Readings
of particular interest

An Early Report on Free Skies

Airline Deregulation—The Early Experience by John R. Meyer, Clinton V. Oster, Jr., Ivor P. Morgan, Benjamin A. Berman, and Diana L. Strassmann (Auburn House, 1981), 287 pp.

The Airline Deregulation Act of 1978 was preceded by a period of "administrative deregulation" in which many of the historical constraints on airline freedom were relaxed. This study examines the effects of deregulation both in the earlier period and in the first two years under statutory deregulation. The authors' task was complicated by a series of market-disrupting events that occurred in the periods under study, such as a rapid rise in the price of fuel, problems with the DC-10, and a general downturn of the economy.

The authors find that, contrary to the expectations of many deregulation proponents, deregulation did not cause a massive reduction in the level of *standard* coach fares, even after controlling for increases in relative wages and fuel costs; real standard coach fares decreased only about 4 percent. But new discount fares carefully targeted at price-sensitive passengers increased overall traffic, so that the real average price per passenger-mile flown declined substantially, by about 17 percent. This change in price structure may have allowed the airlines to increase load levels and profits far more effectively than a simple across-the-board reduction in the standard coach fare. Nevertheless, it was possible that standard coach fares would still be cut, in line with earlier forecasts, as new airline entry and competition proceeded.

Airline productivity gains in the two-year span from 1977 to 1979, a period of first "administrative" and then statutory deregulation, roughly matched the gains during the previous six years under regulation (1970–76), even though there were no major technological sources of productivity gain in the period of deregulation. Some changes in the quality of service complicated matters: crowding may have reduced overall service quality, while more frequent flights may have improved it. The authors speculate that business travelers may have experienced less of a net gain (and possibly even a loss) compared with vacation travelers.

Individual airlines showed a wide range of strategies under both "administrative" and statutory deregulation. Nearly all local service airlines sought to extend their networks geographically, while only Braniff of the trunk airlines sought to do so. Though longer routes are generally thought to correlate with better aircraft utilization, the trunk airlines generally improved the latter without increasing the former.

Under deregulation, the airlines initially chose routes to fit their available aircraft rather than aircraft to fit their routes. This strategy worked so long as overall traffic was rising fast (from 1976 until roughly mid-1979). From mid-1979 on, however, a rapid rise in fuel costs and an economic slowdown caught the airlines with too much wide-body capacity. This apparently stemmed from earlier CAB rate regulations that made long hauls (dominated by wide bodies) much more profitable than short hauls (dominated by smaller planes). The wide-body surfeit stimulated price wars in 1979 and 1980 on transcontinental and other long-haul routes, leaving the formerly less profitable feeder routes to operate in relative tranquility and profitability.

The long-standing tendency for both trunk and local carriers to withdraw from the very smallest communities continued under deregulation. But while a few small cities had losses in scheduled service through mid-1979, far more had gains. Subsequently, the 1980 recession cut into traffic at large and small airports alike.

The Airline Deregulation Act guaranteed "essential" service to small communities for ten years, but also made it profitable to use smaller aircraft. Commuter airlines flying small prop planes replaced larger competitors on many small-city routes, generally resulting in more convenient departure times, more nonstop flights to the nearest major hub airport, and increased ridership. As one consequence, government subsidies dropped substantially.

While the authors feel that it is too early to draw conclusions on industry structure, larger carriers did not seem to be dominating the industry as of 1979. Mergers apparently had the purpose either of acquiring equipment inexpensively or of expanding routes quickly ("end-to-end" mergers). "Parallel" mergers that might limit competition were not encouraged by the CAB. In markets where only one or two firms had been dominant, their share was somewhat eroded, but in large cities, an increase in the number of carriers did not appear to reduce the share held by the market leaders.

Oil Price Controls in Perspective

The Economics and Politics of Oil Price Regulation: Federal Policy in the Post-Embargo Era by Joseph P. Kalt (MIT Press, 1981), 327 pp.

In the early 1970s, a long history of policies that had promoted the interests of domestic crude oil producers came to an end. Depletion allowances, protection from import competition, and state prorationing restrictions on production were all dropped or severely curtailed. In their place, the federal government established a pervasive scheme of price and allocation controls. That scheme gave way in turn to a system of stiff excise taxes under the Crude Oil Windfall Profit Tax Act of 1980.

In this book, Joseph P. Kalt, assistant professor of economics at Harvard University, dissects the major components of federal oil price regulation during the past decade. The unifying theme that Kalt finds among the successive policies is "a battle over the appropriate distribution of income within society, rather than the manifestation of some massive failure of markets and institutions to allocate the nation's resources efficiently."

The three most important federal initiatives were the "entitlements" program, crude oil price controls, and the windfall profits tax. The entitlement program was in effect from late 1974 through early 1981. It provided hefty financial benefits to selected interest groups, such as small refiners, oil-fired electric utilities, and most notably domestic refiners who used imported crude oil. On average, entitlements paid from one-tenth up to one-fifth of the cost of each barrel of imported crude oil, bringing about an increase in imports of roughly 1 million barrels per day—notwithstanding the official goal of "energy independence."

Price controls on domestic crude oil began with the wage and price freeze of 1971 and lasted until early 1981. Beginning in 1973, the controls took the form of constantly shifting, multi-tiered ceiling prices.

Kalt argues that the combination of controls and entitlements is best viewed as an income redistribution policy, rather than an energy policy. By early 1980, the price controls were extracting income from domestic crude oil producers at a rate of approximately $50 billion a year relative to unregulated market levels. The bulk of this, $44 billion, was allocated to users of crude oil through the entitlements program, to be shared by refiners and ultimate consumers. Some proponents of decontrol have argued that the refiners captured the value of these subsidies, leaving final consumer prices unchanged. But Kalt's analysis of price and import data indicates that the entitlements subsidy did in fact lower prices to oil consumers, with refiners and consumers splitting the subsidy sixty–forty. Overall, taking into account the whole range of special interest benefits from oil regulation, Kalt estimates that as of early 1980 refiners and consumers were receiving income transfers of approximately $32 billion and $12 billion a year, respectively. This redistribution entailed substantial efficiency costs, Kalt says: as much as $3 billion a year for private and public regulatory administration, $5 billion a year (in the final period of controls) in the added amount spent to import oil rather than produce it domestically, and $0.5 to $1.0 billion a year in deadweight waste from excessive oil consumption. Kalt estimates that the deadweight waste under the new regime of excise taxes is in the range of $2 billion to $3 billion a year.

According to Kalt, the windfall profits tax may not be much of a change, in either its distributional or its economic effects, from the price controls and the entitlements program it replaced. The newer measure's multi-tiered excise taxes closely resemble, in both pattern and effective level, the earlier price ceilings. By holding producers' after-tax prices considerably below market levels—extracting $35 billion a year from domestic crude oil producers—they discourage domestic crude oil production and boost import demand by 1 to 1.5 million barrels a day. Much of the windfall profits tax revenue, moreover, has been set aside for a number of programs designed to benefit the intermediate and final users of crude oil. Decontrol along with the windfall profits tax, Kalt says, represents less of a change in federal regulatory policy than one might have expected.

Clean Air: Implications for Health

Health and Air Quality: Evaluating the Effects of Policy by Philip E. Graves and Ronald J. Krumm (American Enterprise Institute, 1981), 156 pp.

Despite considerable scientific research on the health effects of pollution, there still is no "widely accepted theoretical guide to the nature of dose-response relationships," according to the authors of this book. Hence researchers using the same data can draw vastly differing conclusions, each one offering a dose-response function that seems to fit the data well.

Graves, an economist at the University of Colorado at Boulder, and Krumm, a research fellow at the University of Chicago, here propose a uniform methodology for empirically assessing the health effects of air pollution, and demonstrate its use by examining data on hospital admissions and pollution levels in Chicago. They also examine some of the earlier empirical work that has been done on health effects.

Acknowledging that hospital admissions are only a rough indicator of health effects, the authors argue that other ways of assessing health damage suffer from more serious drawbacks. Animals used in lab tests have respiratory and cardiac systems very different from those of humans. Human volunteers cannot be exposed to high dosages, for reasons of ethics, or to long-term dosages, for reasons of expense. "Cross-section" studies comparing different cities are undercut by the great mobility of the modern population, especially since the individuals most vulnerable to pollution are the most likely to move from a smoggy city. Studies of episodes of unusually high pollution, like those in Donora, Pennsylvania, in 1948 and London in 1952, may not reflect low-level, long-term dangers; moreover, there have been no such episodes since the late 1960s.

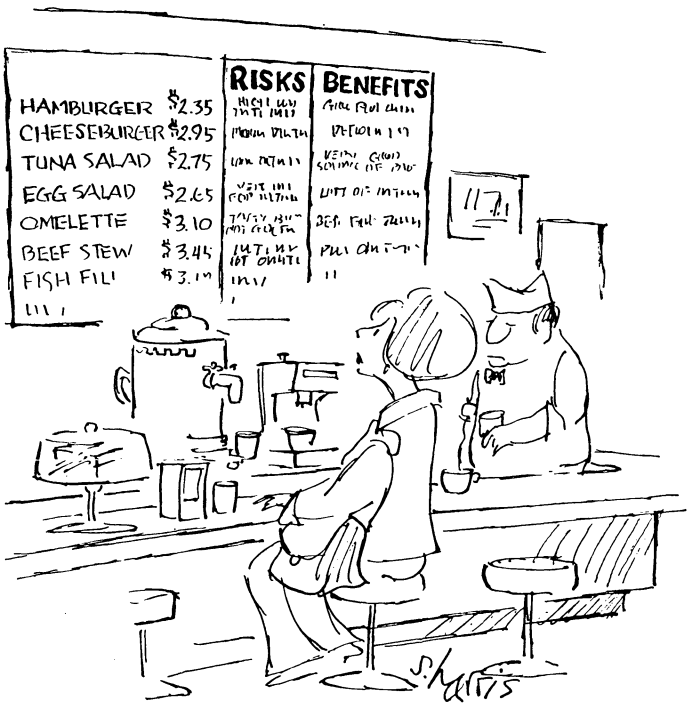
The authors' data suggests that at the levels studied, the damage done by a single pollutant increases in a faster than linear progression—that is, that later increments do more damage than earlier increments. The authors also found strong positive interactions between pollutants, so that a higher level of one pollutant increased the damage done by another. "The presence of interactions and nonlinearities," they write, "suggests that uniform standards are an inappropriate means of solving the pollution problem." A city with high levels of several pollutants may be best advised to crack down especially hard on one of them because of the interaction problem.

Pollution levels in large cities have generally come down since the 1960s, notably for particulates and sulfur dioxides, Graves and Krumm note. But most of the improvement can be attributed to some older, lower-cost anti-pollution measures, not to the more stringent rules of later years.

Risk and Regulation: The Food Additive Case

The Strategy of Social Regulation: Decision Frameworks for Policy by Lester B. Lave (Washington, D.C.: Brookings Institution, 1981), 166 pp.

In this book, Lester Lave of the Brookings Institution sets out eight "decision frameworks," six currently in use and two that have been proposed, that agencies could use in making decisions on health, safety, and environmental regulatory issues. He then applies these frameworks to various recent regulatory controversies, most notably those concerning food additives and contaminants.



Drawing by S. Harris; © 1979 The New Yorker Magazine, Inc.

The six frameworks in current use, ranked roughly according to the amount of data and analysis they require and the degree of flexibility they afford to the regulator, are (1) "market regulation," or leaving private markets to the forces of competition and self-interest; (2) "no-risk" standards such as the Delaney Clause, which tolerate no increase in risk no matter what the cost; (3) technology-based standards, such as those requiring use of a "best available control technology," which need not explicitly take up questions of costs and benefits; (4) risk-benefit, a vaguely specified framework that attempts to balance risks and benefits in a less formal and quantitative way than benefit-cost; (5) cost-effectiveness, which seeks the most efficient means of attaining an objective that has already been defined; and (6) benefit-cost analysis. The two untried frameworks are (7) risk comparison, which weighs the safety risks of various alternatives against each other, and (8) regulatory budget proposals, under which Congress would set annual targets for the burden regulation could impose on the economy.

The Food and Drug Administration is statutorily required to use the "no-risk" framework for carcinogenic food additives, but in fact it exercises considerable discretion. The FDA has moved against three additives linked to cancer in humans or test animals: saccharin, the preservative sodium nitrite, and the livestock feed additive diethylstilbestrol (DES). There is no clause comparable to the Delaney Amendment for carcinogens that occur "naturally." Thus the contaminant aflatoxin, which results from a mold affecting peanuts and some grains, is regulated less stringently, even though it has been linked to liver cancer in both humans and animals. (The FDA did act against another naturally occurring carcinogen, safarole, by banning sassafras tea.)

Each of the possible decision frameworks Lave discusses has its own implications for the control of these substances. At one extreme, no-risk policy would call for bans on all of them. For aflatoxins, however, this is utterly impracticable, since there is no completely effective way to keep aflatoxins out of the food supply; in the field, therefore, the regulator might be forced to move to the less restrictive mode of technologically based standards, including such drastic ones as banning the consumption of peanuts and of corn grown in the Southeast, where the mold is most prevalent. Risk comparison might dictate a ban on saccharin and DES, but not on nitrites, since they protect consumers against the risk of fatal botulism. Cost-effectiveness standards or a regulatory budget might show that consumer health would benefit if the agency shifted its attention from all of these substances to aflatoxins, or perhaps to other health hazards entirely. Benefit-cost, in Lave's estimation, would direct the FDA to leave saccharin alone and to regulate, but not ban, the others; risk-benefit would lead to similar results but with more scope for discretion and ambiguity, since the dollar value of health effects would not be assessed.

In the actual event, Lave notes, the FDA banned DES and saccharin. Congress forestalled the saccharin ban and also forced the agency to back off from tough nitrite regulations. Aflatoxin levels have come under regulation, and the agency has proposed lowering the permitted tolerance level in response to improvements in detection technology.

Lave concludes that quantitative analysis is feasible not only in the case of additives but for a wide range of other agency decisions as well. It can nudge agencies toward greater economic efficiency, he says, by lopping off the most egregious examples of regulatory excess.

The United States as Common Market

"Regulation, Federalism, and Interstate Commerce," edited by A. Dan Tarlock, principal paper by Edmund W. Kitch (Oelgeschlager, Gunn & Hain, 1981), 167 pp.

Advocates of a strong federal role in the regulation of commerce have warned since the earliest days of the republic that the states, left to their own devices, would erect restrictive barriers to trade, preventing savings from economies of scale and the division of labor. In a series of rulings between 1820 and 1860, the Supreme Court seemed to adopt this view, asserting its right in the absence of congressional action to invoke the commerce clause to invalidate state legislation that blocked interstate commerce. Since then, the Court has come to be viewed as the guardian of the American common market.

This volume contains the proceedings of a conference held in March 1980 at the Law and Economics Center of the University of Miami, sponsored by the Liberty Fund, on federalism and the regulation of interstate commerce. In the conference's principal paper, Edmund W. Kitch, professor of law at the University of Chicago, argues that the Constitution does not necessarily require the Court to maintain free trade between the states, and that the efforts of Congress and the Court to eradicate one kind of barrier to trade have sometimes created different kinds of barriers. For example, congressional jurisdiction over interstate industries such as railroads, interstate trucking, and aviation has led to barriers to entry within those industries that the states themselves might never have erected.

The nation's experience under the Articles of Confederation seems to support the case of the advocates of federal preemption. In the absence of any centralized authority over commerce, states enacted restrictive regulations and taxes to protect indigenous industries and increase state revenues. The *Federalist* refers to the "interfering and unneighborly regulation of some States, contrary to the true spirit of the Union, [that] have, in different instances, given just cause for umbrage and complaint to others."

But Kitch notes that interstate commerce was in fact relatively unimportant at the time that passage was written, because most commerce was with Europe. Many of the restrictions that caused friction between the states pertained more to international than to interstate commerce. For example, some states with major ports levied a tariff on goods brought there from points in other states for export.

Kitch argues that, in theory, states have adequate incentives to cooperate and to promote uniformity of regulation. He cites several examples of state regulations which initially hindered interstate trade but which, with time and under competitive pressure from traders in the interstate market, became less restrictive and ultimately ceased to be barriers at all. "In the short run, this approach to free trade may cause significant bargaining instability, as each jurisdiction tries to establish a bargaining position through bluff, threat, and implemented threat," Kitch says. "But in the long run, this system may provide more free trade than centralized authority because it places stronger incentives on each jurisdiction to promulgate efficient rules for both its internal and external commerce."

The Costs of Product Liability

"Products Liability Insurance, Moral Hazard, and Contributory Negligence" by Richard S. Higgins, in *Journal of Legal Studies*, January 1981, pp. 111-130.

The traditional negligence criterion in products liability law has been giving way to a standard of strict producer liability in the last two decades. Moreover, the defense of contributory negligence, which still survives in some jurisdictions under the names "mishandling" or "misuse," is rapidly being dropped altogether or replaced by "shared liability" rules. Con-

sumers are, in effect, forced to buy, along with a product, an insurance policy covering injuries from its use. Full producer liability thus amounts to full insurance, while shared liability is similar to a coinsurance or deductible clause.

One theory holds that this shift to producer liability is justified when consumers have less information than producers about product quality and performance and when the information they do have is biased. An opposing line of analysis emphasizes the problem of "moral hazard," the tendency of insurance to make the insured less likely to exercise care, as a reason to maintain partial or complete consumer liability. Richard S. Higgins, an economist at the Federal Trade Commission, outlines a model of product liability that takes into account both biased consumer information and moral hazard, and allows for alternative assumptions about how risk-averse consumers are.

Intuitively, producer liability both lessens the effects of information bias (by incorporating the expected cost of damages in the sale price of the product) and worsens the problem of moral hazard. And Higgins does indeed find that, where moral hazard is absent, consumers who are overly optimistic about product quality will fail under a consumer liability rule to purchase adequate insurance coverage voluntarily. Where moral hazard is present, however, mandatory insurance will often reduce consumer welfare. Even when consumers are overly optimistic, full insurance coverage generally will be less than optimal.

Thus consumer welfare is typically greater, Higgins says, where producers are allowed a defense similar to contributory negligence, in order to deter careless use of products by consumers. A clause wholly freeing producers from liability where the consumer has behaved negligently may be more effective at doing this, and may enhance consumer welfare more, than contributory negligence rules based on either a "deductible" or a "coinsurance" model, Higgins says.

Higgins's model also indicates that regardless of how risk-averse they are, consumers who hold unbiased information about product safety will be better off under consumer than under producer liability. When consumer information is biased, the effects on consumer welfare depend on the relative importance of moral hazard and information bias. The model also implies that the sale price of goods is higher (and fewer goods are accordingly purchased) under producer liability without a contributory negligence rule than under producer liability with such a rule, and higher in the latter than under consumer liability.

Hospital Insurers: Is There a Conflict of Interest?

"Regulatory Control of the Membership of Corporate Boards of Directors: The Blue Shield Case" by William J. Lynk, in *The Journal of Law & Economics*, April 1981, pp. 159-173.

Since at least as far back as 1914, when the Clayton Act forbade interlocking directorates among competing firms, the government has sought to regulate business behavior by determining who may sit on corporate boards of directors. In April 1979 the Federal Trade Commission's Bureau of Competition recommended that the commission venture into uncharted corporate governance waters by barring doctors from sitting on, or controlling, the boards of Blue Shield and similar health insurance plans. In the bureau's view, doctors have a self-evident interest in raising reimbursement rates for their services, so that removing physician influence from Blue Shield boards would remove one upward pressure on medical costs. William Lynk, an economist at Lexecon Inc., here offers evidence that contradicts this view.

Lynk first notes a theoretical reason why physician influence on health insurance plans might not take the form of simple upward pressure on rates. There is substantial variation in physicians' fees, including the fees billed to Blue Shield plans. Physicians are reimbursed at the lower of their actual charge or the plan's reimbursement limit ("allowance"). Lynk points out that each physician would like a reimbursement rate high enough to cover his *own* charges to Blue Shield patients, but no higher, because higher allowances do not benefit him and do make some of his competitors —physicians with higher fees than his—more attractive to Blue Shield patients. Since allowances either above or below the median fee level will be opposed by a majority of physicians,

physician influence on reimbursement policy should cause allowances to move toward the middle of the fee distribution.

The allowances set by individual plans are ordinarily well above the median charge. But this is due to the demands of the subscribers themselves, Lynk argues. Subscribers who demand comprehensive medical coverage want it to cover almost any physician's charge fully. A majority of physicians, however, would profit from tighter limits. Thus physician influence on a plan should reduce the size of its allowance, not raise it, if Lynk's theory is corect.

Lynk tests the latter hypothesis with three sets of data on Blue Shield reimbursements in 1977. One concerns payments for forty-five medical procedures under a Blue Shield policy available to federal employees throughout the United States. Another is a survey of twenty medical procedures under sixty plans. The third is a survey carried out by the General Accounting Office of reimbursement limits for seventeen procedures. The physician percentage of each plan's board of directors and the percentage of directors who must be approved by medical societies serve as Lynk's measures of doctor influence.

In every instance, Lynk finds, greater doctor influence is associated with lower allowances and lower actual payments. This effect was more pronounced when doctors themselves sat on the boards than when medical societies nominated representatives. Lynk also found that the Blue Shield plans with more doctors on their boards—despite their lower reimbursements—were more successful at getting local doctors to participate. Here, too, direct physician membership had stronger effects than did medical society nomination.

Regulators have directed their attention at the presumed conflict between doctors' and patients' interests, Lynk says. In this instance, however, competition within a group—doctors—appears to be at least as important in determining rates as conflict between groups—doctors and subscribers. If Lynk is correct, efforts to purge doctor influence from the plans may be of little use in lowering health costs.

[EDITOR'S NOTE: *On April 27 the Federal Trade Commission decided not to proceed with a rule on physician participation on Blue Shield boards.*]

No Rule without a Rulemaking?

(*Continued from page 14*)

tion with A, then surely the person who may complain of such unconstitutionality is only B. A has no gripe; he has had his day in court! And Francis Ford, in this case, is A.

There is, however, one basis upon which the Ninth Circuit's holding, though not its reasoning, could be affirmed. A distinctive feature of the case (which the court alluded to, but expressly disclaimed as the basis for its decision) was that, while the adjudication was in progress, a rulemaking was pending on a closely allied subject—*deficiencies* (as opposed to surpluses) in repossession cases. One might well argue that it is irrational, and therefore an abuse of discretion, for an agency to believe that the one problem best lends itself to adjudicatory, and the other to rulemaking, disposition. There would remain, of course, the problem of whether it was the decision to go with rulemaking or the decision to go with adjudication that was bad—but that could be resolved by the presumption in favor of rulemaking established by *Chenery*. ("The function of filling in the interstices of the [Public Utilities Holding Company] Act should be performed, as much as possible, through [the] quasi-legislative promulgation of rules to be applied in the future.") It is by no means certain, however, that even this argument will suffice to keep Francis Ford's chestnuts out of the fire. The agency did in fact offer a plausible reason for treating deficiencies in a rulemaking and surpluses in an adjudication. In its view the "unfairness" of the existing practices was clearer in the latter case (indeed, it thought those procedures actually violated state law). In such circumstances it chose to proceed by adjudication because that would force blameworthy companies to disgorge past profits, while rulemaking would be purely prospective.

Even if the decision in favor of Francis Ford is upheld on account of the parallel rulemaking, the principle thus established would hardly be applicable to many cases in the future. The depressing or encouraging reality is that the reasons for and against the use of adjudication instead of rulemaking are so diverse, so unquantifiable, and so dependent on the facts of the particular case, that the courts are most unlikely to police the selection.