
Readings

of particular interest

Shared Monopoly

Shared Monopoly and the Cereal Industry by Brian F. Harris (East Lansing, Michigan: Division of Research, Graduate School of Business Administration, Michigan State University, 1979), 169 pp.

The Federal Trade Commission's shared monopoly case against the three largest breakfast cereal manufacturers will, according to the author of the monograph, have important implications for government antitrust policy and marketing practices in concentrated industries. The FTC is charging that Kellogg, General Mills, and General Foods have created and share a monopoly primarily by using similar nonprice marketing practices in new product development, advertising, and sales promotion and by controlling how much shelf space retailers allocate to their brands. These practices, the commission claims, have deterred entry into the industry and allowed concentration levels to remain high, resulting in overcharges of 15 to 20 percent for breakfast cereal. The overcharges could be reduced if the manufacturing sector of the industry were restructured, with the major manufacturers being required to first divest themselves of a number of their plants and then to license on a royalty-free basis a number of their established trademarks. (The latter requirement would be unprecedented.)

Brian F. Harris, professor of marketing at the University of Southern California, finds that the "most unique feature of the case is the FTC's use of the term shared monopoly in place of the more traditional term, oligopoly," and that the distinction makes a difference. "For the first time in U.S. antitrust history, a number of firms have been charged formally with sharing a monopoly."

In analyzing the FTC's novel approach, the author identifies two bases for the shared monopoly theory. First, extending oligopoly theory

to include nonprice marketing practices of firms in differentiated oligopolies, the FTC argues that these practices constitute unfair methods of competition and violate section 5 of the FTC Act. Second, the FTC contends that, even if a tacit conspiracy does not exist, there is a direct relationship between the structure of the cereal industry and its performance. In other words, regardless of the behavior of firms, the existence of certain structural characteristics—high concentration, stable firm market shares, high entry barriers, and high product differentiation—provides sufficient evidence, per se, to constitute a violation of section 5 of the FTC Act.

Harris notes, however, that for the first time, the structuralist model is being applied to a segment of the food industry in which manufacturers and resellers affect the overall performance of the industry, especially the level of retail prices. Therefore, the restructuring of the manufacturing sector of the industry would not guarantee that resellers respond in ways to cause retail prices for cereal products to fall.

The author develops a theory of reseller decision making and uses it to analyze the possible effects of the proposed remedies on the pricing behavior of wholesalers and retailers. He concludes as follows: First, the entry of new cereal manufacturers that would occur under the proposed restructuring order would not guarantee lower retail prices. In fact, the adverse effect of a larger number of manufacturers on profit contributions of cereals at the reseller level could force wholesalers and retailers to increase selling prices. Second, by raising distribution costs, the FTC's restructuring remedies could simply reallocate profit margins between manufacturers and resellers without causing any decrease in retail price levels. Third, contrary to the claim of monopoly theory that heavy advertising by the large manufacturers is a major cause of high retail prices,

this advertising allows wholesalers and retailers to achieve profit contribution objectives at lower levels of gross margins and selling prices.

Harris concludes that "to achieve a significant reduction in cereal retail prices, reseller profit margins would also have to be reduced," perhaps requiring that "the reseller sector of the industry would also require restructuring." That would, however, "greatly increase the complexity of the problem and the regulator's task." Clearly, the structure, behavior, and performance of both manufacturers and resellers must be considered when devising an antitrust policy designed to improve the price performance of any industry with structural characteristics similar to the breakfast cereal industry.

Incentives as the Mother of Invention

The Impact of Tax and Financial Regulatory Policies on Industrial Innovation by Joseph J. Cordes, in cooperation with the Committee on Technology and International Economic and Trade Issues and the National Academy of Engineering (Washington, D.C.: National Academy of Sciences, 1980), 34 pp.

It is generally agreed that the climate for industrial innovation in this country has worsened, with serious implications for the well-being of the U.S. economy. In this monograph, economist Joseph J. Cordes of George Washington University identifies the federal tax and financial regulatory policies that significantly affect the innovation process and attempts to determine whether recent changes in those policies have encouraged or discouraged technological innovation.

Historically, investments in technological innovation have offered the potential of high returns in exchange for high risk. A government policy for encouraging innovation must deal, according to the author, with four areas: general economic stability, the climate for capital investment, incentives for research and development, and support for small technology-based firms. First, Cordes argues that an unstable recession-prone economy increases uncertainty about future profits generally and

therefore discourages all investment. But technological innovation may be particularly sensitive to basic economic instability, because investment in innovation requires long-term financial commitments. It follows that policies that improve the stability and promote the rational growth of the economy will also encourage innovation.

Second, the general level of industry's capital spending also affects the level of innovative activity, because much of the application of innovation is in new capital equipment. Therefore, measures that stimulate new investment necessarily speed the spread of innovations throughout the economy. In Cordes's view, while the corporate tax changes made in the Revenue Act of 1978 should increase corporate investment and therefore provide some stimulus to innovation, their effect is likely to be modest. A much more significant factor, tending in the opposite direction, is the failure to adjust the corporate tax base for the impact of inflation, thus reducing the real value of depreciation deductions. To encourage investment in capital goods generally and innovation in particular, depreciation should be allowed on the basis of replacement rather than historical costs.

Third, since R&D is obviously an important component of the innovation process, tax incentives to stimulate additional R&D are one means of stimulating innovation. Section 174 of the Internal Revenue Code provides that firms may deduct certain R&D outlays from income as a current expense, but may not expense the cost of the plant and equipment used in R&D or the costs of patents or processes. Cordes recommends that section 174 be changed to allow the immediate expensing of such R&D-related asset costs or to extend tax credits to those expenditures. This change would have its major effect on such industries as pharmaceuticals, where R&D costs are a substantial portion of the total costs of innovating.

Finally, Cordes finds that while several features of the tax code favor small businesses, others may unintentionally discriminate against them, particularly if they are new. Small firms benefit from progressive taxation of corporate earnings, deduction of dividends paid to shareholders of regulated investment companies, treatment of corporations with fifteen or fewer shareholders as partnerships

for tax purposes, and various provisions that permit individual investors to deduct from ordinary income investment losses in small businesses. On the other hand, loss offsets, depreciation deductions, and investment tax credits are helpful only to the extent that a firm, large or small, is profitable. To make sure that such measures are useful to new, initially unprofitable firms, Cordes recommends that their period of availability should be lengthened.

In addition, in light of the importance of equity financing to small technology-based firms, the author examines a variety of policies for encouraging such investment. These include reducing capital gains tax rates, liberalizing deductions for capital losses, allowing investors to roll over equity investments in small technology-based firms on a tax-free basis (provided any gains are reinvested in similar enterprises), modifying SEC regulations that restrict the rate at which investors may resell securities, adjusting the Regulation-A registration limit to reflect inflation, and ensuring that ERISA guidelines do not unduly discourage pension fund managers from investing in new, potentially high-risk technology ventures.

Whatever steps are taken, the author encourages a new commitment to innovation. Without it, he sees a further erosion of America's productivity and competitive edge.

The Seabrook Experience

Seabrook and the Nuclear Regulatory Commission—The Licensing of a Nuclear Power Plant by Donald W. Stever, Jr. (Hanover, N.H.: University Press of New England, 1980), 248 pp.

Taking a critical look at the Nuclear Regulatory Commission's licensing procedures, Donald W. Stever of the Department of Justice (formerly assistant attorney general of New Hampshire) analyzes the events and proceedings that led to the construction of a 2200-megawatt nuclear power plant at Seabrook, New Hampshire. The book begins in 1971 when the Public Service Company of New Hampshire (and its partners) first proposed Seabrook to the state's siting board. It traces the project through a maze of state and federal regulatory procedures and examines the antinuclear civil disobedience the project generated.

The four major issues raised by the Seabrook case—site suitability, risk assessment, financial qualification, and environmental impact evaluation—constitute the core of the analysis. Stever argues, to begin with, that preliminary site selection by utility management underemphasizes values of importance to future opponents and that state site-screening procedures have proven inadequate to cope with controversial issues. The result is inevitable controversy before the NRC, whose procedures are inadequately designed to resolve it.

From this perspective, Stever goes on to evaluate the NRC's reactor-siting criteria. Noting that the AEC's original criteria were apparently intended to compel the location of nuclear plants away from large concentrations of population, he describes how the AEC, in a series of subsequent decisions, began approving sites that were closer and closer to populous areas, and doing so without adopting any cognizable standard. This history explains how the NRC came to approve the Seabrook site, in spite of substantial population exposure and the questionable ability to evacuate an adjacent resort area. Policies such as this, Stever contends, contributed to civil disobedience at Seabrook and widespread public dissatisfaction with the NRC.

Second, Stever grapples with the problem posed by human risk assessment, evaluating various proposed methods for accomplishing it. He concludes that, although current NRC practice represents an unstated judgment that the level of risk is acceptable, there is no analytical basis for that judgment.

Third, on the financial qualification question, Stever notes that the Public Service Company of New Hampshire, with only Unit 1 under construction, is already in serious financial trouble. It has had to divest itself of a large portion of its ownership interest in the plant, is having trouble raising money to complete the project, and is facing rate difficulties before the state public utilities commission. This situation could have been anticipated: the testimony before the NRC contains compelling evidence of PSCNH's inability to finance the project. The commission, however, rather than reject PSCNH's license application, deliberately reformulated its financial qualification standard, rendering it essentially a nonstandard. The so-called Seabrook rule allows a utility to meet

the financial test merely by showing a history of favorable rate treatment at the hands of state authorities. Unfortunately for the PSCNH, the New Hampshire regulatory climate soured dramatically after its plant was licensed by the NRC. As an alternative to the Seabrook rule, Stever suggests a five-point test aimed at determining the applicant's ability to raise needed capital on the open market and the potential impact of a long-term shutdown of the facility on the applicant's system and on its financial stability.

Turning to the environmental issues raised in proceedings, Stever discusses the NRC's environmental impact analysis, its methodology for considering alternatives to a proposed project, and the interactions between the Environmental Protection Agency and the NRC. He finds that "where the thirst for energy is large and the economic commitment to a project significant, the government's ability to say no based on speculation about future damage to an ecosystem must be doubted."

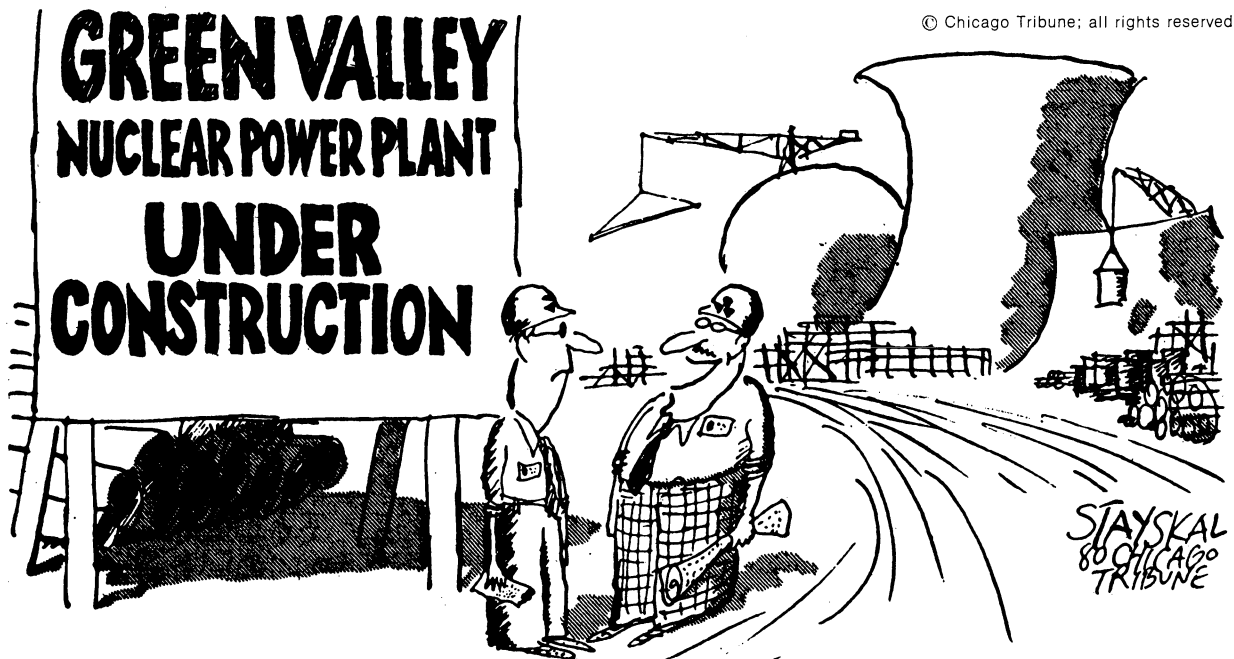
The book concludes with a study of the opposition to the project, tracing its growth from a small coalition of citizen groups to an aggressive sophisticated opponent, and then its fragmentation into two camps—those willing to work within the legal system and those choosing civil disobedience. Stever concludes

that antinuclear civil disobedience is harder to justify on a theoretical basis than similar acts aimed at racial injustice or government policies that are felt to be illegal or unconstitutional themselves. In the author's opinion, however, the procedures for citizen-group participation in the licensing process may be so restrictive that they may well foster the frustration with the system that led to confrontation.

Politics, Pressures, and Nuclear Power

"Congress, Regulation, and the Decline of Nuclear Power" by Barry R. Weingast, in *Public Policy*, vol. 28 (Spring 1980), pp. 231-255.

The "producer protection" model of regulation, which holds that a regulatory agency's policy making is likely to be captured by the industry it regulates, may be useful in explaining the behavior of the Interstate Commerce Commission and Civil Aeronautics Board, at least in the days before deregulation. But, according to Barry R. Weingast of the Center for the Study of American Business at Washington University, the model has its limitations. Weingast examines the Atomic Energy Commission and its successor, the Nuclear Regulatory Commis-



© Chicago Tribune; all rights reserved.

"We were plagued with protesters until we spread the story that this used to be the site of an old chemical waste dump."

sion, concluding that their behavior is better explained by a pluralist, or multi-interest group model in which an agency responds to both producer and nonproducer pressures.

Economists developed the producer protection model as a reaction to the older "public interest" model, which had depicted regulatory efforts as disinterested attempts by government to remedy market failures and thus advance the general well-being. The new model seemed to explain the propensity of agencies like the CAB and ICC to shield their industries from competition. Analysis of the origins of the agencies often revealed that there had been no real market failure to remedy in the first place. In addition, the "capture" of an established agency can be explained by the relative ease of coalition building. Producers are generally fewer in number and have a more concentrated interest in regulatory decisions than consumers or potential competitors. Lobbying by producers has smaller organizational costs and fewer "free rider" problems, and is thus more likely to be effective.

But, Weingast argues, the producer protection model does not explain the behavior of the newer regulatory agencies whose jurisdiction cuts across industry lines—agencies like the Occupational Safety and Health Administration, the Environmental Protection Agency, and the Consumer Product Safety Commission. Few observers believe that these agencies have been captured by the industries they regulate. According to Weingast, the behavior of these agencies can best be explained by what he calls a "multi-interest group influence model," in which producer and nonproducer interests vie for influence.

The Atomic Energy Commission/Nuclear Regulatory Commission regulates only one industry, nuclear power—which the AEC was originally designed to promote. But during the 1960s, Weingast says, the AEC gradually changed from an agency largely influenced by producers to one influenced by a range of pressure groups, particularly environmentalists. As the pressures changed, so did the agency's behavior: regulation became far more complex and stringent, construction delays drove up the cost of nuclear plants, and applications for new reactor permits dropped off sharply.

In the early years of the industry, both Congress and the AEC sought to encourage the de-

velopment of nuclear power through such measures as the Price-Anderson Act (which limited liability for nuclear accidents), federal stockpiling of uranium, and a program of outright subsidies. It was only after the termination of direct subsidies in 1963, ironically, that the industry began to take off. Orders for new reactors, which had been averaging only about one a year, rose to seven in 1965, twenty in 1966, and thirty in 1967.

However, as the applications began flowing in, a severe regulatory bottleneck developed. The time elapsing between a new plant application and commercial operation rose from 86 months in 1966 to 122 months in 1970. These delays were especially costly because capital represents such a large proportion of the total costs of nuclear power. "A plant ordered in 1965 at an estimated cost of \$120/kW cost \$240/kW on completion," writes Weingast. The ratio of actual cost to initial estimates reached three-to-one by 1968 and kept rising. By 1974, nuclear power had virtually been priced out of the market: new orders slowed to a trickle, and many previously announced orders were cancelled.

Why the bottlenecks? One possible reason is intervention in the licensing process by environmentalists and by municipalities seeking an assured share of power output. But this cannot fully explain the bottlenecks. As Weingast points out, the time lag for *uncontested* construction permits was increasing at least as fast as the lag for *contested* ones. Average delays for uncontested permits rose from nine months in 1966 to twenty-eight in 1970; for contested permits, from fourteen months in 1966 to forty-one in 1970.

Nor were these delays caused simply by inadequate agency resources for reviewing applications. Although the figures were not broken down by function until 1972, figures after that date show that while the AEC/NRC backlog of cases expanded, funding for the licensing process was expanding even faster. Congress, in fact, allocated more money to licensing during this period than the agency requested, apparently in an effort to expedite the licensing process.

The bottleneck grew serious at a time when Congress and the courts were expanding the AEC/NRC requirements—as was the agency itself. The agency added 25 new safety

standards in 1972, 90 in 1973, 143 in 1974, and 167 in 1975. In addition, a whole new set of issues having nothing to do with safety—issues like automatic antitrust review and “need-for-power”—began to complicate the licensing process.

All in all, Weingast concludes, environmental and other nonproducer groups were highly successful in influencing agency behavior in the late 1960s and 1970s. Moreover, the evidence suggests that while Congress was slightly more sympathetic to producers, it too was substantially influenced by environmental concerns. If the nuclear case is at all typical, U.S. regulatory bodies are susceptible to influence by many types of politically active interest groups, not just producers.

Speeding Up New Drug Approval at the FDA

FDA Drug Approval—A Lengthy Process That Delays the Availability of Important New Drugs, a report to the Subcommittee on Science, Research, and Technology, House Committee on Science and Technology, by the Comptroller General of the United States, May 28, 1980, 83 pp.

Responding to a congressional request, the General Accounting Office undertook to review the Food and Drug Administration's drug approval process. In the course of its investigation, the GAO interviewed U.S. officials and experts in industry, academia, and the FDA (and their counterparts in nine foreign countries). This report by the comptroller general contains the GAO's conclusions and recommendations.

The Federal Food, Drug, and Cosmetic Act requires the FDA either to approve new drug applications within 180 days or grant the applicant a hearing on the deficiencies found. If more time is needed, the agency and the applicant must agree to an extension. However, when the GAO studied 132 new drug applications made in 1975, it discovered that the FDA had approved only 69 (52 percent) by the end of May 1979 and had taken longer than six months to notify the applicant of deficiencies in 86 cases (65 percent). On average, it took the agency twenty months to act, and only one application was approved within the six-month statutory limit.

Among the drugs selected for study were fourteen considered by the FDA to be “important”—providing major or modest therapeutic gains over drugs already being marketed. A number of important drugs were available in other countries before they were in the United States, and, except for Sweden, other countries generally had shorter approval times. Although some of the fourteen drugs studied were available here before being available in some other countries, only one was available here first.

The GAO found six major factors that contribute to these delays in drug approval: (1) FDA guidelines that are imprecise and subject to different interpretation; (2) disagreements between the FDA and the industry involving both scientific and professional questions; (3) the agency's slowness in notifying drug firms of deficiencies in their applications and test procedures; (4) lengthy reviews of drug chemistry and manufacturing controls; (5) insufficient time spent reviewing applications and poor work-load management; and (6) incomplete new drug applications. These problems, the fact that Congress and consumer groups intensely scrutinize what has become an adversary process, and the FDA's essentially conservative approach all contribute to what the GAO concludes are excessive delays in drug approval.

The FDA has already established goals to decrease its processing time by 25 percent for important new drugs and by 15 percent for all others. But, the comptroller general notes, even if these goals are met, approvals will still take, on average, fifteen to seventeen months. Thus, in the interest of reinforcing the FDA's efforts, the report recommends that the secretary of the Department of Health and Human Services direct the FDA commissioner to take the following steps:

- Monitor the FDA's progress toward reducing processing times for new drug applications by 25 and 15 percent over a three-year period and revise actions as necessary to ensure that these goals are met;
- Give drug firms timely notice of deficiencies in new drug applications and of instances when their actions are responsible for delaying drug approvals;
- Expedite development of an improved post-marketing surveillance program and en-

sure dissemination of program results to reporting physicians; and

- Formally clarify the FDA's policy on the acceptance of foreign data.

The GAO also endorsed the proposed Drug Regulation Reform Act of 1979 (H.R. 4258 and S. 1075), which would require post-marketing surveillance by drug firms and informal procedures for resolving scientific disputes between drug companies and the FDA. This proposal would also reduce regulation in the early phases of new drug testing in an attempt to encourage more drug innovation in the United States. Moreover, in an attempt to get vital drugs into use sooner, the proposal would accelerate approval of "break-through drugs" and allow the restricted distribution of major new drugs before they would be generally available. On the whole, the GAO does not quarrel with the FDA's bias toward safety, but thinks its own recommendations could reduce unnecessary delays in bringing beneficial drugs to the U.S. public.

The Cost of Regulating Copper Production

"The Economic Impacts of Environmental Regulations on the U.S. Copper Industry" by Raymond S. Hartman, Kirkor Bozdogan, and Ravindra M. Nadkarni, in *The Bell Journal of Economics*, vol. 10, no. 2 (Autumn 1979), pp. 589-618.

This report on the impact of pollution abatement regulation on the copper industry focuses on the Clean Air Act Amendments of 1970 and 1977 and the Federal Water Pollution Control Act Amendments of 1972. It estimates the effects these regulations would have, if they were more vigorously enforced, on costs, prices, production, imports, capacity and its utilization, employment, and domestic consumption.

The authors—Raymond S. Hartman of Boston University and the Massachusetts Institute of Technology, and Kirkor Bozdogan and Ravindra M. Nadkarni of Arthur D. Little Inc.—compare two alternative scenarios developed by the Environmental Protection Agency with a "baseline" scenario to estimate these effects. The "baseline" scenario assumes the existence of the national ambient air quality standards,

but without additional rules specifying how those standards are to be achieved. There would be nominal industry compliance through the use of minimal permanent control systems, such as tall smokestacks and production curtailments. The two EPA scenarios assume more stringent restriction on smelter-refinery capacity. The "constrained capacity" scenario posits that new source performance standards are applied to new and replacement capacity and that variances are granted to "dirty" smelters that cannot install reasonably available control technologies. The "reduced capacity" scenario posits that new source performance standards are applied to existing as well as new and replacement capacity (that is, are not granted for "dirty" smelters), which would mean that four existing smelters would close over the forecast period.

The econometric model used by the authors takes explicit account of the oligopolistic decision making of the major group of the primary producers that existed for much of the post-war period through 1974. The model also explicitly incorporates the effects of pollution controls on copper production costs (capital and operating) and the capacity expansion and replacement decisions of the primary producers during all four stages of primary copper production: mining, milling, smelting, and refining.

The authors estimate the effects of the two pollution abatement scenarios relative to baseline conditions, finding these effects to be significant. Should capacity be effectively restricted by EPA regulations, domestic prices would rise considerably in the face of growing demand. By 1987, prices would be 29.4 percent higher under the constrained capacity scenario than under the baseline scenario. Using the reduced capacity scenario, prices would be 38.7 percent higher. The authors also find that, with both alternative scenarios, the production, consumption, employment, and smelter/refinery capacity of the U.S. copper industry would all be substantially lower. However, imports, secondary copper prices, and production costs would all be higher. With the costs of following EPA's technology-based approach so high, the authors recommend effluent fees as a more efficient, lower-cost approach for achieving society's goals.
