The Economics of SMOKING

Pierre Lemieux
Although the Greeks have one of the highest per capita tobacco consumption rates in the world, their country shows a relatively low incidence of lung cancer. In an obscure annex to its famous 1992 anti-smoking report, the Environmental Protection Agency explains this paradox by high fruit consumption in Greece. Why, asks British philosopher Antony Flew, did EPA bureaucrats not recommend that smokers eat fruit instead of foregoing tobacco? Yet, in general, the medical literature strongly supports the hypothesis that smoking is dangerous for the smoker's health. Let us take this conclusion for granted. Now, why does one fourth of the population continue to smoke?

All human activities carry costs that have to be weighed against their benefits. Risk to limb or life is merely a type of cost that will occur with a probability lower than one but higher than zero. Economist Kip Viscusi reports that, in the U.S., the annual death risk from motor vehicle accidents is 1/5,000. In France, 115,000 skiers are injured every year, and more than 50 killed. In a typical year, 390 Canadians drown, and 5 are killed by lightning. Individuals presumably take risks into account when they make choices. They believe that the pleasure of driving, skiing, swimming, or walking outweighs the risk; otherwise, they don’t engage in such activities.

Why does the state try and persuade individuals to quit smoking, but not skiing? Why do we hear about the “social cost of smoking”—$130 billion per year in the U.S., according to a 1998 Treasury study—but not about the social cost of driving or swimming? What do we mean by “social cost”? We shall see that, on these issues, economists generally arrive at
In the US, the annual death risk from motor vehicle accidents is 1/5,000. In France, 115,000 skiers are injured every year, and more than 50 killed.

Conclusions opposite to those of the Public Health approach—i.e., the approach of the medical specialists and government organizations of which we hear so much in popular discourse and the media.

**Economics versus Public Health**

Before we look at the main Public Health arguments and the economic counter arguments, let’s have a first look at how the two approaches differ on the basic concepts of benefits and costs.

Economics starts with subjective individual preferences. Individuals who smoke tobacco reveal that they gain net “utility” (or satisfaction) from this consumption. The risky character of many activities—whether smoking, driving cars, or skydiving—does not change this conclusion, as the demand that each consumer brings to the market includes his estimates of such non-price costs. Economic theory demonstrates that, given
In a typical year, 390 Canadians drown... …and 5 are killed by lightning.

Why persuade individuals to quit smoking but not skiing?

certain conditions, free markets are efficient; i.e., they lead to the socially optimal allocation of resources.

The Public Health school adopts a radically different methodology. Starting from the observation that smoking is bad for the smoker’s health, it goes on to conclude that individuals do not derive benefits from smoking. Anti-smoking activist Scott Ballin asserts that “There is no positive aspect to [smoking]. The product has no potential benefits.”

Not only does the Public Health school neglect subjective benefits of smoking, as evaluated by each individual, but it often reveals a confused notion of cost. This was especially obvious in the Public Health literature of the 1970s and 1980s, which assumed that costs of smoking-related illnesses were of the nature of a “social cost,” borne by “society as a whole.” Typically, 75% of the so-called “social cost” of smoking was made of incomes lost by ill or deceased smokers.
Health care related expenses caused by smoking are not external “social costs” transferred to others. They are borne by individual smokers.

Now, if we consider, like economists, that “society” does not own individuals, such costs are private costs to smokers, not “external costs” transferred to others. Each individual deducts these costs from his subjective benefits before making his consumption choices. It would be double counting to add them again to social costs.

The Transfer Argument

Not all Public Health arguments were so simplistic. A more serious one was related to what economists call “transfers,” i.e., subsidies between different groups in society. The transfer argument claimed that health care costs of treating smoking-
related diseases was partly supported by non-smokers and, hence, amounted to a forced subsidy to smokers. This claim implicitly relied on the fact that health care has been more or less nationalized; otherwise, smokers would have to pay for their self-imposed diseases, possibly through higher private insurance premiums. Now, public health insurance regimes have been set up with the avowed objective of operating a redistribution from the healthy to the sick; in fact, the whole Welfare State is based on cross-subsidies between social groups. It would seem a perversion—if not a totalitarian slippage—of the system to single out certain groups who happen to be on the receiving side.

Consider, for a moment, the similar cases of alcohol and sedentary lifestyle (i.e., lack of physical exercise). Research has shown that alcohol consumption transfers net costs to the rest of society because it is often a causal factor in automobile accidents and violent crimes. Yet, forcing the drunk to bear responsibility for the costs they impose would seem to be a more appropriate response than prohibition for everybody. As for sedentary lifestyle and obesity-related diseases, economists Willard G. Manning, et al. write: “Surprisingly, the lifetime external costs of a sedentary life-style are actually higher than the external cost of smoking. ... We estimate that lack of exercise imposes external costs of 24 cents for every mile that sedentary people do not walk, jog, or run.” The fact that not doing something might impose “costs” on others illuminates the troubling implications of this kind of transfer argument.

In the case of smoking, anyway, the transfer argument is empirically false. Economists who looked at the figures in many countries (including Robert Leu and Thomas Schaub in Switzerland, Willard Manning in the U.S., Raynauld and Vidal in Canada, and Jean-Jacques Rosa in France) discovered that net transfers go the other way around if one factors in tobacco taxes
paid by smokers plus the savings that their early deaths bring to public pension plans and other kinds of old-age care. Not only do smokers pay their way, but they actually subsidize non-smokers. Interestingly, Public Health activists have turned this defeat to their advantage: they now argue that this is simply “not the kind of calculation that a civilized society engages in,” as MIT Prof. Jeffrey Harris puts it.

The World Bank’s Arguments

After the economists’ analytical assault, the case for smoking regulations seemed pretty thin in the early 1990s. Then, a new argument was proposed by World Bank economist Howard Barnum. It relied on welfare economics, a field of neoclassical economic theory designed to show that “market failures,” created by external costs or other types of “externalities” (phenomena that bypass the market), prevent free markets from maximizing social welfare. The welfare-economics argument against smoking has since been refined by other economists working with the World Bank, and has provided the intellectual basis for the Bank’s 1999 report on the smoking “epidemic.”

The argument runs as follows. Smoking is not like other consumption choices, and the economic presumption of market efficiency does not apply. This is because, as the World Bank puts it, “many smokers are not fully aware of the high probability of disease and premature death,” and because of the addictive nature of tobacco. Consequently, the demand that smokers bring to the market does not represent the true benefits of tobacco for them. Externalities transform what would be private risks and costs of the smoker himself into social costs. Reducing tobacco consumption (or eliminating it, in the original Barnum version) would increase net social benefits.
The first question is whether addiction really takes over the free will of its impotent victims. Statistics show that half of non-smokers are former smokers, which suggests that quitting is not infinitely costly. Many smokers claim that they would like to quit, but that they are unable to. Words are only words and, in the economist’s eyes, an actual choice to smoke reveals that, all costs and advantages being considered, this is what the smoker prefers to do. Analogously, notes Kip Viscusi, half the residents of Los Angeles claim that they would like to move out, but never do. There is much everyday evidence that one is “addicted” to tobacco because one likes it, not the other way around: many former smokers start again months or even years after any withdrawal symptom has long gone away, and smokers prefer a cigarette to nicotine gum or patches.

Moreover, the theory of “rational addiction”, developed mainly by Gary Becker, a Nobel Prize-winning economist, has brought addictive behaviour into the realm of rational choice. An
Evidence shows that people are “addicted” to tobacco because they like it, not the other way around.

An addictive good is defined as one whose utility is a function of previous consumption: the more you have consumed, the better you are likely to appreciate it—like for alcohol, drugs, music, television, or religion. Individuals become addicted to something because, given their own circumstances, they judge the benefits higher than the costs, including possible withdrawal costs. One can test the rational addiction theory by testing whether addicts take future prices into consideration in their current demand for the addictive good (as a rational individual would, because he can get hooked into paying higher future prices). Indeed, it has been found that smokers are more responsive to long-term price changes.

The second basis of the World Bank argument lies in the assumed imperfect information about smoking risks. This is contradicted by research showing that American smokers actually overestimate the risks of smoking, compared to
the claims of Public Health specialists themselves. While the smoker’s risk of getting lung cancer during his life is estimated at around 10% in the scientific literature (much higher than the nonsmoker’s risk), opinion polls show that the public’s assessment of this risk is at least three times higher. Moreover, if perfect information may be a convenient assumption in formal neoclassical models, it is not an economic ideal as long as information is costly; i.e., as long as producing or gathering information requires the use of real resources including time, the scarce resource *par excellence*. The rational consumer will obtain additional bits of information only as long as their advantages are higher than their costs. This is why the typical consumer doesn’t get a degree in mechanics before choosing a car, or a Ph.D. in electronics before buying a computer.

**Secondhand Smoke** and Property Rights

So far, so good: smokers only “hurt” themselves. (This is only a way of talking since they obviously expect to derive more benefits than costs from smoking.) But what about secondhand smoke? Assuming that secondhand smoke imposes inescapable “external (health) costs” on third parties, most economists (at least in the neoclassical tradition) would consider this as a real case of market failure, which calls for government intervention.

There is a double catch here. First, the health hazards of secondhand smoke may well turn out to be the hoax of the twentieth century. Regarding the 1992 EPA report that classified secondhand tobacco smoke as a “Group A carcinogen,” U.S. District Judge William Osteen wrote, in a recent decision: “The court is faced with the ugly possibility that EPA adopted a methodology for each chapter, without explanation, based on the outcome sought in that chapter. ... The record and EPA’s
The health hazards of secondhand smoke may well turn out to be the hoax of the twentieth century. 

explanations to the court make it clear that using standard methodology, EPA could not produce statistically significant results with its selected studies” (Flue-Cured Tobacco Cooperative v. EPA, No. 6:93CV00370 at 60, 77, M.D.N.C. July 17, 1998).

The second point is that, even if secondhand smoke did cause a risk of disease to non-smokers, private property rights would solve the problem better than regulations or prohibitions. Take the example of restaurants. In order to maximize his profits, a restaurant owner must mediate between the demands of customers who want to smoke, and of those who do not wish to have smokers around. Depending on his clientele, on how much they are willing to pay to have their preferences catered to, and on the costs of satisfying them, the owner will decide to which extent he will segregate his customers. The market will show its usual diversity, with non-smoking, smoking-only, and dual-section restaurants. Non-smokers who do not wish to be exposed to secondhand smoke will give their patronage to non-smoking restaurants. Similarly, people who don’t like to be punched don’t climb on boxing rings, and people who want a zero risk of being hit by an avalanche or a fellow skier don’t patronize Alpine ski resorts.
Is Government Perfect?

If what we have said is right, it appears that, even in the worst possible scenario—i.e., smoking harms smokers’ and nonsmokers’ health—economics cannot justify regulation of smoking, at least on private properties. Yet, an objection remains: in the real world, markets do not work perfectly. We have returned to the market-failure argument.

Suppose that there are, indeed, unredeemable market failures. It would still remain to be proven that government intervention would succeed in correcting them at an acceptable cost, including the loss of individual liberty. There is no point in comparing imperfect markets with perfect government. Yet welfare economists traditionally do just that.

The main thrust of the Public Choice school of economics has been to show that government failures are often worse than market failures. Incoherent policies are one manifestation of government failures—when, for example, government subsidizes tobacco farmers while trying to reduce tobacco consumption. Public policy is more an outcome of pressure
group politics and bureaucratic incentives than a product of enlightened welfare economists.

Regulation against smoking is not only a theoretical debate. In most Western countries, smoking is legally prohibited, or regulated, on private properties—not yet in people’s private homes, but in many private places open to the public, like restaurants, shopping centers, or workplaces. Laws—and the armed people that ultimately enforce them—not only prohibit businesses from mixing smokers’ and nonsmokers’ accommodations, but also from offering smoking-only restaurants or smoking-only flights.

Most economists are opposed to regulating adult smoking because economics shows how markets are generally more efficient than political and bureaucratic processes. On the contrary, the Public Health school expresses a heavy prejudice in favor of coercive government intervention. There are some economic arguments for government regulation of smoking, but they resort to the most questionable aspects of welfare economics, and assume that bureaucrats and politicians are disinterested and omniscient. History suggests that, between imperfect markets and imperfect governments, liberty and prosperity side with the former.

Pierre Lemieux is an economist in the Department of Management Sciences at the Université du Québec en Outaouais.

This article appeared on www.econlib.org on June 28, 2000.