ECONOMIC RENTS AS A BARRIER TO DEREGULATION

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Rent seeking has been part of government regulation since at least 1887, when the railroads succeeded in gaining partial government enforcement of their cartels (Hilton 1966; Kolko 1965). Recent theories of regulation (Stigler 1971; Peltzman 1976) focus on this rent-seeking or wealth-transferring aspect of government regulation but are not particularly helpful in predicting when and where new regulatory initiatives will succeed. Nor do they necessarily predict when and where deregulation will succeed.

The past two decades have seen a remarkable combination of regulation and deregulation. During this period, the federal government has assumed wide responsibility for regulating occupational safety, product safety, and environmental discharges. At the same time, regulation has been sharply reduced or abandoned in trucking, airlines, banking, crude oil, natural gas, and cable television, and the courts have forced a major upheaval in telephone regulation. How can these diverse trends be explained by any theory of wealth transfer or rent seeking?

In this paper I argue that the wealth transfer theory also helps to explain the areas where legislated deregulation will occur. Once Congress effects wealth redistribution—whether intended or not—through regulation, it finds it very difficult to reverse course. I argue that this is not only true for long-standing programs of economic regulation but also for the newer health-safety-environmental regulation, where rent seeking is as prevalent as in the older regulatory programs.

Cato Journal, Vol. 6, No. 1 (Spring/Summer 1986).

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Economic Deregulation—The Limited Role of Congress

The recent wave of economic deregulation has been remarkable from several perspectives. As late as 1975 it would have been difficult to predict that Congress would deregulate trucking, airlines, and (partially) railroads, and that even oil, natural gas, depository institutions, and cable television would be subject to a substantial modicum of deregulation.

The traditional Stigler-Peltzman theory of wealth transfer would seem to apply to regulation in these industries. Regulators have cartelized the suppliers who otherwise would face the discipline of market competition. Why, then, in the late 1970s, did the diffuse victims of regulation apparently rise up and inflict mortal political wounds on the more concentrated beneficiaries of these policies?

I doubt that we have a clear solution to this puzzle. Breyer (1982, pp. 191ff.) argues that legislated deregulation occurred when public-spirited congressmen and staffs publicized the "mismatch" between regulation and the public interest. Derthick and Quirk (1985, chap. 2) are largely in agreement, for they stress the role of economists and the economic literature in promoting deregulation. One does not have to be a cynic, however, to question the thesis that it was the persuasive testimony of regulatory economists that moved Congress to reverse course so suddenly in the 1970s.

Obviously, the inflationary pressures of the time helped. The Ford and Carter administrations inherited the inflationary problems created by OPEC, and both administrations sought single-shot assaults on the price level to slow the pace of inflation. Regulation provided some convenient targets.[1] There were proposals to deregulate trucking, airlines, cable television, and natural gas. The deregulatory legislative proposals that actually passed, however, were only those involving trucking and airlines, although some progress was made in natural gas, railroads, and, later, depository institutions.[2] Nevertheless, Congress has been unable to pass deregulatory legislation for telephone service, television broadcasting, old natural gas, insur-

[1]Both administrations established regulatory reform groups to advance deregulation proposals, and both used the Council on Wage and Price Stability to induce regulators to be more aware of their effects on economic welfare.

[2]President Ford proposed deregulation of airlines and trucks, but both were passed in the Carter administration. In 1978 the Natural Gas Policy Act was passed, loosening the government's grip on new natural gas but keeping controls on "old" gas. In 1980 Congress passed the Depository Institutions Deregulation and Monetary Control Act, expanding the asset powers to thrift institutions, extending NOW accounts to all depository institutions, and phasing out interest-rate ceilings over a six-year period.

ance, or the merchant marine, despite equally compelling cases for action in these areas. Regulation in many of these latter markets, of course, has probably produced greater welfare losses than Interstate Commerce Commission (ICC) regulation of trucking or Civil Aeronautics Board (CAB) regulation of the airlines.

There has been little discussion of deregulation of television broadcasting (see Noll, Peck, and McGowan 1973; Besen et al. 1984), even though the market concentration in the television industry is the result of a decision by the Federal Communications Commission (FCC) to limit spectrum allocations. Obviously, the licensees have reaped enormous benefits from this contrived scarcity. The ratio of capitalized rents to the reproduction cost of assets in television broadcasting is higher than in any other federally regulated industry.[3]

Nor has Congress entertained proposals to eliminate its cartelization of the merchant marine. In fact, it has recently acted to strengthen this government-created cartel.[4]

The obstacle to deregulation of "old" natural gas is to be found in another form of wealth transfer, inadvertent as it might have been. It is doubtful that Congress could have known it would confer extremely large rents on purchasers of regulated, old natural gas when it passed the Natural Gas Act. Given the unequal geographical distribution of old and new gas consumption and that most of the old gas is supplied by the large oil companies while the high-priced new gas is more likely to be supplied by small independents, Congress has been unable to move toward deregulation of old gas. Their inaction defies persuasive evidence that such regulation distorts the allocation of energy supplies and reduces the development of natural gas reserves.[5] There are simply too many consumers, pipeline companies, and independent gas suppliers who would lose from such deregulation.[6]

[3]Crandall (1978). The capitalized value of the rents is estimated to be more than the reproduction costs of television industry assets.

[4]See Jantscher (1972) for an analysis of maritime regulation; see General Accounting Office (1982a) for a more recent measured critique.

[5]See Broadman (1985) for a review of current problems created by natural gas regulation; see Breyer and MacAvoy (1974) for an earlier analysis of natural gas regulation.

[6]It is far from clear that the regulation of "old" gas has transferred wealth from producers to consumers. The pipelines may have captured much of the rents, rather than the consumer (see the testimony of William A. Niskanen in Docket No. RM85-1-000, Federal Energy Regulatory Commission, 18 November 1985). If deregulation would benefit the large oil companies that have a large share of the old gas, while hurting many of the smaller independents that supply much of the high-cost new gas, it is not surprising that deregulation of old gas proved politically unpopular.

Nor is it likely that Congress could have predicted that federal-state regulators of telephone service would allow long-distance rates to be raised far above the cost of service in order to subsidize local service.[7] Nevertheless, there are now very large rent transfers between urban and rural telephone subscribers and between frequent and infrequent users of long-distance service. Legislative proposals to end these major pricing distortions through partial deregulation inevitably include the creation of a fund to bribe some of the losers. Even with provisions for such a fund, however, Congress has been unable to pass any significant amendments to the 1934 Communications Act.

In summary, it is misleading to think of deregulation as a sea change in representative democracy in which the victims rose up to deal the government-cartelized sellers a series of legislative defeats. More often than not, Congress failed to pass deregulatory statutes or even to consider them. Too many markets are still regulated—despite the welfare losses that such regulation undoubtedly creates—for one to believe that the political economy of regulation changed overnight in the 1970s. Much of the deregulation that actually occurred was, as we shall see, hardly the result of a social consensus that regulation was reducing economic welfare.

Deregulation by Legislation

Remarkably, legislative deregulation has been narrowly confined to transportation industries (and to the reversal of crude-oil regulation that developed at the time of OPEC-I). Thus, there is not all that much to explain if one wants to ask why Congress chose to enact deregulatory statutes in the past decade.

The two industries that were extensively deregulated by legislative action, trucking and airlines, did not benefit very much from regulatory cartelization. Airlines were not earning large regulation-induced monopoly rents before 1978 (see McMullen 1985), and capitalized operating rights were worth only 15 to 20 percent of revenues in the trucking industry in the 1970s (American Trucking Associations 1974; ICC 1980). The transfer of rents from the owners of capital in these industries to consumers was small—perhaps $400 million in the case of trucking and a negligible amount in the case of airlines.

The major losers in airline and trucking deregulation were the unionized employees of these two industries. Table 1 provides data on average hourly earnings and employment in these two deregulated industries and several others that have avoided congressional

[7]See Wynns (1984) for an excellent discussion of the evolution of telephone regulation.

TABLE 1

AVERAGE HOURLY EARNINGS, NONSUPERVISORY WORKERS, AND EMPLOYMENT IN SELECTED INDUSTRIES, 1975–84

Year	Nonfarm Private Sector	Trucking	Airlines	Radio & TV	Communications: Services	Communications: Equipment
		Average Hourly Earnings (Dollars per Hour)				
1975	4.53	6.00	7.22	5.10	5.54	5.25
1980	6.66	9.18	9.55	7.44	8.51	7.94
1984	8.33	10.46	11.60	9.68	11.31	10.78
		Percentage Change				
1975–84	83.9	74.3	60.7	89.8	104.2	105.3
1980–84	25.1	13.9	21.5	30.1	32.9	35.8
		Total Employment (Thousands)				
1975	62,259	1108	326	154	1176	457
1980	74,486	1284	402	202	1356	551
1984	78,187	1300	419	230	1387	615
		Percentage Change				
1975–84	25.6	17.3	28.5	49.4	17.9	34.6
1980–84	5.0	1.2	4.2	13.9	2.3	11.6

SOURCE: Bureau of Labor Statistics, *Employment and Earnings.*

surgery. The difference between hourly earnings in trucking and airlines and earnings elsewhere in the economy suggests that truckers and airline employees have clearly lost in deregulation. Trucking wages rose by only about half of the nonfarm private average in the 1980–84 period, while airline wages rose by 80 percent of this broad average. In the industries not deregulated by Congress, broadcasting and telecommunications, wage increases were substantially above the average for the economy.

Regulation may allow workers to bargain for more lenient work rules and higher wages. This was surely true for the airlines and may have been so for trucking. As Table 1 shows, employment growth in trucking and airlines has been below the average for the private economy since 1980, and broadcasting has been above the average. The rapid substitution of capital for labor caused by the electronics revolution apparently has kept employment growth low in the telephone industry and, therefore, in the aggregate of all communications services.

In the case of airlines, Bureau of Labor Statistics data show very little loss in real annual wages for flight attendants and mechanics. Only the pilots have suffered real income losses since 1980, but even they may be recouping some of these losses now. However, the number of hours worked has probably increased for flight crews as the new competition from nonunion carriers has forced the older, established carriers to reduce total labor costs.

Labor also has been the loser in transportation deregulation. An ICC (1980) report, issued before the 1980 legislation that deregulated trucking, predicted that truckers' wages would be reduced by 21 percent in five years by deregulation. Despite this startling prediction, Congress passed the legislation.

Given the level of wages in the trucking and airlines industries under the regime of regulation, it is hardly surprising that competitive pressures have pushed them back toward the average for the nonfarm private economy. But why were the unions involved and the union movement in general so impotent in fending off deregulation? One explanation is that the union movement had peaked by the mid-1950s.[8] By the late 1970s, the share of the labor force in unions had declined substantially, and many of the heavily unionized industries were under attack from imports. As a result, the union movement had precious little capital to devote to legislative battles for the airlines and trucking—especially the latter, given the status of the Teamsters within the labor movement.

Deregulation Without Legislation

The de facto deregulation of telephones, cable television, and financial institutions was achieved without the active participation of Congress. In some cases the regulatory authorities or the courts effected the deregulation, in others a combination of unforeseen circumstances was responsible. Although political forces may have been involved to some extent in these exercises, it is difficult to argue that concerted collective action was responsible for the abolition or reform of decades of rent-creating regulation.

Telephones

In the case of telephones—the most important example of deregulation in terms of its contribution to social product—the changes in regulatory policy seem totally unguided by a consistent political purpose. When the FCC allowed private microwave carriers in 1959,

[8]Bureau of Labor Statistics data show that the share of union members in the private labor force peaked in 1954.

it could not have known that it would be forced to license MCI and other specialized carriers ten years later.[9] When it licensed MCI, it could not have known that it would find itself with no defense against the company's unauthorized entry into long-distance (switched-message) service.[10] And when it failed to block MCI's entry into traditional long-distance service, it had no policy, nor even a methodology, for setting rates for MCI's connections with the local telephone companies.[11]

The failure of the FCC to foresee the problems that competitive entry would create led to conflicts between AT&T and the new competitors that the commission could not arbitrate. The competitors challenged every AT&T attempt to reduce its competitive rates, but the FCC had no idea of the relative costs of different services on the AT&T network. As a result, the FCC was unable to approve AT&T tariffs because the commission had no framework or data on which to base such decisions.

AT&T also controlled the new competitors' access to customers through its operating companies. When the Justice Department filed an antitrust suit because of AT&T's use of exclusionary practices, the commission lost control of telephone policy.[12] The antitrust decree that broke up AT&T in 1982 was not the result of a direct political process.[13] Indeed, it was the inadvertent outcome of a series of inadvertent results from regulation.

The question remains of why definitive, legislated deregulation has not occurred in the telephone industry. In the 1960s and 1970s, federal-state regulators created a system of pricing access to local connections for long-distance calls that paid the local exchange carriers far more than the cost of the connection (see Wynns 1984). For example, in 1982 interstate telephone calls accounted for 8 percent of the minutes of telephone use in the country, yet 26 percent of the $39 billion of total accounting costs of telephone service were allocated to interstate calls (Wynns 1984). The pricing formula used to allocate this $10 billion per year in revenues greatly benefited many rural states at the expense of states with large urban populations. Moreover, since long-distance access was overpriced, and because

[9]See Wiley (1984) for a brief review of the landmark cases in telephone regulation.

[10]The FCC tried to block MCI's entry into switched long-distance service, but it failed to convince the courts that it had a satisfactory rationale for doing so.

[11]For more than 15 years, the FCC was unable to determine that any AT&T tariff was lawful because it simply could not divine AT&T's costs for individual services.

[12]U.S. v. AT&T et al. Civil Action 74-1698 (D.D.C. 20 November 1974).

[13]U.S. v. AT&T et al. (D.D.C. 11 August 1982). Decision by Judge Green on proposed settlement.

businesses accounted for a disproportionate share of long-distance calls, business telephones generally cross-subsidized residential service. Thus, the pricing system that developed without legislative guidance led to multibillion dollar annual rent transfers between states, from business users to residential users, and from urban to rural areas.

Even though Congress is not responsible for the distortions in telephone pricing, it has found it difficult to pursue deregulatory legislation that would lead to more efficient telephone rates. In fact, Congress has been the major obstacle to the FCC's attempt to set more efficient rates for access to the telephone network. In this case, the rural interests, small businesses, and vocal defenders of the consumer's right to low monthly rates have prevailed over urban and large business users and, incidentally, sound economics.

Cable Television

Cable television provides a less dramatic example of deregulation without legislation or even legislative guidance. In the 1960s the FCC began to limit cable's right to compete with broadcast stations, on the rather spurious grounds that such competition might destroy local public-service broadcasting.[14] The television station licensees enjoyed enormous rents, and they successfully lobbied the FCC to protect them from any new competition, even though Congress seemed to stand aside.

To protect broadcasters, the FCC erected complex rules governing the number and variety of signals that a cable system could carry, but these rules were abolished over a four-year period beginning in 1975 without any new legislation or apparent change in the political strengths of the affected parties (Besen and Crandall 1981). Pay cable rules were invalidated by the Court of Appeals in 1976,[15] and the commission refused to revisit the issue, despite the continuing objection of broadcasters to this form of competition. It is difficult to find a significant change in the economic landscape or in costs of organizing common interest groups that would explain the dramatic shifts from no regulation to a regulatory stranglehold on cable and back again to virtually no federal regulation in just 14 years.

Depository Institutions

Financial deregulation provides yet another example of deregulation without changes in legislation, albeit a less perplexing one. As interest rates soared following the Federal Reserve's tightening of

[14]See Besen and Crandall (1981) for a review of the history of cable television regulation.
[15]Home Box Office v. FCC (567 F 2d 9), 1977.

money in 1979, thrift institutions were faced with unprecedented disintermediation. This increased the pressure on regulatory authorities to allow thrifts to offer high-yielding money-market instruments to stem the outflow of deposits. Negotiated orders of withdrawal (NOW) accounts began to undermine the prohibition on interest rates for commercial bank demand deposits and the limits on time-deposit interest prescribed by Regulation Q. Eventually, all thrifts and commercial banks were permitted to compete for deposits without regulatory limits on interest rates (see Carron 1982, chap. 1).

Similar deregulation has not occurred, however, on the asset side of financial institutions. While regulation has been liberalized somewhat, there are still important limitations on the portfolios of thrifts and commercial banks, partly because of the moral hazard problems created by deposit insurance.

In sum, much of the important deregulation that has occurred in the last decade has not been due to a decline in the political power of rent seekers before the legislature. Indeed, I contend that because of the large rent transfers created by regulation in these industries, deregulatory legislation was impossible.

Deregulation in some of these industries has been inadvertent, and in others it has been forced by events and court decisions, which are, one could argue, less influenced by political coalitions of common interest groups than is legislation. It is possible that the decline of regulation in the late 1970s and early 1980s was simply an example of rapid technological and economic change rendering old regulatory policies obsolete. This, of course, does not explain why the interests that benefited from regulation could not persuade Congress to reestablish their cartels or otherwise restore their rents through new legislation.

These examples of substantial deregulation demonstrate that where large rents were created by regulation, Congress has been generally unable to enact deregulatory statutes. Nevertheless, deregulation of one variety or another occurred anyway. In other cases, such as television broadcasting, old natural gas, and the merchant marine, regulation continues in full flower, in large part because Congress cannot take away the rents that regulation has created. In the case of television and natural gas, these rents have been enormous; it would be difficult for Congress to deregulate by bribing the losers because the bribes would have to be so large.

Health-Safety-Environmental Regulation

For those inclined to believe that a general political-ideological shift in the country is responsible for the deregulation of the 1970s

and 1980s, it is sobering to consider the growth of federal health-safety-environmental regulation during this period.

A brief listing of the major statutes in this area and the agencies they created illustrates the steady march of increased social regulation in the 1970s.[16] In 1970 the Environmental Protection Agency (EPA) was formed by executive order after the passage of the Clean Air Act Amendments of that year. Similarly, the Occupational Safety and Health Administration (OSHA) was created by the 1970 Occupational Safety and Health Act. The Federal Water Pollution Control Amendments were passed in 1972, the same year that the Consumer Product Safety Commission was established to administer four statutes enacted in earlier years. In 1974 Congress passed the Safe Drinking Water Act. Concern about toxic substances and solid waste led to the passage of the Toxic Substances Control Act and the Resource Conservation and Recovery Act in 1976. In 1977, both the Clean Air Act and the Federal Water Pollution Control Act were amended again, adding further complicated standards-setting criteria for EPA. Finally, in 1980, the Superfund, or Comprehensive Response, Compensation, and Liability Act, was passed, empowering EPA to supervise the cleaning up of toxic waste sites, in part with the assistance of a multibillion dollar federal fund accumulated from taxes on petroleum and chemical companies.

In virtually all of these new regulatory programs, Congress instructed the regulatory agencies to set detailed technology-based standards. These standards vary among industries and even among sources within an industry. They are often tighter for new sources than for older sources. The Clean Air Act requires stricter standards for areas with clean air than for areas with dirty air. Some statutes allow a cost-benefit trade-off, others strictly forbid it. If one believes that the economic deregulation of the 1970s was the result of Americans tiring of government controls and longing for a return to markets, he is forced to believe also that Congress and the electorate had a large blind spot when it came to handling problems of health, safety, and the environment.

Rent Seeking and Social Regulation

One might have thought that the Republican victory in 1980 would presage the start of a deregulatory wave in social regulation similar to that which occurred in economic regulation in the 1975–80 period. If the costs of social regulation are at least partially absorbed by

[16]See Crandall (1986) for a more complete listing.

business, we might expect the Republicans to relax this type of regulation and begin to look for more efficient mechanisms for pursuing the stated goals of these programs. Such expectations, of course, have proved groundless; the current administration has done nothing to unwind the complex regulatory programs drafted in haste during the 1970s.

The failure of the Reagan administration, with its business constituency, to propose major changes in the important social regulatory statutes suggests that there is little business support for repeal or thoroughgoing reform of these programs. This could simply reflect the declining real compliance costs associated with these programs since the late 1970s, when environmental control costs peaked (Table 2). Or it could be that the indirect benefits of these programs for some businesses are substantial, whether anticipated or not.

The environmental programs, which I examine in the remainder of this section, are particularly rife with examples of rent seeking. Others have argued that the Occupational Safety and Health Act protects some producers from competition (Maloney and McCormick 1982). The fuel-economy standards are clearly an example of a regulatory policy being subverted by rent seeking. And the pesticides program at EPA has served to block entry into markets in which patents have expired.

TABLE 2

OUTLAYS ON POLLUTION ABATEMENT IN CONSTANT DOLLARS, 1972–82
(BILLIONS OF 1972 DOLLARS)

Year	Total	Households	Business	Government
1972	18.4	1.5	11.5	5.4
1973	20.6	2.0	12.9	5.8
1974	21.3	2.1	12.9	6.3
1975	23.0	2.6	13.5	6.9
1976	24.3	2.9	14.3	7.2
1977	24.8	2.9	14.9	7.0
1978	26.3	3.1	15.6	7.6
1979	26.9	3.1	16.3	7.5
1980	26.4	3.2	16.0	7.2
1981	25.6	3.8	15.7	6.2
1982	24.4	3.9	14.8	5.8

Note: Individual columns may not add to total because of rounding.

SOURCE: Farber et al. (1984, p. 28).

Environmental Policy

Current environmental policy imposes very large costs on the public through the imposition of technology-based standards on prospective or actual polluters. The total cost of air and water pollution control is estimated to be nearly $40 billion per year (Farber et al. 1984). Despite these enormous costs, few in Congress or elsewhere seem interested in measuring the impact of these programs on pollution.

Reports by the General Accounting Office that there are no satisfactory measures of air quality to guide such assessments are met with a deafening silence from Congress.[17] Although there is some evidence that air quality improved in the 1970s, it appears to have improved at a slower rate than in the 1960s (Crandall 1983, p. 20). Water quality also has improved very little since the mid-1970s.[18] If improving the environment were the most important objective of these programs, why would Congress and the programs' defenders be so uninterested in their results?

Current environmental policy has produced only limited improvements in the environment, but there is little support for changing any of the major statutes. Environmentalists and business groups seem to agree that wholesale reforms are either unnecessary or unwise. This may be the natural result of a policy that is designed to discourage growth through its effect on new investment.

The most severe impacts of air and water pollution policy are on new capacity. This is the result of both the tighter standards that apply to new sources, particularly for air pollution, and EPA's and the states' poor record of enforcement against existing sources (Crandall 1983, chap. 3) Congress has instructed EPA to be much more severe in designing new-source standards for air pollution, particularly in high-growth areas of the country. This is done under the guise of protecting pristine environments and promoting equity and efficiency.

It should be easier to design a new plant to be clean than to retrofit an older one. But new-source standards go much farther. They penalize new sources by imposing higher control costs on them per unit abatement than upon older sources. The data in Table 3 show that the ratio of air-pollution control costs to value added is higher in high-growth states than in low-growth states.

[17]There are several of these critical reports. See, for example, General Accounting Office (1982b).

[18]See Council on Environmental Quality (various years).

TABLE 3

AIR POLLUTION CONTROL COSTS PER THOUSAND DOLLARS OF VALUE ADDED IN EIGHT INDUSTRIES, 1977

	Frost Belt						Sun Belt						
Industry[a]	North-east	Middle Atlantic	East North Central	West North Central	Avg.	Value Added, 1972–77[b]	South Atlantic	East South Central	West South Central	Moun-tain	Pacific	Avg.	Value Added, 1972–77[b]
Food Processing (SIC 20)	0.42	0.90	1.27	1.80	1.25	53.0	0.72	0.93	0.70	0.84	0.69	0.74	63.4
Paper (SIC 26)	3.32	1.89	2.81	2.63	2.58	10.3	13.60	11.99	8.67	1.95	7.85	10.81	78.3
Chemicals (SIC 28)	1.80	3.85	4.07	4.60	3.90	58.2	5.59	10.30	8.73	6.72	3.96	7.44	94.0
Refining (SIC 29)	—	36.70	23.80	12.70	26.97	200.3	22.50	—	37.10	16.10	57.80	42.52	238.0
Stone and Clay Products (SIC 32)	4.05	7.49	5.76	8.92	6.95	47.6	7.27	8.97	8.76	8.71	10.30	8.78	60.5
Metals (SIC 33)	2.93	19.36	15.70	13.90	16.20	54.6	21.10	18.80	21.40	136.00	19.40	24.52	72.6
Machinery (SIC 34)	1.52	1.16	0.69	0.99	0.90	63.6	0.48	1.59	0.64	5.35	1.56	1.09	91.0
Transport. Equip. (SIC 37)	0.46	1.96	1.07	0.57	1.09	66.8	0.38	0.19	0.39	—	0.81	0.65	50.1

[a]Standard industrial classification (SIC) numbers in parentheses. The data in this table represent total outlays and value added in each industry in the states for which the Census Bureau reports the requisite information. Coverage ranges from 66 percent of value added in Frost Belt states in SIC 29 to 99 percent of value added in Frost Belt states in SIC 37. In all but three of the sixteen average entries, more than 90 percent of value added is included.

[b]Percentage growth in value added.

SOURCE: Bureau of the Census.

The reason for the severity of new-source standards is found in the politics of environmental voting (Crandall 1983, chap. 7). Fearing the continuing shift of industry to the Sun Belt, congressmen from northern industrial states have been the most consistent supporters of environmental policy (Pashigian 1985). The provision of the 1977 Clean Air Act Amendments that requires areas with clean air to impose rigorous standards and procedures on prospective new sources was given greater support by congressmen from northern urban areas than by those from states with cleaner air. Clearly, clean-air policy is an important weapon in preventing further flight of industry to the Sun Belt and even in creating entry barriers by raising the price of entry into a number of industries. Both causes are likely to attract congressmen from industrial areas of the country.

The most stunning example of rent seeking in environmental policy involves the mandatory scrubbing provisions for new sources of sulfur oxides that were written into the 1977 Clean Air Act Amendments (Ackerman and Hassler 1981). All new fossil-fuel burning boilers are required to use stack-gas scrubbers, regardless of the sulfur content of the fuel they burn. This provision discourages the use of low-sulfur fuel and thereby increases the demand for high-sulfur coal from the Midwest and Appalachia—a curious environmental goal. Equally important, however, is that this provision increases the cost of electric power in western and southwestern states that have ample quantities of cheap low-sulfur bituminous or sub-bituminous coal. This explains why northern congressmen with no dirty coal in their districts are so intent on protecting the coal mining industry east of the Mississippi.

A simulation conducted by EPA during its 1978 rule making on standards for new sources of sulfur oxides demonstrated the regional bias of the full-scrubbing provision (Table 4). The West South Central states suffer an 11 to 12 percent increase in electric utility rates because of the new-source standard for sulfur oxides, while the lower Great Lakes states incur an increase of only 0.3 to 4.8 percent.

Even more curious is the impact of full scrubbing on emissions. Because this strict standard discourages utilities from replacing dirty old boilers, EPA was able to show that a full scrubbing standard is not only substantially more expensive than a less strict (partial-scrubbing) standard, but that it actually leads to greater emissions (Table 5). EPA finally adopted the weaker, partial-scrubbing standard, but not without considerable opposition from environmentalists, who supported a standard that creates more pollution and costs several billions of dollars more per year. Even EPA's simulation fails to

TABLE 4

EFFECTS OF FULL SCRUBBING OF SULFUR DIOXIDE ON REGIONAL ELECTRICITY RATES, 1995
(CENTS PER KILOWATT-HOUR IN 1975 PRICES)

Region	Price in 1976	Price in 1995			
		Moderate Growth		Rapid Growth	
		Without Mandatory Scrubbing	With Full Scrubbing	Without Mandatory Scrubbing	With Full Scrubbing
New England	3.96	4.23	4.30 (1.7)[a]	4.31	4.32 (0.2)
Middle Atlantic	3.75	3.58	3.65 (2.0)	3.83	3.91 (2.1)
East North Central	2.56	3.11	3.12 (0.3)	3.32	3.48 (4.8)
West North Central	2.57	2.73	2.78 (1.8)	2.95	3.11 (5.4)
South Atlantic	2.89	3.03	3.08 (1.7)	3.27	3.42 (4.6)
East South Central	1.68	1.32	1.35 (2.3)	1.42	1.46 (2.8)
West South Central	1.99	2.92	3.24 (11.0)	2.91	3.26 (12.0)
North Mountain	1.37	2.02	2.09 (3.5)	2.30	2.47 (7.4)
South Mountain	2.52	2.67	2.77 (3.7)	2.91	2.96 (1.7)
Pacific	2.11	2.75	2.80 (0.7)	2.90	2.93 (1.0)

[a]Numbers in parentheses are percentage increases resulting from full scrubbing.

SOURCE: EPA, "Background Information for Proposed SO_2 Emission Standards, Electricity Steam Generating Units." July 1978, pp. 7–44.

TABLE 5

IMPACT OF ALTERNATIVE SCRUBBER REQUIREMENTS ON EMISSIONS, COAL CAPACITY, OIL USE, AND CONTROL COSTS OF ELECTRIC UTILITIES, 1995

Description	1977 Standards[a]	Full Scrubbing (90 Percent Removal)	Final Standard: Dry Scrubbing Option (70 Percent Minimum Removal)
National Emissions (millions of tons)	23.8	20.7	20.5
Regional Emissions (millions of tons)			
East and Southeast	11.2	10.1	9.7
Midwest	8.3	7.9	8.0
West South Central	2.6	1.7	1.7
West	1.7	1.0	1.1
Coal Capacity (gigawatts)	554	520	537
Oil Consumption in Utilities (millions of barrels per day)	1.2	1.6	1.4
Incremental Annualized Costs of New Standards (billions of 1978 dollars)	—	4.4	3.3

[a]Ceiling of 1.2 pounds per million BTUs.

SOURCE: EPA, "New Stationary Sources Performance Standards, Electric Utility Steam Generating Units," *Federal Register* 44 (11 June 1979): 33608–09.

capture the excess emissions caused by the inevitable breakdowns of scrubbers in utilities burning high-sulfur coal.

If environmental policy were truly concerned with the level of sulfur oxides emissions, it would regulate or tax the emissions (or the sulfur input). Instead, the current policy actually increases the sulfur oxide and acid rain problem. When Congress tried to pass legislation on acid-rain in 1984, it found that its dirty-coal/clean-air coalition would not countenance true environmental control. Congressmen from the Midwest, where power plants emit enormous amounts of sulfur oxides, were not likely to vote for a program that imposes control costs in proportion to the magnitude of the problem. But these congressional districts supplied the votes for most of the existing environmental statutes. By using the Clean Air Act to stifle Sun Belt growth, the representatives from this area have implicitly helped create the acid rain problem in the Northeast and Midwest. Instead of controlling actual emissions, they voted for a statute designed to slow the exploitation of clean coal reserves in the West while promoting the burning of dirty eastern and midwestern coal. They are not now likely to countenance a true environmental policy.

Automobile fuel economy

When enacted in 1975, the Corporate Average Fuel Economy Standards (CAFE) seemed relatively innocuous. Oil prices had been rising dramatically in 1973–74, and automobile companies were being given the wrong signals by the federal government's oil price controls (Crandall et al. 1986). By 1985, however, the CAFE program looked much different. Gasoline prices had been falling for four years, and the major concern was over how far oil prices might fall in the future.

Despite the changed environment, there is no support for abolishing the program—not even from the auto manufacturers. General Motors and Ford face the prospect of fines of several hundred million dollars per year if the standard remains at its 1985 level of 27.5 miles per gallon (Table 6). These two companies, therefore, want the standard relaxed to 26 mpg. Chrysler, on the other hand, is satisfied with the 27.5 mpg standard because it offers few large cars for sale. Even though its cars are less fuel-efficient than similar cars offered by GM or Ford, Chrysler wants the current standard retained (Crandall et al. 1986). This would allow Chrysler, the one company that did not have the foresight or financial wherewithal to continue producing large cars that the market now demands, to use the government to tax the other two auto makers for having the ability and foresight to produce large cars.

TABLE 6

CORPORATE AVERAGE FUEL ECONOMY FOR SELECTED U.S. AND IMPORTED CARS
(MILES PER GALLON)

	Actual 1985	Preliminary 1986
Government Standard	27.5	26.0
U.S. Automobiles:		
AMC	33.5	26.2
Chrysler	27.9	27.7
Ford	26.3	26.4
General Motors	25.5	26.2
Imports:		
Honda	33.9	34.5
Nissan	29.4	28.9
Toyota	32.9	32.2
BMW	25.8	25.2
MG-Jaguar	19.3	19.1
Mercedes-Benz	23.0	—
Peugeot	24.7	24.6
Renault	28.6	26.2
Saab	25.8	—
Volvo	26.5	—

SOURCE: Department of Transportation

Were there no CAFE program, U.S. car manufacturers would be importing more small cars from Japan or Korea because their U.S. plants are not competitive in these lines. With CAFE, however, such a strategy would be very expensive to Ford or GM because the CAFE standards apply separately to a company's domestically produced cars and its imports. GM and Ford need small car production in the United States to raise their domestic CAFE performance. Each mile per gallon that they fall below the standard costs them $50 per automobile produced. Thus, GM could easily accumulate annual fines of $200 to $400 million just for missing the standard by 1 or 2 miles per gallon. The United Auto Workers, therefore, sees CAFE as a mechanism for obtaining protection for U.S. small cars without resort to formal trade policy.[19]

It is reasonable to ask why Ford and GM are not arguing for the abolition of CAFE altogether. One possibility is that a 26 mpg stan-

[19]Henderson (1985) makes this point.

dard is difficult for them, but much more of a barrier to imports from the larger-car producers in Europe. Many of these foreign companies are having difficulty meeting the CAFE standard, and some are forced to offer a large share of diesel engines just to satisfy the regulation. Thus far, the only company to pay CAFE fines is Jaguar.

Pesticides

Pesticides regulation was transferred to EPA in 1971. A major issue since then has involved the rights of producers to sell pesticides whose patents have expired. The 1975 amendments to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) require the new producer to compensate the original patent holder and government licensee for a share of the costs of licensing or of the value of the license. The issue of whether it is the cost or the value of the license that must be compensated remains unsettled, but very important.

On occasion, pesticide manufacturers have successfully used FIFRA after the expiration of their patent to delay for years the manufacture of pesticides by new producers. The law requires an initial attempt at negotiating the compensation due the original patent holder and then final arbitration. In some cases this process has taken as much as five years, thereby greatly extending the effective life of the patent. If the courts ultimately rule that compensation must be based on the original licensee's loss of monopoly rents due to the new entrant, the patent life will be essentially extended forever.

The follow-on licensing procedures have constantly been challenged in the courts, and at several points the entire process was held in abeyance, pending court decisions. Incumbents, therefore, can delay new entrants almost indefinitely by threatening or using legal challenges to any new entrant. Such a strategy would not be available without FIFRA regulation for a firm with an expired patent.

Occupational Safety and Health

A few recent studies (Bartel and Thomas 1985a; Bartel and Thomas 1985b) have concluded that the Occupational Safety and Health Act is a mechanism for large firms to make competition difficult for smaller firms. Most major occupational safety and health standards are technological standards that require the installation of capital equipment. Adjustments in work practices and personal protection devices are generally frowned upon by OSHA regulators.

Some studies suggest that OSHA regulation has been used by certain large manufacturers to create rents for themselves. Maloney and McCormick (1982) have shown that cotton-dust regulations actually

benefited some large textile companies. OSHA regulation may also have given unions greater bargaining power by limiting the range of wage-safety trade-offs that nonunion firms may offer.

The Prospects for Reforming Social Regulation

The above discussion does little more than identify the rent-seeking aspects of social regulation. The most important opportunities lie in the environmental area, simply because environmental regulation dwarfs all other social regulation in its impact on business and the economy. But a brief review of other new regulatory programs suggests that Congress may have succeeded in transferring substantial wealth through these programs.

If earlier experience with economic deregulation provides any guidance, we should not expect much change in the newer social regulatory programs that have succeeded in creating large rents for organized groups within our society. These rents have been the motivating force behind environmental regulation, but the evidence is less conclusive for most of the other programs. Even if economic rents have been the inadvertent effects of regulation, however, they will serve as a weighty barrier to future attempts to rationalize or alter these regulatory programs.

It is an illusion to think that reform of environmental regulation simply awaits definitive evidence that the programs are inefficient or, even worse, ineffective. The response to this kind of evidence thus far is not very encouraging. There is substantial evidence that air pollution policy is inefficient, biased against new sources, and poorly enforced, but its proponents quickly set aside all legislative initiatives for reform.[20]

Every attempt to change the most inefficient and costly provisions of the 1977 Clean Air Act—the new source standards for sulfur oxides—is met with a weak response that a few thousand dirty, dangerous coal jobs might be lost.[21] Surely, no one believes that such light parries are sufficient to defend a program that may be brutally effective in restraining economic growth. Something far more important explains the refusal of Congress to change the basic design of environmental policy: the protection of old industries in the Northeast and Midwest.

Congress's refusal to tackle economic deregulation in cases where the regulatory system created large rents for sellers or certain classes

[20]See Crandall and Portney (1984) for a discussion of this problem.

[21]See Congressional Budget Office (1982) for a discussion of the very small effects of efficient alternatives on the geographical distribution of coal production.

of consumers does not bode well for attempts to reform social regulation. It is not necessary for environmental policy to reduce pollution or OSHA regulation to reduce occupational injury rates if there are other "benefits" to these programs.

If my theory is correct, well-meaning economists may toil for decades demonstrating the folly of environmental policy with as little effect as they have had in reforming merchant-marine or television regulation. This does not mean that they should not try, but their success will depend on something other than their ability to persuade congressmen from the Northeast and Midwest that a restoration of economic growth in Texas should be their overriding concern.

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