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Increased Government Intervention in the Railroad Industry: Salvation for Shippers or Requiem for Railroads?

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Introduction

Deregulation of the railroads in 1980 was a singular success. Freed from comprehensive economic regulation, an anemic industry quickly reversed course after a decade of bankruptcies, governmental bailouts, and threatened nationalization. Over the next 20 years, railroads flourished as haulers of freight. They simultaneously reduced rail freight rates for customers by more than half, achieved quantum efficiency gains, radically reduced accidents, and doubled capital expenditures.

Despite these successes, some shippers seek increased government regulation of the railroads. These shippers are unhappy because, following recent railroad mergers, the merging railroads experienced crippling service failures that delayed shipments and imposed substantial costs on shippers. These shippers also are dissatisfied with differential rail pricing and concerned about perceived reduced competition in the industry. Last December's announcement that Burlington Northern Santa Fe and Canadian National want to combine as North America's largest railroad stimulated additional calls for legislation. The railroad industry, which requires a higher level of infrastructure investment than any other major industry, contends that government re-regulation would deprive it of essential earnings, force it to shrink the rail network, and require it to curtail service. The railroads argue that most shippers would be hurt and

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the national economy would suffer.

In this paper, we examine the arguments on both sides of this contentious and complex public policy debate. We begin by reviewing the depressed state of the regulated railroads only 20 years ago and the industry's nearly miraculous recovery after deregulation. We then discuss why some shippers seek new government intervention, as well as the types of intervention they propose. Finally, we consider the railroads' fears about more government involvement in their industry.

Deregulation Revives the Railroad Industry

Economic deregulation of the railroad industry was one of the great public policy triumphs of the modern era. It arose from a national consensus that Interstate Commerce Commission regulation was causing the railroad industry's slide toward economic collapse.

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Until 1980 the government regulated every aspect of railroad competition and service. The ICC applied what the Department of Transportation described as "a hodgepodge of inconsistent and often anachronistic regulations that no longer correspond to the economic condition of the railroads, the nature of intermodal competition, or the often-conflicting needs of shippers, consumers, and taxpayers." It treated railroads as dominant monopolists, even though air and highway carriers had taken most of the nation's passengers and freight from the railroads.

Railroads could not compete on the basis of price, but instead were forced to charge identical freight rates over every route. The ICC set rates with little regard to the costs of transportation. This preserved inefficient and redundant services, such as a transcontinental route that included ferry boat transportation across Lake Michigan. Some routes were so inefficient that shippers used them as an inexpensive form of storage. Lumber shippers routed wood products across the country over a succession of a dozen or more railroads to ensure that their cars would spend weeks in transit.

Business practices common in other industries, such as contracts and volume discounts, were illegal. Government regulation forced railroads to subsidize money-losing passenger services, as well as uneconomic freight operations on lines with insufficient traffic. The ICC even restricted railroads from using new technologies to compete. For example, regulators for years prohibited Southern Railway from reducing charges for grain transportation to reflect the efficiencies of large freight cars. The ICC found the rates "discriminatory."

The ICC's Rock Island Railroad merger proceedings became the poster child for regulation run amok. When Union Pacific proposed to acquire the struggling Rock Island, other railroads either contested the purchase or demanded self-serving concessions. The proceedings dragged on for years. By the time the ICC finally issued a decision, the Rock Island had so deteriorated that it was no longer viable. An exhausted Union Pacific walked away from its financially crippled prize. Rock Island declared bankruptcy and liquidated its lines, ending rail service to hundreds of communities.

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Unable to adapt to changing market conditions, the railroad industry lost traffic and revenue. Its average rate of return on investment fell from 4.1 percent in the 1940s to 3.7 percent in the 1950s to 2.8 percent in the 1960s and to only 2.0 percent in the 1970s. In the 1970s, the industry imploded. For the twelve months ending September 30, 1978, the industry's rate of return was only 0.2 percent, less than the interest on a bank savings account. On many railroads, even main line tracks undulated so badly that trains could not exceed 10 miles per hour. Rail cars standing still fell off deteriorated tracks.

Many railroads failed. Half of the railroad mileage in the eastern United States fell into bankruptcy, as did several midwestern carriers. In 1972, Penn Central Transportation Company collapsed in what was then the largest bankruptcy in American history, and several other railroads in the region followed it, creating the Northeast Rail Crisis. Fearing that railroad bankruptcies might cripple the automotive industry and the entire economy, the federal government poured billions of dollars into northeastern railroads, eventually purchasing most of their lines to preserve rail service. Even the strongest railroads feared a federal takeover. Bill McDonald, Union Pacific's General Counsel, wrote in 1973 that "the entire rail industry is faced with creeping and inevitable nationalization...on the installment plan." UP and other railroads formed conglomerates to diversify into communications, insurance, airlines, natural resources, and other businesses where they could obtain better returns on investment and shield nonrail assets from government seizure.

The Northeast Rail Crisis was the straw that broke the camel's back. By 1980 Congress was fed up. The Congressional Declaration of Findings that accompanied the Staggers Rail Act, which eliminated most economic regulation, blasted ICC regulation and its effects:

> (4) many of the Government regulations affecting railroads have become unnecessary and inefficient;...
>
> (6) earnings by the railroad industry are the lowest of any transportation mode and are insufficient to generate funds for necessary capital improvements;
>
> (7) by 1985, there will be a capital shortfall within the railroad industry of between $16,000,000,000 and $20,000,000,000;
>
> (8) failure to achieve increased earnings within the railroad industry will result in either further deterioration of the rail system or the necessity for additional Federal subsidy.[1]

The Staggers Rail Act enabled railroads to respond to the marketplace like other businesses. It allowed railroads to compete on the basis of price for most shipments, eliminating price uniformity and rewarding efficiency. (The Lake Michigan railroad ferries stopped running.) It authorized confidential contracts with shippers and legalized volume discounts. It streamlined procedures for abandoning unproductive rail lines. And it broadly instructed the ICC to exempt railroads from remaining regulations unless regulation is needed to protect shippers from abuse of market power. Other legislation provided even broader freedom to Conrail, the government-owned company established to rescue railroads in the Northeast. Railroads remain subject to limited economic regulation to protect shippers and substantial federal safety regulation, as well as other forms of regulation applicable to all industries.

The railroads experienced a renaissance. Today the industry carries more freight tonnage than at any time in its history, and it accomplishes this feat with far fewer employees and on much less track. The industry responded to deregulation with vigorous rate competition, huge productivity gains, safety improvements, and massive investment. Between 1982 and 1997:

- Average railroad freight rates fell 55 percent.
- Industry productivity increased 170 percent.
- Railroad accident rates declined more than 70 percent.
- Railroads invested over $200 billion in private funds to maintain and improve the national rail system.
- Railroads doubled their annual rate of capital expenditures.

Although railroad profitability still lags behind profit levels for most industries, the railroads are more prosperous today than at any time since the 1920s.

"Captive Shippers" Call for New Federal Regulation

Despite this remarkable turnaround, many railroad customers are not content. Some, including influential shipper groups such as the Chemical Manufacturers Association and the National Industrial Traffic League, are pressing for new government regulation of the railroad industry, as described below. Most of the shippers that want re-regulation are "captive shippers," so called because they are served by only one railroad and do not have competing railroad service. Many other shippers and shipper organizations support the current deregulated regime.

Captive shippers seek legislative changes for several reasons. Many are frustrated because they believe rail service is inadequate, especially when railroads implement mergers. Captive shippers also believe that they pay too much for rail service, citing two reasons. First, they object to "differential pricing" under which railroads charge them more than other shippers for similar service. Second, captive shippers believe railroad mergers keep rates high by reducing the number of large railroads and weakening competition.

1. Service Problems

Unhappiness about rail service is the most important factor driving demands for rail re-regulation. In recent years the shipping community has become broadly dissatisfied with rail service. Shippers compare it unfavorably to motor carrier service, which is highly predictable. Rail service is less reliable for most types of shipments, with transit times varying by up to several days. Businesses want to lower costs by reducing inventories, but unpredictable rail transportation requires them to maintain inventories. Captive shippers argue that if Congress were to inject more competition into the rail industry, service would improve.

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Short-term service failures following recent railroad mergers galvanized captive shippers into seeking legislation. Burlington Northern Santa Fe (BNSF) lost shipments and experienced delays after its 1995 merger. Union Pacific's (UP) well-known 1997-98 gridlock in the Houston area hit chemical companies especially hard, forcing many to use expensive transportation alternatives. BNSF and UP service recovered fully without re-regulation, but the bad taste of service failures lingered. When CSX Transportation (CSX) and Norfolk Southern (NS) divided Conrail between them last summer, they caused a new round of service failures in the East. CSX and NS service problems continue to delay shipments, sometimes forcing businesses to close because they lack supplies. The ill-timed announcement last December of yet another major consolidation, which would create the largest railroad in North America, inflamed those already unhappy with railroad service.

2. Rate Complaints

So-called captive shippers also believe that they pay too much for rail service, even though freight rates have declined since deregulation. Their complaints focus on differential pricing and loss of rate competition due to mergers.

a. <u>Differential pricing</u>. In a seminal 1985 decision, the ICC embraced the economic principles of differential pricing for the railroad industry. Using differential pricing, a railroad charges each of its customers what it is willing to pay. Each customer pays a different rate depending on such factors as its ability to use alternative transportation and the profitability of its products. The shipper that can ship on another railroad or by truck or water usually pays less than the captive shipper that lacks transport alternatives, just as business travelers who must travel on short notice and must fly on weekdays pay airlines more than leisure travelers who can plan ahead and stay over a weekend.

Economists believe that differential pricing allows a railroad (or an airline) to provide the most service to the largest number of customers. If airlines charged full fares to everyone, most leisure travelers would stay home and airline revenues would fall sharply. Airlines could not afford as many airplanes and would reduce service. If airlines charged low leisure fares to all passengers, they again could not afford as many airplanes and would reduce service. By attracting both full-fare and leisure travelers and charging differential prices (even “low-fare” airlines like Southwest use differential pricing), airlines maximize larger contributions from both business travelers and leisure travelers to fund the costs of airplanes, airports, and computer systems. In aggregate, the large and small contributions allow the airlines to buy more airplanes and offer more flights. According to economic theory, any other pricing system would reduce the total amount airlines can invest in airplanes, airports, and computers.

Railroads need differential pricing for the same reasons as the airlines. They need large contributions to the costs of the rail network from captive shippers[2] and smaller contributions from other shippers. All shippers contribute to the network, and no shipper subsidizes another. If railroads charged less to captive shippers (the railroads' version of full-fare travelers), the railroads could not afford as many rail lines, locomotives, freight cars, terminals, and computers. The railroad network would shrink, and railroads would provide fewer services. If railroads raised rates for shippers that can ship by truck (the railroads' version of leisure travelers), those shippers would abandon the trains and put their shipments on the highways. Again, railroad revenues would fall, forcing the railroad network to shrink.

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Captive shippers, like full-fare airline passengers, dislike differential pricing because they pay more than others for essentially the same service. Many captive rail shippers want to eliminate differential pricing by passing laws to restructure the railroad industry so that they will have competing railroad service. They argue that competition is the engine that drives the U.S. economy and that the government should force the railroads to compete. Other shippers, those that pay less under differential pricing, disagree. They recognize that if differential pricing disappears, the railroad network will shrink and they may lose rail service.

b. Effects of mergers on rates. Captive shippers also object that several decades of rail mergers weakened rate competition. They want legislation to offset this loss of competition.

Due to railroad mergers, the nation today has only a half dozen large "Class I" railroads, down from more than two dozen in the 1940s. Some captive shippers think that reducing the number of big railroads inevitably reduces competition. In approving railroad mergers, however, the ICC and the Surface Transportation Board (STB) guaranteed that every shipper that was served by two or more railroads before a merger would continue to be served by at least two railroads after the merger. This two-railroad competition appears to be effective in keeping rates competitive: Railroads bid down rates to the same extent whether two, three, or more railroads serve a shipper.

Many captive shippers—those that were never served by multiple railroads—believe that mergers nevertheless deprived them of competitive alternatives. They believe that mergers eliminated opportunities to bargain for lower rates, not from the railroad that serves their facility but from that railroad's connecting carriers. Assume, for example, that a captive shipper in Rockford, Illinois, ships airplane parts to Buffalo, New York. The captive shipper can ship from Rockford to Chicago only on Railroad X, but the shipper has three choices between Chicago and Buffalo: Railroad A, Railroad B, and Railroad C. Prior to a merger between Railroad X and Railroad A, the shipper could negotiate with the three Chicago-Buffalo carriers for the best rate between those cities. After a merger between Railroads X and A, however, new Railroad XA is able to force shipments onto its own route from Rockford to Buffalo. The captive shipper loses its ability to use the best rate offered by the three connecting lines east of Chicago. Captive shippers want legislation to make up for this lost competition.

The STB believes that these shippers are mistaken. The agency believes that, because of the "one lump" theory, captive shippers do not lose rate competition in mergers. According to the one lump theory, the railroad that serves a captive shipper can always charge up to the maximum amount the shipper is willing to pay. In the example of the Rockford shipper, assume the shipper is willing to pay $1,000 for the entire Rockford to Buffalo movement, although the shipper is not willing to pay more than $1,000. Before the merger, the shipper negotiated with Railroads A, B, and C for the best rate on the Chicago-Buffalo segment. If Railroad C offered the lowest rate,

$700, Railroad X could charge the difference between $1,000 and $700 ($300) for the Rockford-Chicago segment. After Railroad X and Railroad A merge, Railroad XA can still charge only $1,000 for the entire route. In either situation, the railroad that serves the captive shipper can charge an amount that results in the shipper paying what it is willing to pay.

Re-Regulation Proposals

The several re-regulation bills pending in Congress contain a wide array of measures under which government would intervene in the railroad industry. Several bills include so-called "open access" provisions. Open access refers to government requirements that railroads allow competing railroads to share their tracks in order to reach captive shippers.[3] Open access legislation could require private railroads to share virtually every railroad line in America with a competitor. Railroads view this as indistinguishable from forcing manufacturers (for example, Ford) to make their plants available to competing manufacturers (for example, General Motors).

Revenue losses from re-regulation would prevent the railroads from preserving the rail network and providing the levels of service they provide today.

One form of open access is "terminal trackage rights," under which regulators would allow a railroad to operate trains over a competitor's track in "terminal areas," which are usually urban areas. If the railroads cannot agree on the rent for using the tracks, the STB would set it. Another form of "open access" is called "reciprocal switching," in which one railroad is required to handle shipments as agent for a competing railroad. Again, regulators would set fees if the railroads could not agree. Trackage rights and reciprocal switching would give captive shippers rail competition. The captive shipper could obtain rates from not only the railroad that owns the track but also the railroad that makes use of the track.

Some of the pending bills would impose a form of rate regulation called "bottleneck rate regulation." Under bottleneck rate regulation, the government would require a railroad serving a captive shipper to carry freight only to a nearby junction where it intersects with another railroad, even though the first railroad could provide service to a more distant point or all the way to the destination. In our example, the government would force Railroad XA to carry the airplane parts only from Rockford to Chicago, not to Buffalo. The owner of the "bottleneck" segment between the captive shipper and the junction (Rockford to Chicago in the example) would set a rate, but the government could then reduce it.

The overriding objective of these measures is to force railroads to reduce rates for captive shippers. As the executive director of the Alliance for Rail Competition said last year, "We just want to improve our bargaining position."

How Would Re-Regulation Affect the Rail Transportation System?

The railroads argue that re-regulation would be financially devastating and would force them to shrink the rail network and discontinue service for many types of shipments. The railroads urge Congress not to destroy deregulation, which the World Bank considers responsible for making U.S. railroads the world's best value in rail freight service. On July 29, 1998, the *Journal of Commerce* quoted Louis S. Thompson, World Bank railways advisor, as follows:

> Because of a market-based approach involving minimal government intervention, today's U.S. freight railroads add up to a network that...gives the world's most cost-effective freight service.

The railroads believe that re-regulation would achieve its goal of reducing many railroad freight rates, causing railroads to lose billions of dollars in revenues. With sharply reduced revenues, the railroads could not afford to fund and maintain, much less expand, their expensive national infrastructure of tracks, terminals, freight yards, locomotives, communication systems, and other assets. If the railroads earn inadequate revenues to maintain the rail infrastructure, they must disinvest in the rail network and cut back services to only those that are most profitable on a smaller rail network.

The railroad industry expects that re-regulation, if enacted, would devastate railroad revenues. This would happen for two reasons. First, when railroads compete head-to-head, they fight for market share and reduce prices downward toward variable costs in order to take traffic from each other. Studies show that with head-to-head competition, railroad rates earn only a few percentage points above the variable costs of transporting the shipments. This is not enough revenue to fund the industry's investment costs.

Second, regulated prices rarely cover the full costs of funding and maintaining the rail infrastructure. The ratemaking principles that guide STB decisions in "access" cases do not reflect all the costs of maintaining and funding the railroad network, much less allow railroads to recover the revenues they would lose if forced to give up differential pricing. Bottleneck rate regulation allows the railroads to recoup investment costs on only short segments of their routes. The railroad industry estimates that bottleneck rate regulation would cost it $2.4 billion annually, a loss that would eliminate all railroad profits. Regulated prices are also inflexible; they do not respond to changes in the marketplace.[4]

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Just as the airlines could not afford as many airplanes or fly as many flights if the government outlawed full coach fares, revenue losses from re-regulation would prevent the railroads from preserving the rail network and providing the levels of service they provide today. STB studies and Wall Street analysts agree that the railroad industry does not yet earn adequate revenues to fund and maintain existing tracks, locomotives, yards, signals, cars, and other assets. As one investment analyst described the situation, “The railroads are still going out of business, but not as fast as before.” With re-regulation, the railroads would face even greater shortages of investment capital and funds for maintenance.

Capital shortages will be especially devastating to railroads because the rail industry requires much higher levels of capital expenditure than any other major American industry. Between 1992 and 1996, for example, the railroads devoted the equivalent of 16.1 percent of their revenues to capital expenditures. By comparison, the average level of capital expenditures by all manufacturing sectors was 3.5 percent, and the second highest industry level of capital expenditure, by the paper products industry, was only 5.5 percent, approximately one-third of the railroad industry level.

Railroads would be unable to maintain their current level of investment, let alone invest for future growth. They would return to the downward spiral of the regulated era. If the railroads remain in business at all over the long term, they would be forced to retreat to smaller rail networks that could be supported with lower revenues. They would disinvest in less profitable assets and discontinue lines of business that would no longer be profitable.

By forcing railroads to eliminate their less profitable services, new government regulation would force rail traffic back onto the highways.

By forcing railroads to eliminate their less profitable services, new government regulation would force rail traffic back onto the highways. For example, the railroads’ fastest growing, but often marginally profitable line of business is “intermodal” traffic: movement of truck trailers and containers on rail cars instead of on the nation’s highways. Railroads cannot increase rates for this traffic because subsidized truckers can carry the shipments if rates increase. As the railroads eliminate their least profitable traffic, intermodal shipments would leave the rails for the nation’s already crowded roadways.

Conclusion

The impassioned debate over railroad re-regulation is one of the most complex to confront policymakers in many years. Those who argue for renewed regulation claim to favor competition. Our economy embraces and depends on competition, yet we also resist government interference in private industry and investment. Those who argue for preserving deregulation warn that not only the rail industry but also the majority of shippers would be harmed if Congress overturns today's successful policies.

Notes

[1] Public Law 96-448, Oct. 14, 1980, Section 2.

[2] In order to prevent price-gouging, federal law offers protection to shippers who have no transportation alternative. Captive shippers that must ship by rail and that have access to only one railroad can ask the Surface Transportation Board (STB) to set a reasonable rate. According to the Government Accounting Office, however, the STB's ratemaking procedure is expensive and sometimes slow. Also, the STB has never developed reliable and cost-effective ways of establishing rates for small shippers or when the amount in dispute is modest.

[3] Under current federal law, railroads already must carry shipments in connection with their competitors. If one railroad tenders a freight shipment to another, the second railroad must accept it in interchange. The second railroad, however, is entitled to charge whatever it can for the service it provides, taking into consideration the profits it would lose. Under "open access" provisions, the second railroad loses its ability to charge a market-based price and must instead charge a regulated price that is almost always lower.

[4] In a recent paper, L. E. Peabody & Associates, Inc., a lobbying organization for shippers, purported to show that railroad profits would grow if Congress adopted new rail regulation (Alliance for Rail Competition, *The Effects of Increased Competition and Improved Service on the Railroad Industry,* 1999). The paper relies on dubious assumptions. For example, it assumes that railroads could today reap enormous profits through rate reductions, but that railroad managers do not know how to maximize their own profits. More seriously, the paper assumes that railroads will radically improve their profitability over the next several years through a combination of rate increases and cost reductions. The history of railroad pricing since the Staggers Rail Act shows, however, that rates fall as productivity improves, because competitive pressures force railroads to pass on most cost reductions to their customers. Finally, the paper makes the improbable assumption that railroads can greatly improve service and increase traffic without significant new investments. None of these assumptions is plausible.

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