Chapter 9

THE (DIS)INCENTIVES OF HIGHER TAXES

Politicians always seem to be looking for additional ways to raise tax revenues. And most often, politicians talk (and even act) as though their taxing decisions have no effect on the quantity supplied or the quantity demanded of whatever good or service they wish to tax. Indeed, there is a saying among economists that politicians believe all demand curves and supply curves are **perfectly inelastic.** In such a world, higher taxes would have no effect on either quantity demanded or quantity supplied. What a wonderful world that would be—for politicians.

In the real world, however, changes in taxes cause changes in **relative prices,** and individuals in their roles as consumers, savers, investors, and workers do react to these relative price changes. Consider a truly telling example: the luxury tax enacted by Congress in 1991. Members of Congress were looking for additional revenues to reduce the federal budget deficit. What better way to raise these hoped-for revenues than with new taxes on the purchases of high-priced luxury items, such as big boats, expensive cars, furs, planes, and jewelry. After all, rich people don't really care how much they pay, right? That is why we call them rich. So Congress passed a 10 percent luxury surcharge tax on boats priced over $100,000, cars over $30,000, aircraft over $250,000, and furs and jewelry over $10,000.

The federal government estimated that it would rake in $9 billion in extra revenues over the following five-year period. Yet just a few years later, the luxury tax was quietly eliminated. Why? Because the actual take for the federal government was almost *nothing*.

Rich people, strange as it may seem, react to relative price changes, too. For high-priced new boats, for example, they had alternatives. Some bought used luxury boats instead of new ones. Others decided not to trade in their older luxury boats for new ones. Still others bought their new boats in other countries and never brought them back to the United States

to be taxed. The moral of the story for politicians is that the laws of supply and demand apply to everyone, rich and poor, young and old, whatever their description might be.

The discrepancy between the fantasyland of politics and the reality of human behavior can be traced in part to the fact that politicians routinely engage in **static analysis.** They assume that people's behavior is static (unchanging), no matter how the constraints they face—such as higher taxes—might change. If the politicians who had pushed for the luxury tax had used **dynamic analysis,** they would have correctly anticipated that consumers (even rich ones) were going to change their buying decisions when faced with the new taxes.

Dynamic analysis takes into account the fact that the impact of the tax *rate* on tax *revenue* actually collected depends crucially on the **elasticity** of the relevant demand or supply curves. That is, even a high *rate* (measured in tax per item, or as a percentage of the value of the item) can yield relatively little *revenue* (total dollars collected) if consumers are highly responsive to the tax-inclusive price of the good. For example, in the case of the luxury tax, the **elasticity of demand** for new, high-end boats was relatively high: When the tax per boat went up, the quantity demanded fell so far that tax collections were negligible.

Now let's shift from the demand side of this taxing issue to the supply side. Does quantity supplied react to changing relative prices? Yes, but you might not know it from listening to politicians. The first modern federal personal income tax was imposed in 1916. The highest rate was 15 percent. Eventually, the top federal personal marginal income tax rate reached an astounding 91 percent, during the years 1951 to 1964. This marginal tax rate dropped to 70 percent in 1965. In 1980, it was lowered to 50 percent. For much of the 1980s and since, the highest federal marginal income tax rate has ranged from 31 percent to almost 40 percent.

Often politicians (and even some members of the general public) believe that the income tax rates paid by America's richest individuals do not matter to them because they are so rich that even after paying taxes, they are still very rich. The underlying "theory" behind such a belief is that the supply of labor is completely unresponsive to the net after-tax price received by the providers of labor. Stated another way, if you were to draw the **supply curve** of labor, it would be a nearly vertical line for each individual at some fixed number of work hours per year; supposedly, the **elasticity of supply** of labor is low.

To be sure, you might know somebody who loves work so much that she or he will work with the same intensity and for the same number of hours per year no matter what the income tax rate is. But changes occur

at the margin in economics (meaning in the real world). If there are *some* individuals who respond to higher federal marginal tax rates by working less, then the overall supply curve of labor is going to be upward-sloping even for the ultrarich—just like all other supply curves for goods and services.

The data seem to confirm our economic predictions. In 1980, the top marginal income tax rate was 70 percent. The highest 1 percent of income-earning Americans paid 19 percent of all federal personal income taxes in that year. In 2007, when the top tax rate was 35 percent, the richest 1 percent paid more than double that share. How can this be explained? The answer is relatively straightforward: Lower marginal income tax rates create an incentive for people to work more and harder, because the rewards of doing so are greater. Also, in their role as risk-taking entrepreneurs, individuals are almost always going to be willing to take bigger risks if they know that success will yield greater net after-tax increases in their incomes.

Data from Europe suggest that exactly the same incentives are at work across a broad spectrum of income earners. Researchers have found that a tax increase of just over 12 percentage points induces the average adult in Europe to reduce work effort by over 120 hours per year—the equivalent of almost four weeks' work. Such a tax change also causes a sharp reduction in the number of people who work at all and causes many others to join the underground economy. Overall, then, higher tax rates cause lower output and higher unemployment and also induce marked increases in efforts devoted to tax evasion.

It is also true that what we have been talking about applies even among people who are at the very bottom of the income distribution. In many countries today, and in many circumstances in the United States, poorer individuals receive benefits from the government. These benefits can be in the form of food stamps, subsidized housing, subsidized health care or health insurance, and direct cash payments (often referred to as "welfare"). Those who receive such government benefits typically pay no income taxes on these benefits. In the case of the United States, they may even receive an **earned-income tax credit,** which is a type of **negative tax** or **tax credit.**

If such individuals were to accept a job (or a higher-paying job, if they are already employed), two things will normally occur. The first is that they will lose some or all of their government benefits. The second is that they may have to start paying federal (and perhaps state) personal income taxes. They understand that the loss of a benefit is the equivalent of being taxed more. And when they also have to pay explicit taxes, they know that the result is effectively double taxation.

Just as at the top end of the income ladder, the quantity of labor supplied by people at the lower end is affected by changes in the marginal income tax rates they face. If taking a good job and getting off the welfare rolls means losing benefits plus paying income taxes, the person on welfare has less incentive to accept a job. A good case in point is Ireland, which for most of the past twenty years was the fastest-growing economy in Europe. Twenty-five years ago, its economy was a disaster, one of the poorest among European countries. One of the problems was that individuals on welfare faced an effective (implicit) marginal income tax rate of about 120 percent if they got off the dole and went back to work. Obviously, they weren't directly taxed at 120 percent, but with the actual income tax that did apply, combined with the loss in welfare benefits, the *implicit* marginal tax rate was indeed 120 percent. Stated differently, their available spendable income would drop by about 20 percent if they went back to work! Needless to say, large numbers of poorer Irish stayed on the welfare roles until the program was completely overhauled.

Interestingly enough, this overhaul of the incentives facing low-income individuals was accompanied by an overhaul of the tax rates (and thus incentives) facing high-income corporations, with much the same results. In the 1990s, the Irish slashed the corporate profits tax to 12.5 percent, the lowest in Europe and only about one-third as high as the U.S. rate of 35 percent. Beginning in 2004, the Irish government also began offering a 20 percent tax credit for company spending on research and development, offering high-tech firms an opportunity to cut their taxes by starting up and expanding operations in Ireland. Almost immediately, Ireland became a magnet for new investment and for successful companies that didn't want to hand over a third or more of their profits to the tax collector.

The combination of lower corporate tax rates and tax breaks on research and development induced hundreds of multinational corporations to begin operations in Ireland. They brought with them hundreds of thousands of new jobs (and this to a nation of only 4 million residents), and Ireland quickly became number one among the European Union's fifteen original members in being home to companies that conduct research and development. And tax revenues of the Irish government? Well, despite the drastic cut in tax rates, tax revenues actually soared to levels never seen before. Indeed, measured as a share of gross domestic product, the Irish collect 50 percent more tax revenues out of corporate profits than Americans do, despite Ireland's lower tax rate.

The lesson of our story is simple. It is true that "nothing in life is certain but death and taxes." But it is equally true that higher tax rates don't always mean higher tax revenues. And that is a lesson that politicians can ignore only at their own peril.

DISCUSSION QUESTIONS

1. If you found yourself in the 91 percent federal personal income tax bracket in 1951, how great would have been your incentive to find legal loopholes to reduce your federal tax liabilities? If you found yourself in the lowest federal personal income tax bracket of, say, 15 percent, would your incentive to find loopholes to reduce your tax bill be the same? Explain.
2. Explain how the incentive effects of each of the following hypothetical taxes would cause people to change their behavior; be sure to explain what people are likely to do *less* of and what they are likely to do *more* of in response to each tax:
   (a) A $1,000,000-per-story tax on all office buildings more than two stories tall
   (b) A $2,000-per-car tax on all red (and only red) cars
   (c) A $100-per-book tax on all *new* college textbooks
3. Suppose that federal marginal personal income tax rates will rise significantly over the next ten years. Explain the ways in which individuals at all levels of income can react over time, not just immediately after taxes are raised. How will the size of the response differ, say, a year after the rise in tax rates compared to a week after the increase? Is it possible that some people will actually change their behavior *before* the higher tax rates go into effect? Explain.
4. How does a country's tax structure affect who decides to immigrate into the nation or emigrate out of the nation? Contrast, for example, nations A and B. Assume that nation A applies a 20 percent tax on every dollar of income earned by an individual. Nation B applies a 10 percent tax on the first $40,000 per year of income and a 40 percent tax on all income above $40,000 per year earned by an individual. Start by computing the tax bill in each country that must be paid by a person earning $40,000 a year and the tax bill that must be paid by a person earning $100,000 per year. Then consider the more general issue: If the language, culture, and climate of the two nations are similar, and if a person can choose to live on one side or the other of a river separating the two nations, who is more likely to choose to live in A and who is more likely to choose to live in B? To what extent does your reasoning apply if an ocean, rather than a river, separates the two countries? Does it apply if the language, culture, or climate in the two nations differs? Explain.