Readings of particular interest

The International Regulators

Regulating International Business through Codes of Conduct by Raymond J. Waldmann (American Enterprise Institute, 1980), 142 pp.

International codes of conduct for business, a relatively recent phenomenon, are becoming a focal point of conflicts between "North" and "South" on the world economic scene. Raymond Waldmann, a Washington attorney who is now assistant secretary of commerce for international economic policy, in this book examines some of the international regulatory codes that have been adopted already or are in the process of negotiation. While sympathetic to the principle of standardizing economic regulation across national boundaries, Waldmann says that the provisions of several codes should be of concern to the United States.

Treaties to regulate international commerce have long been common, in both bilateral and multilateral form. They have usually bound only governments, however, and affected private parties only indirectly. Where an international body monitored the agreement, it usually confined itself to informational and "housekeeping" functions.

The new type of code, Waldmann says, generally is intended to apply to the entire world, and increasingly regulates private bodies and transactions directly, instead of prescribing government treatment. The international body that enforces it has an independent existence of its own, and may have wide power to interpret the code's language, arbitrate and adjudicate conflicts, and cite private companies for violations. Its administrators are drawn from a burgeoning "economic diplomatic corps" stationed at international bodies in Geneva, New York, and elsewhere.

None of the codes has binding force within a country unless ratified by the country's government. Thus, the so-called Liner Code for ocean shipping adopted in 1974, one of the most ambitious codes of conduct, has yet to be ratified by any major maritime nation. This code would impose "cargo-sharing" rules, dividing most shipping trade between vessels of the buyer and seller nations, with only a small amount left to "third-flag carriers." In what Waldmann calls "a potentially far-reaching provision," the Liner Code also provides for mandatory binding conciliation of disputes, taking precedence over remedies available under national law. To go into effect, the code must be ratified by at least twenty-four states carrying at least 25 percent of total world tonnage; as of November 1978, thirty-three nations representing only about 6 percent of liner tonnage had ratified it. If the Liner Code does eventually go into effect, Waldmann notes, the United States will be affected whether or not it is one of the ratifiers, since U.S. ships often serve as third-flag carriers between foreign ports.

More far-reaching in implication are the ongoing negotiations for a Code of Conduct on the Transfer of Technology. In 1975, member governments of the United Nations Conference on Trade and Development (UNCTAD) began work on such a code, with rival drafts submitted by developed and less developed groups of countries. A working group has been meeting periodically since 1977 trying to iron out differences between the two sides.

Several Latin American countries, along with Spain and Portugal, have for some years controlled technology transfers from abroad. The Andean Common Market code, which may offer a preview of the international effort, seeks to prevent foreign firms from placing conditions on the export of their technology. Among the conditions prohibited in contracts for technology transfer, Waldmann says, are clauses that limit the volume of production, require the recipient to buy raw materials or technologies from specific sources, require the re-

cipient to transfer further improvements or inventions to the technology supplier, or allow the supplier to fix the sales price of products manufactured using the technology. A Mexican law similarly attempts to screen out "dependency-creating" investments, and both Mexico and Brazil prohibit contracts that limit a recipient's right to export products using the transferred technology. Portugal's code particularly restricts transactions between foreign firms and their branches in Portugal.

The draft code prepared by the less developed countries for UNCTAD's consideration included "a long list of provisions that must be guaranteed by the suppliers of the technology," among them that the technology be "suitable" and "appropriate," that local input and consultants be employed and local personnel trained to use the technology, that the recipient have access to all improvements, and that the payment for the transfer not exceed "market prices." UNCTAD has also suggested the establishment of national and regional centers for the transfer of technology, which Waldmann says would "identify technological needs; collect, store, and distribute information on alternative technologies; and evaluate and select appropriate technologies for the needs of each developing country."

The overall theme of the less developed countries' demands is that technology must be "sold," not "rented." Waldmann warns that this idea might make the owners of intellectual property unwilling to sell their knowledge overseas, especially at officially set prices, and that less developed countries might therefore never get the technology they desire at all. Most hazardous of all, he says, would be the overturning of existing contractual arrangements, especially between parent firms and their foreign subsidiaries.

In 1973 the United Nations Secretariat proposed an even more sweeping system of regulation—an international code of conduct for multinational corporations. The UN Economic and Social Council established a commission in December 1974 to come up with such a code, and a UN Center on Transnational Corporations began to operate in November of the next year to provide research and other support. While these groups have not reached any final conclusions, they have produced annotated outlines of code provisions which indicate the drift of the negotiations. One outline calls for multinationals to abstain "from requesting their home governments to exert pressure on host governments beyond normal diplomatic representation"—putting the code, Waldmann says, "clearly on the side of expropriating countries in their continuing contest with expropriated companies." Another working group is addressing the question of corrupt practices; participants differ as to whether the problem should be addressed through an international agreement or through unilateral action by nations. (See Perspectives, p. 11.)

While expressing some reservations, the U.S. government has repeatedly backed the concept of international codes of conduct. Secretary of State Kissinger, at the fourth UNCTAD session in Nairobi in 1976, gave what Waldmann calls "full but general support" to technology transfer initiatives, without going into details. The United States has also endorsed mandatory sanctions against corrupt practices, breaking ranks with other developed countries on the general issue of whether code application should be voluntary. Waldmann notes that the United States has also lent its support to a related type of international activism—the so-called Common Fund, a mechanism to set the international levels of commodity prices.

Incentives in European Water Pollution Control

Incentives in Water Quality Management: France and the Ruhr Area by Blair R. Bower, Remi Barre, Jochen Kühner, and Clifford S. Russell (Resources for the Future, 1981), 302 pp.

In France and the industrial Ruhr valley of West Germany, water polluters pay effluent charges based on the amount and type of pollution they emit. Economists have sometimes cited these arrangements as instances of incentive-based standards, contrasting them with command-and-control standards specifying the exact discharge treatment processes polluters must adopt. The latter are said to characterize U.S. pollution control.

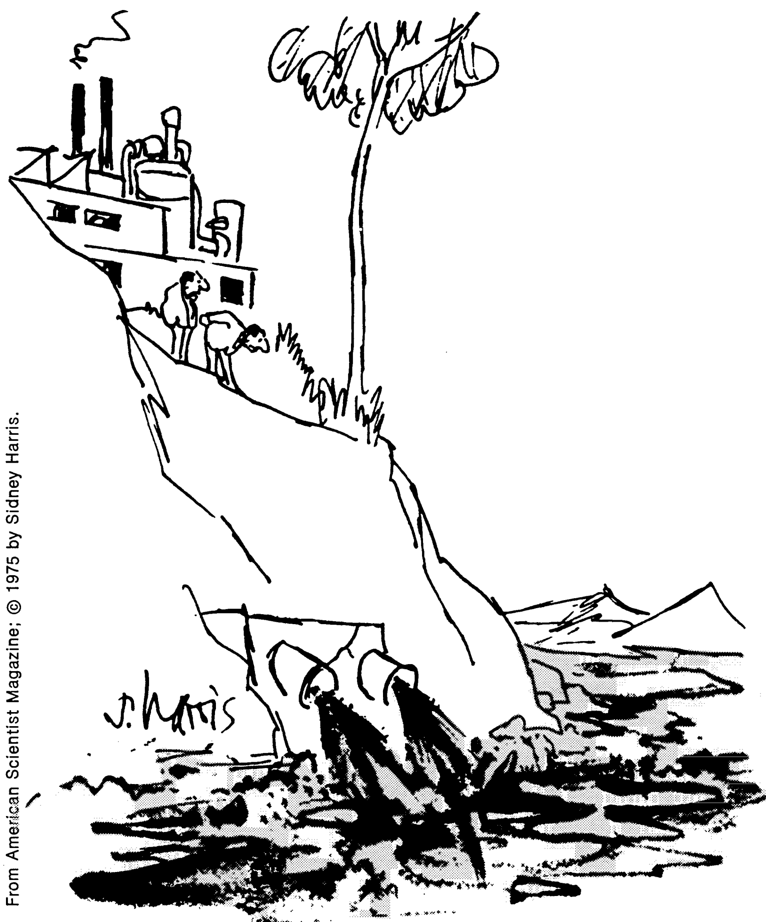
The authors of this report (Bower and Russell of Resources for the Future, Barre, of a French consulting firm, and Kühner, an inde-

pendent consultant) survey the two European systems in some detail, and conclude that such a view may be unwarranted for three reasons. First, the European and indeed the U.S. systems of water pollution control are a blend of incentive and command elements. Second, while the European systems appear to work well, there is not sufficient data to decide whether they work better than ours—or, if so, whether the incentive elements make the difference. Finally, the authors note, in the two systems analyzed effluent charges are set at levels reflecting not the criteria favored by economists (such as the marginal damage done by pollution) but simply the revenue needed to fund pollution control efforts.

At the heart of both the French and the German systems are discharge standards embodied in permits. Subsidies are available for constructing treatment plants (and for making some in-plant process changes) and, in the French system, for rewarding a plant's subsequent performance in pollution reduction. To a significant extent these subsidies are financed by the effluent charges. And since the program of subsidies must be mapped out with fair certainty for several years at a time, the level of the charges is set to provide sufficient revenue to fund the anticipated subsidies (plus, where applicable, the other environmental actions and the administrative costs of the responsible agency). Thus the charges applying to individual activities are set at levels meant not to approximate marginal damages, to stimulate certain degrees of treatment, or to produce a specified improvement in water quality, but purely to raise a given amount of revenue.

Toward this end, the projected revenue needs of the agency are apportioned over projected discharges in order to calculate a charge per unit of emission. The most easily explained method is that used in the Ruhr area, where an index (often referred to as a "population equivalent") combines several key measures of pollution (biochemical oxygen demand, suspended solids, dissolved solids, and toxic substances), and polluters must pay a set fee for each index-unit they emit. Under the French system the agency's projected costs are divided among the major pollutant categories (biochemical oxygen demand, suspended solids, salts, and toxics), and unit charges on each are based on the anticipated emissions in those categories. These anticipated discharges were originally based on rules of thumb for all pollution sources of a particular type, such as breweries or tanneries, but are increasingly based on periodic sampling of discharge. However, Russell and Bower note,

> sources that believe their waste streams to be cleaner than allowed for in the rule of thumb can demand individual sampling (paid for by the charging authority or by



From American Scientist Magazine; © 1975 by Sidney Harris.

"What's the difference? It was a man-made lake in the first place."

the source, depending on outcome of the measurement); but those activities doing worse than implied by the rule of thumb pay only the rule of thumb charge and are only in trouble if they violate (and are caught violating) the terms of their permits.

Because most of the fees are plowed back into subsidies for waste treatment, Russell and Bower observe, "the sources in the region end up in aggregate about where they would be without either charge or subsidies but with only their permit requirements to meet." Particular sources, of course, can fare better or worse financially than this average. French municipal waste treatment plants, for example, receive subsidies but do not pay effluent charges, which are instead collected through the largely private water supply companies.

Another key to the program's political success in France "appears to have been the very gradual raising of charges to operational levels. The initial charges were essentially trivial and thus sources had a chance to get used to the mechanism before the payment could even be felt." Over time, the real charge levels continue to grow as population and industrial growth require greater and greater treatment efforts to prevent pollution levels from rising.

The book notes in passing that in 1976 West Germany enacted a law that does impose charges in line with one of the models favored by advocates of incentive systems. But as the imposition of charges does not begin until 1981, there is as yet no experience with this law.

When the Public Servant Gets Sued

"Suing Our Servants: The Court, Congress, and the Liability of Public Officials for Damages" by Peter H. Schuck, in *The Supreme Court Review*, vol. 1980, pp. 281-368.

One of the most remarkable developments in public law doctrine during the last decade has been the dramatic expansion of the liability of individual public officials—federal, state, and local—for money damages. The Supreme Court's decisions since 1978 have had the overwhelming effect of enlarging the liability of officials and governmental units and narrowing the immunity of governmental units and of most officials. In this article Professor Peter Schuck of the Yale Law School probes the likely implications of this change.

Beginning with the proposition that to pose the question of the appropriate scope of official liability "is one way to ask how we wish to govern ourselves," Schuck speculates on the possibility that "a remedy designed to compensate victims and deter official illegality might in fact defeat some important social objectives and ignore others. Such a remedy might spawn new injustices less visible and thus less tractable."

The author contends that rules governing official liability can be evaluated by the extent to which they advance a number of social objectives: compensating victims of official illegality; deterring officials from engaging in misconduct; encouraging them to execute their duties in a decisive, selfless, and socially beneficial manner; shifting losses from individuals to larger social groups; reinforcing community norms concerning the morality of certain behavior; equity; and avoiding perverse redistributions of wealth. While these objectives almost always conflict to some degree, Schuck points out, the dominant tendencies of tort law, administrative law, and constitutional law have converged in recent decades in ways that strongly encourage courts to expand official liability. Thus, contemporary tort law emphasizes compensation, loss-spreading, and deterrence, even where they conflict with the goals of morality and vigorous decision making. Modern administrative law has legitimated and expanded judicial influence over the exercise of bureaucratic discretion. Constitutional law confirms and encourages two shifts of power—first, from state and local officials to federal officials, especially federal judges; and second, at the federal level, from Congress to the agencies and judiciary.

Schuck then attempts to predict the behavioral consequences of legal rules that increase the exposure of public officials to personal liability for damages. He focuses on what have been called "street-level bureaucrats"—policemen and other law enforcement personnel, school teachers and school board members, social workers, administrators of mental hospitals, inspectors, parole officers, prison officials, and the like. Drawing upon published empirical studies, he examines the distinctive

nature of their working environment, including their interactions with members of the public, their official goals and duties, the risk that they will harm others, the scope of their official discretion, the kinds of incentives they face when making a decision, and their political, institutional, and resource constraints. Facing the prospect of personal liability, Schuck argues, such an official "has an unusually strong incentive to minimize the costs to him of a particular course of action" (at least within what Schuck calls his "duty constraint") even if this does not maximize social benefits; "indeed, in the extreme case he would be willing to forgo all such benefits so long as he could thereby reduce even slightly the costs to him of a given decision." Moreover, the street-level official has "ample scope" to engage in self-protective behavior in ways that escape detection or effective control. These stratagems can include inaction, delay, and excessive formalism, as well as changes in the character of the eventual decision.

The author emphasizes that, for several reasons, we cannot be certain how often and to what social effect officials employ these self-protective devices. For example, officials have other reasons besides fear of liability for using these devices; moreover, the victims of such behavior are usually unaware either that they are being injured or that their injury has been caused by some official's personal risk-minimizing strategy. Schuck concludes, however, that the extent of self-protective official behavior is probably both substantial and increasing.

Next, Schuck considers whether giving most street-level officials a qualified "good faith" immunity is sufficient to discourage this kind of self-protective behavior. After reviewing the way in which courts have actually treated the immunity issue, he concludes that "the qualified, 'good faith' immunity standard, far from assuring an official that vigorous decisionmaking will be rewarded, is pregnant with risk to him: a rather small risk that he will ultimately be held liable, a somewhat higher risk that the immunity will ultimately be denied"—whether or not he is found liable in the case at hand—"and a substantial risk that a full-dress trial will be necessary to establish its applicability and scope." Schuck says that while the government can assume some of its officials' risks by providing them with free defense counsel, purchasing liability insurance for them, and indemnifying them for any claims, these measures do not suffice to eliminate all serious risk to officials. The result of these risk-shifting arrangements may be the worst of all worlds: encouraging self-protective official behavior, denying valid claims, and where government is immune, denying victims of official illegality an adequate remedy against insolvent defendants.

In the final section, the author contends that the existing system of official liability fails to achieve the intended degree of compensation, deterrence, and other social objectives. He maintains that a superior system would integrate three elements—a substantial expansion of governmental liability (especially at the state level), a contraction of official liability, and a strengthening of systems of administrative control of employee misconduct. Schuck then discusses how such a system might be designed. He concludes by considering a paradoxical relationship between the official liability remedy and the values it seeks to secure: in the world of the street-level official, a more powerful remedy may in the end achieve less of those values.

A Policy Built on Shifting Sands?

"Bureaucracy, Entrepreneurship and Natural Resources: Witless Policy and the Barrier Islands" by William J. Siffin, in *Cato Journal*, vol. 1, no. 1 (Spring 1981), pp. 293-311.

The 300 barrier islands on the Atlantic seacoast, stretching from Cape Cod to the Mexican border, form the most elaborate chain of this kind in the world. They range from small elevated sandbars to islands of more than 100,000 acres, and contain such cities as Miami Beach, Atlantic City, and Galveston. Their exposed position puts them in the direct path of devastating storms: in the past eighty years, according to the National Hurricane Center, some 12,000 persons have been killed and about $13 billion in property has been destroyed by storms sweeping inland across barrier islands.

According to William Siffin, professor of political science and public and environmental affairs at Indiana University, several federal

policies indirectly promote the development of barrier islands, placing lives and property at needless risk and diverting resources away from potentially more productive investments. The most important of these policies is the federal flood insurance program, which subsidizes property loss risks in flood-prone areas. The program has nominal control over the building standards of the properties it insures, and it can encourage local communities to institute land-use controls in flood plains—both of which powers are intended to keep casualty losses down. But since the rates for the riskiest areas are set far below what would be actuarially sound, the program is expected to pay out much more to barrier island property owners than it gets back from them in premiums.

South Padre Island, Texas, is one such vulnerable island. In 1967, Hurricane Beulah rendered more than 90 percent of its dwellings uninhabitable. By 1978, Siffin writes, the federal government had written flood insurance for South Padre and neighboring Port Aransas, with a combined permanent population of 2,000, amounting to $464 million.

"Insurance makes all the difference in the world in a place this prone to hurricane damage," South Padre's mayor reportedly said. "The boom began in 1971 when we started getting mortgage money." Federal insurance administrator Gloria Jimenez estimated in 1980 that an actuarially sound insurance program might require premiums of as much as $14,000 a year on private residences. If Congress ever cuts off the subsidy, she said, "the uproar will be horrendous."

Settlement of the islands is also encouraged by disaster relief programs. After Hurricane Frederick did extensive damage to the Alabama-Mississippi coast in 1979, for instance, the Army Corps of Engineers spent $80 million cleaning up debris, and the Small Business Administration's disaster loan fund disbursed $50 million in less than a year to help local businesses rebuild. The Federal Emergency Management Agency likewise provides a range of grants and services to storm-struck localities. At the same time, agencies like the Army Corps of Engineers and the Commerce Department's Office of Coastal Zone Management finance hurricane protection projects and the development of state regulations designed to guard against the storm damage.

Federally financed public works are another important spur to barrier island development, according to the author. Foremost among these are roads and bridges. After Hurricane Frederick destroyed a bridge linking Dauphin Island (population 1,200) to the Alabama mainland, the Federal Highway Administration authorized $33 million to build a new bridge. The total market value of the island without the bridge, Siffin says, was only about $7 million.

The Corps of Engineers dredges harbors and navigation channels, replenishes beaches, and attempts to stabilize shorelines against erosion. Because shoreline erosion is a natural process on the sandy islands, Siffin warns that such stabilization may be at best a palliative. Environmental Protection Agency grants fund much of the expense of waste-water treatment plants and sewers for the islands, and the Office of Coastal Zone Management, the Economic Development Administration, and the Farmers Home Administration finance a variety of other public improvements.

Taken as a whole, Siffin argues, these programs constitute an "unintended system" that shifts much of the costs of barrier island development from local landowners to the general public, with the predictable result that these costs are incurred in unreasonable measure. In the absence of a shift in federal policy, Siffin predicts, the urbanization of the islands will proceed at a rapid clip.

Rent Control: From Amid the Rubble

Rent Control: Myths and Realities, edited by Walter Block and Edgar Olsen (Vancouver: Fraser Institute, 1981), 335 pp.

Both Canada and the United States have seen a revival of interest in rent control in the past decade. In this book, economists Walter Block of the Vancouver-based Fraser Institute and Edgar Olsen of the University of Virginia assemble new and old essays on the theory and practice of rent restriction.

That rent control should have spread in the late 1970s is in a way paradoxical, argues Ted Dienstfrey of the California Housing Coun-

cil, because rents rose less rapidly in that decade than consumer prices and much less rapidly than the cost of home ownership: from a 1967 base, rents were up 78 percent in mid-1979, consumer prices 121 percent, and home ownership costs 168 percent. Dienstfrey also notes that public attitudes on the issue are highly ambivalent. A California Field poll taken a year after Proposition 13 found that 73 percent of tenants believed their own rents to be fair, but that 81 percent believed that rents in general were unfair. (See Viewpoint, page 13.)

New York City's experience with rent control is the best known. In 1940, Olsen writes, before rent control, the vacancy rate in New York City, for owned and rented property taken together, was actually higher than in other cities—7.3 percent versus 4.7 percent. In 1950, with almost all cities under federal rent controls, the comparable figures were 1.1 percent for New York City and 1.4 percent for other cities. By 1960, when almost all cities other than New York had lifted controls, the figures were 2.0 percent and 4.0 percent.

Several essays document the decline in housing quality that has accompanied New York City's housing shortage. Thirty-four percent of the city's controlled apartments suffered heating system breakdowns, according to a Census Bureau survey cited by Frank Kristof of the Rent Stabilization Association. By contrast, the survey found heating breakdowns in only 13 percent of the city's decontrolled units of similar age, and in only 20 percent of apartments of similar age in northeastern central cities generally. Thirty percent of the controlled units had holes in the walls or ceilings, compared with 16 percent for uncontrolled units and 19 percent for apartments in northeastern cities. Overall, according to a 1977 HUD report, rent control has reduced the New York City tax base by an estimated $1.5 billion, costing the city government $115 million annually in tax losses.

Bertrand de Jouvenel and F. W. Paish, in essays from the late 1940s, recount far more drastic examples of rent restriction in France and England respectively, which have both had controls since World War I. In France, the maximum allowable rent was set in 1947 at 6.8 times the 1914 rent, even though retail prices were 99.8 times higher than in 1914. "A dollar a month will pay a wage-earner's rent in Paris," de Jouvenel says, speaking of the situation soon after the 1947 edict. "To put it another way, a month's rent for an individual worker costs little more than six packets of the cheapest cigarettes." The only ways to obtain a vacant apartment (vacated, generally, through the death of the previous tenant) were to get a government requisition or pay the owner a bribe of $500 to $1,500 per room.

Although England did not suffer as severe an inflation as France, rents there still lagged far behind increases in the price level, according to Paish. In some cases rents could be changed only when the units became vacant: "If a house was last let in 1815, then the rent paid at the time of the battle of Waterloo is the standard rent today." A recent study indicates that the percentage of English households living in privately rented housing has fallen from 61 percent to below 15 percent over the more than sixty years of controls, according to contributor Richard Ault of Louisiana State University. F. G. Pennance of the University of Aberdeen notes that by 1970 the only free sector of the housing market, furnished lodgings, was also the only sector where supply was increasing. In 1974 a Labor government brought furnished units under controls as well.

Among other essays collected in the volume are Milton Friedman and George Stigler's 1946 *Roofs or Ceilings?* and a 1930 lecture by Friedrich von Hayek drawing on Vienna's experience with controls. The "fossilization" of housing patterns in that city, Hayek argues, kept workers from finding residences close to their jobs and thus increased their demand for transit: "The cause of Vienna's increased tram traffic, which doubled between 1913 and 1928 at a time of diminishing population, can only have been this inhibited mobility."

Block, Olsen, and Fraser Institute director M. A. Walker take up the question of how decontrol can best be achieved. Decontrolling vacant apartments, often advanced as a relatively painless way out, has at least one major drawback, Walker says: there is no reason for investors to believe a government's promises. New York City, as Dienstfrey and Kristof observe, made such a promise in 1947, only to renege on it in 1969. Olsen and Walker propose phasing out controls gradually, with a specific termination date set for the future; immediate decontrol, they maintain, would be too risky

politically. Block, however, holds that gradual decontrol frustrates natural processes of adjustment and postpones the emergence of proper incentives for investors and developers.

Several contributors quote Swedish socialist economist Assar Lindbeck's remark: "Next to bombing, rent control seems in many cases to be the most efficient technique so far known for destroying cities." The book provides some graphic illustrations. At the start of each chapter is a photograph of a devastated, rubble-strewn urban scene; at the back of the book is a list of which photos are of cities with rent control and which are of bombed-out cities in wartime.

Regulation and Mine Safety: The Statistical Link

"Can Government Regulate Safety? The Coal Mine Example" by Michael S. Lewis-Beck and John R. Alford, in *American Political Science Review*, vol. 74 (September 1980), pp. 745-755.

A coal miner working in 1932 was more than four times as likely to be killed on the job as one working in 1976. In the intervening forty-four years Congress passed three major laws increasing federal regulation of mine safety—in 1941, 1952, and 1969. This article, by Michael Lewis-Beck of the University of Iowa and John Alford of Oakland University, investigates the extent to which the three laws contributed to the improvement in safety. It concludes that the 1941 and 1969 laws significantly reduced the death rate in coal mining, while the 1952 law did not and in fact stopped the ongoing decline in death rates.

Lewis-Beck and Alford begin with a look at the broader debate over the effectiveness of safety regulation. They group the participants in the debate into three categories, which they label "radical," "reformist" and "reactionary." The first and third groups share, for entirely different reasons, the view that mine safety regulation must be ineffective, the authors say. The "radicals" hold that it is at most symbolic, a way to salve the public conscience until the next big mine disaster, and that the interests of mine owners inevitably prevent any real change. The "reactionaries" hold that rules and regulations cannot control human error, and that the carelessness of miners and the inherent dangers of coal mining will cause about the same number of accidents no matter what the regulators do. The last group, the "reformers," believes that regulation can bring about safer conditions.

To isolate the effects of the mine safety laws, the authors carried out a statistical analysis of the data for annual fatalities per million man-hours from 1932 through 1976. They used a regression equation with variables representing changes in mining technology, the size of mines, and the ratio of deep mining to surface mining. (It was important to allow for the effect of these variables since small mines are riskier than large ones, and deep mines riskier than surface ones.) Three other variables represented the influence of the 1941, 1952, and 1969 laws.

During the 1930s, they found, the fatality rate drifted with no evidence of a declining trend. Then, after the 1941 law was passed, the death rate went into a decade-long decline during which a coal miner's chance of dying on the job was cut by about one-third. This trend was arrested around 1952, at about the time the second law was passed, and for nearly two decades the death rate again showed no signs of improvement. Finally, in the early 1970s, it began a sharp drop that continued to 1976, the end of the period studied.

The author's regression analysis came up with strong negative correlations between the death rate trend and the passage of the 1941 and 1969 laws, and an almost equally strong positive correlation between the trend and the passage of the 1952 law. What characteristics of each law could account for these effects? The 1941 law gave federal inspectors the right to enter the mines; their safety recommendations, however, were not binding. Lewis-Beck and Alford speculate that the inspectors' mere presence may have led operators to take some simple and cheap safety steps. The 1952 law gave the Bureau of Mines the power to enforce safety measures aimed at preventing "major disasters," but these accounted for less than 10 percent of all fatalities. Furthermore, because the legislation did not apply to mines employing fewer than fifteen miners, it covered only about a fifth of all mines. According to the authors, all parties concerned showed a lack of

interest in enforcing the 1952 law—even the United Mine Workers, which ceased to have an adversary relationship with management after 1952. The 1969 law was a "tough" one, they say, and established a detailed set of health and safety standards. It was also costly: by one estimate it was largely responsible for a rise of 10 percent a year in the cost of eastern deep mining, and by another estimate it contributed to a drop in output of more than 30 percent per miner.

Another variable that may explain the success of safety legislation is its intensity of enforcement. The authors charted the rise in the health and safety budget of the Bureau of Mines (later the Mining Enforcement and Safety Administration), and found that it had a significant correlation with the degree of safety in the mines. The budget figures were stable through the 1930s, jumped sharply in 1942 and continued to rise for ten years, increased very slowly from 1952 to 1969, more than doubled from 1969 to 1970, and continued rising thereafter.

These results, the authors note, do not entirely vindicate any of the three schools of regulatory thought. The apparent success of the 1941 and 1969 laws should confound the "radical" and "reactionary" critiques; but the apparent failure of the 1952 law should give pause to the "reformer."

Environmental Hazards and the Sensitive Individual

"Sensitive Populations and Environmental Standards" by Robert D. Friedman (Conservation Foundation, 1981), 54 pp.

The Environmental Protection Agency and the Occupational Safety and Health Administration, in fixing permissible levels for pollutants and other health hazards, have from the first sought to protect particularly sensitive individuals, such as asthmatics and the elderly. Both agencies interpret the law as requiring such protection, although neither the Clean Air Act nor the Occupational Safety and Health Act speaks in so many words of such sensitive populations.

Robert Friedman, currently a staff attorney at the Federal Trade Commission, maintains that the agencies' interpretation is reasonable. Using this premise as a jumping-off point, he explores the legal and policy implications of such protection.

Friedman first focuses on EPA's latest ambient air standards for lead and ozone, issued under the Clean Air Act. While EPA must attempt to protect the "most sensitive" in setting a standard, he argues, the definition of that term is essentially arbitrary. In the case of lead, for example, more and more sensitive subsets of the population can always be identified, so that ultimately there is no level of lead in the ambient air that could be considered "safe." Thus, Friedman argues, the identification of a most sensitive population is, in reality, one way for EPA to make a policy decision as to the degree of protection it will require. Neither the language nor the legislative history of the Clean Air Act provides EPA with much guidance on how to make that decision, since considerations other than health (such as cost or technological feasibility) are specifically held to be irrelevant in setting national ambient air quality standards.

The author notes that the Clean Air Act incorporates the concept of "threshold" levels of pollutants below which there are no adverse health effects, and requires EPA to set standards with a margin of safety below the threshold. But science, he says, has been unable to fix such thresholds, especially for particularly sensitive groups. If the threshold concept is tenuous in the case of such groups, the idea of a margin of safety below the threshold is equally tenuous. Without a scientifically definable threshold, decision makers are again forced to fall back on their own judgment, and the resulting standards will not be based strictly on some identifiable quantum of exposure that must be avoided for the protection of health.

Of particular interest to the author is the question of regulating hazardous pollutants. Here, again, EPA is charged with considering only health when setting standards. The issue of sensitive populations has not yet become critical because almost all hazardous pollutants regulated so far have been carcinogens, for which scientists have been unable to identify safe thresholds for *any* individual (thus making moot any consideration of sensitive populations). According to Friedman, EPA faces a

quandary: it must reconcile its mandate to look only at what is necessary to protect health with the realization that for carcinogens only a zero emissions level is thought to be entirely without risk.

Turning to OSHA, the author notes that the language, legislative history, and judicial interpretation of the Occupational Safety and Health Act over the years all point to an obligation to protect sensitive populations, even though the act makes no specific reference to the issue. This has led to controversy in the development of OSHA standards for cotton dust and lead. Nevertheless, OSHA's dilemma is much less acute than EPA's because OSHA's authority is statutorily limited by the requirement that its standards be feasible. Congress has thus implicitly recognized that it may not be technologically or economically feasible to protect all workers from all risk. In both the cotton dust and lead standard, the author says, OSHA accordingly attempted to set exposure levels as low as was feasible, acknowledging that many workers in the most sensitive group would still not be protected.

Of course, as Friedman points out, feasibility itself is not a hard-and-fast concept, but will depend to some extent on an evaluation of the health risks involved in any given case. At some point in the standard-setting process, it might not be considered "feasible" to achieve an insignificant incremental health benefit, however measured, in light of the costs to be imposed. It is the courts that have had to wrestle, so far, with what "feasibility" means in the context of particular regulations.

One other course of action, open to OSHA but not to EPA, is to allow employers to monitor workers and remove susceptible individuals from the site of the hazard when their vulnerability becomes apparent. Although such medical surveillance may not be of use in the case of carcinogens, it is an important tool in both the cotton dust and lead cases, Friedman says.

The author concludes that as our techniques for identifying ever more sensitive populations become more refined, the concepts of thresholds and margins of safety become increasingly "archaic." The result will be to call into question, in more and more regulatory decisions, society's ability and willingness to provide environments that protect such groups.

Overseas Ethics, Four Years Later

(Continued from page 12)

on the other hand, has objected to publishing interpretations and guidelines, and has only reluctantly and temporarily agreed not to prosecute firms that follow the official Justice guidelines. Even if the two agencies cooperate, SEC registrants will likely face different enforcement rules than nonregistrants.

For all of the above reasons, work is proceeding on Capitol Hill to revise some of the statute's more controversial provisions. Senator John Chafee (Republican, Rhode Island) has introduced S.708, which would add a "materiality" requirement to the accounting section, eliminate the "reason to know" standard of responsibility for an agent's acts, require increased compliance guidance by the Justice Department, and transfer civil jurisdiction over the bribery provisions from the SEC to Justice. Chafee's bill would also legalize payments that were legal in the country in which they were made. The Reagan administration has gone further, urging full repeal of the accounting provisions and the SEC's enforcement role. Knowing falsification of accounting records to facilitate corruption would remain illegal under both the proposals.

As one possible way of restoring their competitiveness, many businesses have called for an international antibribery pact. Negotiations have been proceeding for years in the United Nations on this subject, with agreement nowhere in sight. (See Readings, p. 50.) The seven industrialized countries that met at the 1980 Venice economic summit agreed to work toward a multilateral pact of their own, but again there is no prospect that it will ever be completed.

Some proponents of the act assert that retaining it will give the United States a consistent position when it argues for an international pact; some opponents fear that the other industrialized nations will find it worth their while to perpetuate their current competitive advantage by stalling at the talks. One might wonder whether American business's current enthusiasm for an international pact, if indeed it does arise entirely from competitive motives, would evaporate if this country were to repeal its law.