Chapter 8

Regulation: The Economics of Unintended and Intended Consequences

The one result of this study that can be put forward most confidently is that auto safety regulation has not affected the highway death rate.

— Sam Peltzman (1975), "The Effects of Automobile Safety Regulation."

The "jitney" episode of 1914-1915, wherein private automobiles were used as rivals to street railways, is typically treated in histories of American urban transportation either as an historical aberration, or at most, as an incident which inseminated the engineering design of early buses. Rather, we shall attempt to demonstrate in this paper, the jitney episode was central to the history of urban transportation, and more specifically, that the policy of putting down the jitneys led directly to much of what is looked upon as most unsatisfactory in contemporary urban transport.

— Ross D. Eckert and George W. Hilton (1972), "The Jitneys."

The UCLA economists who added the most to our understanding of regulation were Sam Peltzman and George Hilton.

Unintended consequences

One theme of much of their work is the idea of unintended consequences. Legislators and regulators, with little of their own wealth at stake, often fail to think through or simply don't care about the unintended consequences of the policies they favour and enforce. Even those who might care are not omniscient. So even if they have good intentions, they will still often cause consequences that are at odds with their stated goals.

Sam Peltzman's first major contribution to the literature on the unintended consequences of regulation was his famous path-breaking study of the effects on drug development of regulation by the Food and Drug Administration (FDA).

Prior to 1962, the FDA could prevent a pharmaceutical company from selling a drug only on grounds of safety. But after the thalidomide tragedy of the late 1950s and early 1960s in which hundreds of babies, mainly in Europe, were born with drastically shortened or no limbs after their mothers took the drug, the federal government introduced a law that required evidence of drug efficacy. Notice the irony. Thalidomide turned out to be unsafe, not ineffective. Indeed, it was quite effective at its intended use, namely, helping pregnant women deal with morning sickness. But proponents of increased regulation used the tragedy to push for a regulation on efficacy.

The particular regulation was the 1962 Kefauver Harris Amendment to the Federal Food, Drug, and Cosmetic Act. In the early 1970s, Sam Peltzman, then a young professor at UCLA, wondered if the regulation would slow the rate of introduction of new drugs. After all, additional compliance costs make drug development more expensive. So he compared the number of new chemical entities that the FDA had approved before the 1962 law with the annual number approved after the law. The result? According to the Peltzman's analysis, had the pre-1962 law trend continued, there would have been about 40 new drug approvals each year. Instead, there were only 16, a 60 percent drop (Peltzman, 1974).

One might hope that it was mainly bad or ineffective drugs that were weeded out. But no such luck. Peltzman estimated that, at most, the percentage of ineffective drugs being marketed before 1962 was 10 percent. As a result of the Kefauver-Harris Amendment the percentage may have dropped to 5. Yet the 60 percent drop in all drugs meant that patients never had access to many drugs that would have been efficacious. Peltzman commented that the effects of the 1962 law were as if "an arbitrary marketing quota... had been placed on new drugs after 1962" (1974: 45).

For those who think that regulation causes good effects, Peltzman's results presented a puzzle. Why *weren't* there more ineffective drugs on the

market and why *didn't* the FDA have a salutary effect? Peltzman answered, "The penalties imposed by the marketplace on sellers of ineffective drugs before 1962 seem to have been sufficient to have left little room for improvement by a regulatory agency" (1974: 45).

Peltzman concluded that the costs of the 1962 law exceeded the benefits, writing, "It appears that a form of 'shot-gun therapy' has been applied to the problem of ineffective drugs: for the sake of excising (part of) the potentially offending 10 percent, 60 percent of potential innovation is eliminated" (1974: 87).

Peltzman's second major contribution to the understanding of the unintended effects of regulation was his 1975 study of the effects on traffic safety of a slew of US National Highway Traffic Safety Administration regulations on the design of cars. In the mid to late 1960s, the federal government made a number of safety features mandatory. These included seat belts for all occupants, an energy-absorbing steering column, a penetration-resistant windshield, a dual braking system, and a padded instrument panel. In his study, Peltzman stated that the goal of the mandates was to reduce traffic fatalities and serious injuries sustained as a consequence of vehicle accidents. But he found something different. Fatalities were not reduced at all. Instead, deaths of vehicle occupants fell but those of pedestrians and motorcycle drivers rose. Peltzman's tentative explanation was that by reducing the probability of being killed in a given accident, the mandates caused drivers to drive more "intensely." His finding became so well known that economists started referring to the "Peltzman effect." Later studies found that drivers with anti-lock brakes tended to follow the cars in front of them more closely. A 2010 study of NASCAR accidents found that the "mandated use of a head-and-neckrestraint system has almost completely eliminated serious driver injury, while simultaneously increasing the number of accidents per race" (Pope and Robert D. Tollison, 2010).

Due in part to Peltzman's work, studying unintended effects of various regulations has become a cottage industry.

Intended consequences: Regulation as a political market

One of the UCLA School's main contributions to our understanding of the regulatory process is that it shows how regulators behave. Rather than acting as all-knowing promoters of the social good, regulators act in their own

self-interest. Specifically, while in their positions, regulators seek to maximize political support, which translates into more secure on-the-job tenure, larger agency budgets and higher salaries, and greater immunity from the scrutiny of legislators. Hilton (1972) was one of the earliest scholars to point out how regulators can benefit from their regulatory experiences after they leave the agency. He noted that few people make careers as regulators. Their relatively short tenure makes them concerned with what they will do after they leave their regulatory positions. If regulators want lucrative jobs, then friendly relationships created with organizations regularly appearing before the regulatory agency, particularly companies subject to regulation, are arguably more valuable to regulators than building a reputation for being knowledgeable and effective regulators.

Early critics of the regulatory process emphasized the concept of "regulatory capture," whereby the financial interests of the companies being regulated dictated regulatory decisions. Beyond the potential interests of regulators in seeking future employment in the regulated industry, the basic logic behind this view of regulation was the concentrated benefits/dispersed costs paradigm. Producers tend to be in concentrated groups and consumers tend to be in much larger, dispersed groups. Producers have much to gain individually by dominating the regulatory process while consumers have less to lose as individuals. So even if a regulation causes more harm to consumers than it creates in gains to producers, producers will dominate the regulatory debate. Indeed, consumers might not be represented at all and might not even know about the regulations.

Peltzman disputed neither the idea that producers are frequently beneficiaries of the regulatory process nor that regulators pursue their self-interest and not some ideal perspective of the social good. Instead he provided a more general view of the economics of the regulatory process. In Peltzman's model of regulation, the regulator redistributes wealth among various contending groups in order to maximize political support. That insight is probably the single most salient contribution to economists' understanding of the regulatory decision-making process.

In his groundbreaking 1976 article, Peltzman explained the regulatory process as a market in which the forces of supply and demand determine the winners and losers from the wealth-transferring decisions of regulators. Both companies and consumers demand favorable decisions from the regulator.

Their representatives, who are often lobbyists or organizations representing specific groups such as retirees (AARP) or environmentalists (the Sierra Club, for example), supply financial and other support to politicians who are likely to appoint and empower regulators who will take actions favourable to the groups they represent. A key conclusion of Peltzman's model is that the outcome of the supply and demand process is that producers need not emerge as the sole beneficiaries of the regulatory process. Rather, because the cost of organizing into a cohesive lobbying group is only one factor influencing who will obtain favourable regulatory outcomes, the distribution of benefits and costs from regulatory decisions is likely to be more diffuse than the concentrated/dispersed paradigm predicts.

Consider, for example, the Canadian Radio and Television Commission (CRTC), Canada's version of the US Federal Communications Commission. The CRTC restricts foreign broadcasters from supplying Canadians with broadcast services sent directly from outside of Canada. This protects Canadian broadcasters from competition with foreigners, allowing them to charge higher prices for advertising. However, the CRTC does not allow Canadian broadcasters to capture all of the financial gains from the protection they are provided. In particular, they must produce and distribute a significant amount of "Canadian content." Broadcasters must favour Canadians who work in the film, television, and music industries, even though it would be cheaper and more profitable for Canadian broadcasters to license foreign programming, mainly from US copyright holders.

In short, the CRTC engages in cross-subsidization. In exchange for protection from foreign competition, Canadian broadcast distributors must "share" some of the higher profits that they earn from the effective monopoly position created by the regulator with Canadian producers, performers, writers, and other contributors to domestic programing. The "losers" are Canadian consumers who pay higher prices for their subscriptions to cable and satellite distributors, and (indirectly) higher prices for products that are advertised on Canadian distribution outlets.

The idea that regulators primarily engage in cross-subsidization rather than address suspected market failures is now a firmly established idea among academics and others who study regulation. It has received much empirical support, which we shall elaborate upon shortly.

Other economic consequences of regulation

Peltzman's general model of regulation leads to other insights about how regulators behave. As mentioned, cross-subsidization is an important feature of regulation, as regulators balance the demands for wealth distribution from various groups against the political benefits the regulators receive from those groups. For reasons Peltzman's model explains, the pervasive tendency is to subsidize relatively high-cost customers through the regulated pricing system, while penalizing relatively low-cost customers. For example, it is more expensive per customer to connect rural telecommunications users to the carrier's network than it is to connect urban telecommunications customers. However, the prices that rural customers pay do not cover the costs of serving them, while urban customers generally pay more than the cost of serving them.

Such cross-subsidization would be difficult to carry out over any extended period of time if new competitors were allowed to enter. Where consumers are being charged prices well above costs, the high resulting profits would attract new entrants the way honey attracts ants. This entry by new competitors would drive down prices in that segment of the market. That would, in turn, reduce, and ultimately eliminate, the net revenues used by the regulator to subsidize high-cost customers through relatively low prices. Hence, a ubiquitous feature of regulation is barriers to new firm entry set by the regulator. Calls for such barriers frequently arise from existing regulated firms. The reason is that they're stuck serving unprofitable segments and they need to generate higher profits on the lower-cost segments. The only way they can do so is if regulators protect them from competition in those segments. The inevitable result is that much time and money are spent on legal and lobbying efforts by both would-be entrants and incumbents. Furthermore, delays occur in the introduction of new goods and services, as well as in more efficient ways of providing the regulated service in question. This harms the lower-cost consumers and even, in some cases, all consumers.

Many statistical and case studies over decades support the basic insights of Peltzman's general model of regulation, and it is well beyond the scope of this monograph to review this extensive literature. Rather, we will briefly summarize a few of the contributions that the UCLA School has made to this empirical literature.

George Hilton is a relatively unsung member of the School who performed early and academically valuable historical studies of the effects of transportation regulation. As discussed briefly in Chapter 1, in one of his most well-known studies, he and colleague and former UCLA student Ross Eckert documented the rise and decline of urban street cars in North America (see Eckert and Hilton, 1972).

By the early 1900s, urban public transportation in North America was provided almost exclusively by street railways. Most street railways operated one or a small number of lines serving a limited area of a city. The street railways enjoyed monopoly positions protected by franchise rights granted by the city and were regulated by municipal and state regulatory bodies. In virtually every major city, the street railway charged a flat 5-cent fare regardless of distance. This fee structure was a subsidy from riders who traveled short distances to those making longer trips, since operating costs were at least partially related to the distance the street railways needed to travel. This cross-subsidy was in the interest of municipalities since it made it more economically feasible to extend the geographical boundaries of cities by increasing the feasible home-to-work distance. The physical growth of cities, in turn, facilitated a growth of the municipal government's tax base. In addition, the street railways paid franchise fees to city governments.

After around 1914, a growing number of privately owned automobiles were competing with street railways. The faster autos attracted many short-distance passengers from street cars. Furthermore, the so-called jitneys competing with street cars offered customers more flexible destination service, since they were not physically restricted to travelling along specific street routes. The supply of jitneys available to commuters could also be rapidly increased during peak travel times. In short, jitneys offered commuters distinct advantages and were particularly attractive to commuters whom the flat fee structure penalized. Unsurprisingly, the street railways asked regulators for protection from these new competitors. Regulators imposed costly restrictions and fees on jitney drivers, making jitneys unprofitable to operate. The measures imposed were especially punitive for part-time drivers and those operating short-haul routes.

Eckert and Hilton continue their story by noting that buses eventually displaced street cars. However, the linear bus routes and the same flat-fee structures that street railways used led to bus transportation being largely displaced by private (i.e., not-for-hire) automobiles. The authors conclude that allowing free entry while ensuring that jitney operators and all other

users of the streets for transport services bore the full costs of their road use, e.g., road repairs, traffic signaling systems, and the like, would have given society the benefits of competition in urban transportation and saved consumers decades of unsatisfactory experience with inefficient—and very expensive—alternatives.

Peltzman (1968) assesses the effects of the suppression of competition by regulation in the US commercial banking industry. Specifically, he examines the effects of inter-state and intra-state restrictions on branch banking. In the period he studied, banks could not operate branch offices in some states, while in most other states, the number and location of branches were restricted. Furthermore, new banks wanting to enter faced daunting restrictions. The regulations, therefore, protected local banks in many cities and towns from competition. While the ostensible justification was that locally owned banks were essential to ensure lending and deposit services to small communities, the regulatory restrictions allowed the perpetuation of an inefficient banking structure, since banking as an industry was characterized by economies of scale. Furthermore, because regulation protected them from having to compete with larger banks, smaller local and regional banks could charge higher loan fees to borrowers, while offering depositors lower interest rates. In short, restrictions on banking competition were very costly and achieved a dubious purpose.

Final thoughts on regulation

The UCLA School does not contend that markets are perfect. As noted in Chapter 6, though, the UCLAers do not fall for the "Nirvana approach." They contend that imperfections of various sorts are a fact of life and that a failure to produce an "ideal" economic outcome is insufficient for one to conclude that governments should intervene in private market transactions. The burden of proof is on critics to show that the government intervention proposed will produce "better" results for society, where "better" identifies an institutional arrangement that results in greater value for members of society than any other arrangement. While many instances of potential market failure, including environmental pollution and global warming, can be identified, such identification does not imply the necessity for government regulation. In this regard, the School argues that arrangements invoking market incentives to address perceived problems such as global warming are likely to be

preferred alternatives to government regulation. For example, most economists believe that a revenue-neutral carbon tax is a better way to address the problem of carbon emissions than is a command-and-control system of government regulation.

It is appropriate to leave the last word to George Hilton. He asserted that, as a general rule, regulation should not be expected to produce consequences that are in the public interest. Rather regulation can be expected to produce a monopoly and/or to perpetuate services that would fail a market test. He states, "[R]egulation is the worst possible organization as an industry, one to which all of the alternatives are preferable" (Hilton, 1972: 53).