



## Taxing Principles

Making the best of a necessary evil

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IT is hard to think of anything that some government, at some point, has not taxed. Playing cards, urine, fireplaces, slaves, religious minorities, and windows have all at some point attracted the attention of the tax collector. Nowadays we think of income taxes, value-added taxes, taxes on cigarettes, and the like as the key revenue instruments. But the basic principles for understanding and evaluating all taxes are much the same. In this, the first of two articles on taxation, we examine these principles. In the March 2015 issue of *F&D* we will apply them to some current controversies.

The Organisation for Economic Co-operation and Development defines a tax as a “compulsory, unrequited payment to government.” That is, you have to pay it, and you don’t get anything back—at least not directly. (You may derive some benefit from the public spending your payment helps finance, but if not—well, from the perspective of tax collection—that’s just too bad.)

Importantly, however, many policy instruments that are not in a legal sense taxes have much the same effect. Social contributions are a prime example. These are payments linked to an individual’s labor or business income that confer some entitlement to pensions or other social benefits. The personalized benefit means that these are not, strictly speaking, taxes. But the link between payments and contributions is often so far from actuarially fair, and the prospective benefits so remote, that their effect is likely to be very similar to that of an outright tax.

### Efficient taxation

A tax transfers resources from the private to the public sector, and so inescapably imposes a real loss on the private sector, leaving aside any benefit from whatever the tax revenue finances. But almost all taxes will cause more harm than that because they typically drive a wedge between the price a buyer pays for something and the amount the seller receives—which may prevent some mutually beneficial trade. Taxing labor income, for instance, means that the cost to an employer of

hiring someone exceeds what the employee receives. A worker may be willing to accept a job that pays (at least) \$100 and an employer willing to pay (no more than) that, but imposing tax on the wage will prevent this trade from happening. This welfare loss from taxation over and above the loss from the direct transfer of real resources out of the private sector is known

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as *deadweight loss* (or *excess burden*) and is what economists have in mind when they talk of tax *distortions*. (In the example above, because the worker is not hired, no tax is paid, but the deadweight loss is still positive).

Efficient tax design aims to minimize these losses, whose size depends on two main factors. First, *losses are bigger the more responsive the tax base is to taxation*. Suppose for instance that the demand for a worker’s labor is completely inelastic, meaning that an employer is willing to pay any price for the worker’s services. Then, with a 20 percent tax rate, as in the example above, the employee would receive \$100, but the employer’s cost would be \$120. The employee is hired, and there is no distortion. But when one side of the market has an alternative to the transaction being taxed, distortions arise, and the easier it is to exercise that alternative, the larger the distortion. And this is true (given a few more assumptions) whether it is decisions like hiring that are affected by the tax or decisions to avoid or evade tax. Second, *the loss increases more than proportionately with the tax rate*. Adding a distortion, the higher tax rate, is more harmful when there is a large distortion already in place.

Two prescriptions for efficient tax policy follow: tax at a higher rate things in inelastic demand or supply, and tax as many things as possible to keep rates low. Both of these principles require qualification—because in some cases following these general rules can have adverse consequences.

Taxing a good whose demand is inelastic, for instance, will have little effect on the quantity of that good demanded, but it leaves less to spend on other goods, which can lead to large changes in other markets (more on this in March).

And the injunction to seek as broad a tax base as possible must be tempered by one of the most powerful precepts in public finance: transactions between businesses should not be taxed. This is because taxes drive a wedge between buying and selling prices for intermediate inputs, which is likely to lead firms to choose different inputs than they would in the absence of the tax. As a result, firms end up producing less than they could. Broadening the tax base by including intermediate transactions can, therefore, be very bad news for efficiency. A turnover tax, for instance—charged on all transactions, including business-to-business sales—would have a much bigger base than a tax on final consumption (such as a value-added tax) and could raise the same revenue at a much lower rate. But it would also be much more distortionary.

Another set of qualifications arises from externalities—effects (good or bad) on those not involved in the underlying decisions. Environmental damage, such as climate change, is the leading example. Here a *corrective* tax may be called for. The corrective tax, also called a *Pigovian* tax (after economist Arthur C. Pigou, who proposed it), is designed to distort behavior in a desired direction, including, if need be, the actions of businesses—while of course also putting the revenue raised to good use. (See “What Are Externalities?” in the March 2010 *F&D*).

### Bearing, and sharing, the burden

The person who ultimately bears the real burden of a tax may not be the one legally responsible for remitting payment. For instance, in the example above, when the demand for labor was perfectly fixed, the \$20 loss was suffered by the employer, not the worker—and that would be true regardless of which one was legally responsible for making the payment to the government. This illustrates too the general principle that the burden of a tax—its effective *incidence*—falls more heavily on the side of the transaction with the least elastic response—that is, the one that finds it more difficult to shift out of the activity being taxed.

These implications are often ignored. Take the current outrage over the small amount of corporate tax paid by many multinational corporations. Corporations are not people, and only real people—shareholders, workers, customers—can pay taxes. The debate over corporate tax makes little sense without consideration of who really gains when the effective rates are low.

Fairness in taxation is always a major issue, with two main dimensions. *Vertical equity* concerns the treatment of those with different incomes. The impact of a tax system on this

dimension depends on its *progressivity*—that is, how rapidly the share of income taken by tax increases with the level of income. *Horizontal equity* holds that those who are in all relevant respects identical should be treated the same.

Each of these concepts is less straightforward than it may seem. Clearly people have different views on the appropriate degree of progressivity. But people may also disagree, for instance, on whether progressivity should be assessed in terms of annual income—a pretty arbitrary period of measurement—or lifetime income. A consumption tax may look regressive relative to annual income but much less so relative to expenditure, which may be a better indicator of an individual's lifetime income.

And the idea of horizontal equity may not seem controversial, but what does “identical” mean for this purpose? Is it acceptable to differentiate taxes by age, by marital status, across regions, by gender, by height? And what about implicit differentiation? Is a heavy tax on aftershave lotion, overwhelmingly consumed by men, horizontally inequitable?

### Collecting taxes

The dividing line between tax *evasion* (illegal) and *avoidance* (legal) is not as clear-cut as it may sound—highly paid tax lawyers spend much time testing the distinction. Both are major concerns in all countries. There are challenges here for both the design of taxes and their implementation. On the policy side, tax incentives to encourage particular activities, for instance, all too often provide opportunities for evasion.

Tax administrations are on the front line in the fight against failure to pay taxes. It helps to make things easy for those who simply want to pay whatever is due, by writing tax rules that are easy to understand (though simplicity in tax design is difficult to achieve, given the range of objectives and circumstances to be covered) and easy to find. (Roman emperor Caligula's tax rules were made public only in small type and in an awkward place.) Ultimately, the trick for tax administrations is to ensure that the probability of detecting noncompliance—and the penalties that follow—is high enough to encourage compliance while supporting and reflecting widespread willingness to follow the rules. And a good tax administration must do all that while minimizing both its own expenses (*administration costs*) and those of taxpayers (*compliance costs*).

Sometimes the various objectives discussed point in the same direction—for example, when tariffs (taxes on imports) are replaced by a consumption tax at the same rate. The switch leaves the price of imports to consumers unchanged, but increases government revenue (because the tax is now also collected on domestically sourced sales) and improves efficiency by reducing trade protectionism. But such instances are rare. The real difficulty for taxation arises when the objectives conflict—which we will examine in March. ■

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