

I N T R O D U C T I O N

Prices Are Everywhere

ANYBODY WHO HAS visited a garbage dump in the developing world knows that value is an ambiguous concept. To most people in the developed world, household waste is worthless, of course. That's why we throw it away. Apparently, Norwegians are willing to pay about \$114 a ton for somebody else to sort their recyclables from the general garbage. A survey of families in the Carter community of Tennessee several years ago found they were willing to pay \$363 a year, in today's money, to avoid having a landfill nearby.

But slightly beyond our immediate experience, waste becomes a valuable commodity. In Kamboinsé, outside Ouagadougou, Burkina Faso, farmers pay municipal trash haulers to dump unsorted solid waste on their sorghum and millet fields as fertilizer—bits of plastic included. The going rate in 2003 was 400 francs per ton. In New

Delhi, a study in 2002 found that waste pickers earned two rupees per kilo of PET soda bottles and seven rupees per kilo of hard plastic shampoo bottles. A child working on foot on Delhi's dumps could make twenty to thirty rupees per day.

Waste, in fact, confronts us with the same value proposition as anything else. The price we put on it—what we will trade to have it, or have it go away—is a function of its attendant benefits or costs. A bagful of two-rupee PET bottles is more valuable to an Indian child who hasn't eaten today than to me, a well-fed journalist in New York. What she must do to get it—spend a day scavenging among the detritus of India's capital, putting her life and health at risk—is, to her, not too high a price to pay because life is pretty much the only thing she has. She has little choice but to risk it for food, clothing, shelter, and whatever else she needs. I, by contrast, have many things. I have a reasonable income. If there's one thing I have too little of, it is free time. The five cents I could get for an empty PET bottle at the supermarket's recycling kiosk are not worth the trouble of redeeming it.

The purpose of this comparison is not to underscore that the rich have more opportunities than the poor. It is that the poor choose among their options the same way the rich do, assessing the prices of their alternatives. The relative costs and benefits of the paths open to them determine the behavior of the poorest Indian girl and the richest American man. These values are shaped by the opportunities they have and the constraints they face. The price we put on things—what we will trade for our lives or our refuse—says a lot about who we are.

The price of garbage provides a guide to civilization. Pollution is cheapest in poor countries. Their citizens are more readily willing to accept filth in exchange for economic growth. Yet the relative price of pollution rises as people become richer. Eventually it becomes expensive enough that it can alter the path of development. China is a dirty place. Yet underlying its dismal air and foul water is a choice that balances the costs of pollution in bad health, poisonous

rivers, and so forth against the cost of cutting back production or retooling plants to control their effluvia. It is a different choice from that of Switzerland, where preserving environmental assets—clean air, trees, wild animals—is considered more valuable than providing manufacturing jobs to unemployed farmers. Twice as many Swiss as Chinese are members of environmental organizations. More than a third of the Swiss population believes environmental pollution is the most important problem facing the nation; only 16 percent of Chinese feel the same.

But as China grows, the price of building one more coal-fired power plant, measured in terms of its contribution to acid rain, global warming, and the rest will one day exceed the value the Chinese place on the extra output. As it keeps growing, it will likely evolve out of the most noxious industries, like steel and chemicals, into less polluting sectors, like medical and financial services. It may even one day buy its steel and chemicals from poorer countries with a higher tolerance of foul water and air. In other words, it will behave more like Switzerland or the United States. One study concluded that emissions of sulfur dioxide peak when a country's income per person reaches around \$8,900 to \$10,500. In the United States, sulfur-dioxide emissions soared until the passage in 1970 of the Clean Air Act. Since then, emissions have fallen by half.

HEREIN LIES THE central claim of this book: every choice we make is shaped by the prices of the options laid out before us—what we assess to be their relative costs—measured up against their benefits. Sometimes the trade-offs are transparent and straightforward—such as when we pick the beer on sale over our favorite brand. But the Indian scavenger girl may not be aware of the nature of her transaction. Knowing where to look for the prices steering our lives—and understanding the influence of our actions on the prices arrayed before us—will not only help us better assess our decisions. The prices we face as individuals and societies—how they move us, how

they change as we follow one path or another—provide a powerful vantage point upon the unfolding of history.

Nearly two decades ago, when he was chief economist of the World Bank, Lawrence Summers, President Barack Obama’s former top economic adviser, signed his name to a memo suggesting it would make sense for rich countries to export their garbage to poor ones. Because wages are lower in poor countries, he said, they would suffer a lesser loss if workers got sick or died. “I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that,” it said. Moreover, pollution mattered less in a poor country with other problems: “The concern over an agent that causes a one in a million change in the odds of prostate cancer is obviously going to be much higher in a country where people survive to get prostate cancer than in a country where under 5 mortality is 200 per thousand.”

Leaked a few months before the 1992 United Nations Earth Summit in Rio de Janeiro, the memo confirmed to critics that the World Bank believed poor countries were dumps. The reasoning “is perfectly logical but totally insane,” wrote the late José Lutzenberger, then Brazil’s environment minister, in a letter to Summers. Furious, Vice President Al Gore torpedoed Summers’s chance to become chairman of then-president Bill Clinton’s Council of Economic Advisers. Summers apologized, explaining the memo as an attempt to offer “sardonic counterpoint” to sharpen analytical thinking about the trash trade.

Lutzenberger had a point. Wages are not the only benchmark of people’s value. The price of dealing with garbage in impoverished countries is often zero not because their citizens care nothing about pollution, but because their governments don’t enforce pollution-related laws. But Summers had a powerful point too: in poorer countries, an untainted environment is less valuable than other things that are more abundant in richer nations—schools, for instance. Many developing nations would serve their interests best by trading trash for the chance to build an extra one.

THE PRICE OF CROSSING BORDERS

Most of us think of prices in the context of shopping expeditions. In the marketplace, prices ration what we consume, guiding how we allocate resources among our many wants. They prompt us to set priorities within the limits of our budgets. Just as prices steer our purchasing patterns, they steer the decisions of the companies that make what we buy, enabling them to meet our demand with their supply. That's how markets organize a capitalist economy.

But prices are all over the place, not only attached to things we buy in a store. At every crossroads, prices nudge us to take one course of action or another. In a way, this is obvious: every decision amounts to a choice among options to which we assign different values. But identifying these prices allows us to understand more fully our decisions. They can be measured in money, cash, or credit. But costs and benefits can also be set in love, toil, or time. Our most important currency is, in fact, opportunity. The cost of taking any action or embracing any path consists of the alternatives that were available to us at the time. The price of a five-dollar slice of pizza is all the other things we could have done with the five dollars. The price of marriage includes all the things we would have done had we remained single. One day we succumb to the allure of love and companionship. Years later we wonder what happened to the freedom we traded away at the altar. Economists call this the "opportunity cost." By evaluating opportunity costs, we organize our lives.

Just to be born, the scavenger girl in Delhi had to overcome Indian parents' entrenched bias against girls—which has led to widespread abortions of female fetuses. The Indian census of 2001 recorded 927 girls aged six or less per 1,000 boys. This compares to 1,026 girls per thousand boys in Brazil and 1,029 in the United States. The bias is due to a deeply unfavorable cost-benefit analysis: while boys are meant to take over the family property and care for their parents in old age, daughters must be married off, which

requires an onerous dowry. To redress the balance of incentives, regional governments across India have been experimenting with antipoverty programs aimed at increasing parents' appetite for girls. In 2008, Delhi launched a program to deposit 10,000 rupees into the account of newly born girls in poor families—making subsequent deposits as they progress in school. The objective is to build a cushion of resources for them to marry or pursue higher education. A social insurance program launched in 2006 in Haryana pays parents who only have daughters 500 rupees a month between the age of forty-five and the age of sixty, when it is replaced by the general public pension.

I remember a conversation I had a few years ago with an illegal immigrant in Stockton, California. I worked at the *Wall Street Journal* writing about the Hispanic population of the United States. The immigrant was educating me about the relative merits of having his two young children smuggled from Mexico *por el monte*—a grueling hike across the desert—or *por la línea*, across a regular checkpoint using forged documents. The choice was hard. He couldn't have made more than \$8 or \$9 an hour, picking asparagus, cherries, and everything else that grew in California's San Joaquin Valley. He would have to pay about \$1,500 each for a "coyote" to guide his kids across the desert. Yet he figured that getting a smuggler with fake documents to bring them across a border checkpoint would put him back about \$5,000 per child. The conversation laid in stark relief the type of bare-knuckle cost-benefit analyses that steer people's lives.

Over the last decade and a half, the Border Patrol's budget has grown roughly fivefold. Average coyote fees increased accordingly, to about \$2,600 in 2008. Yet the price that rose most sharply is measured in the odds of dying on the way, as a border crossing that used to take less than a day around San Diego became a three- to four-day trek through the Arizona desert, evading thieves and the Border Patrol, lugging jugs of water. In 1994, 24 migrants died trying to cross the border. By 2008, the death toll was 725. The calculation

of the immigrant I spoke to was straightforward enough. To bring his children into the United States through a checkpoint, he would have to work longer to earn the price of passage. But it would lower the risk that his children would perish along the way.

The debate among Americans about illegal immigration is itself a discussion about prices. Critics charge that illegal immigrants lower the price of natives' labor by offering to do the job for less. They argue that immigrants impose a burden on natives when they consume public services, like education for their children and emergency medical care.

These arguments are weaker than they seem. Most illegal immigrants work on the books using false IDs, and have taxes withheld from their paychecks like any other worker. They can't draw benefits from most government programs. And there is scant evidence that immigrants lower the wages of American workers. Some industries only exist because of cheap immigrant labor—California's agricultural industry comes to mind. Absent the immigrants, the farm jobs would disappear too, along with an array of jobs from the fields to the packing plant. We would import the asparagus and the strawberries instead.

Illegal immigrants do affect prices in the United States. One study calculated that the surge in immigration experienced between 1980 and 2000 reduced the average price of services such as housekeeping or gardening by more than 9 percent, mainly by undercutting wages. Still, it had a negligible impact on natives' wages because poor illegal immigrants compete in the job market with other poor illegal immigrants.

Immigration policy has always been determined by who bears its costs and who draws its benefits. Illegal immigrants are tolerated by the political system because their cheap labor is useful for agribusiness and other industries. It provides affordable nannies to middle-class Americans. This suggests that despite presidential lip service to the need to reform immigration law, nothing much is likely to be done. Creating a legal path for illegal immigrants to work in

the United States would be politically risky and could provide a big incentive for more illegal flows. By contrast, cutting illegal immigration entirely would be prohibitively costly. The status quo is too comfortable to bear tinkering like that.

The ebb and flow of immigration will continue to be determined by potential immigrants' measuring the prospect of a minimum wage job—perhaps a first step up the ladder of prosperity—against the costs imposed by the harsh border. The price may occasionally be too high. As joblessness soared following the financial crisis of 2008, many potential immigrants decided to stay at home. The Department of Homeland Security estimates the illegal immigrant population dropped by 1 million from its peak in 2007 to 10.8 million in 2009. But this will prove to be no more than a blip in the broad historical trend.

PRICES RULE

Considering the capacity of prices to shape people's choices, it is rather surprising that governments do not use them more often to steer the behavior of the governed. For instance, public-health campaigns might be a nice way to educate people about the risks of certain behaviors, such as smoking and drug abuse. But they are nowhere near as effective as prices when it comes to making people stop. Four decades after President Richard Nixon launched his "War on Drugs," drug abuse remains stubbornly popular. Between 1988 and 2009, the share of twelfth graders who admitted having done drugs in the last month increased from 16 to 23 percent. The share of teens who had smoked a cigarette in the same period fell from 28 to 20 percent.

This is a paradox. Though it is illegal for minors to purchase cigarettes, adults can readily get them. Drugs, by contrast, are illegal for everybody. Being caught with even a smidgen of cocaine in the

state of Illinois can lead to one to three years in jail. Yet the difference is less paradoxical considering how the price of these vices has evolved. A battery of city, state, and federal taxes has roughly doubled the price of a pack of cigarettes since 1990, to about \$5.20 on average. On July 1, 2010, the minimum price of a pack of cigarettes in New York City rose \$1.60 to \$10.80—of which \$7.50 are taxes. By contrast, the retail price of a gram of cocaine on New York's streets cost \$101 in 2007, about 27 percent less than in 1991. The price of heroin collapsed 41 percent to \$320 a gram. Falling prices reflect the failure of policies to stop the supply of illegal drugs into the American market. But it also suggests a potential solution: at a sufficiently high price, teens would cut back. Compared with a failed drug war, legalizing, regulating, and taxing drugs might be the more effective route to curtail abuse.

Consider what we could achieve by tinkering with the price of gas. In the United States, cheap gas allowed people to move to bigger homes farther from work, school, and shopping. Just in the last decade or so, Americans' median commute to work rose from nine to eleven miles. The typical home grew from 1,750 to 1,807 square feet.

Europe rarely sprawled so. Its cities were constrained by history. They were built hundreds of years ago, when moving long distances was costly in time and effort. During the French Revolution, it took King Louis XVI twenty-one hours to flee 150 miles from Paris to Varennes. Modern sprawl was contained by gas taxes. Europeans pay two to three times as much as Americans for gas. That's partly why Houston in Texas has roughly the same population as the German port city of Hamburg but 2,500 fewer people per square mile.

For all the differences between the configuration of American and Western European cities, they are both strikingly different from development in the Soviet bloc, where market prices played little or no role in allocating land. Seventy years of communist allocation by bureaucratic fiat produced an urban scene pockmarked by old factories decaying on prime locations downtown while residential

housing becomes denser farther from the center, through rings of Stalin-era, Khrushchev-era, and Brezhnev-era apartments.

A study by World Bank urban planning and housing finance experts after the collapse of the Soviet Union found that 31.5 percent of the built-up area in Moscow was occupied by industries, compared to 6 percent in Seoul and 5 percent in Hong Kong and Paris. In Paris, where people pay a premium price to live near downtown's amenities, the population density peaks some three kilometers from the center of town. In Moscow it peaked fifteen kilometers away.

Prices make sense of many disparate dynamics over the span of human history. Advances in transportation technology that reduced the cost of distance enabled the first great wave of economic globalization in the nineteenth century. The obesity pandemic was bound to happen when bodies designed to survive in an environment of scarce food by gorging themselves whenever they could found themselves awash in cheap and abundant calories brought by modern technology.

There are few better ways to understand the power of prices than to visit the places where they are not allowed to do their jobs. During a trip to Santiago de Cuba a few years ago I was driven around town by a bedraggled woman who, to my surprise, turned out to be a pediatrician at the city's main hospital. She had a witchlike quality—knotty and thin as a reed. Two of her front teeth were missing. She told me they fell out during a bout of malnutrition that swept through the island after the Soviet collapse in 1991 cut off Cuba's economic lifeline. The doctor owned a beat-up Lada. She was very smart. But otherwise her life seemed no different from that of any street urchin, living off the black market at the limit of endurance, peddling a ride or a box of cigars that fell off the back of a truck. She charged ten dollars for driving me around town all day. I couldn't help wondering how the collective decisions that shaped Cuba's possibilities at the time could make it so a pediatrician found this to be a worthwhile deal.

WHEN PRICES MISFIRE

As with anything powerful, prices must be handled with care. Tinkering can produce unintended consequences. Concerned about low birthrates, in May 2004 the Australian government announced it would pay a “baby bonus” of three thousand Australian dollars to children born after July 1. The response was immediate. Expectant mothers near their due dates delayed planned cesarean sections and did anything in their power to hold their babies back. Births declined throughout June. And on July 1, Australia experienced more births than on any single date in the previous three decades.

Taxing families based on the number of windows in their homes must have seemed like a good idea when King William III introduced the window tax in England in 1696. Homes with up to ten windows paid two shillings. Properties with ten to twenty windows paid four shillings and those with more than twenty paid eight.

The tax was logical. Windows being easy to count, it was easy to levy. It was fairish: richer people were likely to have bigger houses with more windows, and thus pay more. And it got around people’s intense hostility to an income tax. But the king didn’t count on people’s reaction. They blocked up windows in their homes in order to pay less. Today, blocked-out windows in Edinburgh are known as Pitt’s Pictures, after William Pitt, who brought the tax to Scotland in 1784.

Seemingly modest actions can reverberate throughout society by altering, if only slightly, people’s evaluations of costs and benefits. Such is the case of the 55 mph speed limit imposed across the United States in 1974 as a way to conserve gasoline in the wake of the first oil crisis, when Arab countries proclaimed an oil embargo in response to the United States’ decision to resupply the Israeli military after the Yom Kippur War.

Conserving gas was a reasonable objective at the time. The strategy, however, was fatally flawed because it ignored the value of

drivers' time. At the new legal limit, a seventy-mile trip would take about one hour and sixteen minutes—sixteen minutes more than at 70 mph. Considering that the wages of production workers in 1974 averaged around \$4.30 an hour, those sixteen minutes to commute to and from work would cost a typical worker about \$1.15.

In 1974, a gallon of leaded gas cost fifty-three cents. To break even, an average driver would need to save 2.17 gallons per trip. For this to happen would have required a big leap in fuel economy: a 22 percent increase in the fuel efficiency of a Chevy Suburban, for example, or a doubling of the fuel efficiency of a Honda Civic. Of course, lowering the speed limit did not achieve this improvement. So drivers ignored the new rule.

In 1984, drivers on interstate highways in New York were found to flout the 55 mph limit 83 percent of the time. They dished out \$50 to \$300 to buy CB radios to warn one another about cops nearby. Between 1966 and 1973 there were about 800,000 CB licenses issued by the Federal Communications Commission. By 1977 there were 12.25 million CBs on the road. Cops then reacted to the reaction, installing radar. Drivers reacted with radar detectors. Some states passed laws making radar detectors illegal. I doubt the United States Congress expected this chain of events when it passed the 1974 Emergency Highway Energy Conservation Act. By 1987 it increased the maximum limit to 65 mph and in 1995 it repealed the federal speed limit altogether.

WHERE WILL PRICES TAKE US?

Archimedes of Syracuse, the great mathematician from the third century BC, said that to move the earth he needed only a lever, a fulcrum, and a firm place to stand. Moving people requires a price. The marriage rate has fallen not because of changing fashions but because of its rising price, measured in terms of the sacrifice it

entails. We have fewer children because they are costlier. Economists suggest that the Catholic Church has been losing adherents not because people stopped believing in God but because membership became too cheap compared with evangelical Christianity, which demands a bigger investment in its churches from members and thus inspire more loyalty.

The Price of Everything will take us to the store, where we will discover how price tags operate on our psychology, subtly inviting us to buy. But we will endeavor beyond quotidian commercial transactions, to investigate how other prices affect the way people live. In many cultures, husbands pay for multiple brides to amass as many as possible and increase their reproductive success. In others, parents abort female fetuses to avoid the cost they would incur to marry off their daughters. Many behaviors that we ascribe to “cultural change” arise, in fact, as we adapt our budgets to changing prices. We will ponder why employers pay for workers rather than enslave them. We will discuss why it is that as we become progressively richer, the commodity that increases most in value is our scarce free time. And we will find that despite clinging to the notion that life is priceless, we often put a rather low price on our lives.

And we will find that prices can steer us the wrong way too. We still don't know how much we will have to pay, as a civilization, for the economic distortions caused by the upward spiral in the price of American homes between 2000 and 2006. A century down the road, the cheap gasoline of the 1900s might come to be seen as the cause of incalculable environmental damage. Prices can be dangerous too.