

Cato Institute Policy Analysis No. 98: Railroad Reregulation: Is the C.U.R.E Cure Worse Than the Disease?

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Executive Summary

A special-interest group called Consumers United for Rail Equity (C.U.R.E.) is pushing legislation that it claims would restore fairness to rail freight rates in the wake of the Staggers Rail Act of 1980, which effectively deregulated a large part of the railroad industry. The legislation includes bills introduced by Sen. Jay Rockefeller (D-W.Va.) and Rep. Rick Boucher (D-Va.) that would purportedly reform various provisions of the Staggers Act so as to give freight-rate relief to certain "captive shippers"--mainly coal companies from Appalachia that are served by only one railroad. Rockefeller and Boucher maintain that the Interstate Commerce Commission (ICC) has been remiss in protecting captive shippers from railroad price gouging.

Also in the C.U.R.E. camp are bills introduced by Sen. Dennis DeConcini (D-Ariz.) and Rep. John Seiberling (D-Ohio) with the objective of forcing railroads to open their privately owned tracks (that is, their "factories") to use by others, at rates ultimately to be established by federal courts. The DeConcini-Seiberling proposal would thus subject railroads to regulation by both the ICC and the courts--a kind of double jeopardy. The proposed legislation would incorporate a new application of antitrust law aimed specifically at railroads, which would be subject to penalties if they denied the use of their plant to others. The railroads see that provision as an unjust seizure of private property--a taking without adequate compensation (the controlling principle in condemnation proceedings)--because its effect would be to reduce many rail rates to levels that were below the full cost of providing service.

The so-called reforms advocated by C.U.R.E. are nothing less than attempts to reregulate the railroads. They have emerged less than a decade after Congress decided to deregulate the railroads rather than impose the massive projected cost of nationalizing them on taxpayers and consumers. Passage of the Staggers Act was a tacit admission by Congress that almost a century of railroad regulation had not worked as intended. Instead, regulation had pushed America's railroads to the very brink of destruction as a private industry. It is important to examine the background of the current regulatory proposals because they would likely lead the U.S. rail system down the same track.

The Railroad Industry prior to the Staggers Act

With the development of the steam locomotive, the railroads became a dominant mode of transportation. The first locomotive in America was put into operation on the Delaware & Hudson Railway in 1829. Growth was slow at first, but the railroad industry expanded rapidly after the federal government and state governments began to extend subsidies and land grants. By 1920 there were 252,845 railway track-miles in place. Established as private enterprises but given massive government aid, the railroads had become the most adequate and dependable means of

transportation in America within a century of their commercial introduction.

The railroad business requires a large plant, which represents a huge investment in fixed and specialized capital. The result is an industrywide pattern of high overhead costs and relatively low variable expenses. Overhead costs soon created special pricing problems for railroad firms that sought to exploit their inherent advantages as high-bulk carriers. Eventually all the railroads were brought under the mantle of federal regulation.

The most popular account of the advent of regulation emphasizes the problems and abuses that had sprung from federal and state subsidization: overexpansion, speculation, and the concentration of market power. According to that explanation, the public's complaints (chiefly from agrarian interests) about "high" and "discriminatory" rail rates precipitated regulation. A competing view asserts that the railroads embraced regulation as a means of bringing stability to their cartel.(1)

However one interprets the historical record, it is clear that federal regulation of America's railroads began with the creation of the ICC in 1887. Grover Cleveland was sitting in the White House, Orville Wright was still a teenager, and Henry Ford was still a steam-engine mechanic. The Panama Canal had not yet been built, and the interstate highway system had not even been envisioned. The railroads had a strong market position in the transportation industry. The only other means of transport were horse-drawn wagons, snail-paced barges, and steam-propelled packets on rivers that were not always navigable.

In establishing the ICC, the Interstate Commerce Act gave it broad powers to regulate railway rates and various business practices of the railroads as well as the quasi-judicial authority to determine violations, damages, and legal remedies. The legislation represented the choice of "enforced competition" over government ownership and operation. In a series of additional regulatory acts passed between 1903 and 1920, Congress tried to force the railroads to behave as if they were subject to competition, even though it was generally perceived that they were not.

The Transportation Act of 1920 formally abandoned the enforced competition doctrine and prompted a major overhaul of the regulatory mechanism.(2) Thereafter the federal government attempted the anomalous feat of simultaneously maintaining a healthy national rail system and fostering the development of other modes of transportation. For the next half-century federal regulators held the rates for much of the railroads' competitive business above those charged by barge and truck lines, thus causing a steady erosion of rail traffic and revenues.

The railroads also came to be used as instruments of social policy. In some instances they were required to make distant producers competitive with local producers, to give preference to certain ports and regions, to help protect farm income, to help prevent unemployment, and to provide freight and passenger transportation at rates below their costs.

By the mid-1970s the railway industry was in such a weak financial position that many firms faced the prospect of insolvency. The bankruptcy of Penn Central--one of the nation's largest railroads--in 1970 had set off a chain reaction. Toward the end of the decade railroads accounting for more than 21 percent of the nation's track mileage were being operated under the protection of bankruptcy courts.(3) A 1975 Department of Transportation study found that more than one-third of the nation's rail shippers considered equipment availability and service inadequate.(4) In 1976, despite the fact that the ICC had permitted the railroads (excluding Conrail) to raise their freight rates by a percentage higher than that of inflation during the previous decade, the industry faced the effects of a 10-year capital shortfall.(5)

Deferring maintenance because of severe capital shortages and unprofitability resulted in other signs of the industry's deterioration. Between 1966 and 1976 the number of train accidents caused by track defects increased by nearly 400 percent, and 25 percent of the nation's track mileage was governed by speed restrictions because of dangerous conditions.(6) As the 1980s approached, the railroad industry in America was clearly down and out.

The first congressional action in almost a century to address the economic causes and not the symptoms of the industry's condition was the Railroad Revitalization and Regulatory Reform Act of 1976. The purpose of the act was to infuse much-needed capital into the industry and to give the railroads greater latitude in ratemaking, abandonments, and mergers so that they could regain financial independence. For the first time in the history of rail regulation the ICC was directed to develop standards of rate reasonableness that were based on the railroads' revenue requirements and to determine what annual rate of return on net investment would enable the industry to attract and retain private capital.

The act also required the ICC to render decisions on mergers within 31 months and to set appropriate time limits for abandonment proceedings.

Despite its proponents' good intentions, the Railroad Revitalization and Regulatory Reform Act was merely a Band-Aid on a hemorrhage. The ICC determined in 1978 that the railroad industry needed a return on investment of at least 10.6 percent to attract sufficient private capital to finance the maintenance and renewal of plant and equipment.(7) The industry's rate of return that year was less than 1 percent, the lowest in its history.(8) During the following year, 1979, while federally insured certificates of deposit earned 11 percent, the railroad industry's return on investment climbed to only 2.93 percent.

The Staggers Act and Railroad Deregulation

The regulatory developments outlined above precipitated a national crisis, evidenced most dramatically by the wave of railroad bankruptcies that occurred in the 1970s. It had become obvious to even the most ardent proponents of government intervention that almost a century of railroad regulation in America had failed dismally as a means of promoting economic efficiency. Faced with deciding whether to nationalize the railroads or deregulate them, Congress chose the latter course. In passing the Staggers Rail Act of 1980, it acknowledged three key findings: (1) that most transportation in the United States was competitive, (2) that nearly two-thirds of the nation's intercity freight was transported by modes other than rail, and (3) that the railroad industry's failure to achieve increased earnings would result in either further deterioration of the rail system or the need for additional federal subsidies.

The Staggers Act did not completely deregulate the railroad industry. The ICC has retained ratemaking authority in cases in which rail carriers are declared to have "market dominance" (an absence of effective competition) as demonstrated by revenues that exceed their variable costs by a prescribed percentage.(9) In such cases, the ICC can order carriers to reduce their rates. In addition, the railroads continue to be burdened by antiquated labor regulations that the Staggers Act did not address. Work rules, for example, force them to define jobs and allocate responsibilities in rigid ways that inhibit efficiency. Moreover, the railroads are the only U.S. industry that is still subject to secondary boycotts. Because a transport union can refuse to haul products made by a party to a labor dispute, even a dispute in an unrelated industry (such as steel) can reduce a railroad's revenues. Finally, the interchange of freight cars among railway firms remains mired in a complex system wherein car-hire rates are determined by regulatory formulas rather than by market conditions.

Although it failed to solve all of the problems caused by regulation, the Staggers Act was a giant step toward exposing the railroad industry to market forces. The act guaranteed neither profits nor adequate revenues to the railroads; it merely gave them an opportunity to survive within the competitive environs of the marketplace. Failure to deregulate the railroads would have been a major inconsistency, given that Congress deregulated the airlines in 1978, removed most of the entry, exit, and rate controls on truckers in 1980, and deregulated interstate bus transportation in 1982.

The most important freedom granted to the railroads by the Staggers Act was the right to enter into confidential contracts with their customers in order to guarantee certain volumes of freight and levels of service for certain periods. The confidentiality of such agreements was previously prohibited on the grounds that it would weaken the common-carrier concept. Although the ICC had begun to look favorably on shipper-carrier contracts in 1978, it required that they be open to public inspection. The disclosure requirement discouraged shippers and carriers from entering into contracts. Shippers were wary of revealing their market volumes, supply sources, and transportation costs to their competitors, whereas railroads feared that the ICC's decision would be overturned by the courts. Only after the right to confidentiality was provided by the Staggers Act did both shippers and carriers embrace the contract approach.

The Railroads' Economic Performance since 1980

The Staggers Act was not the immediate salvation of the railroads, but the industry has made significant economic progress since its passage. Improved cash flow and major cost reductions have enabled it to increase its profits in the face of a continual decline in inflation-adjusted revenues since 1980. The industry weathered the longest and deepest recession since the Great Depression (that of 1981-82) without a bankruptcy.

The railroads have ended the practice of deferring maintenance, and rail safety has improved dramatically.(10)

Industry expenditures for research and development are at record highs, and short-line, or regional, railroad creation is up substantially.(11) Piggyback and container loadings have increased by 63 percent, which reflects the railroads' determination to compete head to head with trucks for such traffic even though the profit margins involved are extremely thin. Conrail, once a seemingly hopeless ward of the state, reported annual returns on investment ranging from 5.2 to 8.7 percent during the three years prior to its reentering the private sector early in 1987.(12) Federal subsidies to freight railroads fell from \$500 million in 1980 to \$66 million in 1985.(13)

Despite such clear gains, the railroad industry has a long way to go to achieve a full recovery of its financial health, at least by generally accepted standards. (See Tables 1, 2, and 3.)

As Table 1 shows, the railroad industry's return on investment has continued to lag behind its cost of capital, making it difficult for railway firms to finance renovations and revitalization except through retained earnings. However, they tend to channel retained earnings into the highest-valued uses, which currently lie outside the railroad industry--a fact amply demonstrated by the data in Table 2 and Table 3. Financially, the railroad industry has many miles of rough terrain ahead, but as long as it retains the right to use the competitive tools of the marketplace, it can reasonably be expected to assume a viable economic role in the future, albeit a scaled-down one. On the other hand, if the industry is once again called upon to fulfill social welfare goals by serving as employer of last resort and extender of preferential treatment to special interests (such as below-market rates for coal shippers), its prospects for economic viability will be jeopardized.

Table 1							
Returns on Investment vs. Costs of Capital (%)							
	1980	1981	1982	1983	1984	1985	1986
ROI*	4.2	4.0	2.1	3.6	4.7	3.6	3.5
Cost of capital	12.1	16.5	17.7	15.3	15.8	13.6	n/a

*Based on the retirement-replacement-betterment accounting method, the only method applicable to the entire period. Special charges related to employment reductions and one-time equipment write-downs not included.

Table 2							
Returns on Equity Compared (%)							
	1980	1981	1982	1983	1984	1985	1986
Railroads*	6.0	10.5	5.4	7.3	9.9	6.8	2.1
Electric utilities	10.7	12.4	13.2	14.3	14.9	14.4	n/a
All industries	14.4	13.7	10.9	10.6	13.5	11.5	11.6

*The returns on equity between 1983 and 1986 are not fully comparable to those of prior years because the railroad industry changed to the depreciation accounting method in 1983.

Table 3						
Changes in Dow Jones and Standard & Poor's Stock Indices, 1980-86 (%)						
DJ Indus.	DJ Trans.	DJ Util.	S&P 500	S&P Trans.	S&P Rail	S&P Elec. Util.
+97	+103	+80	+78	+56	+27	+114

Source for all tables: Frank N. Wilner, *Railroads and the Marketplace*, rev. ed. (Washington: Association of American Railroads, 1987), pp. 26-27.

The Political Economy of Reregulation

Deregulation, especially by permitting confidential contracts to be made, has clearly benefited the railroad industry; it

has led to lower rates, costs, and federal subsidies, more-efficient and less-costly intermodal coordination, improved financial health, and better service. However, those changes have not occurred without other "winners" and some "losers" emerging due to the reconfiguration of economic competition and resource allocation. The winners include thousands of shippers and millions of consumers that are widely dispersed and for the most part unorganized. The most vocal losers have been special interests such as certain farmers, labor unions, regional coal companies, and coal-using, power-generating electric utilities. As public-choice theory would predict, the special interests have expressed themselves through new or renewed political activity. The proposals advocated by C.U.R.E.--DeConcini-Seiberling and Rockefeller-Boucher--are manifestations of that activity.

The Nature of Competition in Transport Markets

The case for reregulating the railroads appears to rest almost exclusively on the argument that certain shippers served by a single railroad are "captive"--that is, have no alternative means of transport and must therefore submit to monopoly pricing. The rail shippers most often alleged to be captive are electric utilities that use coal as the primary fuel for generating power. According to modern economic theory, a shipper must have no viable options in order to be deemed to have been "captured" by a monopolist. But close examination reveals that both transport and nontransport options abound for the vast majority of rail shippers.

Just as the captain of the Titanic did, proponents of railroad reregulation see only the tip of the iceberg. The captive shipper argument implies that customers can be considered exploited only when a carrier lacks competition. In fact, the railroads face four kinds of competition: intramodal (other railroad firms), intermodal (nonrail transport firms), product (a shipper's ability to use a substitute for the commodity shipped), and geographic (a shipper's ability to reroute cargo and use other railroads or means of transport). Shipper captivity (and the companion condition, carrier dominance) would not exist in the railroad industry except in the absence of all four. But there is little evidence that transport markets are prone to the absence of competition.

The high shipping rates that prevail in the absence of intramodal competition encourage the creation of new forms of intermodal competition. Competition from the truck and barge industries has confronted the railroad industry for decades. In the pre-Staggers era those industries consistently gained traffic at the expense of the railroads.(14) Today trucks have greater access than trains to most shippers, and the deregulation of the trucking industry has further improved its competitive stance. The recent opening of the Tennessee- Tombigbee Waterway to barge traffic has benefited the coal industry (although not taxpayers) by fostering lower rail rates. New technology, moreover, has made it possible to use extensive pipelines to transport coal and coal products in the form of slurry.

Failing both intramodal and intermodal competition, railroads would still be subject to product competition. An electric utility is not a captive shipper unless it is unable to substitute one input for another and has no "make or buy" options. Many power plants are equipped to burn either coal or oil in order to generate electricity, so high rail rates for coal make input substitution profitable for them. Many sellers of electricity are also able to exercise "make or buy" options. When confronted by high transport rates or other high input costs, they may choose to "import" electricity from lower-cost plants and resell it to their customers, refraining from using their own plants until cost conditions improve. Thus, in many instances the possibility of input substitution and output substitution (through "make or buy" alternatives) severely constrains railways' pricing.

Furthermore, many ostensible cases of captivity dissolve when geographic competition is considered. Take an example from Appalachia: Norfolk Southern appears to have market dominance over coal shipments from southwest Virginia and West Virginia because of the absence of other railways in the region. But electric utilities and steel mills in Norfolk Southern's market area can purchase coal from mines located along the Chessie or Conrail lines or substitute barge shipment for rail. In fact, Virginia Power Company has begun moving coal by barge from Norfolk to its power station on the James River near Richmond.(15) If it perceives that Norfolk Southern's rates for shipments from the coal fields are too high, Virginia Power can move coal from other mines to Newport News or Baltimore via Chessie or to Philadelphia via Conrail --all for subsequent shipment by barge to other locations. Most utilities are able to use similar tactics to create competition among railroads. The plain fact is that Norfolk Southern and its mining customers are in partnership to ensure that the coal they carry and mine can compete with that of their market rivals. Such circumstances are the raw material from which railroad-shipper contracts are made.

Or take an example from the Midwest: Kansas City Power & Light recently announced that it expected to save \$250 million in coal transportation costs over the next decade as a result of a contract it had negotiated with Burlington Northern Railroad. KCP&L achieved significant rail rate reductions under the contract even though it is served by only one railroad. During the negotiations the utility argued that it could build a bridge across the Missouri River to give Union Pacific Railroad access to its Platte County plant.(16)

The disappearance of all four kinds of competition faced by the railroads is only a remote possibility. Even in that unlikely event, however, reregulation would probably not be the best solution. Economists have pointed out that both the actual entry and the potential entry of a market rival serve to discipline the pricing policies of firms in concentrated industries. William Baumol, John Panzar, and Robert Willig have put forth a contestability theory of market structure that identifies ease of entry, not the number of firms in a market at a given time, as the critical determinant of a competitive outcome.(17) Their theory suggests that a railroad can perform in an economically efficient manner even in the absence of competition if its market is contestable because of potential intramodal or intermodal competition.

There is strong evidence that the railroads have been subject to market contestability since they were deregulated. In the intramodal market, rail line abandonments, predicted to become a major problem if deregulation occurred, have slowed to a trickle. Moreover, 140 small rail companies have entered the market since Staggers, which relaxed the standards for granting construction permits and extending rail lines. In the intermodal market, shipments of coal from Canada and South America to the United States (through East Coast ports) have become competitive with domestic shipments.

The Effect of Deregulation on Railway Rates

Because there are thousands of rail rates and the nature of rail service has been altered profoundly, the most reliable measures of industrywide changes in the rates are those based on aggregate data such as revenues per ton of freight. Inflation-adjusted ICC data cited by Christopher Barnekov reveal that revenues per ton have dropped dramatically since the passage of the Staggers Act, even as service quality has improved. Barnekov concluded that Staggers is having the intended effect on the railroad industry, despite the exaggerated complaints of a few disgruntled shippers, notably buyers and sellers of coal.(18)

The following figures show the course of selected rail rates between 1980 and 1985 in the United States as a whole (Figure 1), in the Eastern District (Figure 2), and in the Western District (Figure 3). Notwithstanding statements to the contrary, rail rates for coal have fallen since deregulation, especially in the Eastern District, the source of most of the complaints. As economic theory would have predicted, rail rates for other commodities have fallen even more. Food, for example, having more alternative means of transport, bears lower rates than lumber in openly competitive transportation markets. (Rate relationships, however, depend on the competitive conditions throughout regions, as the figures suggest.)

The point is that the current rate structure is competitively viable and that the relatively low rail rates charged for goods that can easily be shipped by truck, such as food, reduce the burden placed on traffic with fewer alternatives as long as they cover railroads' variable costs and help to offset railroads' overhead cost burden. The complaints of certain demanders of coal transport should not be allowed to mask the fact that deregulation has brought significant benefits to many shippers and consumers.

Additionally, there is no evidence that the electric utilities industry has encountered higher coal transport costs (which in any event it would be allowed, under most states' regulatory regimes, to pass on to customers through fuel-cost adjustment clauses). Between 1981 and 1985 the average electric power rates (per 500 kwh) for the cities of Washington, Philadelphia, New York, and Boston declined in real terms. During approximately the same period the electric power rates for all major U.S. cities underwent virtually no change.(19) Those facts suggest that at the very most, the captive shipper problem is a highly localized phenomenon.

Figure 1

Revenues per Ton of Freight in Selected Commodities: Total U.S.

Source: Interstate Commerce Commission

(Graph Omitted)

Figure 2

Revenues per Ton of Freight in Selected Commodities

Source: Interstate Commerce Commission

(Graph Omitted)

Figure 3

Revenues per Ton of Freight in Selected Commodities: Western District

Source: Interstate Commerce Commission

(Graph Omitted)

Dual Jurisdiction and Rate Reasonableness

The railroads have survived and achieved a mild recovery within the more-competitive environment nurtured by deregulation. In all but a few cases, which are fully adjudicable under the present jurisdiction of the ICC, actual and potential competition appears to be efficiently constraining rail pricing to the limits dictated by the market imperative of each railroad's covering its costs in full. The legislative proposals advocated by C.U.R.E. would eliminate the newfound and long-overdue flexibility that has allowed the railroad industry to compete. That deprivation could threaten the very survival of the industry once again.

The proposals would create a dual system of regulation with the potential for propagating all manner of economic mischief. In addition to being subject to ICC regulations, the railroads would be held to a judicially enforced antitrust standard. Freight rates that conformed to ICC regulations might nevertheless be found to be in violation of antitrust laws by the courts. The proposals contain no procedural or substantive guarantees that would prevent any influence over rates from being construed as market dominance and serving as the basis for legal redress.

The standard of reasonableness incorporated in the reregulatory proposals not only is economically naive and impractical but would turn the concept of competition on its head. No firm is in a perpetual state of equilibrium. The judicial remedies supported by C.U.R.E. seem to be founded on the assumption that any market power possessed by a railroad indicates a degree of monopoly that may be addressed under anti-trust law. By ignoring the many elements of competition that are present in railroad markets, the proponents of reregulation imply that railway rates are set in an unchanging world. But only in economic fiction is competition an end state of static equilibrium. In reality, competition is a process, in which market power is temporarily bestowed on certain market participants--sometimes sellers, sometimes buyers. As Joseph Schumpeter observed eight decades ago, it is precisely such reallocations of market power that foster "creative destruction"--and the genesis of the new products, technologies, and processes that together provide the vibrant force of capitalism.

"Competitive Access" and the Abrogation of Property Rights

The centerpiece of the DeConcini-Seiberling proposal is a provision for "competitive access" wherein, under a broad range of circumstances, railroads accused of the monopolistic exploitation of captive shippers would be required to allow their competitors to use their tracks to offer service to those shippers. That particular regulatory "reform" has been ignored by most commentators.⁽²⁰⁾ Yet from the public's point of view, it has the greatest potential for disaster.

Railroads have long had to deal with a confusing and costly maze of rate and use regulations for freight cars-- rules that were not abolished by the Staggers Act. Rolling stock is currently allocated through reciprocal rentals; a railroad

pays rent when it uses another railroad's freight cars and receives rent when another railroad uses its cars. The rental rates are determined by formulas rather than by market forces. Moreover, the formulas are perverse from a market standpoint because a surplus of freight cars causes an increase in rental rates. That phenomenon has given rise to the "hot potato" problem: railroad companies are constantly encouraged to buy and lease additional freight cars simply because regulated rental rates make it profitable for them to do so.(21)

In essence, railroads lack control of (property rights in) their freight cars. In the absence of reliable market signals to direct freight-car allocation, investment in new rolling stock has been sporadic and distorted; surpluses have usually been followed by severe shortages. The competitive access proposal would extend the costly and illogical means of freight-car allocation to track and terminal facilities and would most likely produce the same kinds of inefficiencies: Ambiguous property rights in track and equipment would provide railway companies with a disincentive to maintain and conserve them. Reduced investment incentives and a deterioration in service quality would result.

The Benefits of Contracting

The right to make private contracts is fundamental to market activity. Private contracting establishes and communicates reliable market signals, which permit more-efficient use of existing facilities and improved investment planning.

The linchpin of the Staggers Act is the freedom it has given railroads and shippers to enter into long-term confidential contracts governing the price and quality of transport. The benefits of deregulation have thus been dispersed among railways, shippers, and consumers. Through such contracts, the so-called captive shippers can protect themselves against opportunistic behavior by the railroads, as the cases of Virginia Power and Kansas City Power & Light clearly demonstrate.

The modest gains made by the railroad industry since 1980 are due to the effectiveness of contracts between railways and shippers. The competitive access provision, if it became law, would reverse two of those gains. First, prices would be subject to judicial review instead of market processes, a change that would resurrect the pattern of distorted extra-market signals to railroad managers, investors, and customers that persisted under earlier regulatory regimes. Second, judicially mandated "sharing" of track and other rail facilities would introduce new uncertainties and cost inefficiencies in rail transport markets.

Is Nationalization the Answer?

Railway regulation in the United States has been a mixed blessing at best. Early gains were offset by an entrenched and rigid institutional structure that encouraged excess capacity, procedural delays, inflexible rate structures, and "umbrella ratemaking." Under the last policy, the inherent economic advantages of one transport mode over another were largely ignored, and other dimensions of competition were completely overlooked.(22)

Having labored under the regulatory burden for almost a century, many American railroads teetered on the brink of financial collapse just two decades ago. Since then deregulation has promoted the partial recovery of most of America's railroad companies, but a complete cure has yet to be effected; achieving maximal efficiency takes time. However, C.U.R.E. and other supporters of reregulation have misdiagnosed the industry's remaining problems.

The perception that the railroads are monopolies, for example, is not supported by economic theory or evidence. Although it is true that some of the economic conditions that led to the regulation of the railroads in 1887 are still present--including, notably, high fixed costs and relatively low variable expenses--economists no longer maintain that high overhead costs inevitably lead to a "natural monopoly." Furthermore, ample potential and actual competition among railroads can be demonstrated. The recent calls for reregulation, therefore, cannot be justified by considerations of general economic welfare. The complaint that rail rates are "unfair" is the predictable response of special interests that feel they would gain more under reregulation than under continued deregulation.

There is substantial evidence that the ICC's safeguards against market dominance are effective. The current ICC guidelines cap rail freight rates at a level that will produce revenues no more than 180 percent of variable costs; 153 percent has been estimated to be the average break-even point. Because the availability of alternative means of shipment has made the demand for rail transport highly elastic, however, a large amount of rail traffic moves at rates

considerably below 153 percent. But the record shows that shippers with legitimate complaints have had ample redress. Almost 80 percent of the market dominance cases heard at the ICC--by administrative law judges, review boards, or the commission itself--have been decided in favor of the shipper. Upon a finding of market dominance in 57 rate reasonableness cases, 21 of the decisions rendered were in favor of the shipper. In two decisions involving Burlington Northern, the ICC ordered the railroad to refund a total of \$57.9 million, plus interest, to two coal shippers.(23)

Implementation of the proposals advocated by C.U.R.E. or similar ones would most likely destroy the railroads' revenue adequacy and long-term economic viability. To avoid judicial censure under such legislation, railroad firms would seek to "smooth out" differences in customers' rates, even if the differences were justified by differing costs of service. Thus, freight rates that have been held close to variable costs by competition would be raised under reregulation. Shippers with sufficiently elastic demands would then turn to other means of transport. Rate uncertainty and property- rights uncertainty would also undermine existing contracts and reduce railroads' revenues. Thus, reregulation would severely weaken railroads' investment incentives and likely terminate the service-quality improvements that have been made since deregulation.

One of the ironies of the legislation supported by C.U.R.E. is that it is a prescription for railway euthanasia. Another is that a weakened rail system cannot, in the long run, benefit coal-using utilities, especially if they have small coal-fired plants. If upstream integration had been economically efficient prior to the passage of the Staggers Act (when the freight rates for coal were higher, on average, than the post-Staggers rates), there would have been vertical mergers of utilities, railroads, and coal companies. But no such market changes have occurred, either before the passage of Staggers or since. Consequently, it appears that the utilities are not prepared to acquire their own means of transport in the event of an economic failure of the railroads.

Should such a failure become imminent, whether as a result of "natural causes" or unwise reregulatory policies, an apparent solution would be to nationalize the railways. But as a practical matter, nationalization was rejected in 1887 and again in 1980. The initial cost of nationalizing the nation's railways was reckoned to be approximately \$100 billion 15 years ago.(24) Assuming that the net value of railroad assets has not changed since then, the current, inflation-adjusted initial cost would exceed \$270 billion; an annual subsidy of more than \$15 billion might be required thereafter. Such massive commitments in the face of record federal budget deficits are enough to make even the most free-spending politician blanch.

Conclusion

In spite of the overall decline in freight rates for coal shipments since rail deregulation, rent-seeking contests have developed between certain coal-using utilities and certain railroads. Under the old regime, such distribution problems were routinely resolved through politically motivated regulatory decisions at the ICC--almost to the demise of the American rail system. But although the return to a market-oriented environment in the wake of the Staggers Act has not eliminated rent-seeking contests between market participants, decisions made in a competitive market tend to be more efficient and more conducive to the general welfare than those made in the political arena. For that reason, the best solution is to let warring parties fight it out under the rules of competitive markets, using private contracts and relying on the jurisdiction of the ICC--as amended by the Staggers Act--to arbitrate any disputes that appear otherwise irreconcilable.

The proposed legislative remedies would again make the railroads a scapegoat for various social and economic ills and a vehicle for politically driven efforts to shore up disadvantaged industries, some of which have been hurt by being forced to comply with unrelated or conflicting government mandates. EPA regulations on the sulfuric content of coal and conversion standards, for example, have put Appalachian mines that produce high-sulfur coal at an economic disadvantage with respect to producers of other grades of coal (such as low-sulfur coal from the West and abroad). The profitability of rail traffic in coal is thus due in part to the government's environmental restrictions. Hence, proposed regulations that would force coal freight rates down to artificially low, noncompetitive levels are intended to compensate for the effects of the environmental restrictions as well as for the general lack of competitiveness of certain grades of coal.

It makes little sense to sacrifice the railroads in an attempt to rehabilitate an industry segment that has been made less competitive by government regulations. In the few instances in which rail shippers are disadvantaged despite the current ICC safeguards, it would be more efficient to give cash subsidies directly to the injured parties than to saddle all the railroads with the yoke of wealth redistribution--an imposition that has already proved to have ill effects.

Since the passage of the Staggers Act the railroads and their customers have been adjusting to a more competitive environment. Problems encountered by certain shippers and regional interests during the transition to freer markets can be shown to have causes other than deregulation per se. The attempt to propel national policy back into a miasma of regulation when progress has clearly been made under deregulation is naive at best and sheer folly at worst. It would thwart the public interest by raising costs for millions of shippers and consumers and jeopardizing the security of the U.S. rail system, merely to placate special interests--a small number of coal-mining companies and rent-seeking utilities. The burden of proving the need for reregulation rests with the special interests. Failing that, a decision to reregulate the railroads in America could well turn out to be a fatal miscalculation. (1)

FOOTNOTES

(1) See, for example, D. F. Pegrum, *Transportation: Economics and Public Policy*, rev. ed. (Homewood, Ill.: R. D. Irwin, 1968), p. 59; and Gabriel Kolko, *Railroads and Regulation, 1877-1916* (Princeton, N.J.: Princeton University Press, 1965).

(2) The Transportation Act of 1920 permitted the Interstate Commerce Commission (ICC) to set minimum rates, to adjust the rates of one carrier for the sole purpose of protecting the profits of another, and to require any railroad earning more than 6 percent on investment to relinquish one-half of the "excess" to the commission for redistribution to less profitable carriers. It also required the railroads to obtain the ICC's approval before abandoning existing lines.

(3) Frank N. Wilner, *Railroads and the Marketplace*, rev. ed. (Washington: Association of American Railroads, 1987), p. 5.

(4) U.S. Department of Transportation, *A Prospectus for Change in the Freight Railroad Industry* (October 1978), pp. 19-31.

(5) *Ibid.*, pp. 3-4.

(6) *Ibid.*, pp. 25, 35.

(7) ICC, *Adequacy of Railroad Revenue, 1978 Determination*, ex parte no. 353, 362 ICC 202 (1978).

(8) Association of American Railroads, Economics and Finance Department, cited in Wilner, p. 16.

(9) Unwilling to trust subjective measures of market dominance, Congress ruled that a carrier cannot be found market dominant if its rates are such as to produce revenues below a specified revenues-to-variable-costs ratio. Since 1985 the ratio set by the ICC has been 180 percent.

(10) Since 1980 the number of rail accidents caused by track defects has decreased by 63 percent. See U.S. Department of Transportation, Federal Railroad Administration, Office of Safety, *Accident Incident Bulletin*, no. 154 (July 1986).

(11) According to the Research and Test Department of the Association of American Railroads, research and development expenditures have increased from \$5 million annually to almost \$40 million in a little more than a decade. The American Short Line Railroad Association reported that 140 short-line, or regional, railroads have been created since 1980, compared with only 75 between 1950 and 1980.

(12) Consolidated Rail Corporation, R-1 Reports, cited in Wilner, p. 27.

(13) C. C. Barnekov, "The Track Record," *Regulation* 11, no. 1 (January/February 1987): 19.

- (14) Between 1947 and 1977 truck tonnage increased by 300 percent and barge tonnage increased by 250 percent, while rail tonnage decreased by 9 percent. See *Transportation in America* (Washington: Transportation Policy Associates, 1983).
- (15) "Utility Tests Barging of Coal," *Journal of Commerce*, November 25, 1985.
- (16) "Rail Contract to Save Utility \$250 Million," *On Track* (Association of American Railroads) 1, no. 9 (June 1-15, 1987).
- (17) W. J. Baumol, J. C. Panzar, and R. D. Willig, *Contestable Markets and the Theory of Industry Structure* (New York: Harcourt Brace Jovanovich, 1982). See also E. F. Fama and A. B. Laffer, "The Number of Firms and Competition," *American Economic Review* 62 (September 1972): 670-74.
- (18) Barnekov, pp. 21-22. See also C. C. Barnekov, "A Look at Two Faces of Railroad Deregulation," *Traffic World*, August 18, 1986, pp. 86-90.
- (19) Calculated from data in *Statistical Abstract of the United States, 1984-1987*; and *Economic Report of the President, 1987*.
- (20) Barnekov is a prominent exception. See "Two Faces of Railroad Deregulation," p. 89.
- (21) The ICC's attempts to deregulate freight-car hire rates have been persistently blocked by Congress, small railroads, and freight-car leasing companies. Barnekov reported that the leasing companies have invested almost as heavily in congressional PAC contributions as in freight cars. *Ibid.*, p. 88.
- (22) The magnitude of the initial gains from ICC regulation is a matter of dispute, but the evidence that it is exceeded by the net costs is overwhelming. See, for example, R. M. Spann and E. W. Erickson, "The Economics of Railroading: The Beginning of Cartelization and Regulation," *Bell Journal of Economics and Management Science* 1 (Autumn 1970): 227-44; and R. O. Zerbe, Jr., "The Costs and Benefits of Early Regulation of the Railroads," *Bell Journal of Economics* 11 (Spring 1980): 343-50. Ann Friedlander estimated that the social costs of excess capacity in the railroad industry were 8 to 13 times as great as the deadweight losses from value-of-service pricing. See "The Social Costs of Regulating the Railroads," *American Economic Review* 61 (May 1971): 226-34.
- (23) *San Antonio Public Service Commission v. Burlington Northern et al.*, case no. 36180; and *Omaha Public Power District v. Burlington Northern*, case no. 38783.
- (24) Wilner, p. 55n. Consistent estimates of the cost of nationalizing the railways were advanced by James Sullivan, assistant vice president of marketing at Penn Central, and Federal Railroad Administrator John Ingram.