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# Readings

## of particular interest

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### **Resisting Redistribution in Court**

*Takings: Private Property and the Power of Eminent Domain* by Richard A. Epstein (Harvard University Press, 1985), 362 pp.

The debate over the proper size and function of government has taken a new turn in recent years, in part because scholars have learned more about not just why markets can fail (e.g., inequality of bargaining power) but also why they do work (e.g., incentives and monitoring) and also why collective decision making can fail, as demonstrated by public choice theory. This new turn in the debate has led to important practical changes in such areas as antitrust and transport regulation. But according to Richard A. Epstein, professor of law at the University of Chicago, it has had little effect on the theory of constitutional law. Judges still acquiesce in the seemingly inexorable extension of government control over economic life, even as academic scholars are rethinking their former support for that trend.

In this book Epstein seeks to reinterpret specific theories of constitutional interpretation in the light of such staples of modern political and economic analysis as Pareto-optimality, transaction and measurement costs, hold-out problems, and imperfect information. He seeks to demonstrate that each of these elements of modern economic and political thought is reflected in the text of the Constitution itself.

While his examination touches on many substantive constitutional guarantees, Epstein finds the key to constitutional economics in the takings clause of the Fifth Amendment—"nor shall private property be taken for public use, without just compensation." He argues that this clause distills the Lockean tradition of limited representative government, with its respect

for the priority of private property rights over the convenience of the rulers.

The entitlements in a system of private property, he argues, originate not in the fiat of the state but in the older common law principles of first possession. Private property acquired in this way properly includes all rights of possession, use, and disposition over external things. So defined, a regime of property rights affords a set of exclusive and exhaustive rights over all things at all times. Government is forbidden not just to confiscate a piece of private property in whole, but also to take it in part; in principle, there is no fraction of the original bundle of property rights too small to merit constitutional protection.

Any time the state changes the relationships between one or more persons or between a person and the state, it has taken property, whether it calls its action a taking, a regulation, a tax, or a modification of a liability rule. Accordingly, the constitutional restrictions on takings apply not only to the taking of land from a single individual to build a post office, but also to the use of comprehensive systems of rent control, zoning, or progressive taxation. The Supreme Court has consistently placed formal takings in one box, and taxes and regulation in other boxes, where they escape in-depth scrutiny and review. Epstein rejects this view as inconsistent with both the language and structure of the eminent domain clause.

Although the author holds that all forms of regulation and taxation are takings, he does not insist that the government pay cash to compensate anyone it taxes or regulates. The Constitution provides for limited government, not no government. Just as individuals may justly use force in defending themselves and their property, so some government takings may well be justified under the police power, as when there has been wrongful conduct by the parties regulated. Nonetheless, the means used must be reasonably related to that limited class of permis-

sible ends. By that standard many common forms of zoning, for example, must be struck down when compensation is not provided, since their central purpose is to use the political process to take property from one group of citizens and transfer it to another.

Similarly, although taxes are takings, the takings clause does not require the state to make cash refunds to all persons who pay taxes. But it does mean that the state power to tax, far from being unlimited, is subject to judicial scrutiny intended to prevent its use as a way to conduct implicit takings from one group of persons and transfers to another. Epstein stresses that the difficulties of measuring costs and benefits necessarily limit the scope of the judicial role, but insists that a simple principle of disproportionate impact—that special benefits should be paid for through special taxes, and general benefits should be paid for through general taxes—would place an important and workable restraint upon arbitrary government power in this area. That conclusion would invalidate the windfall profits, estate, and gift taxes and, even more controversially, the progressive income tax. In addition, as a matter of first principle, Epstein regards all income transfer programs, including those for the poor, as uncompensated takings for private use, though he recognizes that the extensive reliance by existing parties on the present system of intergenerational transfers (such as social security) creates an interest that precludes, if only for pragmatic reasons, their constitutional invalidation today.

The last section of the book ventures into more philosophical territory and argues that the takings clause, as reinterpreted, affords an ideal summation of the sound objectives of government. Epstein thus takes issue with Robert Nozick's uncompromising libertarian position, which he believes ignores the pervasive difficulties of voluntary collective action and would preclude, for example, all forms of taxation. Instead Epstein argues that the eminent domain clause provides a way to constrain the scope of public regulatory and taxing powers without eliminating the necessary uses of those powers.

In addition, Epstein attacks the conception, associated with the work of John Rawls, that each person's natural talents should be treated as part of a common pool for the common benefit. He rejects that position as leading

to impossible problems in the management and control of human resources and counters with the Lockean proposition that all individuals should be properly regarded as the owners of their own labor.

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## A Tribe of the One-Eyed?

*The Economist's View of the World: Government, Markets, and Public Policy* by Steven E. Rhoads (Cambridge University Press, 1985), 331 pp.

Microeconomists, also known as resource, welfare, or benefit-cost economists, tend to hold a particular view of the world of public policy. This perspective often unites Democratic and Republican economists on micro-policy issues, placing them at odds with politicians, consumers, businessmen, and union leaders. The micro world view has had an important impact on government policy, especially in the area of regulation, and has also influenced the disciplines of political science, law, philosophy, sociology, and psychology.

In this book Steven Rhoads, associate professor of government at the University of Virginia, describes this world view in nontechnical language and assesses its merits, finding in it both "marvelous insights and troubling blindness." Rhoads argues that elementary knowledge of microeconomics could save government from many current policy blunders, but also that economists put too much faith in their cornerstone principle of "consumer sovereignty" and frequently misapply it by overemphasizing narrow self-interest both as a controlling motive of economic actors and as the correct route to happiness.

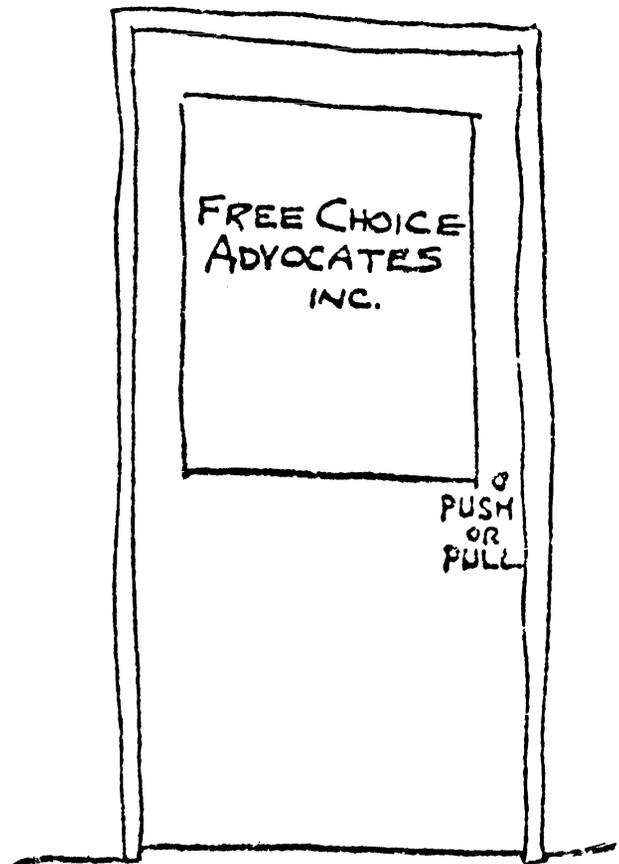
The author begins by discussing three powerful concepts central to the world view of nearly all economists: opportunity cost, marginalism, and incentives. All three concepts, Rhoads argues, are too often ignored by public-sector decision makers intent on their own policy goals. These government professionals frequently fail to realize that to care about costs is to care about benefits, since costs in one sector amount to benefits forgone in other sectors. Similarly, they sometimes forget that informed spending choices require not just looking at the intrinsic importance of a program but weigh-

ing its marginal costs and marginal benefits. If the designers of current life-saving and clean-air programs had a fuller grasp of the opportunity cost and marginalism concepts, Rhoads argues, the scope and stringency of their endeavors might be very different.

The economists' belief that markets are usually more efficient than governments is based on more than unrealistic theory or conservative ideology, the author holds. He cites some of the evidence for the pro-market view and criticizes the most frequent objections of noneconomist skeptics. The concept of externalities is useful in pinning down what government can do better than the market, he says, but caution must be exercised. On the one hand, it is true that the market and voluntarism will not suffice to clean up the environment. On the other, common arguments for aviation and rail subsidies rest on bogus externalities.

A chapter on benefit-cost analysis contains a nontechnical explanation of how economists estimate people's willingness to pay for government services that are not traded on markets. It also includes an extended discussion of the charge that benefit-cost analysis offends ethical or equitable principles and that actual estimates of benefits and costs are too biased and uncertain to be useful. Rhoads believes that the most common criticisms of benefit-cost analysis are not persuasive and that "in today's political process, filled with tunnel-vision advocates of many kinds, the economists with their benefit-cost studies do more good than harm."

The author further argues that noneconomists can learn from the economic literature on equity. "By reminding us of the allocative function of wages and profits and of the effect of high marginal tax rates on work, on savings, and on economic growth, economists set certain reasonable boundaries to intelligent debate about income redistribution," he says, adding that "the presumption against compensating losing regions or producers seems justified. So does that against interfering with flexible market-clearing prices in pursuit of equity goals." Despite this praise, Rhoads believes that economists are unlikely to solve the problem of poverty because, chained to their assumption of consumer sovereignty, they reject the idea of providing certain in-kind services that could combat the pathologies that lead to dependency.



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Among other weaknesses in the policy perspective of most of today's economists, the author argues, is their treatment of tastes. Market-oriented economists in past eras considered it part of their task to remind their readers that there are (in Mill's phrase) high and low pleasures, that we aspire to cultivate better tastes than we have now so as to increase our capacity for enjoyment, and that profit-seeking suppliers do not necessarily serve our best interests when they pander to our weaknesses. Today's economists, however, are more likely to feel a professional obligation to combat such sentiments than to support them. At the core of much of evaluative economics, in the author's view, is the assumption that tastes do not matter—which is an invitation to subjectivism, selfishness, and materialism. Treating preferences in a nonjudgmental way in a benefit-cost analysis can sometimes mean putting decisive weight on the gains to the criminal from crime or the costs to the malevolent from lifesaving. He also faults economists for glibly

equating people's policy preferences with their financial self-interest in some cases.

Welfare economic principles do not allow one to distinguish between high and low or moral and immoral pleasures. The externality concept does, however, in the author's view, provide a rationale for government to encourage activities that bring third parties pleasure and discourage activities that bring third parties pain. One might thus expect, Rhoads argues, to find economists emphasizing policies that promote serious learning, ethics, good will, civility, and other human traits or activities that yield benefits throughout society. In fact, however, they usually confine their analysis of externalities to more tangible and measurable effects—another consequence, he says, of putting too much emphasis on money and narrow self-interest.

Though welfare and benefit-cost economics have no explicit "line" on what the political process should look like, Rhoads argues that their implicit teaching is that consumer preferences should control public policy. When economists address political-institutional questions explicitly, they often suggest that the good representative is a clerk-like aggregator of consumers' preferences. This view leaves little room for political leadership, the independent judgment of representatives, or the idea that rational discussion and deliberation can change consumer preferences and improve public policy. Democratic politicians and political theorists are right, the author concludes, when they call on elected officials to take a more substantial and creative role.

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## Next Stop: Private Transit?

*Urban Transit: The Private Challenge to Public Transportation*, edited by Charles A. Lave, with a foreword by John Meyer (Pacific Institute for Public Policy Research, 1985), 372 pp.

Public transportation in the United States is facing a deficit crisis of its own, with some of our largest cities having threatened to close down their transit systems amid huge losses. Cities that have built new rail systems have encountered especially serious fiscal problems, and many face enormous long-term construc-

tion and operating costs despite steep federal subsidies.

Ridership of public transit has been heading down since World War II. Transit use tends to decline with urban prosperity but increase with urban density, and trends in both areas have been adverse in recent decades: city residents have been getting richer and more dispersed. Families who can afford to buy cars usually do, and once a family owns a car it is likely to use it for most trips (other than those to the city center). Transit is a big money-saver only when it replaces the need to own a car instead of replacing the individual trips. In the postwar period, large numbers of people ceased to be regular mass transit patrons as they abandoned city living for single-family suburban homes.

Contrary to popular impression, a declining system need not be a money-losing system. In fact, until 1969, the fares collected by most transit systems were just about covering operating costs. Then things fell apart rapidly, and within fifteen years fares were accounting for barely 40 percent of operating costs. The deterioration coincided with the growth of the federal Urban Mass Transportation Administration, launched in 1964 to provide capital and operating subsidies to the industry.

Editor Charles Lave, professor of economics at the University of California at Irvine, asserts that federal generosity has itself been part of the problem: "government funds were used to keep transit fares low for *everyone*, in order to assure access for a few—the poor. And the easy availability of these subsidies encouraged labor unions to ask for high wages and generous working conditions." By now the costs of public transit in this country are nearly double private transit costs anywhere else in the world.

This volume is a collection of fourteen essays on how the cities got into their current transit mess and how they might get out. Most of the latter proposals involve expanding the currently modest role of private enterprise transit. The majority of cities continue to forbid creative entrepreneurship in urban transit, notably bus and taxi transportation.

UCLA economist George Hilton sketches a historical overview of how transit systems evolved from private, horse-drawn omnibus systems in the 1820s to their present state of disarray. The first major urban transit opera-

tors to come along, the privately owned street railways, never succeeded in earning a very high rate of profit, but they were important tax sources for governments and helped drive up the value of downtown land. The development of jitney bus services after World War I threatened tax revenues and they were soon banned in virtually every city, accelerating a gradual increase in the government's role that continued until practically all local transit services had been taken over by governments. Nearly all the streetcars were eventually replaced by bus systems, which in turn, particularly in the 1960s, were incorporated into the regional monopolies under public ownership that are currently typical of the industry.

Three essays examine the recent rebirth of new private transportation services in Tidewater Virginia, New York, and Chicago. In the latter city, financial crisis led to the establishment of privately owned commuter bus lines and greater community control over some city-owned transportation services, splitting a once monolithic public transportation system. The authors, Christine Johnson and Milton Pikarsky, conclude that the resulting fragmentation and competition have served Chicago passengers well.

Edward K. Morlock and Philip A. Viton present evidence against the ideas that public transportation cannot be provided profitably, that government can subsidize one of its own agencies more conveniently than it can contract out to a private company, and that private companies can operate successfully only in relatively high-income areas. On the latter point, Gabriel Roth, in a separate article, examines profitable private sector transit in the developing world. In Singapore, operators stretch their dollars by using school buses for double duty to carry not only students but also business people (who follow a different schedule). Calcutta's full-sized private buses also make a profit, competing head-to-head with state-owned buses that lose money, while profitable taxis serve even the poorest areas in sprawling Mexico City.

Sandra Rosenbloom discusses the taxicab, a mode of transportation that carries more passengers in this country than all forms of conventional public transit put together. Although taxis are often thought of as a luxury item, they in fact carry far more people who are depend-

ent on transit service than do public transit systems: Almost 70 percent of all taxi passengers come from households with incomes of less than \$10,000 a year. The failings of municipal taxi regulation have been widely reported; Rosenbloom says that a deregulated system would probably feature low enough fares to enable its substitution for other forms of public transportation and could also serve, under government contract, to provide services targeted at particular constituencies such as the handicapped and elderly.

The remaining essays examine ways to privatize public transportation and increase competition. C. Kenneth Orski draws a blueprint for a redesigned transit system made up of carpools and vanpools for commuters, shared taxis in places of low population density, and employer-sponsored ride-sharing and shopper shuttles. Other topics include contracting out, the role of commuter buses, and questions raised by competition.

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## Amber Waves of Success

*Impacts of Rail Deregulation on Marketing of Kansas Wheat* by Keith Klindworth, Orlo Sorenson, Michael Babcock, and Ming Chow (U.S. Department of Agriculture, Office of Transportation, September 1985), 52 pp.

The Staggers Rail Act of 1980 marked the most significant change in railroad policy since the Interstate Commerce Act of 1887. The act generally reversed previous policy by (1) permitting railroads more flexibility in setting rates, (2) allowing confidential contracts between railroads and shippers, (3) limiting the regulation of joint rates and routes, (4) providing for mandatory reciprocal switching agreements to encourage competition, and (5) accelerating regulatory decisions on requests for abandonments and mergers.

The Staggers Act had major implications for agriculture because of the high degree of interdependence of railroads with the farm economy. In 1977, railroads carried 59 percent of the nation's interstate shipments of wheat, 83 percent of sorghum, 49 percent of corn, and 29 percent of soybeans. In 1984 farm products were the railroads' second most important

source of tonnage and third most important source of revenues.

Kansas makes an appropriate case study of the impact of Staggers on agriculture for several reasons. It is the leading wheat-producing state and is also a major source of feed grains. It is located at long distances from the major grain markets and has only limited access to major waterways, so it is much more dependent on railroads for grain shipment than the rest of the nation. About 80 percent of total Kansas wheat shipments travel by rail, and nearly all the major western railroads serve the state.

A number of important changes in Kansas grain transportation have taken place since deregulation, according to this study from the Department of Agriculture's Office of Transportation. Railroads used to adjust their rates simultaneously; now one railroad initiates a rate change and others follow in action-reaction fashion. This apparently more competitive procedure correlates with a major drop in charges: published rates for shipping Kansas wheat to Gulf of Mexico ports declined 34 percent from 1981 to 1984, compared with a 64 percent increase in the four years before the Staggers Act.

Contracting between Kansas shippers and carriers has also expanded greatly. Although the contracts vary greatly in form and features, the average one applies to a ten-month period, involves movement on a single railroad, and covers the shipment of any and all types of grain. In almost all contracts the shipper provides volume commitments in the form of either a minimum tonnage guarantee or a percentage of business. (Most Kansas contract shippers are large and can control grain movements from many shipping locations in different states.) Contracts confer a rate advantage on shippers that obtain them: for example, contract rates to the Gulf of Mexico are an average of 17 percent lower than published rates, the discount varying by place of origin.

"Reciprocal switching charges" are the fees that one railroad charges another to switch rail cars to the competing carrier's lines. Except in a few cases, these fees have risen roughly as fast as rail costs in general, and there is no evidence that they are going up any more rapidly than they did in the period just before the Staggers Act. Nor is there any statistical evidence, the authors say, that increases in these charges

have been impeding market access for Kansas shippers. The authors' interviews with fourteen elevator managers unanimously confirmed this finding.

The rate of branch line abandonment has risen since the Staggers Act. The authors did not find any direct evidence, however, that immediately links this change to the act's provisions.

These changes have had important effects on Kansas farmers and shippers. Because rail rates have fallen, middlemen offer a higher price for their grain than they would otherwise. The authors could not estimate how much of the rate reductions have accrued to farmers, but they believe that the share is likely to be significant because the Kansas wheat-marketing system is highly competitive.

The impact on small shippers has been more varied. Small shippers that have obtained contracts indicated to the authors that they have benefited and can outbid competitors that lack contracts. But the latter group of shippers has suffered, and some shippers' volume of outgoing traffic has dropped by as much as two-thirds.

Other economic forces have been at work in Kansas wheat transportation since 1980, including a reduction in export demand, railcar surpluses, and changes in marketing systems, and it is impossible to establish the precise share of the effects owing to deregulation. But, the authors say, deregulation certainly enabled the market to adjust to new market forces much more quickly than it had in the past.

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## Cartelization on the Hop

"Contracting Problems and the Adoption of Regulatory Cartels" by William S. Hallagan, in *Economic Inquiry*, January 1985, pp. 37-56.

Under a law dating from 1937, the growers of fruits, vegetables, and other crops can invoke the regulatory powers of the federal government to enforce limitations on their output. In 1966 the nation's growers of hops voted to adopt a federal marketing order embodying a "closed shop" scheme: no one could henceforth start growing hops without buying the right to

do so from an existing grower. Since then, output of existing growers has been sharply limited in annual proportion to a 1966 "base." A committee of growers meets each year to determine what proportion of the base will be legally marketable. For example, if a grower owns 100,000 units of base, and the committee decides that 90 percent of base will be marketed, then that grower can legally sell only 90,000 pounds of hops. Economic reformers have criticized the arrangement as a government-sponsored cartel, and President Reagan recently singled out the hops order as an example of a marketing-order excess that should be discontinued. (See "Harvest of Waste: The Marketing Order Program," by Thomas M. Lenard and Michael P. Mazur, *Regulation*, May/June 1985.)

It might be assumed that since such a scheme raises overall industry profits, it would be eagerly embraced by the growers, according to the authors. But in fact the hops growers did not choose to adopt an order during the 1950s and early 1960s, and in a 1965 referendum conducted by the Department of Agriculture they actually voted down a proposal to establish an order. A qualified majority was obtained the next year only after new clauses were added to the proposed marketing order. This paper probes three related questions: (1) What sorts of growers opposed the 1965 marketing order proposal? (2) What happened between 1965 and 1966 to defuse enough opposition for the 1966 proposal to pass? (3) Why did the push for regulation succeed when it did? That is, if the marketing order raises industry profits, then why was it not adopted during the 1950s?

Hallagan, who is a professor at Washington State University, begins by hypothesizing that opposition to output limitations will be strongest among growers who are planning to expand their operations, since the marketing order will prohibit them from doing this unless they buy additional base from other growers. Growers who were planning to leave the industry (by switching to other crops, for example) were predicted to register the strongest support for the marketing order, since they could keep the profits earned by selling base units as an effective windfall.

The author checked this thesis using individual voting data from the 1965 referendum. The results of this empirical check supported the hypothesis that growers in the midst of ex-

pansion registered the strongest opposition to the marketing order. The data also indicated that, except for very small growers, lower-cost growers were more likely to be opposed to the marketing order than their high-cost colleagues. The theoretical model had been ambiguous on how grower costs would affect preferences with respect to the marketing order.

The changes incorporated in the revised 1966 order, which won over enough of the opposition to pass the measure, included special provisions that benefited lower-cost growers and growers who could verify that they were in the midst of expansion. The moral of the story, Hallagan says, is twofold. First, the specific form a cartel-like regulation takes will be shaped by the need to resolve conflicting interests within the regulated industry. Second, for such political brokering to succeed there must be institutions that allow monitoring and verification of differences between cartel members.

Many theoretical and empirical discussions of "producer protection" regulations have suggested that they are most likely to be adopted during cyclical economic downturns—as opposed to "consumer protection" laws, which are said to be adopted more often in periods of expansion. The data in this case do not lend support for this hypothesis, Hallagan says: the key factors, he believes, were the homogeneity of the industry and the existence of institutions that made political brokering of differences feasible.

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## The Dirty-Coal Policy: New Cost Estimates

"Cost-Minimizing Regulation of Sulfur Emissions: Regional Gains in Electric Power" by Frank M. Gollop and Mark J. Roberts, in *Review of Economics and Statistics*, vol. 67, no. 1 (February 1985), pp. 81-90.

The Clean Air Act has often come under criticism for ignoring the principle of least-cost emissions reduction. This paper estimates both the cost of current regulations for controlling sulfur dioxide, a major pollutant, and the potential cost savings that would result if electric utilities were encouraged to pursue a cost-minimizing policy. The authors studied the opera-

tions of fifty-six electric utilities, divided by region of the country, over the period from 1973 to 1979. Gollop and Roberts are with Boston College and Pennsylvania State University respectively.

Sulfur dioxide regulation is important on an economy-wide scale. The Commerce Department estimates that the utility industry spent nearly \$2.7 billion on pollution control equipment in 1979 alone. The cost figures would be higher still if they included the cost of switching from high- to low-sulfur fuels, a switch that is often motivated by pollution concerns.

The authors found that the marginal cost of reducing emissions differs considerably from region to region, running lowest in the West, which had a marginal abatement cost of \$199 per ton of sulfur dioxide in the period 1976-79, and highest in the Northeast, which had a corresponding figure of \$1,022. The marginal costs for utilities in the Midwest, Great Lakes, and South were \$246, \$397, and \$524 per ton respectively. These costs rose between the period 1973-75 and the period 1976-79 in every region, the authors say, but at considerably different rates: they nearly doubled in the Great Lakes region and in the South, increased by more than 70 percent in the Northeast and by nearly 40 percent in the Midwest, but inched ahead by only 2 percent in the West.

This variation results partly from differences among firms in the intensity of regulation, but mostly from variations in the price difference between low- and high-sulfur fuel. The wider the price differential, the higher the marginal cost of reducing pollution through fuel switching (the most effective method of reducing sulfur dioxide emissions in this industry). Northeastern utilities face an average premium for low-sulfur fuel that is nearly thirteen times as much as western utilities face, which helps explain why the marginal cost of abatement is so much higher for utilities in the Northeast.

There are substantial variations in the marginal cost of abatement among utilities within a given region as well, stemming from both fuel-switching factors and regulatory intensity. The important implication is that it would be possible for utilities to reassign emissions reductions among themselves so as to reduce the overall costs of achieving the current levels of emissions within each region.

The authors calculated the dollar value of potential resource savings for each region by redistributing emissions from utilities with low costs of control to utilities with high costs of control until marginal abatement costs were equal across the region's utilities. Total regional emissions were held constant at 1979 levels. The aggregate cost savings equaled the money saved by high-cost emitters minus the added cost of control expenditures at low-cost emitters. This formula, the authors say, closely resembles the outcome of a competitive market in pollution rights under which firms could freely trade emission permits equaling in number the desired total level of emissions.

The most striking result is the magnitude of the potential cost savings as a percentage of the current cost of regulation. It varies from a low of 7.5 percent in the Midwest to a high of 75.3 percent in the West. The northeastern, Great Lakes, and southern regions, where the costs of regulation per utility are highest, would have cost savings of 49.7 percent, 23.5 percent, and 68.1 percent, respectively. These represent average cost savings per firm of \$16.3 million in the Great Lakes region, \$19.1 million in the South, and \$40.2 million in the Northeast. In all, average costs could be reduced by as much as 47 percent.

An alternative way to formulate the gains from a market-oriented policy is to determine the added reduction in emissions that could be achieved given current expenditures on pollution removal. Holding regional expenditures on pollution abatement fixed at 1979 levels, Gollop and Roberts found that a cost-minimizing allocation of resources would result in additional emission reductions varying from 1.3 percent in the Midwest to 33.2 percent in the Northeast, with 11.1 percent, 24.4 percent, and 28.6 percent reductions in the Great Lakes, South, and West, respectively. These savings are noteworthy since coal-fired power plants are the source of more than 60 percent of the nation's sulfur dioxide emissions.

The authors conclude that the potential resource savings from adopting regional markets in pollution rights are substantial. The country is spending twice as much as is needed to achieve the present level of emissions in the industry, at a needless cost of nearly \$2 billion a year.