow, then when she decides to spend it, the consumption she can afford is reduced by the same x percent. The consumption tax, then, does not favor consuming now or waiting and consuming tomorrow. The only thing our hypothetical person must consider is whether the interest paid on her savings justifies the wait.

But the consumption tax is distortionary in its effect on the labor/leisure decision. The tax makes consumption costlier, so a dollar earned from working does not go as far. Leisure becomes more attractive.

The biggest problem with a consumption tax is that it is regressive. Poor households consume a much larger fraction of their income than rich ones, so a consumption tax is particularly onerous for them. Of course, a consumption tax need not be flat. Rates that increase with total consumption and sizeable tax rebates are two ways to get the efficiency benefits of a consumption tax while addressing progressivity concerns.

When economists limit available tax policies to income taxes only, another prominent optimal tax emerges: a flat income tax with a large exemption for initial earnings. For all households, income below a given level would not be taxed. Income above that would be taxed at the same marginal rate. A flat tax at the upper end causes less distortion for households that tend to save, compared to a progressive schedule that keeps raising rates at higher income levels. The exemption also makes this tax more attractive to lower-income households that, under any proportional tax, are likely to suffer a greater welfare loss than their more affluent counterparts.

A tax policy should focus on the long run. Knowing what fiscal policy will be for years to come allows households and businesses to make long-term investment decisions.

#### That Said ...

A good fiscal policy should be no more complicated than necessary. It should generally be focused on longer horizons and be credible, so that people can make long-term decisions with confidence. Good fiscal policy should seek to meet policymakers' goals while imposing minimum distortion on people's economic decisions. Policies that distort savings are particularly costly, and policymakers should give these costs added weight in balancing the distortion of capital taxes against the benefits of broader policy objectives.

Economics, however, can take us only so far in designing a tax code. It can help whittle down the set of possibilities to taxes that meet policy aims with less distortion, but ultimately, the final choice is political. People disagree about which behaviors should be incentivized or discouraged, how much government spending is necessary, and whether (and to what degree) resources should be redistributed.

These disagreements may be very difficult to resolve. While economics cannot settle this conflict, it can at least focus the debate by highlighting the tradeoffs inherent in any tax proposal.



#### Resources

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