***The Half-Life of Policy Rationales: How New Technology Affects Old Policy Issues*, edited by Fred Foldvary and Daniel Klein, New York University Press, New York, 2003.**

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Foldvary and Klein, both professors of economics at Santa Clara University, propose that in any sector of the economy, the rationale for government intervention has a "half-life" determined by the rate at which relevant technologies advance. Though physicists might quibble over the suitability of the metaphor, this cleverly titled book aims to demonstrate that technological advancement tends to vitiate the "market failure" rationale for government intervention in the economy, and to enhance the case for free markets based on property rights, contract, and consent.

Markets—a regrettably impersonal term for the very personal choices made by billions of people every day about how to spend their time and money—depend on access to information, definable and enforceable property rights, and the ability to charge users for products and services. Yet in any given circumstance, each of these has costs that economists refer to as transaction costs. The theme running throughout the book is that "If technology trims transaction costs—by making it easy to charge users, define and enforce property rights, exit and utilize substitutes, gather information, gain assurance of quality and safety, enter and compete in markets—the invisible hand works better" (p. 1). In this view, technology creates more opportunities for mutually beneficial exchange by reducing the overhead costs of bringing those exchanges to fruition.

Many books and articles have speculated about what social, political, and economic changes new technologies might bring. *Half-Life*'s editors intend here to break new ground by explicitly examining the policy changes that new technologies *ought* to bring. The book's thirteen essays range across subjects as disparate as air pollution, medical licensing, banking, and postal services. All are tied together by their common focus on how new technologies facilitate voluntary provision of goods and services. Foldvary and Klein conclude that because of on-going technological advances "interventionists need to concern themselves especially with the intellectual half-life of their positions, lest they promote policies appropriate yesterday but no longer appropriate today or tomorrow" (p. 15).

Half-Life is divided into three main sections. "Metering, Excluding, and Charging" looks at commons problems—cases in which it was formerly more expensive or time consuming to charge users of a service, or to define or enforce property rights to a resource. For example, Reason Foundation's Michael De Alessi shows how marine tracking and "herding" technologies could become the marine equivalent of the brands and barbed wire that secured cattle ranchers' property rights in the 19th Century American west. Creating such marine property rights could mitigate the strong incentives to over-fish under the current de facto commons system for ocean resources. Other chapters address automobile air pollution, road financing and provision, substitutes for lighthouse services, and parking.

Regulations for consumer protection are founded on the premise that the high cost of information makes consumers vulnerable to false or misleading representations about the quality and safety of products and services, especially those that are complex or infrequently used. The second section of the book, "Quality Assurance and Consumer Protection" addresses this concern with specific examples from banking and medical licensing and, more generally, by showing how the Internet has drastically reduced the cost of creating, disseminating, and acquiring information and has become a source for almost any type of consumer information.

In the standard economic portrayal, public utilities have been considered "natural monopolies"—that is, an industry that, in a free market, will end up with a single monopoly provider, due to large, irreversible up-front costs, a low marginal cost of adding users, and a low unit-cost of distributing the product. Under this view, government must step in to supervise such industries and control their prices. The third section, entitled "Natural Monopoly?" assesses the validity of natural-monopoly claims past and present. Chapters on electricity and water conclude that whatever the validity of earlier rationales for natural monopoly, technology has obviated them by drastically reducing the cost of local water treatment and reclamation, and of local electricity generation. A chapter on the post office by Cornell economist Rick Geddes argues that alternatives like e-mail, phone, and fax make it implausible that a private postal company could exploit consumers. Furthermore, private companies such as UPS and FedEx have found ways to compete with the postal service in package delivery, driving down prices almost in spite of the government's efforts to "protect" consumers.

Though *Half-life* shows how new technology weakens the market-failure rationale for many government interventions, a number of the essays make it clear that there was often no legitimate rationale for government intervention to begin with. For example, Geddes notes that the original pretext for the postal service's letter-delivery monopoly was the claim that private companies would not provide service to rural areas due to its high cost. He then shows that what was really going on was a politically motivated cross-subsidy from the densely populated middle states to the more rural west and south. Rural areas would receive service without the postal monopoly, as shown by early pony express services, and more recently by private newspaper and package delivery services in rural areas. New technologies, such as optical character recognition, robotic mail sorting, and other automation have drastically reduced the cost of mail delivery. Telephone, fax, and, most formidably, e-mail have created an ever wider range of competitive substitutes for traditional "snail mail." The ironic result is that, while the postal monopoly has the purported goal of keeping rural residents from becoming isolated, an ever larger portion of what the post office actually delivers is commercial "junk" mail, rather than personal correspondence.

Other chapters similarly demolish other longstanding market-failure arguments. Wake Forest economist John Moorhouse shows how branding, reputation, warranties, return policies, and third party evaluation by organizations such as Consumers’ Union and Underwriters’ Laboratories were already providing information, trust, and quality assurance long before the Internet vastly increased the information available to consumers.

Several authors remind us not to fall into a double standard when comparing markets and regulation. Economist Peter Samuel, in his chapter on road financing, notes that from the point of view of many regulators and activists, markets fail when they “fail to be perfect” (p. 47); the implicit converse being that regulation succeeds so long as it does any good at all, regardless of offsetting side effects. The more relevant standard is whether freer markets are better than the alternatives. In their introductory chapter, Foldvary and Klein note that regulators generally suffer from an insurmountable knowledge problem when they try to centralize decisions about production and consumption. Most useful knowledge is decentralized, unarticulated, and dependent on specific local circumstances, and even then the “right” course of action varies from person to person based their specific values, goals and circumstances.

Market critics also often fail to assess how regulatory initiatives, regardless of how well intended, can go awry. Regulators suffer not only from insufficient knowledge, they often work under perverse incentives. Moorhouse notes, for example, the asymmetry in the consequences for a safety agency that makes regulatory errors. The Consumer Product Safety Commission (CPSC) and the FDA are at much greater risk if they fail to ban a dangerous product than if they mistakenly ban a protective or life-saving one. In the latter case the victims are unlikely to know they’ve been harmed. As a result, “prudent bureaucrats err on the side of issuing bans” (p. 131). Moorhouse cites research showing that the CPSC devotes few resources to actually measuring risk or to disseminating useful consumer information—exactly what one would expect from an agency that has little incentive to weigh the costs and benefits of its policies.

In some cases, government intervention has actually created the problems evaluated by *Half-Life*’s contributors. De Alessi shows how government fisheries subsidies and quotas have encouraged over fishing, over capitalization of fishing fleets, and inefficient harvesting. Rick Stroup and Jane Shaw, economists at the Political Economy Research Center, show how the Endangered Species Act, by giving the Fish and Wildlife Service the power to erase the value private landholdings, has encouraged property owners to destroy endangered or potentially endangered species and their habitat.

It is all well and good to discuss how current policies have gone awry, or how new technologies could facilitate better social and economic arrangements. A number of *Half-Life*’s contributors take the more challenging step of thinking about ways to get better policies implemented. In “Buying Time at the Curb” UCLA’s Donald Shoup notes that urban planners generally require minimum amounts of parking in new developments and often require it to be free. “Free parking inflates parking demand, and this inflated demand is then used to set the minimum parking requirements. Because of this circular relation, free parking dictates the design of urban development” (p. 63). Instead, charging market prices for parking would both reduce private costs and increase public revenue. The problem is how to get businesses—who want people to park near their shops—and residents—who don’t want strangers parking near their houses—to go along. According to Shoup, businesses and residents can be turned into advocates for market-priced parking by creating parking benefit districts in which parking fees are used to improve amenities in the districts where the fees are collected.

Of course, some policy changes would require much greater social and political changes. In these cases, the paths to get there—and the potential benefits—are therefore less obvious. Santa Clara University's David Friedman and Kerry Macintosh make a clear and technically convincing case for "free banking"—that is, eliminating central banks and allowing private banks to issue money. They also effectively address the major arguments against free banking and discuss historical examples where *laissez-faire* banking has functioned stably and successfully.

Yet despite the technical feasibility of *laissez-faire* banking, Friedman and Mackintosh seemed to me to place too large an information burden on the public. For example, in discussing bank failures and panics they suggest that "a concerned bank customer could simply check the newspaper to see whether there was any discount on the notes he held. If not, he would feel no urge to redeem them" (p. 115). I suspect many readers would not find this burden either simple or convenient.

More so than just about any other policy area, banking policy will probably seem complex and arcane to almost everyone who reads *Half-Life*. Money is so intimately linked in people's minds with their sense of health, welfare, and security that the idea of a *laissez-faire* money system is likely to strain the intestinal fortitude of all but the most die---hard libertarians. For better or worse, this places a greater burden on analysts to show how their proposals address the most intimate fears of the people who will have to live with them. Friedman and Mackintosh might have made a stronger case by addressing these concerns more explicitly.

While lucid and engaging overall, *Half-Life* does take an occasional tedious detour. For example, though cogently challenging natural monopoly arguments for provision of electricity and water, Alvin Lowi's two chapters sometimes get bogged down in engineering jargon and overly detailed catalogues of electricity-generation and water-purification technologies.

Klein and Foldvary are mindful that technology might not always enhance the case for free enterprise, and are careful not to take a good idea too far. They note several areas, including intellectual property and national security, where technological advancement potentially expands the legitimate role of government. Greater government intervention might be necessary to protect intellectual property rights against the ease with which music and books can now be digitally copied and disseminated. Yet this could also be seen merely as government protecting property rights—a legitimate government function in the eyes of most free-market proponents. Likewise, technological advances might create a greater national-security role for government, because "capabilities to create advance quickly, but not as quickly as capabilities to destroy" (p. 6). Depending on the specific measures and your point of view, national security policies could represent government's legitimate "night watchman" function, or unreasonable restrictions on constitutionally guaranteed liberties.

Whether you are interested in the role of government and markets, or the role of technology in society or in specific policy areas, *Half-Life* makes for stimulating reading. Technology advances far more rapidly than most government institutions are capable of responding. Foldvary and Klein should be commended for bringing together many disparate policy areas under one roof, and assessing the role of technology in promoting choice, freedom, and prosperity.

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