LEARNING FROM THE PAST, FREEING UP THE FUTURE: The Political Economy of Regulatory Change

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INTRODUCTION

This paper seeks to abstract some general rules from the experiences with regulatory policy in the US transport sector and then to apply those rules to the challenges of environmental policy reform. The experience of the US transport sector is pertinent because it is an area in which regulations were imposed in one era—and then removed in another. What can be learned from this experience? What initially led to the imposition of political controls over this industrial sector, and what later led to their removal? What were the prerequisites for change, and what can regulatory reformers in other fields learn from this experience? In particular: When is change possible and how might it best be advanced?

As an observer and activist in policy matters, let me begin with a strong disclaimer. Politics is extremely complex, the dynamics of policy change poorly understood. The number of factors surrounding any policy change is enormous. Some factors are visible, others less so; some are relevant, others probably not. The game of Pick-Up-Sticks provides a useful metaphor. One drops a tangle of sticks and then seeks to unravel the puzzle of their interactions. Some sticks appear critical but, when touched, prove to have no contact with anything; others appear irrelevant and yet, when these are touched, the whole pile comes tumbling to the ground. An invisible field of force vectors joins the various elements of the pile but that field is not readily deduced from the visible evidence. Politics is like that; discerning the pattern that will induce creative change from the tangle of forces present around all real issues is not easy—but it is to that task that groups such as CEI and the IEA are committed—hence this paper.

First, I develop a framework for examining the key elements of policy change. Policy reform, I argue, requires both a compelling vision of the change sought and an effectual championing of that change. Without a compelling intellectual and moral vision of why the change is important, economic and ideological champions are unlikely to wage the critical policy battles. Without effective economic and ideological champions, scholars are unlikely to develop the necessary intellectual and moral ammunition for such battles.

Using this framework, I review two eras in U.S. transport history: the initial regulation of the railroads in 1887 and the subsequent deregulation of most domestic freight transport in the 1970s. I then apply the lessons of that experience to the decision to address environmental problems through a pervasive system of federal regulations in the 1970s and the more recent rethinking of that approach which offers some opportunity of replacing these regulations with property rights-based approaches. Whilst there are differences between the regulation of transport and the regulation of the environment, the requisites for change appear to be similar. Today, environmental protection is perceived to be almost exclusively a political issue; to reverse that situation will require both a compelling vision and powerful champions of that vision.

THE POLITICAL ECONOMY OF REGULATORY CHANGE

Regulatory changes are political changes, that much is clear. But what are the factors that make such changes possible? As noted above, I believe that regulatory change is possible only when ideas are effectually advanced in the policy debate; a compelling vision must be coupled with an efficacious championing of that vision. 'Ideas have consequences' has become a slogan of economic reformers. But in our heterogenous society there are always competing ideas, competing visions. So, if they are to prevail, deregulatory ideas must be championed more effectively than regulatory ideas. Clearly, these two tasks are linked: ideas help bring forth champions; champions create a demand for compelling visions.

A compelling vision of reform will itself have both an intellectual and a moral component. Reform must be seen as both effective and the right thing to do. These goals are advanced by policy analysis. Conventional economic analysis demonstrates the inefficiencies of regulation and the gains possible from deregulation. Public choice analysis adds to this by showing who wins and loses from existing and proposed programs, thereby elucidating the overall distributional consequences of current policies. Efficiency analysis suggests the overall benefits of reform, whilst distributional analysis clarifies the motivation of those supporting government intervention and can thereby reduce the perceived legitimacy of the existing program. A compelling vision thus persuasively makes the case that reforms will advance both economic and equity goals.

An effective coalition for change should include champions from both economic and ideological groups, corresponding roughly to the intellectual and moral elements of the vision. The economic groups are motivated by pecuniary self-interest—the proposed regulatory change is expected to be more efficient and, thus, to lower their costs or to improve their profitability. The ideological groups are non-profit entities motivated by moral considerations—seeking to advance a specific policy vision. Bruce Yandle describes such effective coalitions for change metaphorically as an alliance of 'Bootleggers' and 'Baptists' and notes that they emerge in almost all policy struggles, often on both sides of the struggle.²

Whether or not visions of reform and champions of those visions will emerge is determined in part by circumstance. If politicians feel that reform is infeasible, evidence on the costs and inequities of current policies will not matter; few champions of change will emerge. On the other hand, if change appears imminent then arguments that bolster change will be eagerly solicited and champions will rapidly emerge. This fact shows the importance of developing

^{1.} Distributional impacts are not, of course, the only elements of a policy that might influence its moral standing; however, those favoring political, collective controls over the economy are largely motivated by such values and thus arguments that a specific policy harms such values can be very powerful in affecting the prospects for reform. See, for example, the series of essays on this topic by the late Aaron Wildavsky, *The Rise of Radical Egalitarianism*. (The American University Press: Washington, D.C.) 1991.

^{2.} Bruce Yandle, "Bootleggers and Baptists-The Education of a Regulatory Economist," Regulation, (May/June 1983), pp. 12-16.

both visions and champions in advance; opportunities may arise without warning, leaving little time to develop arguments or nurture champions.

Let us now examine how these various elements contributed first to the creation of the Interstate Commerce Commission in 1887 and then to its near elimination via a series of administrative and legislative actions in the 1970s. We then apply that framework to the situation of environmental regulations today and to the prospects for their reform.

VISION AND CHAMPIONS: TRANSPORT REGULATION IN THE US

The Interstate Commerce Commission (the ICC) was created in 1887. Here, I consider what brought this about: What vision motivated the decision to create national regulations? Who championed this policy?

The intellectual arguments favoring a politically regulated transport sector were part of a broad movement in the late 19th century. American intellectuals who had visited Bismarck's Germany had been favorably impressed with the emergence there of the modern regulatory state.

During the course of the 19th century, American and European scholars had reacted against classical liberal beliefs, and had come to see the market as a very fragile institution, continually in need of correction (by the intellectuals, of course). Indeed, the American Economic Association was founded by economists eager to combat the "pernicious theory of laissez-faire capitalism!"

By the end of the 19th century, most intellectuals in the US had become collectivists of one sort or another. However, European style socialism—nationalization of industries—was not favored in an America still deeply suspicious of central government. Regulations seemed more acceptable. The dominant intellectual vision was the seductive ideal of the mixed economy. To American intellectuals of the time it seemed that there was no need to choose between the inequity of capitalism and the corruption of politics. To them, the independent regulatory agency offered a "third path"—one that would largely avoid the problems of both political influence and private greed.³ Unlike the patronage agencies of yore, which had been managed by ignorant political hacks, these new agencies would be directed by individuals of high intellect and moral character (such as themselves). This mixed economy model was the intellectual vision promulgated by the champions of regulation at the dawn of the era of interstate commerce.

The moral force behind regulation flowed from a traditional populiat belief that big is bad. America was growing rapidly and its economic institutions were growing also in both scale and scope. Railroads and banks and then a host of other sectors of the economy became national industries. As innovative distribution schemes and manufacturing technoplogies evolved, the size and scale of firms within industries also tended to increase. For example, the large meat packing companies in Chicago arose from the invention of the refrigerated box-car, making national distribution possible. For a while at least, many industries experienced economies of scale and most sectors of the economy became more concentrated. This trend horrified the agrarians who believed firmly in a 'small is beautiful'

^{3.} A.C. Pigou was a strong advocate of the independent regulatory commission. He wrote: "In any industry, where there is reason to believe that the free play of self-interest will cause an amount of resources to be invested different from the amount that is required in the best interest of the national dividend, there is a *prima facie* case for public intervention." Pigou recognized that politically motivated actors were unlikely to act in the public interest. However he believed that the independent regulatory agency provided a means of overcoming such political disadvantages: "The members of such Commissions can be specially chosen for the fitness for their task, their appointment can be for long periods, the area allotted to them can be suitably adjusted, and their terms of appointment can be such as to free them, in the main, form electoral pressure." See R.H. Coase, *The Firm, the Market, and the Law*, (The University of Chicago Press: Chicago) 1968, p. 20-21.

world. They condemned the era as one of cut-throat competition and robber baron capitalism. ⁴ To these visionaries, regulation provided a way for society to regain control of its errant industries.

Championing regulations were business groups and progressives. In many industries, Economies of scale and scope led to mergers and the elimination of smaller, less efficient firms. Faced with declining profits, small firms turned to their state governments for help. This help came in the form of legisaltion designed to moderate competition. Farmers and other small shippers condemned rate discrimination -- the practice of charging different shippers different amounts for the "same" service -- arguing that transportation rates should be detemined by cost factors alone; that it was unfair to allow firms to exercise their market power to charge "captive shippers" higher amounts. These arguments were bolstered by progressives, who viewed competition as excessive—as "destructive."

The initial impact of such pressures was the enactment, in many states, of 'Granger laws'—laws aimed at ensuring "fair" rates and terms of service. However, these state regulatory laws proved to be largely ineffectual; in part, because their implementation was delayed by many years as a result of opposition from railroad companies; in part, this was because state regulation was increasingly irrelevant in a rapidly emerging national economy. As state regulation failed, both business and progressives came to view federal regulation as the only solution.

Conflicting and confusing state controls over railroads also encouraged industry to look more favorably on federal regulation. Initially, state laws setting maximum rates on transportation and storage were opposed by railroads—some successfully, some less so.⁶ The railroads mounted a federal challenge to these Granger laws, but in 1877 the Supreme Court ruled against the railroads. In this decision, the Court held that states had the right to regulate businesses which affected the public interest and classified railroads as one such business. Running a national railroad in a world of pervasive and inconsistent state regulations became increasingly costly. Moreover, "foreign" (out-of-state) railroads rarely fared well in state courts.

Such problems led some railroad executives according to favor federal regulation via an "independent" (non-political) railroad commission.⁷ Indeed, C. E. Perkins, one of the chief railroad leaders of the time argued specifically for a national Board of Rail Commissioners.⁸

But, railroad executives did not view federal regulation as simply the lesser of two evils. In the late 19th century, rail competition was fierce -- but this was partly because the industry had massive over-capacity, which, in turn, was the

^{4.} Richard Sylla, "The Progressive Era and the Political Economy of Big Government," *Critical Review*, (Fall, 1991), pp. 531-557.

^{5.} George H. Miller, Railroads and the Granger Laws, (The University of Wisconsin Press: Madison, Wisconsin) 1971, p. 19.

^{6.} George H. Miller, op. cit., p. 25-26.

⁷ See George H. Millar, op. cit. p. 25-26

^{8.} See Richard Sylla, "The Progressive Era and the Political Economy of Big Government." Also, Thomas Cochran, *Railroad Leaders*, *1845-1890: The Business Mind in Action*, (Cambridge Mass.: Harvard University Press, 1953).

result of federal and state land grant subsidies,⁹ which encouraged "cutthroat competition." Rate wars reduced profit margins, as published rates were rarely honored. In addition, rebates to larger customers (and small customers with options) became common. The resultant decline in profitability led several large railroad companies to favor federal rate-setting.¹⁰

Moral legitimization of such calls was provided by progressive intellectuals and agrarians who favored such "good government" reforms. Big business felt that the states were antagonistic towards them and that federal action would at least harmonize regulation. Farmers were convinced that the railroads were exploiting them and that regulations would help; anti-trust advocates were convinced that excessive market power must be curtailed (even though transportation rates fell throughout this era).

The vision of an agency independent of political taint, manned by highly motivated civil servants charged with advancing the public interest by wisely balancing carrier and shipper needs proved irresistible. Agrarian "Baptists" and railroad/shipper "Bootleggers" joined together to create the Interstate Commerce Commission in 1887.

Moving forward almost a century, let us now review the forces that brought about the reversal of these actions, the deregulation of transport in the 1970s. Regulation had been both popular and powerful—so what had happened to change matters? I argue that a new coalition of Baptists and Bootleggers came to the fore, that a new vision came to dominate the public discourse, and that new champions of this vision arose. However, I also argue that the economic gains that regulation had provided had been weakened, reducing the incentives to defend regulation.

Certainly the vision of non-political management of transport by brilliant public-servants had disappeared. By 1970, the "good government" vision of non-political regulation had been severely tarnished. Moreover, the belief in the fragility of the market had greatly declined. The intellectual groundwork for these changes developed slowly, emerging during the Eisenhower administration. Henrik Houthaker, an economic advisor to Eisenhower, took an early lead in the fight, basing his positions on the research that had been done by Chicago school economists indicating that competition was more likely to advance consumer welfare than was regulation. ¹¹ Think tanks such as the American Enterprise Institute in Washington and the Institute of Economic Affairs in London aggressively

^{9.} These subsidy programs normally granted railroads a certain amount of land for every mile of track laid. This not only encouraged railroads to view trackage as a good in itself; it also encouraged them to neglect the costs of maintenance and operations. As a result, much of the initial track proved overly costly to maintain, railroad operation costs were excessive, and bankruptcies were often the result.

^{10.} Edward A. Purcell, Jr. "Ideas and Interests: Businessmen and the Interstate Commerce Act," *The Journal of American History.* 54 (1967) pp. 563.

^{11.} Both George Stigler in "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science*, (Spring 1971). and Sam Pelzman in "Toward a More General Theory of Regulation," *Journal of Law and Economics*, 19(Aug 1976), pp. 211-40, argued that there was a mismatch between regulation and the public interest. Martha Derthik and Paul J. Quirk argue in *The Politics of Regulation*, (Brookings Institution: Washington D.C.) 1988, that the economics literature played a large role in regulatory reform. Also see, Robert W. Crandall, "Economic Rents as a Barrier to Deregulation", *Cato Journal*, (Spring/Summer 1986), pp. 173-94.

advanced this agenda for reform. This work was conducted by a new group of bright young economists such as Thomas Gale Moore and Arthur Seldon. By the 1970s, the intellectual debate was largely won; the prevailing intellectual view was that no case existed for pervasive transport regulation.

This intellectual work also undermined the moral basis of transport regulation. Much of the support for the ICC stemmed from the belief that it was a "White Hat" force opposing the dark force of business. A Marxist historian, Gabriel Kolko, demolished that thesis in a seminal work, *Triumph of Conservatism.*¹² His analysis suggested that the beneficiaries of regulation were not small shippers, not consumers, but rather the larger transport firms and their unionized labor force. Kolko's work and subsequent work by others transformed the image of the ICC from that of noble defender of the little guy to that of a co-conspirator with big business and big labor.¹³

This challenge to the conventional wisdom prompted some transport regulation officials to champion deregulation. Alfred Kahn¹⁴ at the Civilian Aviation Board and Darius Gaskins at the ICC among others began to use the flexibility granted them to free up transport.¹⁵ The normal presumption that an individual will defend his agency omits the fact that political appointees often have a longer term career goal. A temporary role as St. George is not damaging when one does not see one's life's mission as protecting endangered regulatory dragons.

Deregulation became a visionary idea to intellectuals and social reformers alike. But what made it possible for this vision to become reality? After all, the trucking industry and the Teamster's union were scarcely paper tigers. ¹⁶ What changed the political balance of power, making deregulation possible? In part, I argue that change became possible because the ability of the ICC to grant favors had diminished ¹⁷, in part because powerful forces outside this system—both economically motivated shippers (consumers of transport services) and ideological groups (Ralph

^{12.} Gabriel Kolko, *Triumph of Conservatism: A Reinterpretation of American History, 1900-1916*, (The Free Press: New York) 1968

^{13.} See Lee Benson, *Merchants, Farmers and Railroads: Railroad Regulation and New York Politics 1850-1887*, (Cambridge, 1955), and Edward A. Purcell, Jr. "Ideas and Interests." Indeed it appears that big business was behind most Progressive Era reforms. James Weinstein argues in *The Corporate Ideal in the Liberal State, 1900-1918*, (Boston: Beacon Press, 1968), that the Federal Trade Commission and workmen's compensation laws were promoted by big business. James Livingston in his *Origins of the Federal Reserve System: Money, Class, and Corporate Capitalism, 1890-1913*, (Ithaca: Cornell University Press, 1986), argues that big business promoted the Federal Reserve system. Even the welfare state was promoted by big business as argued by Edward D. Berkowitz and Kim McQuaid in *Creating the Welfare State: The Political Economy of Twentieth Century Reform,* 2nd ed. (New York: Praeger, 1988). Also see Richard Sylla, "The Progressive Era and the Political Economy of Big Government," *Critical Review.* (Fall, 1991)., pp. 531-57.

^{14.} James Q. Wilson, The Politics of Regulation, (Basic Books: New York) 1980, p. 110.

^{15.} There were several ICC appointees in the Carter and Reagan administrations who favored deregulation. Commissioner Marcus Alexis and Tad Trantum in the Carter administration, and Heather Gradison and Malcolm M.B. Sterrett under Reagan. See Paul Stephen Dempsey, *The Social and Economic Consequences of Deregulation: The Transportation Industry in Transition*, (Quorum Books: New York) 1989. John Robson, under Ford, actually got the ball rolling.

^{16.} The gains to labor from regulation were substantial; an estimated 37 to 55 percent raise in union wages. Such benefits were believed to make deregulation very difficult if not impossible. See Thomas Gale Moore, "The Beneficiaries of Trucking Regulation," *The Journal of Law and Economics*, 21 (October, 1978): pp. 339.

Nader's consumer activists, for example) had come to favor deregulation. Also, as noted above, some regulators themselves were won over to the reform vision. With the keys to the regulatory defenses in the hands of individuals who increasingly saw themselves as deregulators, the rents made available to the regulated industries (and, thus, their stake in defending regulation) also declined.

Certainly, the ICC's ability to grant monopoly rents had declined over time. For example, the original beneficiary of regulation, the railroad sector, now faced increasingly fierce competition from the trucking industry, while truckers themselves faced competition from non-unionised owner-operators. Also, in 1935 special exemptions began to be enacted which loosened regulations for important sectors of the economy such as agriculture. Moreover, firms that depended on efficient transport found the rates and service options available in the regulated sector unacceptable and formed their own internal trucking divisions (private trucking). Often such firms would face empty backhaul problems—they would deliver some product to a region but lack legal authority to seek business for a return haul and so began to put pressure on congress to loosen regulation. Regulated firms tended to benefit from and, hence, to favour the competitive restrictions maintained by the ICC. But the inflation of the 1970s reduced the value of these regulations. Costs increased rapidly during this era and the ICC found it hard to hold hearings and raise rates rapidly enough to offset the value lost through inflation. In addition, other technological and institutional changes occurred which affected the viability of the regulatory framework. In partricular, the introduction of the reliable, powerful, heavy-duty diesel truck permitted individual owner-operators to compete more effectively.

One would have expected the ICC and the parties benefiting from regulation to attack such threats. Why didn't they? At an earlier stage -- in the 1930s -- they had certainly done so. At that time, trucking had become a major competitor to rail, threatening the very existence of rail regulation. To counter the threat, the ICC bureaucracy and the railroads worked together to extend regulation to trucking and inland barge traffic. They succeeded and free markets were held at bay for another forty years.

By the 1970s, the approach of expanding regulation to incorporate less regulated external competition was no longer viable. In part, this was because regulation became too difficult; in part becasue the rents made possible by regulation had declined, making it less worthwhile to defend such privileges. As noted above, competition from within and outside the industry had made it more difficult to earn excessive rates of return in transport. Inflation also played an important role. During the Carter administration, America experienced double digit inflation. Regulators were not quick to adjust to such altered economic conditions and transport firms found themselves facing less and less favorable rates. Moreover, in this era, deregulating the transport industry was a way to bring down the prices of

^{18.} Owner operators were small business who purchased and operated large over-the-road vehicles (18 wheelers) on a contract basis. Improvements in technology (more powerful, more reliable equipment) made it possible for such a vehicle to be operated by one person (unionized truckers relied on team driving) to compete successfully with regulated truckers. Owner-operators became a major force in interstate trucking and forced competition into the system.

^{20.} Charles R. Perry, *Deregulation and the Decline of the Unionized Trucking Industry*, (University of Pennsylvania: Philadelphia), 1986.

consumer goods. Also, the railroad industry was rapidly going bankrupt under regulation. Either railroads would be nationalized or deregulated. Congress decided to deregulate (it was cheaper) and, with rail deregulation, came trucking deregulation. Whilst this explanation seem plausible, some pieces of the jigsaw remain absent.²¹

One important factor was the strange pro-deregulation coalition of progressives who had come to view regulation as simply another form of special interest policy (Senator Ted Kennedy was one of the leaders in the deregulation fight) and free market groups who viewed economic freedom as good in itself.²² The creation of such a "Baptist" pro-deregulation force reduced the credibility of the *pro bono publico* moral defense of transport regulation (certainly neither business nor the Teamsters possessed such moral standing).

However, the progressive element of the Baptist component of this coalition was, in part, historical accidental: a result of the particular way in which regulation had occurred. The progressive groups had come to understand, albeit reluctantly, that regulation benefited powerful business and labor groups, rather than the poor.²³ Progressives are fierce egalitarians, opposing all policies they believe will increase societal differences. Normally this group favors regulation, seeing it as a way of creating a more equitable world. However, the analysis and experience of transport regulation made it evident that regulation simply meant higher prices. Higher prices disadvantage the poor more than the rich and were thus opposed.²⁴ Had the primary impact of regulation been to restrain choice rather than to increase price (for example, by creating a universal, low value, low cost service), the progressives might well have continued to support the ICC.²⁵

Given the lack of moral and economic support for regulation and the anti-egalitarian reputation of the ICC, the regulated firms and the Teamsters, it was perhaps inevitable that the media would favor deregulation. Nonetheless, the fact that they did so was useful. Stories discussing transport regulation as another form of special interest legislation -- a way of rewarding unions and businesses at the expense of the consumer -- began to appear widely and these stories made it easier for politicians to play a "leadership" role.

^{21.} This pseudo-Hegelian view is presented in *Thinking the Unthinkable: Think-Tanks and the Economic Counter-Revolution*, 1931-1983, by Richard Cockett, (Harper Collins Publisher, London) 1994.

^{22.} Thomas G. Moore, "Rail and Truck Reform -- The Record So Far," Regulation, (Nov/Dec 1983), pp. 33-41.

^{23.} See Robert C. Fellmeth, *The Interstate Commerce Commission: The Public Interest and the ICC, (The Nader Report).* (Grossman Publishers: New York) 1970.

^{24.} For similar reasons, progressives favored the elimination of interest rate caps on small savings accounts (the rich could receive higher interest rates, the poor should be able to also); but progressives did not favor reforming federal deposit insurance (market insurance would mean that different banks would levy different risk premiums and therefore that prices would be more variable). Nor have progressives generally favored telecommunications deregulation (there are already enough choices). Choice is not a value of progressives -- do we really need all these consumer goods?

^{25.} Note that progressives have opposed deregulation in such economic regulatory areas as insurance and telecommunications where regulation is seen as a tool to force "universal" service.

Moreover, the case for deregulation had empirical support. California and Texas, for example, had intrastate airline systems which provided evidence of what might occur in a less regulated environment. Data on transportation costs by private trucking firms and owner operators suggested also that lower rates were feasible. Such data indicated to transport-dependent business groups that deregulation would yield real benefits. Theory suggested that deregulation would make cost savings possible; data from areas which were free of regulation demonstrated that this was true. For example, in the 1950s the courts declared fresh and frozen poultry exempt commodities under the Interstate Commerce Act. As a result, poultry prices fell on average by more than 30 percent. Frozen fruits and vegetables were also declared exempt, leading to a 19 percent drop in prices. These examples were important in the selling of deregulation as a viable policy approach and in mobilizing pro-deregulation political coalitions. As mentioned above, the value of such price decreases became more evident during the inflation era.

What lessons can be garnered from this experience? First, transport deregulation occurred only when the ICC was nearing its 100 birthday. Time had dimmed the luster of the hopes of progressive reformers that enlightened political management would advance the public interest. Moreover, change occurred only after the ICC—which never had affected more than a small part of the U.S. economy—found its ambit of control shrinking. This gradual decline in the ICC's power freed critical groups from fear of reprisal by the regulators. Even so, the history of deregulation was slow and painful.

Finally, deregulation is always partial.²⁸ Success in deregulating one sector of the economy merely means that the problem areas between the private and political spheres have been moved out to new frontiers. Inevitably, the new flexibilities allowed by deregulation will stress some element of society. Airline deregulation, for example, led to modified flow patterns (the "hub and spoke" system) and vast increases in traffic. However, the airports and the air traffic control systems remained (and remain) under complete political control, so they reacted slowly to the massive changes brought about by deregulation (increased traffic, introduction of hub and spoke systems). The result was long delays, and (perhaps inevitably) this was blamed on deregulation rather than the failure to free up the whole

^{26.} Michael E. Levine, "Is Regulation Necessary: California Air Transportation and National Regulatory Policy," *Yale Law Journal*, (July 1965), pp. 1416-47; and William A. Jordan, *Airline Regulation in America: Effects and Imperfections*, (Baltimore: John Hopkins University Press), 1970.

^{27.} Thomas Gale Moore, "The Beneficiaries of Trucking Regulation," *The Journal of Law Economics*, 21 (October, 1978): pp. 327.

^{28.} Antitrust considerations posed still another transitional issue, still not fully resolved. Some small communities gained, for example, air services because of politics; some feared that small communities would be abandoned under deregulation. Such concerns led to a transitional subsidy to continue services to designated communities. "Captive shippers" in the rail industry insisted that rival railroads be allowed operating rights to ensure competitive pressures. Network deregulation poses such "captive" user problems frequently. Mandatory access to the deregulated grid (telephone, railroads, electricity) is one common "solution" but creates the risk of continued government control and, thus, the risks of re-regulation. Moreover, grid access requires continued determination of "appropriate" rates and, thus, to the same problems posed by regulation initially. In the rail industry, the captive shipper issue has encouraged contractual arrangements -- a step that often replicates the results that probably would have occured had regulation never existed.

system. Those who had favored regulation publicized these problems and sought to re-regulate the industry.²⁹ Such re-regulation efforts came close to success on several occasions in the 1980s. One conclusion from this is that proponents of deregulation should consider other changes that will be necessary as deregulation proceeds (for example, airport privatization) and move to lay the groundwork for these changes. Also, deregulators should identify and mobilize the beneficiaries of deregulation to fend off the inevitable counter-attacks.

To recap: Deregulation of the airlines succeeded in large part because the intellectual and moral vision of, as well as the economic and ideological basis of support for, regulation had been undermined over a period of decades, while the comparable factors favoring deregulation had gained strength. Deregulation occurred only when the strength of the economic forces favoring it were adequate to challenge those favoring a continuation of regulatory policies. Finally, the media, progressive forces and academics had come to favor deregulation, or were at least open to deregulatory arguments. Ideas matter—but many forces must come together if policy change is to occur. ³⁰ Let me now relate this to the evolution of environmental policy and the prospects for its reform.

ENVIRONMENTAL REGULATIONS: A STATUS REPORT

During the period when the United States government was deregulating the transport sector, it was actively regulating almost every sector of the economy through a vast expansion of health, safety and environmental regulations. Henrik Houthaker cautioned the optimists during this era, noting that while we were deregulating by the foot, we were regulating by the yard. Today, the U.S. Environmental Protection Agency (EPA) has become the most powerful regulatory agency in America's history. What is the vision that motivated such regulations? Who championed this expansion?

In some respects, the evolution of environmental regulation followed a similar path to that of the earlier transport era. The Vision Component was (and is) very much in evidence, and environmental regulation certainly had (and has) many ideologically driven proponents. However, there is little evidence that economic groups played any key role in promoting environmental regulation. Thus, the intellectual and moral elements seem to have been more important than they were for transport regulation. The intellectual component of the dominent environmental policy vision is that of **Market Failure** -- the belief that a world of voluntary arrangements will inherently fail to protect critical environmental values. Markets, the argument goes, are valuable institutional arrangements but they fail to consider factors external to the market, such as pollution. Since markets "fail," government action is required. The logic of the **Market Failure** model, therefore, is that all economic activities having environmental consequences

^{29.} Milton Friedman, "Using the Market for Social Development," Cato Policy Report, (Nov/Dec 1988), pp. 10.

^{30.} See, for example, Robert B. Ekelund and Robert D. Tollison, *Mercantilism as a Rent-Seeking Society: Economic Regulation in Historical Perspective*, (College Station, Texas: Texas A&M University Press), 1981, where he argues that Adam Smith might best be viewed as an important but not critical factor in the demise of mercantilism. Intellectuals smooth the way and provide useful rationales for change, they argue, but self-interest dominates the process.

should be regulated.³¹ This way of thinking about environmental policy is widely shared—from environmental activists such as Greenpeace to most firms in the Fortune 500. (One little noticed problem with this approach is that it seeks to do too much. All parts of the economy entail some environmental consequence; thus, the **Market Failure** paradigm would suggest that US Environmental Protection Agency (EPA) regulate the entire world. They're trying.³²)

This powerful intellectual vision is combined with an equally powerful moral vision. To many in the environmental movement, all economic activity is inherently destructive; however, the rationale for this is not based on economic theory but rather on a complex blend of egalitarian "small is beautiful" thinking, old progressive "good government" beliefs, neo-Malthusian concerns and modern biocentrism. Government is viewed as essential to protect vulnerable nature from destructive man, to segregate man from nature. The ideal is wilderness—an area devoid of man and his works. The moral vision of modern environmentalism might best be viewed as ecological apartheid.³³

The egalitarian elements of the modern environmental vision create further problems. As noted, the **Market Failure** argument suggests pervasive regulation. To egalitarians, however, such regulation cannot be left to the scientists—the goal of the progressive era regulators. The progressives believed that wise public servants—the high priests of a secular age—would oversee the complex problems of a modern society and decide accordingly. Such experts could be trusted because they would be outside politics, outside the corrupting influence of the capitalist economy protected by civil service rules, motivated by the values of public service. The modern environmental movement is far less trustful of authority, far less willing to assign any authority to anyone. Why should a scientist or economist be able to place her judgement over that of the average citizen?³⁴ Experts cannot be trusted—indeed, there should be no experts!

^{31.} Michael Kellog, "After Environmentalism: Three Approaches to Managing Environmental Regulation," *Regulation*, (1994, number 1).

^{32.} A substantial body of literature criticizing the EPA now exists. See, for example, *EPA: Asking the Wrong Questions*; Michael S. Greve and Fred L. Smith Jr. eds., *Environmental Politics: Public Costs, Private Rewards*, (Praeger Publishers: New York) 1992; Roger E. Meiners and Bruce Yandle, eds., *Taking the Environment Seriously*, (Rowman & Littlefield Publishers, Inc.: Lanham, Maryland) 1993; Stephen G. Breyer, *Regulation and its Reform*, (Harvard University Press: Cambridge) 1982.

^{33.} The concept of a "balance of nature," popularized by Rachel Carson implies that human activity can upset the delicate balance which will ripple throughout the ecosystem and destroy life on earth. Thus human activity must be curtailed or removed from nature. See Charles T. Rubin, *The Green Crusade: Rethinking the Roots of Environmentalism*, (The Free Press: New York) 1994 pp. 44-45.

^{34.} One anecdote that illustrates this egalitarian emphasis was provided in the 1980's. The state of California had under consideration a major ballot initiative (California is one of several states which permits citizens to voice a vote on specific policies) which would have further expanded environmental power over the state economy. That initiative was backed by major environmental groups and they mounted a major campaign to garner votes for the issue. Celebrities volunteered time to help promote this "Big Green" initiative. One TV advertisement discussed various arguments against the initiative, quoting various "scientists" who suggested that the fears of environmental catastrophes had been over-stated -- the oceans weren't dying, pesticide residues weren't creating a cancer epidemic, drinking water wasn't hazardous to our health. Having sneeringly reviewed, "what the scientists say," the narrator (an actor who had played Little Joe in the 1950's *Bonanza* western television show) stated that he was tired of what the scientists were saying; he thought it was time to listen to the people.

But, in the real world, almost everyone will be **rationally ignorant** about almost everything. If one precludes "experts" from the decision process, then the priorities that will emerge will be bizarre. And so they have proven to be. EPA's own internal studies found that the agency was spending most time and resources on low priority programs and proportionately far less on programs of higher environmental value. ³⁵ Modern environmentalists find it extremely hard to determine what is most important, where scarce resources should be applied. This has led to a tendency to deny that environmental regulations have costs. Time and again, we are told that environmental protection has benefits but no costs. Indeed, many even claim that environmental programmes (such as subsidies to energy efficiency improvements) have negative costs. Their message is, "Regulate everything and we will all get richer." This is patently false and the frivolity such an attitude induces in public policy has not been helpful. ³⁶

Who would champion such a confused vision? How has such a peurile utopian dream garnered such massive political support? Few major economic groups appear to benefit from regulation, although some—large waste management firms, environmental law firms, and producers of ethanol (the modern day Green moonshine) -- clearly do. Thowever, these groups would seem to lack the political influence of the Fortune 500. Of course, powerful environmental regulations create supporters over time—even within business. Those heading environmental divisions at major corporations owe their salaries to their detailed knowledge of regulatory policy; any substantive reform effort would reduce the value of their intellectual capital. Such reasons may discourage reform efforts by the environmental directors in business, but this does not explain why the CEOs of their companies wouldn't champion reform, nor does it explain the initial failure to block regulation.

It may be that the business community simply misjudged the threat posed by the intellectual and moral vision of modern environmentalism. Lacking any competing vision of how the environment might be protected and receiving extremely bad media coverage for its resistance, business may well have elected to capitulate. One economic motive for such capitulation was the fact that some states had moved before the federal government to impose environmental regulations. Larger companies faced an array of conflicting and ever more restrictive regulatory controls. Some firms may have decided that federal regulation would be less costly than seeking to meet 50 competing systems of state regulations.³⁸ Larger firms, in particular, often favor national uniform standards; such

^{35.} See, U.S. EPA, *Unfinished Business: A Comparative Assessment of Environmental Problems*, (Washington D.C.: U.S. EPA, Office of policy Analysis, February 1987); Science Advisory Board, Environmental Protection Agency, *Reducing Risk: Setting Priorities and Strategies for Environmental Protection*. (Washington D.C.: EPA, 1990); Stephen G. Breyer, *Regulation and Its Reform*.

^{36.} See, Noah Walley and Bradley Whitehead, "It's Not Easy Being Green," *Harvard Business Review*, (May/June 1994), which discusses the fallacies of "all gain/no pain" environmentalism.

^{37.} See Jonathan Adler's chapter in *Environmental Politics: Public Costs, Private Rewards*, ed. by Michael Greve and Fred Smith which discusses such environmental rent-seeking.

^{38.} Notice, this does not explain why state governments had been led to regulate. More work on the history of state and federal environmental regulation would be extremely helpful. Particularly useful would be information on which groups advanced and which opposed such laws. There has yet been no Gabriel Kolko to examine the politics of environmental regulation.

standards simplify their compliance with the regulations and reduce competition in states that might have left local industry unregulated. In practice, "uniformity" often backfires and business finds itself facing 51 systems of overlapping and confusing regulation. Smaller firms which operate in fewer states normally oppose such national uniformity but they lack the political clout (unless well organized) of the Fortune 500 companies.

Environmental policy seems to be an area where ideological rather than economic forces have driven the process. The direct force that has made environmental regulation such an important element in modern society seems to be the environmental movement itself. Aaron Wildavsky points out that egalitarian values have become dominant in modern society creating a force that has, to date, been invincible. The modern environmental movement, moreover, is extremely well financed. The ten or so major global environmental groups now have combined annual budgets exceeding \$500 million, staffs in the thousands, and millions of members. Moreover, their allies in government agencies, the churches, the schools, Hollywood, and the advertising world are extremely well funded and produce libraries of propaganda material. The framework of environmental policy making—rule making procedures, public hearings, citizen suits, citizen education grants—all reinforce the strength of the environmental establishment. The forces now supporting and defending current environmental policy dwarf those that backed transport regulation.

Still, this does not explain why environmentalists initially found it so easy to rout business. The environmental movement in the 1970s was not powerful, nor were the environmental departments of major corporations. Whatever the cause, it is certain that business has paid dearly for its defeat.

PROSPECTS FOR ENVIRONMENTAL REFORM

What then of the prospects for reform? Environmental policy is a novel form of political intervention (the U.S. Environmental Protection Agency, EPA, was only established in 1971) and is only now receiving any serious critical attention. Criticism, given its relative youth, is considered by many to be premature. To this group, the

^{39.} See, Aaron Wildavsky, The Rise of Radical Egalitarianism. (The American University Press: Washington D.C.) 1991.

^{40.} See Peggy Kueffel Daniels and Carol A. Schwartz, eds. *Encyclopedia of Associations: 28th Ed.*, (Gale Research Inc.: Washington, D.C.), 1994. Nature Conservancy, Annual Budget: \$100,500,000; Ducks Unlimited, \$79,000,000; National Wildlife Federation, \$71,000,000; World Wildlife Fund, \$60,000,000; Greenpeace, \$50,000,000; National Audubon Society, \$44,000,000; Sierra Club, \$35,000,000; The Wilderness Society, \$16,700,000; The Cousteau Society, \$14,000,000; People for the Ethical Treatment of Animals, \$9,000,000. Both the World Wildlife Fund and Greenpeace have many branches located in foreign countries with separate budgets. Greenpeace International in the Netherlands has a \$27,000,000 budget, for example. All denominations are in U.S. dollars.

problems of the EPA are simply the result of its youth and the complexity of the tasks it is undertaking.⁴¹ EPA defenders also claim that EPA has been managed by anti-environmental conservatives for most of its history.⁴²

EPA also seemed to do well in its first efforts at environmental regulation (the reduction of bulk air and water contaminants). This, however, was a relatively simple task. The second-generation cleanup programs now underway are designed to control a vast number of trace contaminants from a very large number of small point and non-point sources. Few expect this experience to fare so well; still, it is too early to assess that experience.

Academic assessment of EPA has only begun in the last decade and clearly merits much more attention. There has been very little historical analysis of the factors that led to environmental legislation in the first case: Who were the primary groups lobbying for the initial clean air and clean water acts? Why was environmental policy nationalized in the first place? Who benefited and who lost under these various acts? However, Bruce Yandle and Roger Meiners have examined an event suggesting that the "White Hat" theory of regulation—the world in peril, a brave political initiative, and salvation—is overly simplistic. They found that the city of Chicago had successful sued the city of Milwaukee under the common law of nuisance for dumping untreated sewerage in Lake Michigan. Then the Clean Water Act was enacted in 1971, Milwaukee went back into court, and under the "EPA decides all" nature of that act, persuaded the Court to lift its order. Under the Act, decisions about "how clean was clean" were to be decided by EPA, not the parties affected. In this case, Milwaukee (and those firms using that city's treatment facility) clearly benefited at the expense of the environment. Whether such events are rare is unknown.

In the absence of any persuasive research to the contrary, most people continue to believe that environmental problems must be resolved politically. The idea that deregulation (accompanied by an expansion of property rights into the ecological sphere) might provide a superior way of resolving environmental issues has little standing in the current policy climate. Indeed, few current reformers even consider deregulation. The need for political controls is conceded; the one request is that the regulators will select market oriented instruments (taxes and emission rights) rather than command-and-control regulations. In effect, the current environmental debate has a logic which is the equivalent in terms of transport regulation of a world in which private ownership of transport firms was recognized but it was believed that the rates charged and the nature of trucking services provided should be politically determined. There is still no well-understood alternative vision in the environmental area. While the intellectual case for transport regulation had virtually disappeared by the mid-1970s, the case for environmental regulation is still dominant.

^{41.} Brian Keating and Dick Russel, "Inside the EPA: Yesterday and Today...Still Hazy After All These Years," *E*, (July/Aug 1992) pp. 30-37.

^{42.} A claim that seems outlandish given the fact that, with the possible exception of Anne Gorsuch in the first years of the Reagan Administration, the agency has been headed by true believers (for example, William Ruckelshaus and William Reilly).

^{43.} See Regulation and the Reagan Era, (Oxford University Press: Oxford, England), 1989.

Work to craft that alternative vision is only now beginning although the foundation was provided decades ago by the work of such economists as Ludwig von Mises and Ronald Coase. Mises was the first to recognize that markets should not be viewed as rigid, frozen arrangements but rather as creative problem-solving institutions that—left unimpaired—would move to integrate all emerging values into an ever expanding system of voluntary arrangements. Mises was critical of the Market Failure rationale for government arguing that although markets do sometimes "fail", this fact is "not the outcome of alleged deficiencies inherent in the system of private ownership ... [but rather] ... a consequence of loopholes left in the system." He went on to argue that such failures were best addressed "by a reform of the laws concerning liability for damages inflicted and by rescinding the institutional barriers preventing the full operation of private ownership." Unfortunately, the work of Mises is largely unknown in the academic world; it is almost totally unknown in the environmental field.

Ronald Coase who also dealt with environmental concerns from the viewpoint of alternative institutional arrangements. His work focused on transaction costs. These are the costs encountered in making exchange possible and include a wide range of factors (how can the property be identified, how can it be securely transferred, how does one ensure proper payment for the good or service, how does one protect the resource from being used by those not paying). These problems are often the rationale for classifying environmental problems as better resolved in the political sphere. However, Coase himself argued that creative voluntary arrangements—cooperative agreements, extension of property rights, contracts—were often far more effective at reducing transactions costs than government intervention. 46 Unfortunately, few have yet followed up on this pioneering work.

Work to fill this gap is now underway -- at the IEA Environment Unit, at CEI, at the Political Economy Research Center in Montana, at the Reason Foundation and the Pacific Research Institute in California, at the Heartland Institute, and at the Cato Institute in Washington. ⁴⁷ However, until such alternative research gains a wider hearing, most people will believe that there is no alternative to the dominant market failure paradigm. Absent this intellectual work and efforts to challenge the moral standing of the environmental movement may be premature. However, in the U.S., such a challenge is occurring because of the conflict of environmental policy and other values. Recent years have seen the moral standing of environmentalists suffer because of their failure to respect private property rights, their disregard of the costs of environmental regulations to state and local governments, and the lack of scientific justification for environmental risk regulation. These points threaten the traditional standing of the environmental movement but the issue remains uncertain. If forced to choose between business and environmental groups, most would still select the latter.

^{45.} Ludwig von Mises, Human Action: A Treatise on Economics, 3d ed, (Chicago, Henry Regnery Co. 1966) p. 657, 658.

The alternative view, that environmentalism has become a perversely anti-human philosophy focused at suppressing economic growth and technological change, has received little attention.⁴⁸ Environmentalists seem eager to crucify mankind on a cross of green -- but no groups possessing the moral standing needed to mount a coherent attack have yet entered the environmental debate. The moral standing of the environmental establishment remains high.⁴⁹

Moreover, the economic forces favoring regulation are stronger than those favoring deregulation. The business community that might favor deregulation is fragmented. Natural gas fights with coal; plastics against paper; the Fortune 500 battles the National Federation of Independent Businesses. No effort has ever been made by the business community fundamentally to challenge environmental policy; moreover, given their assessment of the prospects for reform, it will be difficult to persuade them to support any plan in the near future.

The ideological imbalance is even greater. Today, free-market public interest groups engaged in environmental reform spend perhaps \$2 million, orders of magnitude less than the opposition. Perhaps 20 organizations around the world are engaged to some extent in environmental reform; well over 2,000 are engaged in supporting and expanding regulation. Membership in various pro-regulation environmental groups numbers in the millions, while membership in groups now active in reform are a few thousand. This hundred-fold difference in power is real and will not easily be reversed.

HEADING OFF GLOBALIZATION: THE GREENING OF PROTECTIONISM

Considering the current support for environmental policies—intellectual, moral and economic—and the fact that environmental programs are expanding rapidly throughout the economy, the immediate challenge is not to deregulate but, rather, to prevent environmental regulations from being harmonized at the global level. Such harmonization has already begun, viz.: the Basel Convention, the green provisions of the recent NAFTA treaty, the decision to create an environmental committee as part of the new World Trade Organization (the successor of GATT) and so forth. In order to prevent this movement gaining ground we need to know why this is happening.

The current situation with respect to environmental policies resembles the situation that prevailed at the dawn of transport regulation. To see this, consider the problem that was "solved" by the creation of the ICC. Railroads (along with a host of other industries) had grown massively after the Civil War. Increasingly, such firms operated at a national scale. In earlier decades, they had operated at the state or local level where active political agencies existed to work with business to ensure "fair" competition, to guard against "cutthroat competition." As the various sectors

^{48.} See George Claus and Karen Bolander, *Ecological Sanity*, (David McKay: New York) 1977, pp. 14-15; Ron Bailey, *Eco-Scam: The False Prophets of Ecological Apocalypse*, (St. Martins Press: New York) 1993, pp. 12; Michael Fumento, *Science Under Siege: Balancing Technology and the Environment*, (William Morrow: New York) 1993, pp. 355-58.

^{49.} Intellectual and moral criticisms of current policy do exist, of course, and such work is growing. See, CEI's *Free Market Environmental Bibliography* for a survey of such material.

^{50.} W. John Moore, "Golden Rules," National Journal, (May 14, 1994), pp. 1124-28.

expanded their scope and scale, they began to operate more at the national level. However, until late in the 19th century, there were no federal agencies empowered to work with industry to regulate commerce. Businesses were thus unable to seek special anti-competitive favors -- there was no national political body with the power to grant them. ⁵¹ The result was that throughout the 19th century the rail industry was relatively unregulated and was characterised by aggressive and unprecedented competition and an era of rapidly reducing prices. Historians sometimes refer to this era as one of "robber baron" capitalism; in reality, it was an era in which business was forced to compete fiercely to the benefit of consumers. ⁵²

Few businessmen relished this process, the railroads least of all. The excess capacity in rail transport ensured horrendous (from the railroad viewpoint) price wars. In an era when the antitrust laws had not yet suppressed voluntary efforts to coordinate operations, the rail leaders had sought to stabilize prices by cartelizing the industry. That proved impossible. As others have noted, in the absence of a political agency able to coerce compliance, cartelization is very difficult.⁵³ As a result, businesses that operated on a national scale were forced to compete.

In earlier times, when railroads were operating predominantly at the state level, competition could be avoided. A firm might meet with a state agency and argue the need for restriction on competition. If persuasive, the state would enforce the agreement on all competitors. The rail problem reflected the fact that states had no ability to regulate economic activities beyond their borders and that there was no federal regulatory body.

All this changed when the ICC was created. The ICC made it possible once again for business to seek favors that could be granted. This anti-competitive private/public partnership survived for almost one hundred years. Indeed, the pro-regulation coalition was strong enough in the 1930s to extend regulation over trucking and inland waterway operations. Gradually, the railroads began to lose influence with the ICC; however, the beneficiaries were not consumers but rather trucking and barge operations (and their unionized work forces). Through the early 1970s, the ICC remained impregnable—a powerful institution that held sway over rates, entry and even technology. For almost 100 years, competitive forces were kept in check and consumer interests were sacrificed.

In the environmental field, the world today faces a risk akin to that created by the success of transport regulation in 1887. Multinational businesses around the world are now operating at a scale that dwarves many national governments. Such firms favor competition no more than did the railroads of the 19th century; indeed, since many multinationals are based in cartelized economies, their distaste for competition is even greater. Nation states seek to restrict, to control, to regulate the activities of those firms operating within their territories, but they are constrained

^{51.} This situation prevailed for most firms and most economic activities. Railroads were heavily subsidized by federal land grants; certain "infant" industries and export industries gained favor. But federal policy was restricted to pork-barrel aid, preferential awards of contracts, and export/import policies. There was also limited use of federal taxes to regulate business behavior. Still, most business activities fell outside the scope of the federal government.

^{52.} Burton W. Folsom, Jr., *The Myth of the Robber Barons: A New Look at the Rise of Big Business in America*, (Young America's Foundation: Herndon Virginia), 1991.

by global competition. The nation that over-regulates its industries will find capital and entrepreneurial talent fleeing to more attractive political environments.⁵⁴

Many in the business community favor some form of global regulatory agency to create a "level playing field"—a world of uniform predictable regulation. The environmental establishment also favors such a world because it allows them to rachet up regulations in those jurisdictions in which they have greatest power without creating high costs and thus opposition in those jurisdictions. It is exactly that strategy which has long characterized environmental policy in the United States: a particularly costly regulation is imposed in California; pending its implementation, big business and national environmental groups lobby aggressively to ensure that this new rule is adopted nation-wide. That strategy has, to date, succeeded. Environmentalists would certainly favor the extension of that strategy around the world.

This would be unfortunate. The major factor encouraging a reconsideration of U.S. environmental policy is the economic penalties such laws impose on our global industries. If that external check is weakened -- the inevitable result of globalization of environmental regulation -- the prospects for reform would dim. Must we endure 100 years of green regulation before reform is possible? That is the issue which should motivate a deep review of the greening of protectionism issue now under review.

CONCLUSION: THE RESTRAINED CASE FOR REFORM

Environmental regulations imposed on the U.S. economy cost us over \$150 billion each year and EPA is still expanding. Environmental regulations are being extended to an ever widening array of business activities. Very little economic activity falls outside of the EPA's sphere of influence. The experience of transport regulation suggests that reform is possible; it also suggests that external changes weakening the strength of the regulatory establishment are a critical prerequisite to reform. The experience of transport regulatory establishment are a critical prerequisite to reform.

Yet, the analogy is not perfect; the costs of environmental regulation and its impact on the economy are far greater than those created by transport regulation. These costs and the inherent inefficiencies of ecological central planning are fast becoming more apparent to a growing number of environmental scholars. The intellectual case for reform (the realization that the market failure rationale for regulation ignores the comparative political failure problem), although not yet widely realized, is gaining adherents. Moreover, a vast array of potential deregulation supporters exist (private property groups, those affected by unfunded mandates, the poor at home and abroad most harmed by

^{54.} This is the core thesis of the book by Dwight Lee and Richard McKenzie, Quicksilver Capital.

^{55.} See Robert H. Nelson's chapter in *Taking the Environment Seriously*, pp. 1-23.

^{56.} However, the 1994 U.S. elections may signal one such external event. Certainly, the instincts of the 1994 freshman class suggests a willingness to entertain serious reform ideas; whether that willingness will translate into reality remains to be seen.

under-development, the scientific community, conservative think tanks) which, given adequate resources, could be mobilized into a more effective force for deregulation.

Given the stakes involved, it is clear that the battle against environmental collectivism must be waged. Yet, it is critical to realize that this effort will require at least a decade and tens of millions of dollars. The eventual effort may well require hundreds of millions of dollars, thousands of organizations and millions of individuals.

The challenge is twofold: first, an alternative environmental vision is critical; second, a vast amount of analysis, education, coalition development and advocacy is necessary to flesh out that vision and ensure that it is widely understood. In addition, the media must be encouraged to cover environmental policy in a more realistic fashion. Continued coverage of white hat environmentalists against black hat business polluters makes reform impossible. Also, sound science must become a much more significant part of the policy debate. Studies critical of current policies as well as those examining how property rights approaches would better integrate economic and ecological concerns are also needed. Educational efforts aimed at the key educational centers—the schools, the churches, the arts, the media—all will be necessary. Without both a competing vision and a balanced and analytically rigorous message (explaining what is going wrong and how it could be put right), reform would be premature. Efforts to enlist key decision leaders in the reform task—business leaders, celebrities, academics, scientists, politicians—is also key. Finally, the fight must be engaged at the political level through direct political action, regulatory intervention, and even litigation.

The reform needed is clear: just as economic central planning failed to motivate the citizenry of the world to create wealth, so ecological central planning is unlikely to motivate people to protect the environment. Only a system of decentralized resource management—a system based on private property—can bring people to view the environment in the critical and direct terms needed to integrate environmental values into the human-oriented economic system. The effort to translate this vision into reality is the challenge facing all friends of liberty in this final decade of the 20th century.