ASSESSING THE IMPACT OF REGULATION AND DEREGULATION ON THE RAIL AND TRUCKING INDUSTRIES

by

Donavan M. Lowtan

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Signature of Author _____
Department of Civil and Environmental Engineering
16 September 2003

Certified by _____
Carl D. Martland
Senior Research Associate
Department of Civil and Environmental Engineering
Thesis Supervisor

Accepted by _____
Heidi Nepf
Chairman, Departmental Committee on Graduate Students

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ABSTRACT

The Interstate Commerce Commission successfully implemented its 1887 mandate of reducing the monopolistic powers of the railroads. However, as freight transportation evolved into a competitive system with the emergence of trucking, the ICC effectively adapted its policies. ICC minimum rate regulations and track abandonment procedures kept many Class I railroads competitive. ICC ownership certificate requirements reduced destructive competition in the trucking industry.

The blame assigned to the ICC for railroad problems was exaggerated. The Penn Central bankruptcy showed that the railroads had a variety of non-regulation related problems; including rigid management, poor attitudes towards passenger rail services, and inadequate merger planning. This exaggeration was part of a wider misrepresentation as indicated by the attempt to portray Northeast railroad problems as a system-wide problem. This essay shows that there were in fact, many profitable railroads prior to deregulation. Before the passage of the Staggers Act and Motor Carrier Reform Act in 1980, the ICC witnessed the survival of the railroads and truckers through significant economic and political changes, including increased competition, evolving industrial markets, high interest rates, inflation, urbanization, and two World Wars. This was all done while allowing the overall transportation network to evolve into a ubiquitous, competitive system.

Deregulation did not achieve several of its stated goals. Freight rail profits were flat and trucking profits fell. The railroads remained unfavourably viewed by Wall Street investors as annual capital investment shortfalls mounted. Many Class I railroads disappeared and severe competition bankrupted many small carriers in the trucking industry. Larger trucking carriers gained market dominance. Real wages in the trucking industry fell. The size of the railroad labour force decreased while railroad wages remained stagnant. Based on numerous pre-deregulation indicators provided by the government, industry, and academia, this essay shows that deregulation did not fulfill many of the promises made prior to the Staggers Act and the Motor Carrier Reform Act.

Thesis Supervisor: Carl D. Martland
Title: Senior Lecturer in Civil and Environmental Engineering

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A list of the number of people whose faith in me throughout my life culminated in my acceptance to MIT and ultimate success at this program would be in itself, the length of a book. This document is for my old man, who believes that two possessions are more important than anything else: honesty, and a good education.

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1.1 General Introduction

At the time of the writing of this paper, in mid-2003, the United States was experiencing its greatest period of economic uncertainty in over a decade. Just four years earlier, the stock market was in the midst of one of its greatest bull runs ever. New technology and innovative business practices offered testimonials to the great potential of the free market. The federal government achieved budget surpluses for the first time in a generation. Four years and an estimated four trillion dollars in lost investments in the stock market later; many people have been reacquainted with some of the difficulties of the free market. In this period of time, when some of Wall Street's most prestigious firms are in legal predicaments, people are reminded that sometimes the government is compelled to intervene in order to maximize public good. People are turning to the government to solve a myriad of problems from regulating internet access to providing security. It is in this context that history can be rewound 116 years to the 1887 formation of the first regulatory commission in the United States, the Interstate Commerce Commission, another period in American history when people questioned certain aspects of free market activity.

It was the actions of the Granger movement, a nationwide coalition of farmers who experienced the hardships of declining agricultural prices, which provided the impetus for government regulation in certain aspects of American commerce.[1] They formed political entities whose power in the Midwest helped produce "Granger Laws", an attempt to adjust rates and legislate against abuses perpetrated by the railroads against grain farmers. It was the Supreme Court's support of the constitutionality of the Granger Laws in Munn v. Illinois[2] in 1876, and the subsequent reduction of those powers in the Wabash Case[3] in 1886 that compelled the federal government to create the Interstate Commerce Commission (ICC) in the 1887 "Act to Regulate Commerce".[4] For the first time since the beginning of railroading in the United States with the chartering of the Baltimore and Ohio in 1827, railroads would be subject to a regulatory apparatus.

This essay explores the history of railroad and trucking regulation from the inception of the ICC to the present day. What this essay sets to establish is whether the pre-deregulation story is the same that is being told in the post-deregulation era. Furthermore, this essay will examine whether some of the predictions suggested by pro *and* anti deregulation advocates have come to pass. The reason why this issue is under scrutiny is the desire to maintain historical accuracy in light of the "winner writes history" syndrome that sometimes occurs when exploring past events. This essay will accomplish this task by reviewing the history of the ICC, by understanding the role of regulation in preserving and protecting both railroads and trucks by improving innovation

[1] Locklin, Philip. *Economics of Transportation.* Sixth Edition. Illinois: Richard D. Irwin, Inc., 1966. (P.198)
[2] Ibid. (P.203)
[3] Ibid. (P.209)
[4] Ibid. (P.210)

and industry performance, and by examining the stated goals and the ensuing results of deregulation.

1.2 Interstate Commerce Act 1887

The original text of the Interstate Commerce Act, approved on 04 February 1887 provided for regulation of passenger and freight railroads and waterways between states in the country but not wholly within a state and prohibited the "unjust and unreasonable charge" for such service.[5] The act prohibited carriers from using various pricing tools available in the free market in the hopes of preventing monopolistic behavior. Furthermore, the act made the pricing mechanism of the railroads completely transparent to the public. Figure 1.1 outlines and explains the various articles of the bill. The first seven sections provided the majority of the economic regulation of the subject industries, while the remaining items addressed administrative issues of the ICC.

Highlights of the legislation included a mandate that no carrier could charge various customers different prices for similar service. Carriers were compelled to rationalize the prices they charged for long haul and short haul services through the requirement that shorter distance could not be more expensive that longer distance. The act made it illegal for carriers to pool freight; this enforced competition and restricted one type of collusive behaviour. The carriers were required to publish rates and charges between all destinations, file these rates with the ICC, and provide a period of public notice when rates were going to be increased. Finally, the ICC was granted virtually unlimited access to the financial and contractual arrangements of the carriers under its jurisdiction; making

[5] Ibid. (P.210)

the carriers essentially privately held public entities. There were a variety of reasons why the railroads (in particular) were being subject to government regulation.

- "The rails had demonstrated so much technical superiority over other forms of transport at [the time of passage of the act], except for certain waterways, there were no good alternatives to rail service."[6]
- "Because the railroads had monopolies at intermediate points and by concerted action often limited competition at others, rates were frequently excessive and there was discrimination against persons, points, and traffic where competition was not effective."[7]
- "The original regulatory task was to curb such excesses of rail monopoly power in the interest of small shippers, communities served by one railroad, and other shipping interests hurt by monopolistic practices."[8]

[6] Nelson, James. *Railroad Transportation and Public Policy.* Washington D.C.: The Brookings Institute, 1959. (P.112)
[7] Ibid. (P.112)
[8] Ibid. (P.112)

Figure 1.1 Explanation of the 24 articles of the Interstate Commerce Act of 1887

1	•Defines the carriers subject to the act •Defines the primary purpose of the act: "reasonable and just" rates for conducting business with those carriers
2	•Prohibits "price discrimination" when providing identical service to different customers
3	•Prevents carriers from giving preferential treatment to any customer •Requires carriers to afford reasonable facilitation of traffic interchange between different lines of different carriers
4	•Prohibits carriers from charging higher fees for short distance compared to long distance hauls
5	•Prohibits competing carriers from pooling freight
6	•Requires carriers to publish rates for public use and to not deviate from those rates for any purpose •Requires carriers to provide 10 days public notice for increases in rates •Requires carriers to file rates with the ICC •Requires carriers to file with the ICC any contracts, agreements, and arrangements with other carriers and certain joint rates between carriers
7	•Requires shipments to be considered "continuous" from origin to destination regardless of the occurrence of "breaks" in between
8	•Outlines liabilities of carriers for offenses
9	•Outlines procedures for filing complaints against a carrier
10	•Outlines liabilities of carriers for offenses contrary to ICC regulation
11	•Establishes the ICC and its membership
12	•Authorizes ICC to inquire into the business management of common carriers
13	•Outlines procedures for complaints to and investigation from the ICC
14	•Procedures for ICC investigation
15	•Limiting the liability imposed by the ICC upon successful correction of deficiencies by a carrier
16	•Provides ICC federal court protection and enforcement
17	•Guidelines for how the Commission conducts daily business
18	•Payments and salary guidelines for services of Commission members
19	•ICC office location
20	•Allows ICC to require carriers to supply annual reports regarding the amount and payments for capital stock issued, dividends, stockholder numbers, debts, value of carrier property, employee numbers and salaries, expenditures for improvements, earnings and revenue, operating expenses, profit and losses
21	•Annual ICC report requirement to the Secretary of the Interior
22	•Rate exemptions for employees, government, charities, religious organizations
23	•ICC Funding
24	•Date legislation takes affect

1.3 Strengthening the Original Act (1906 – 1920)

The early 20th century witnessed a movement to strengthen the ICC by amending several items in the original act of 1887. The 1906 Hepburn Act authorized the ICC to set maximum rates and required Federal Courts to shift the burden of proof onto the railroads regarding Commission rulings. The Mann-Elkins Act of 1910 empowered the ICC to disallow rate increases and to have its decisions reviewed by a special *Commerce Court* (the Commerce Court was short lived - it was abolished in 1913).[9] The 1916 Adamson Act limited railroaders' normal workday to eight hours (requiring overtime pay beyond eight hours). Rising labour costs combined with few rate increases between 1907 and 1917 created financial difficulties for the industry. WWI provided the impetus for the federal government to nationalize railroads, which were returned in 1920 with the passage of the Esch-Cummins Transportation Act. The 1920 act reversed some of the early ICC trends. The ICC now had a greater propensity to approve mergers, the ability to set minimum rates, and power to approve line abandonment and extension.[10] The setting of the minimum rate was an attempt to reverse some of the difficulties imposed by the Hepburn Act of 1906. By guaranteeing a minimum income for railroad activities, regulators expected that increased revenue would compensate for increased cost. Minimum rate requirements would also reduce the occurrence of rate wars between competing railroads. This decision was made in an era when competition from other modes, ones that could undercut the mandated railroad rate floor, was in its infancy.

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[9] Locklin, Philip. *Economics of Transportation*. Sixth Edition. Illinois: Richard D. Irwin, Inc., 1966. (P.222 – P.223)
[10] Ibid. (P.229)

1.4 The Advent of the Motor Carrier and the Interstate

Even when the railroad was the only significant mode of long-distance land transportation, regulation by the ICC was not a straightforward matter, as seen by the many adjustments in regulations. With the advent of other competitive modes of transportation, such as trucking, the effects of regulation became vastly more complicated. As a response to the state of the railroad industry during the Great Depression, the 1933 Emergency Railroad Transportation Act "allowed for the creation of a federal Transportation Coordinator to oversee the industry."[11] The act also restructured the method by which the ICC evaluated rates – this time considering the effects on the *shippers.*[12] Eventually, through the influence of the same Transportation Coordinator created under the 1933 act, Congress was prompted to pass the Motor Carrier Act of 1935, "placing the highway transportation industry under ICC oversight."[13]

"[The Motor Carrier Act of 1935] emphasized control of what was popularly regarded as excessive or "destructive" competition among carriers in the [motor field] and between carriers and the railroads. The chief instruments of ICC control quickly became the entry controls (certificate and permit requirements) and minimum rate powers, which were extended to apply also to [motor carriers]."[14] While the issue of whether the ICC

[11] Bereskin, Gregory. "Regulation, Deregulation, and Re-regulation in the Surface Transportation Industry." Washington D.C.: TRB: Committee on Freight Transport Regulation, 2003. (P.2)
[12] Ibid. (P.2)
[13] Ibid. (P.2)
[14] Nelson, James. *Railroad Transportation and Public Policy.* Washington D.C.: The Brookings Institute, 1959. (P.113 – P.114)

"prevented competition" may be open to question, the ICC had become an important consideration in the trucking industry.[15]

The beginning of the modern interstate system can be traced to the Federal Highway Act of 1956 when legislation authorized appropriations for the construction of a nationwide system of interstate and defense highways. Section 108 of the Act specifically declared that it is "essential to the national interest to provide for the early completion of the National System of Interstate Highways."[16] After 1956, the trucking industry was both regulated by the ICC through the setting of tariff rates, and advanced by the government, in part through the construction of the Interstate. In many ways, this scenario is comparable to that of the late 19th century construction era of the railroads when rates were regulated by the ICC but where entrepreneurs still found the rails an attractive business in part due to the government's partial funding of rights-of-way. In the United States in the latter part of the 19th century, railroads were one of the largest and most profitable industries whose vast geographical and operational scale required new and innovative methods of management.[17]

1.5 Rate Bureaus

During the pre-ICC era, in areas where railroads did not hold a monopoly and actually had to contend with other rivals, many times competition approached a level that was defined as ruinous. "Under the stress of competition, railroads will carry traffic at little

[15] If the ICC was trying to control "destructive competition" between railroads and motor carriers, then perhaps this is one example of how the ICC preserved (or attempted to preserve) the railroads in light of the new competition from the trucking industry.
[16] Federal Highway Act. 1954. (Section 108)
[17] Chandler, Alfred. *Strategy and Structure: Chapters in the History of the American Industrial Enterprise.* Massachusetts: M.I.T. Press, 1962. (P.21)

more than the out-of-pocket costs."[18] There were also severe fluctuations in rates charged between an origin-destination pair. As a result, freight rail customers had difficulty in making long term contractual commitments with their own patrons due to the uncertainty in their shipping rates. Both the shippers and the railroads saw benefits to imposing certain restrictions on rate setting. The early years saw the rise of rate agreements – a scheme where rail carriers "agreed to maintain specific rates."[19] Rate pools followed. A rate pool was entity where traffic was shipped over various rail-lines and the revenue generated from that shipment was divided among the various carriers whose lines were utilized. These arrangements met with some success in dampening the ruinous competition between railroads, but their legality was always in question. The Sherman Antitrust Act resulted in the decline of rate agreements and rate pools and the rise of rate bureaus. Rate bureaus "are organized on a regional basis, each concerned with traffic moving within or between certain areas."[20] Rate bureaus were regional committees (with representatives from each of the participating railroads) that set rates for its territory after taking into consideration both the needs of the carriers and the shippers. These rate bureaus functioned on a quasi-regulatory level until 1944, when the justice department challenged their legality. The Reed-Bulwinkle Act of 1948 legalized the existence of rate bureaus and placed them under the jurisdiction of the ICC.

[18] Locklin, Philip. *Economics of Transportation*. Sixth Edition. Illinois: Richard D. Irwin, Inc., 1966. (P.292)
[19] Ibid. (P.294)
[20] Ibid. (P.299)

1.6 The DOT Era and "Railroad Decline"

The Department of Transportation (DOT) was established by an act of Congress, signed into law by President Lyndon B. Johnson on October 15, 1966. Its first secretary, Alan S. Boyd, took office on January 16, 1967. The department's first official day of operation was April 1, 1967. The DOT assumed responsibility from the ICC of safety oversight over the railroads. The mission of the Department of Transportation is stated as follows:

> The mission of the Department of Transportation, a cabinet-level executive department of the United States government, is to develop and coordinate policies that will provide an efficient and economical national transportation system, with due regard for need, the environment, and the national defense. It is the primary agency in the federal government with the responsibility for shaping and administering policies and programs to protect and enhance the safety, adequacy, and efficiency of the transportation system and services.[21]

The DOT was not the regulatory apparatus that was the ICC, but it still presided over (or was involved in) several crises in the 1970's that involved ICC regulated carriers including the bankruptcy of Penn Central (through the auspices of the United States Railway Association), the creation of Amtrak, and the organization of Conrail. The DOT was involved in the deregulatory mechanisms in the late 1970's that led to the 1980

[21] The United States Department of Transportation. Office of the Historian, [Online], 10 June 2003. Available: http://isweb.tasc.dot.gov/Historian/history.htm

Staggers Act, the Truck Regulatory Reform Act and the April 1987 privatization of Conrail.[22]

The bankruptcy of Penn Central may be looked upon as the beginning of the era of deregulation. The event provided leverage for those who were arguing for a return to the pre-1887 days of unfettered free-market competition in the rail industry. The extent to which regulation factored into the bankruptcy may never truly be known, but by the end of the 1970's, deregulation proponents assigned a significant degree of the blame for Penn Central's demise on the ICC, while other factors such as corporate malfeasance and poor merger planning between the New York Central and the Pennsylvania Railroad were forgotten. Chapter 2 will delve further into the events that precipitated the June 1970 bankruptcy.

Although May 1971 witnessed the creation of Amtrak (in the federal government's attempt to help the faltering railroads by relieving them of unprofitable passenger service), for many railroads, the bankruptcy option became quite appealing. The Reading followed Penn Central's lead and filed on 23 November 1971 followed by the Lehigh and Hudson on 18 April 1972 and the Erie on 26 June 1972. The "Northeastern Crisis" was in full motion; which in turn led to the Regional Rail Reorganization Act of 1973, and the eventual Railroad Revitalization and Regulatory Reform Act of 1976 and the creation of Conrail.

[22] Ibid.

1.7 The Staggers Act and Motor Carrier Reform Act

By the end of the 1970's, even a Democratic president was in favour of deregulating various areas of the transportation sector. The rail industry had witnessed a decline in mode share during the period in which interstate trucking had become a competitor. "Total intercity ton-miles hauled by railroad... dropped sharply from 77 percent in 1929 to 36 in 1977."[23] While competition from other sectors played a significant role in the reduced levels of freight railroading, regulation from the ICC (rightly or wrongly) was assigned a high proportion of blame by many economists[24] and by groups such as the Association of American Railroads. In October 1980, President Carter signed into law the Staggers Act – a culmination of over a decade's worth of lobbying by various interests to deregulate the rail industry. For the first time since 1887, the railroads were in the realm of the free market. 1980 also produced the Motor Carrier Reform Act, legislation that began the process of deregulating interstate trucking. The twenty years following the Staggers Act and the Motor Carrier Reform Act was a period of adjustment for all parties in the trucking and rail industry. Some of the notable events during that period include the 1987 privatization of Conrail and the 1996 abolition of the ICC.

1.8 Conclusion

This section outlined the legislative history surrounding the railroads and motor carriers from the passage of the Interstate Commerce Commission Act of 1887 to the termination of the ICC in 1996. Like the scandals that beset Wall Street at the outset of the 21st

[23] AAR/I&PA. "Economic Regulation of Rail Freight Operations." Document. 05 February 1979.
[24] For example, in a 25 February 1985 statement entitled *"Economists' Statement in Support of the Staggers Act"*, 56 leading economists affixed their signature on a document endorsing previous deregulatory initiatives and "partly" assigning blame for the "deterioration of the railroads" on the "failures of economic regulation."

century, events in the mid-to-late 1800's convinced many people that greater regulatory intervention was required. The creation of the ICC was a response to the need to curb monopolistic tendencies within the railroad industry. The dominance of the railroads receded with the onset of the motor carriers in the 1920's and the 1930's. The passage of the Motor Carrier Act in 1935 allowed for regulation of that industry. By the 1970's, several events, including the bankruptcy of Penn Central and the creation of Amtrak resulted for a push to deregulation of both the railroads and the motor carriers. By 1980, the Staggers Act and the Motor Carrier Reform Act accomplished just that. By the 1996 dissolution of the ICC, the transportation sector came full circle as both the truckers and railroads were essentially left to their own auspices to compete as they desired.

Figure 1.2 Railroads Historic Timeline

1827	•B&O Railroad chartered by State of Maryland
1830	•B&O Railroad completed
1867	•Granger Movement formed
1876	•Munn v. Illinois
1886	•Wabash Case
1887	•Act to Regulate Commerce / Interstate Commerce Commission created
1906	•Hepburn Act [June]
1910	•Mann-Elkins Act
1916	•Adamson Act
1917	•Federal government takes control of railroads for remainder of WWI
1920	•Esch-Cummins Transportation Act
1933	•Emergency Railroad Transportation Act
1935	•Motor Carrier Act
1940	•The Transportation Act of 1940
1948	•Reed-Bulwinkle Act of 1948
1954	•Federal Highway Act / Interstate Road System
1955	•Intermodal freight reported as separate category of freight
1958	•Transportation Act
1966	•Department of Transportation created
1970	•Penn Central declares bankruptcy [June]
1973	•Regional Rail Reorganization Act
1976	•Conrail created by Railroad Revitalization and Regulatory Reform Act
1980	•Staggers Rail Act [October]
1980	•Motor Carrier Reform Act
1987	•Conrail privatized
1996	•ICC dissolved

Chapter 2 Transition to Competition

2.1 Introduction

Although the original mission of the ICC in 1887 was to reign in the perceived monopoly powers of many railroad carriers, there is debate regarding whether this "reigning in" involved weakening the railroads, protecting railroad customers, or protecting railroads from each other. The ICC reduced competition in certain geographical areas while keeping rail service in areas that would otherwise have lost it. Some have suggested that the ICC helped to preserve railroads in a transitional period when other modes of transportation may have dealt the rail industry a crippling blow.[25] There is evidence that suggests regulation did just that. When the ICC was first created, railroading was the major passenger and freight shipping mode; but by the middle of the 20th century, there was substantial competition from trucking. Did the presence of the ICC allow for both modes to co-exist in a period of time when unfettered competition might have caused disorder in one or both industries? Many in the trucking industry were *in favour* of regulation. As one trucking study noted, "[despite] misgivings based on the background of [the ICC's] long association with the competing railroad industry, the results of Federal regulation have, on the whole, been constructive... It seems safe to say that, at

[25] Martland, Carl. Personal interview. 05 September 2003.

least financially, the [trucking] industry would not be in nearly as good shape today if the free and easy practices of the pre-regulation days had been allowed to continue."[26] If regulation was beneficial to the trucking industry, why was it supposedly so malevolent towards the railroads?

2.2 Competition from Trucking

In 1920, the trucking industry was in its infancy with approximately 1.10 million trucks registered in the United States.[27] By the time regulation was legislated with the passage of the Motor Carrier Act in 1935, the number of registered trucks more than tripled to approximately 3.67 million.[28] The Great Depression had placed unusual burdens on the new industry. Issues such as safety, rate wars, and fraudulent business practices led many truckers to perceive regulation as a requirement whose time had come. "Ethical standards deteriorated in large segments of the [trucking] industry as efforts were intensified to wrest a living out of this relatively new form of transportation. The whole industry was getting a black eye."[29] Considering the view of the opponents of regulation in the 1970's, it might come as a surprise that the trucking industry supported regulatory measures in 1935. "Conditions had become literally chaotic by 1935, which resulted, *with the support of trucking industry associations*, [italics added] in the enactment in that year of the so-called Motor Carrier Act of 1935."[30] The passage of regulatory measures

[26] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.3)
[27] American Trucking Associations, Inc. "Trends." (qtd in. Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.4))
[28] Ibid. (P.4)
[29] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.4)
[30] Ibid. (P.4)

did not reduce the level of truck registrations. Even with the intervening years of World War II, by 1955, truck registrations in the United States reached almost 10 million.[31]

Over the years, many shippers expressed their support for the regulatory apparatus. As one shipper stated in 1972, "I feel very strongly that regulation by the Interstate Commerce Commission and the other regulatory agencies has been beneficial to the growth of a sound transportation system."[32] Many shippers indicated that paying higher rates for more reliable service under regulation was preferable to receiving cutthroat rates but less reliable service. Although some opponents of the trucking industry argued that the primary reason why truckers were able to attract customers away from the railroads was because of undercut prices, the trucking industry long ago contended that "the conviction that cost is the major factor in choosing the means of transportation is... fallacious."[33] The trucking industry cited several other reasons beyond lower costs as to why shippers prefer the truck. Among those reasons were shorter transit time, less handling in pick-up and delivery, greater truck flexibility (with trucks requiring smaller volume in order to ship), avoidance of yard delays, break ups, and reclassifications, and the ability of truckers to respond to emergency shipping needs of their customers.[34] Taking the cost argument one step further, in 1971, the chairman of the board of Yellow Freight System observed that "in terms of cost per ton-mile, the inland water carriers perform at the lowest cost, with pipelines next, then the railroads, the motor carriers and

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[31] American Trucking Associations, Inc. "Trends." (qtd in. Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.4))

[32] Heine, Robert (Manager – Physical Distribution. ITT Corporation, New York). "Profitability in a Changing Economy – Shipper Point of View." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.54)

[33] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.10)

[34] Ibid. (P.10)

the air carriers."[35] He further argued that the motor carrier and airline industries would have little or no freight traffic if ton-mile cost was the only factor of concern to shippers. "It is because the relatively higher quality of motor carrier service frequently results in lower total distribution costs that the industry has grown."[36]

The relationship between the trucking industry and the railroads is complex. Over time, the truckers have captured a large portion of rail's traffic. From the perspective of increased competition, the railroads would have suffered a decline *regardless* of the regulatory apparatus in place. However, some of the diverted freight was from the short haul category, traffic that the "railroads were almost certainly glad to get rid of."[37] Not all of the trucking industry's freight business was taken from the railroads either. The truckers also opened new markets that the railroads never serviced in the first place. As Shields & Company indicated in 1956, "much of the traffic now handled by trucks developed only because there were trucks and would not otherwise be moving at all."[38] Therefore to place all the blame on the trucking industry for the railroads' dilemma is not accurate.

The national trend towards decentralization and movement away from the city centers and into suburban neighbourhoods was in part, assisted by the trucking industry. By 1956, Shields & Company estimated that 25,000 communities in the United States had no railroad facilities whatsoever and that these centers relied entirely on trucks for their

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[35] Powell, George Jr., (Chairman of the Board. Yellow Freight Systems, Inc. Kansas City, Missouri). "Transportation Outlook in the 70's." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1971. (P.154)
[36] Ibid. (P.154)
[37] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.10)
[38] Ibid. (P.10)

transportation needs.[39] Furthermore, Shields & Company contended that "the building of railroad facilities to serve such communities, with their relatively limited transportation demands, would not have been economically justified."[40] So another factor outside of "regulation" has been identified as deleterious to the railroad industry. That factor is the trend, partly assisted by the post World War II move to private conveyance and partly assisted by the establishment of the trucking industry, which resulted in the suburbanization of the US population. "The motor carrier industry has grown not only because of the adequacy of its management, but because of increasing demands of shippers for the kinds of service that only the motor carriers can perform, i.e., fast, flexible, safe door-to-door service at relatively low total cost to the shipper."[41] Such moves, according to Shields & Company, "would hardly have been economically feasible had it not been for trucks and their ability to operate in relatively small tonnage units."[42] The ability of trucks to make small regular deliveries of items such as fruits and manufactured commodities in a method that the railroads could not economically accomplish allowed for an increase in the standard of living of these bedroom communities.[43]

In this competitive environment, the trucking industry discovered significant benefits under the regulatory apparatus. While the question of whether regulation "preserved" the railroads in a period of time when outside competitors may have significantly damaged

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[39] Ibid. (P.11)
[40] Ibid. (P.11)
[41] Powell, George Jr., (Chairman of the Board. Yellow Freight Systems, Inc. Kansas City, Missouri). "Transportation Outlook in the 70's." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1971. (P.154)
[42] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.11)
[43] Ibid. (P.11)

the industry needs to be further explored, little research needs to be completed about how regulation preserved the trucking industry. When the Transportation Act of 1935 was passed by Congress, the notion of a national, multimodal transportation system was forefront. The intent of truck transportation regulation at that point was protecting the advantages of motor transportation for consumers and for the industry. "The avowed purposes of the Act of 1935 were to preserve the inherent advantages of motor transportation, to foster sound conditions in the industry, and to promote an adequate motor carrier service at reasonable rates."[44]

Regulation indirectly added value to the ownership of a trucking license. The "cutthroat" behavior that was prevalent during the pre-regulation days was substantially reduced with the ICC's ability to control the number of issued operating certificates and permits. "The power of the Commission to grant or withhold operating certificates of public convenience and necessity, and permits... has been one of the most helpful aspects of regulation. It is this authority that puts an effective block to uneconomic expansion of motor carrier facilities in areas already adequately served by the existing companies."[45] The certificates were one method that the ICC and regulation in general allowed for the rational growth of trucking. By specifying the conditions under which trucks could operate, and more importantly limiting the number of competitors, the ICC was able to create an item of worth – possession of a certificate or permit. From that point, simple supply and demand economics took over. "Certificates and permits are of unlimited duration, but they may be suspended or revoked for cause. They may be transferred from

[44] Ibid. (P.4)
[45] Ibid. (P.5)

one carrier to another under rules and regulations prescribed by the Interstate Commerce Commission and thus are saleable rights."[46] Tradable certificates added value to the truckers who possessed them because they now had something in their possession that had limited supply but virtually unlimited demand. By its nature, the trucking industry in an unregulated environment has low barriers to entry. Industries with low barriers to entry are well positioned for extreme competition. Under the ICC, a barrier to entry was erected that was viewed by proponents as a method of "supreme importance in bringing order to the industry."[47] The ICC worked to balance the need of operators in a fairly infant industry to develop new facilities without fear that "swarms of new competitors" would "dissipate the value of existing operating rights" versus the need of shippers who desired an adequate level of competition.[48] "[The ICC] has not, however, regarded a certificate as an authority for monopoly rights and has allowed new carriers to compete when sufficient traffic was available or when the existing service was inadequate."[49] The ICC preserved the trucking industry in its infancy by reigning in potentially destructive competition and by boosting the value of individual enterprises but also permitting an adequate level of industry competition.

Both shippers and truckers appeared to see benefits to regulation and neither side seemed to favour complete deregulation of the trucking industry. For example, one shipping

[46] Regular Common Carrier Conference of the American Trucking Associations, Inc. "Financing the Motor Carrier Industry." September 1952. (P.65)
[47] Ibid. (P.68)
[48] Ibid. (P.68)
[49] Ibid. (P.68)

manager saw a "need for constructive reform in our legal procedures"[50] but also opposed complete deregulation, viewing it as an option that "can lead only to absolute chaos and ultimate destruction – a tragic step backwards."[51] They also opposed deregulation of the railroads for the same reason – another example of how regulation allowed both industries to survive without "open warfare" during the formative years. The idea that railroads be allowed to establish their own rates was met with opposition from the truckers, "the truck operators have closed ranks in united opposition to any legislation implementing [railroads' freedom to establish competitive rates]. It is the feeling of the trucking companies... that the suggestions if enacted into law would give the railroads an open hand to wage an uninhibited rate war in which the railroads with their huge resources would necessarily come out victorious."[52] In the current state of the trucking industry and the railroads under deregulation, rates have plummeted.

There were two other areas that the ICC attempted to protect the truckers; the amount of debt they could assume, and the level of accounts receivable they were allowed to carry. "[Carriers] may not deliver goods until payment is received for their services except under regulations permitting a maximum credit period to private shippers of seven days after billing, the billing being required within seven days after delivery. Thus, the carriers are assured that large amounts of working capital will not be tied up in receivables and are able to employ their funds more effectively."[53] During periods of

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[50] Heine, Robert (Manager – Physical Distribution. ITT Corporation, New York). "Profitability in a Changing Economy – Shipper Point of View." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.54)
[51] Ibid. (P.54)
[52] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.6)
[53] Regular Common Carrier Conference of the American Trucking Associations, Inc. "Financing the Motor Carrier Industry." September 1952. (P.70)

time when bankruptcies are in vogue, one could see the benefit of the accounts receivables and debt requirements. Limiting debt would curb expansion, but it also would reduce speculation. Section 214 of the Motor Carrier Act essentially required trucking companies to obtain ICC permission before issuing debt. The requirements were outlined as follows:

- A motor carrier cannot issue short-term notes in excess of the aggregate amount of $200,000 without first obtaining approval of the Interstate Commerce Commission.[54]
- A motor carrier may not issue securities in an aggregate amount in excess of $1,000,000 without first obtaining Commission approval.[55]

Not that the ICC was intent on hampering the financing needs of the industry. As one ICC official indicated, "The Commission has consistently attached great importance to the financing needs of the carrier industry. The flow of adequate funds into the industry is absolutely necessary to insure its efficient development to meet the needs of a growing economy. Several factors must be considered in this respect, including a fair rate of return which would induce private capital to flow into transportation, and confidence in the determination and ability of the industry to use proceeds effectively and prudently."[56] It is that prudent and effective use of funds that the stock market decline of 2000-2003 demonstrated that the free market cannot absolutely guarantee. The second item of regulation was the limiting of accounts receivables. "The trucking business is essentially

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[54] Ibid. (P.25)
[55] Ibid. (P.25)
[56] Mattras, John. (Interstates Commerce Commission, Washington D.C.). "Financial Regulation – Too Little or Too Much." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1976. (P.9)

a cash operation. Under ICC regulations bills must be rendered within seven days and must be paid within 14 days of shipment. Thus no substantial trade accounts receivable need be carried."[57] This clause prevented carriers from holding substantial outstanding payments. On one hand, it limited their ability to extend credit to their customers, on the other hand, it also made it more difficult for customers to default on payments. One aspect of the legislation that was detrimental to the truckers was that fines levied for breaking the accounts receivable rule were mainly directed at the truckers. Shippers had little incentive, even under this system, to necessarily pay their bills on time.

There is a significant amount of evidence that indicates regulation protected the trucking industry and allowed it to grow in a period of history when free market chaos could have occurred. At the same time, the growth of this industry caused significant decline in the percentage of overall ton-miles carried by the railroads. Despite the regulation in place, some have suggested that "owner-operators [of trucks] often underpaid their own labour and defaulted on financing of their equipment"[58] which would have kept their rates lower (during regulation, but nowhere as low as compared to what was experienced under deregulation). So even under the regulatory environment, the desire by some truckers to "undercut" the system added to the difficulty of the railroads. In an unregulated environment, the undercutting may have been more severe. State governments were also accused of not adequately enforcing some truck regulations and as such, further added to the competitive forces damaging the railroads. A 1978 report for the Secretary of

[57] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.37)
[58] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.501)

Transportation indicated that "inadequate enforcement by some state governments of regulations on truck size, weight, and speed also permit truckers, not regularly subject to maintenance and hours of service checks, to reduce prices by carrying hidden loads for longer hours."[59] While the report itself focused on the fact that these failures damaged the highway system, increased the accident rate, and resulted in "unnecessary consumption of energy,"[60] clearly the ability to reduce prices and to carry hidden loads for longer hours would also provide additional competition to the railroads and undercut that industry during a time when adequate *enforcement of regulation* would have helped.

Although trucking took business away from the railroads, the extent of what was taken is debatable. Trucks generated new business of their own that probably would never have occurred in a railroad-only environment. Yet other items are clearly more suited for railroading than for trucking – and importantly, many shippers can purchase their own private fleet of trucks, thus competing with the trucking industry, but cannot readily purchase their own railroad – so the commodities that are best suited for the rails should be shipped by rails. Truckers themselves recognized this idea. The Chairman for Yellow Freight System indicated such in a 1971 presentation when he said, "continued growth of the trucking industry in terms of revenues certainly does not spell doom for the railroads. In fact, the ATA projection shows the railroads growing rather substantially during the seventies in terms of ton miles. Rail service is best adapted to the movements of basic heavy commodities moving relatively long distances as large shipments. This traffic even though it generates low revenues per ton-mile also is low-cost to the railroads and

[59] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.6)
[60] Ibid. (P.6)

can be very profitable. Actually, some of our more profitable railroads, and there are some, handle heavy portions of so-called low-rate commodities."[61] He further added that rails have found reduced costs in the development of new efficient trains, and higher revenue with increased coal and grain traffic.[62] The advent of the trucking industry spurred the specialization of both rails and trucks in terms of what items each shipped (and the distance of those shipments). In 1972, more than half the ton-miles of transportation equipment, wood products, chemical products, tobacco products, and primary metal products were shipped by rail; while more than half the ton-miles of textiles, apparel and finished textiles, furniture, rubber and plastics, leather products, fabricated metals, instruments, photographic and medicals goods were shipped by truck.[63]

2.3 Changing Nature of Industrial Markets

Yet the items shipped in the 1970's were vastly different from the items shipped in the 1920's and somewhat different from what is shipped today. When deregulation was being debated in the 1970's, "plastics were replacing metals, making products lighter and less "rail intensive." Aluminum substituted for steel, paper and plastics for glass, composites for lumber, individually packaged products for bulk, and fresh and frozen goods for canned fruits and vegetables. Stock-keeping units of all kinds of finished

[61] Powell, George Jr., (Chairman of the Board. Yellow Freight Systems, Inc., Kansas City, Missouri). "Transportation Outlook in the 70's." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1971. (P.154)
[62] Ibid. (P154)
[63] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.16)

consumer goods proliferated and became smaller, lighter, and more valuable per pound – and more suitable to trucking than to rail." [64]

2.4 Competition from Barges and Airlines and Subsidies

Beyond the competition provided by the trucking industry, railroads also experienced a certain level of competition from airlines and barges. More so, the airlines had the luxury of operating from federally subsidized airport facilities and the barges operating from federally subsidized waterways. With the competition from three modes, barges, airlines, and trucking, the railroads experienced "high end" and "low end competition."[65] The level right-of-way subsidy for barges was quite extensive during the 1970's. "Barges had an even better deal than the trucks; they were not required to pay any user fees at all until after passage of the Inland Waterways Revenue Act of 1978, which established an Inland Waterways Trust Fund and imposed a gradually escalating fuel tax."[66]

Construction of the interstate system allowed for further development of the trucking industry. "The interstate highways substantially improved truck transit times and operating cost performance. Larger trucks became feasible, while road taxes remained about one-third lower than required to recover the full costs large trucks imposed on the highway system."[67] Of course, the debate regarding the "fair share" that truckers should pay for use of the highways is ongoing. On one hand, railroads might suggest that the

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[64] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.502)
[65] Ibid. (P.501)
[66] Congressional Record, Vol.132 no.144, October 17, 1986, p.H11533. (qtd in. Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.501))
[67] Ibid. (P.501)

heavily subsidized interstate puts them at a disadvantage compared with truckers; on the other hand, truckers complain that they pay more than their share. However, the truckers do realize many of the advantages that the advanced interstate system in the United States provides for them. In the 1950's, when the interstate program was in its early stages, the truck industry recognized that "the saving in time will allow greater utilization of equipment, lower mileage will mean fuel and tire economies, better surfacing should cut down on maintenance needs, and it seems likely that improved and more adequate highways should reduce accidents. These are very important potential gains for the industry. An improved highway system is essential if the industry is to realize the further substantial growth visualized for it."[68]

In the 1970's, when transportation officials were trying to identify the cause of the "railroad problem", one of their targets was the amount of government involvement in providing facilities for railroads' competitors. "Government has provided right-of-way facilities for highways, waterways, and airways that – in cases where adequate user charges are absent – have subsidized the rail industry's principal competitors."[69] However, these subsidies followed a pattern that was established by the federal government in the 19th century (when railroads expansion was subsidized) which promoted a national development of transportation facilities. The railroads had their construction and land appropriation subsidized by the government; the truckers had their right-of-way subsidized by the creation of the interstate system; the airlines were subsidized by airport construction; and barges were subsidized through waterway

[68] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.37)
[69] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.3)

development. The railroads were not treated very differently in that aspect – the federal government subsidized all infant industries with the intent of national benefit.

Furthermore, regulation protected many of these industries during their nascent years. It's already been shown that the truckers were protected from excessive competition (and several other problems) by regulation. So were the airlines through route management. Although little will be said about airline regulation and the benefits accrued, it should be noted that many complaints were outlined against the regulatory apparatus in that industry. For example, regulation was blamed for duplication of some routes which cut into profitability. Regarding that and other issues, as Professor Leslie Waters suggested, the airlines themselves were to blame for some of the problems they attributed to regulation. "You are all aware of the fairly extensive duplication of routes which was authorized during recent years. I commonly hear the complaint that this was the fault of regulation. I do not find this explanation very helpful, even though I wish that the duplication had not been granted. The airlines themselves ask for the duplication and, indeed, they showed evidence of wanting very much more."[70] It can at least be said that detractors in many regulated industries blamed the government for their problems when evidence suggests they need only blame themselves.

2.5 Did Regulation Help the Railroads?

A certain amount of evidence has been presented which outlined the environment in which the railroad industry operated after the major onset of trucking competition and the

[70] Waters, Leslie (Professor of Transportation. Indiana University School of Business, Bloomington, Indiana). "Transportation Above, on and Underground and on Water." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1971. (P.159)

passage of the Motor Carrier Act of 1935. Many factors beyond the typical accusation of "regulation" can be attributed to the difficulties experienced by the railroads at that time. Competition from trucking and customers moving towards the inherent advantages presented by truckers; truckers opening new markets; the suburbanization of America; subsidies for competitors' rights of way; and the changing nature of industrial markets and shipped items all played a role in the decline of the railroads. Furthermore, evidence has been presented that other industries *favoured* regulation. Many truckers favoured the protection that regulation provided during the early days of cutthroat competition through the value added mechanism of certificates, the limits placed on acquired debts and accounts receivables, and the thrust by the ICC that all players in the industry prudently use available funds and avoid the speculation that at times can be inherent in a cash abundant market. In what ways did the ICC and regulation preserve and protect the railroads in the period of time when competition from other modes (specifically trucking) and various other factors could have severely damaged the industry? The remainder of this chapter will examine this question.

2.6 ICC and Smooth Rationalization of Rail Line Capacity

Two facts should be noted when discussing the amount of rail capacity in the United States. First, a significant amount of rail was added to the national network during the regulatory period, starting around 167000 miles of track in 1890 and peaking to 260000 miles of track in the early 20th century. Secondly, despite the arguments generated by regulation opponents that the ICC did not permit reduction in rail mileage, significant rail

route reduction occurred *during the regulatory period* and well before the 1980 Staggers Act. Figure 2.1 provides approximate US route mileage since 1929.

Figure 2.1 US Rail Approximate Route Mileage[71,72]

Year	Miles	% Δ	From/To	Year	Miles	% Δ	From/To
1929	229,530	N/A	N/A	1980	164,822	(13.94)	1975/1980
1939	220,915	(3.75)	1929/1939	1985	145,764	(11.56)	1980/1985
1944	215,493	(2.45)	1939/1944	1990	119,758	(17.84)	1985/1990
1947	214,486	(0.46)	1944/1947	1992	113,056	(5.59)	1990/1992
1955	211,459	(1.41)	1947/1955	1994	109,332	(3,29)	1992/1994
1960	207,334	(1.95)	1955/1960	1995	108,264	(0.98)	1994/1995
1965	199,798	(3.63)	1960/1965	1996	105,779	(2.35)	1995/1996
1970	196,479	(1.66)	1965/1970	1998	100,570	(4.92)	1996/1998
1975	191,520	(2.52)	1970/1975	2000	99,250	(1.31)	1998/2000

One of the compelling stories of the early years of railroading is the telecom-like expansion of route mileage. The ICC understood and acknowledged this overexpansion and allowed for significant rationalization of the network. By 1980, the last year of pre-Staggers regulation, rail route mileage was near the 167000 miles level it had achieved in 1890 during the early years of the ICC. Virtually all the miles built up during regulation were reduced before the Staggers Act. While the railroads may place much of the blame for their overcapacity squarely on the regulators, the ICC had an acceptable explanation. "The railways of the United States are not built where they should have been built. Everybody understands that. A great many have been built that never should have been constructed. We are now under the disadvantage of having developed a system which must be maintained because communities have been built up along the railways, and their interests cannot be disregarded in the regulations which we shall adopt. The whole

[71] Association of American Railroads. "Railroad Facts." Washington D.C., 2002. (P.45) [Note: Percentage change calculated separately}.

[72] Note: Figure 2.1 provides length of rail *roadway*, and does not account for yard tracks, siding or parallel tracks.

trouble has arisen because of the building of railways simply to make money out of their construction and without regard to the possible profit of their operation."[73]

Much of that increase in construction can be blamed on railroad speculators (aided by land grants and other government non-regulatory measures) in the 19th century. The era prior to regulation, from 1840 – 1890, the railroads, on average, doubled its rail mileage each decade. By the dawn of the regulatory age, expansion still continued at a rapid pace, with almost 100000 extra miles of track added in the 30 years between 1890 and 1920. By 1920, many railroad profits had been made by the construction of railroads, that according to ICC officials, were built solely for the purpose of being built, and for making money on those developments (with government subsidizes also provided). Therefore, it should come as little surprise that a regulatory body such as the ICC, which was charged with protecting railroad customers would hesitate to allow the railroads to speculatively build capacity, take the profits, and then simply abandon the lines; leaving not only the government (who provided subsidizes) holding the bag, but also companies and communities that established themselves in particular locations due to the fact that the railroads were already there.

Despite some of the misgivings that could have emanated from the ICC, rail capacity was permitted to be reduced during the 50 years between 1930 and 1980. On average during this period, railroads reduced route-miles at an approximate average of 5% per decade. This level of average decline was smaller than the post Staggers Act reduction level

[73] Weller, John (Rail Services Planning Office; Interstate Commerce Commission; Washington D.C.). "Problems of the Capital Crunch." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1976. (P.39)

when, during the decade after deregulation, the decline was approximately 27%. However, it should also be noted that the decade *prior* to deregulation, the decline was approximately 16%. This level would indicate that the regulatory agencies recognized the heightened need for railroads to reduce their route-mileage during the 1970's and permitted them to do so. Whether regulators would have allowed a 27% rate of contraction during the 1980's will never be known. However, the trends in Figure 2.1 indicate that towards the end of the regulatory era, the ICC was increasing the level of permitted rail-route abandonment.

Competition from the truckers resulted in further abandonment as railroads realized that certain small shipments were not profitable. As one trucking representative in 1968 suggested, quoting an ICC source, "railroads have retired quietly, but almost completely, from the business of hauling small shipments. That railroad service which is still available is so restricted that it is valueless for most small shippers."[74] While the suggestion that railroads almost completely ceased hauling small shipments might be an exaggeration, the railroads had an incentive to eliminate unprofitable small shipments. Naturally, the truckers magnified the potential dislocation caused to communities affected by abandonment. "The reason they [the railroads] got out of handling small shipments and service at minor points was that [abandonment was] to their money advantage... Whether they caused serious dislocations to shippers and whole

[74] Brothers, David (President. American Trucking Associations, Inc.). "Problems of Success." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1968. (P.46)

communities was of no great consequence to the railroads. Not enough to overcome their understandable purpose to drop operations that weren't profitable."[75]

An interesting aspect of rationalizing capacity was the "combination and concentration"[76] of the railroads. One benefit of having a regulatory apparatus is the degree in which the presence of the ICC protected the railroads from the Sherman (antitrust) Act. Alfred Sloan recalls how Dupont acquired General Motors stock from the period of 1917 to 1919, and almost 40 years passed before Dupont was sued by the justice department and the company was required to sell the shares.[77] Speaking on the same topic of required divestiture, from the truckers' perspective, the president of Johnson Motor Lines stated that "under the umbrella of ICC regulation we have some benefits. While we cannot acquire or merge without first having been granted authority by the Commission, once we have authority to go ahead the threat of having to divest does not hang over our heads, nor do we face the threat of treble damage suits by customers of competition." [78] This standard applied to the railroads as well. In the 70 year period starting near the turn of the 20th century, the United States witnessed a 2/3 decrease in the number of railroads. Many of those mergers occurred in the decades before the Staggers Act. "The development of the railroad industry, like many other mature industries, has been characterized by combination and concentration. There were 1546 operating railroads in 1907, more than three times the number in 1976. The reduction is a result of numerous

[75] Ibid. (P.47)
[76] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.12)
[77] Sloan, Alfred. *My Years with General Motors.* 1963. Intro. Peter F. Drucker. New York: Doubleday, 1990.
[78] Cunningham, R. (Vice President. Johnson Motor Lines, Inc., Charlotte, North Carolina). "Acquisitions and Mergers from a Motor Carrier's Viewpoint." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.88)

acquisitions and mergers, many of which have occurred during the past two decades."[79] It should also be noted that by the late 1970's, the number of firms in existence was not indicative of industry concentration. By 1978, "10 groups of affiliated railroads account for approximately 80 percent of total Class I operating revenues."[80]

2.7 ICC and Rate Setting

Originally, the intent of the ICC in 1887 was to maintain the best (and fairest) rates for the customer. This was one of the primary forces used to counteract the perceived monopoly power of the railroads, and one that was strengthened by legislation in the early 20th century. The Esch-Cummins Transportation Act somewhat reversed the "hostile" mindset of the ICC , which changed the mandate to one of keeping rates at a level that considered fairness to both the consumer and to the railroad companies. When motor carrier transport became an issue, the ICC viewed rate setting from a global perspective. Many individuals in the trucking industry were fearful that an unregulated railroad would ignite a rate war, and that the ICC was the only instrument preventing that from happening. Admittedly, the railroads could argue that the ICC prevented them from competing at the lowest possible market price in order to protect the competition – the truckers. However, from a national transportation perspective, the regulators can be viewed as taking the position of protecting the overall network, in a period of time when an unregulated railroad might have crushed the infant trucking industry before it became well established. Part of that protection involved the requirement that common carriers publish their rates. The trucking industry appeared more willing than the railroads to

[79] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.12)
[80] Ibid. (P.12)

credit the ICC for minimizing rate war carnage. "Individual action by any carrier in publishing a new low rate is practically certain to meet with effective protest by competitors, and if the rate is proved to be unreasonable it will be nullified by the Interstate Commerce Commission. In addition, the power over the minimum rates of contract carriers enables the commission to keep them from exerting an unduly destructive influence upon the rate structure established for common carriage."[81]

The amount of interference by the ICC in preventing railroads and truckers from setting lower rates can be debated. In 1973, the Commissioner of the ICC, in quoting a Transportation Journal article by Merrill J. Roberts, observed that "Mr. Roberts is by no means an uncritical admirer of the Commission, but he speaks with the decided advantage of having done his homework. He writes: The rebukes to the ICC commonly concern its cartelization role, and particularly undue restraints on price competition. As a railroad complaint this charge has little substance and merely serves as an excuse for inaction. I once reviewed ICC actions, including those by employee boards, on roughly 400 rate reduction cases during the height of the 'competitive adjustments.' Very few were disallowed and then only because [they were] demonstrably below out-of-pocket costs."[82]

Many industry representatives complained about the exact *opposite* issue regarding ICC rate setting. Specifically that the regulators kept rates artificially low in order to protect

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[81] Regular Common Carrier Conference of the American Trucking Associations, Inc. "Financing the Motor Carrier Industry." September 1952. (P.69)

[82] Hardin, Dale (Commissioner. Interstate Commerce Commission, Washington D.C.). "Deregulation and the Public Interest." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1973. (P.76)

customers. During the inflation filled 1970's, new rate regulators emerged – the Price Commission. Daryl Wyckoff, a Harvard Business School faculty member expounded that, "speaking of changes in the environment, there are now new rate regulators on the scene: the Price Commission. They are not as "nice" to deal with as the ICC and do not understand why rates need to increase. In fact, one spokesman said that the Price Commission was prepared to take major steps to alter the regulation of the industry and the entire rate structure. You can bet that he was not thinking of upward revisions of rates."[83]

The essence of the complaints against regulators is that some rates were not permitted to move downward and some rates were not allowed to move upward. To be fair, a free market pricing system might have allowed rates to adjust as the industrialists would have liked to see during this period of time; where some rates moved upward and some moved downward. However, it appears that under post deregulation rates, competition forced prices downward in both the trucking and railroad industries. This environment is in stark contrast to that which the industries, specifically the truckers, faced during the early days of the 1935 Motor Carrier Act when the ICC worked towards industry profitability. The "conference organizations" which represented motor carriers in various geographic regions noticed that the ICC requirement for rates to be published resulted in prices "gravitating" towards the lowest level.[84] With the *encouragement of the commission,*[85]

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[83] Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Cambridge, Massachusetts). "Profitability in a Changing Economy – A Strategic Viewpoint." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.61)
[84] Regular Common Carrier Conference of the American Trucking Associations, Inc. "Financing the Motor Carrier Industry." September 1952. (P.68 – P.69)
[85] Ibid. (P.68 – P.69)

these conference organizations began fighting this trend in the mid-to-late 1930's. "The effort was fruitful from the beginning. Although at first the commission was preoccupied with the determination of "grandfather" rights, it gave early evidence that the effect of regulation would be to increase the general level of rates. No hesitation was shown in rejecting those which were not profitable."[86] It appears that the ICC was very interested in allowing the motor carrier industry to price for profitability.

Regarding motor carrier rate setting, the ICC had to concern itself with the ability of customers to purchase their own trucking fleet. "From the point of view of the common carrier, the rate structure must be so designed as not to encourage the individual shipper to purchase and operate his own trucks. If rates are set at levels that allow large profit margins the question naturally arises as to the feasibility of the shipper, particularly if he is a large one and his operation allows two-way haul between key points, starting his own operation in the interest of economy. This potentiality acts as an effective brake against rate rises out of line with the actual mounting costs of operations."[87]

Backhauling has always been a significant issue for truckers. Generally, a route would have more traffic going in one direction and less in the other. Prior to 1935, truckers would cut rates for the backhaul. In 1952, the American Trucking Association cited the disruptive nature of this pricing behaviour. "When a rate reduction has been proposed for a motor carrier back haul movement, the Interstate Commerce Commission has rejected the mere recovery of out of pocket cost for the general principle that rates should recover

[86] Ibid. (P.68 – P.69) [Note: The grandfather clause referred to in this passage is specifically regarding certain exemptions for carriers in operation before the 1935 Act. The early regulators spent much of their time determining who was eligible for the exemption].
[87] Ibid. (P.14 – P.15)

the average cost of the traffic of all carriers involved. The principle has been a guiding rule in improving the whole rate structure."[88] The ATA indicated its preference for this type of regulatory behaviour in protecting the trucking industry and reducing price carnage. They provided an example of two trucking companies, each with significant one-way traffic, going in the *opposite* direction of the same route. If each provided below cost rates on their respective back-hauls, they effectively price each other out of business. ICC regulatory behaviour aimed at preventing this scenario.

2.8 Collective Ratemaking

The regulatory apparatus provided another benefit to the motor carriers in the ability to establish rates as a collective without violating anti-trust legislation. Such a system created another dilemma. "The basic public policy issue posed by the collective ratemaking system is whether the benefits which accrue to the public from uniformity, stability, and equitableness in the structure of motor-carrier rates outweigh any drawbacks flowing from limitations that collective rate action places upon the workings of competition."[89] Regulators and government policymakers at times, deemed it in the public's best interest to allow companies to collude in setting prices, instead of allowing competition to govern the setting of rates, behaviour that would otherwise be illegal under the Sherman Act. Another example, "outside of transportation... the Capper-Volstead Act permits agricultural producers to price and sell their output in common

[88] Ibid. (P.69)
[89] Freidman, Jesse. "Collective Ratemaking in Trucking: The Public-Interest Rationale." Washington D.C., October 1977. (P.16)

through cooperative marketing associations under immunity from antitrust laws. (7 U.S.C. Sec 291, 292)"[90]

What was the mechanism of collective ratemaking that existed in the trucking industry under the jurisdiction of the ICC? Essentially, truckers could collude in setting rates for various regions, as long as the rate-setting was conducted under the strict supervision of regulators. The object was to prevent large shipping customers from gaining benefits from their economies of scale; price discrimination was not looked upon favourably by the ICC. It was the view of regulators that favouritism for one shipper in the form of price discrimination "is felt not only by the disadvantaged shipper firms and their customers or suppliers, but by their labour force and, in some cases, by the entire economy of the communities in which they are located."[91] Truckers would benefit from this arrangement. In a free market arrangement, large shippers would have the bargaining power to force truckers to provide special rates. In a regulated environment, carriers were placed in a position where they had to accept low or even below-cost prices for their services.

2.9 Rail Profitability in the 1970's

When the Secretary of Transportation published the *Prospectus for Change in the Railroad Industry* in 1978, the state of railroading profitability was unhealthy. "In 1976, Class I railroads earned $468 million in net railway operating income on gross operating revenues of $18.6 billion. This resulted in a 1.65 percent rate of return on an average net

[90] Ibid. (P.17)
[91] Ibid. (P.18 – P.19)

investment of $28.3 billion in rail plant. Net ordinary income (net railway operating income plus income from outside sources, less fixed rentals, interest and other deductions) was even lower - $320 million. Return on net worth in 1976 was only 1 percent, based on ordinary income without regard to deferred taxes and before equity in undistributed earnings of affiliates."[92] Beyond profit, the railroads were also experiencing a cash crunch. "In 1976, cash flow (ordinary income plus depreciation was $1.3 billion less than capital expenditures, requiring the industry to seek capital from external sources. This situation has adversely affected the industry's net working capital (current assets minus current liabilities exclusive of material inventories). Net working capital at the close of 1976 reached a deficit of $40 million."[93]

2.10 Problems Exaggerated?

Have some of the problems attributed to regulation been possibly oversubscribed? For example, Leslie Waters wrote, "we should not speak of the railroad problem but, rather the problem of some railroads. I can agree that they are interdependent, but, on the other hand, there are some that have done quite well. Lines such as the Norfolk & Western, the Union Pacific, the Southern Pacific, the Burlington Northern, the Southern, the C&O, B&O, the L&N, the GM&O, and the Illinois Central, as well as the Missouri Pacific, have done reasonably well."[94] Many proponents of deregulation portrayed the railroad problem as systematic. In reality, a majority of failures were with the *Northeastern*

[92] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.19 – P.21)
[93] Ibid. (P.19 – P21)
[94] Waters, Leslie (Professor of Transportation. Indiana University School of Business, Bloomington, Indiana). "Transportation Above, on and Underground and on Water." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1971. (P.157 – P.158)

railroads while many of the railroads in other parts of the country were performing adequately. Furthermore, as already stated, many of the bankruptcies in the Northeast were occurring at a time when American industrial capacity was being shifted away from that part of the country; which would indicate macroeconomic difficulties beyond the ICC and regulation as a contributory factor. Yet as Waters indicated, "many of the articles dealing with the railroads lump the good and the bad together and while in some cases this is proper in other aspects of finance and operation, the practice is wholly improper."[95] If companies such as the Penn Central, Northwestern, Milwaukee, and the Rock Island, constituting approximately 25 to 30% of US rail mileage[96] were experiencing difficulty, then companies representing 70 – 75% were not. It should be noted that when Chrysler was on the verge of collapse, that 30% of the US automobile industry was affected. However, there were no economic regulatory agencies to blame, the automobile companies had only themselves.

The 1970's were characterized by macroeconomic issues that caused problems for all industries, not just railroads or trucking. Inflation was one example already explored earlier. It was an issue that many experts predicted in the late 1960's would become endemic in the 1970's. "The problem – a very serious problem – is inflation, and related to it our balance of payments which has been out of whack for several years now and is not getting any better. Unless we come to grips with inflation immediately – and we are

[95] Ibid. (P.157 – P.158)
[96] Ibid. (P.157 – P.158)

very late in doing this – our country is in very serious difficulty."[97] As Paul Breitbach, a Price Waterhouse partner indicated, inflation created an artificial capital scarcity during a period of time when capital intensive industries (such as railroads) needed funds just to keep up with inflation.[98] Another issue (perhaps related to the inflationary trends of the early 1970's) was the uncertain financial markets, which in turn made long term borrowing a very difficult proposition. "The weak stock and bond markets brought about by the unique combination of simultaneous inflation and recession has made it increasingly difficult and expensive to raise long term capital. Companies are being forced to rely more heavily on short term borrowing at historically high interest rates, thus creating heavy demand on the corporate cash position."[99] During the late 1960's, there was a concern that the bond markets, one of the important sources of long term financing, was close to being destroyed. "Nobody wants bonds today. There is available 6½-7% interest on the highest quality corporate bonds, and you don't find takers. Nobody wants the bonds – everybody pooh-poohs bonds. This is not good at all. My reaction is that this is a sign of a serious problem. This country cannot afford to destroy its bond market, the only market for capital in the world of any consequence."[100] Reliance on short term financing can cause cash flow difficulties for a company. First, it severely hampers the ability of managers to plan long term outlays in terms of financing

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[97] Watkins, John (Vice President. Detroit Bank & Trust, Detroit, Michigan). "The Economic Outlook for the Remainder of 1968 and 1969." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1968. (P.135)

[98] Breitbach, Paul (Partner. Price Waterhouse & Company, Indianapolis, Indiana). "Today's Profits – Real or Imaginary?" *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1968. (P.45)

[99] Ibid. (P.45)

[100] Watkins, John (Vice President. Detroit Bank & Trust, Detroit, Michigan). "The Economic Outlook for the Remainder of 1968 and 1969." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1968. (P.136)

their debts. Secondly, during a period of high interest rates, if companies are forced to roll over their debts, they do so at increased costs. As one ICC official noted, "extreme credit crunches, recurring in approximate four-year cycles, seem to have become a fixture of the economy; the last three came in 1966, 1970 and 1974..."[101] Certainly related to inflation and high interest rates is the problem, as coined by one banker, known as disintermediation. "This is a word that came into practice a couple of years ago and it means the outflow of money from our savings institutions, from the commercial banking system and from the savings and loan industry... If you get market interest rates above what banks can pay, what the saving and loan industry can pay for savings, you start this process going and it isn't healthy."[102] While regulation and the ICC were blamed for several railroad failures in the 1970's, many macroeconomic difficulties were also shocking the economy. Inflation, high interest rates, banking problems, difficult debt financing all made conducting business a very difficult proposition during this time.

In the United States, much of the early 1970's was consumed with two political issues; the Nixon administration scandals, and the OPEC crisis. As with most controversies that threatens the future of a sitting President, Nixon's problems consumed the Congressional leadership in Washington. Many other issues of the day (such as bankrupt railroads) lost importance as the possibility of removing Nixon approached reality. The OPEC crisis added to the problems. By restricting their output, the OPEC countries temporarily

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[101] Weller, John (Rail Services Planning Office; Interstate Commerce Commission; Washington D.C.). "Problems of the Capital Crunch." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1976. (P.35)

[102] Watkins, John (Vice President. Detroit Bank & Trust, Detroit, Michigan). "The Economic Outlook for the Remainder of 1968 and 1969." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1968. (P.136)

inflated the price of a product that was the backbone of the United States economy, and especially to transportation interests. However, both these issues have been debated as to the degree of impact they had on transportation difficulties in the 1970's. As one trucking executive suggested, "It would be very easy and convenient for me to say that the Nixon administration caused it all so with those guys gone we're in for some good times. The facts are something else again. The facts are that we've had a congress spending like a bunch of drunken sailors for their pet projects, we've had an administration so scandal-racked that even when they did find time to concentrate on important domestic issues they were mistrusted, and we've had a Federal Reserve System going its own way. We've had some international problems to be sure, but the Arab oil embargo did not cause all our problems, and as we have shown, we could handle those temporary setbacks."[103] Professor Waters summed up the environment best when he stated, "the railroads would like to achieve substantial deregulation in the near future. I am doubtful that this will be achieved and extremely skeptical of the results if the goal is gained. I do not find regulation as a major factor in the plight of the railroads, although at times I would agree it has been vexing. The presence of rates below costs is certainly not attributable to regulation. The requests for rate increases with some continued erosion of traffic to other carriers are not the fault of the Commission... I would remind you that the Norfolk & Western has fared very well under the same Commission that regulated the Penn Central. More importantly, I would remind you that our railroads are in far better shape than the railroads of virtually all the other countries of the world. The carriers are

[103] Lankford, Ronald (Vice President – Finance. Spector Industries, Inc., Chicago, Illinois). "The Economy – Where Have we Been, Where are we Going?" *NAFC Award Winning Papers. National Accounting and Finance Council.* Washington D.C., 1975. (P.19)

caught up in a technological sweep of history which cannot be rolled back and cannot be altered by tinkering with aspects that, on comparison, are rather superficial."[104]

Yet those who were in favour of deregulation were able to push for change; even in the backdrop of serious macroeconomic issues that were outside the scope of the ICC. By 1978, the Secretary of Transportation had commissioned a report looking at how to change the railroads. Even though deregulation had become the issue, the report also pointed out many problems that were beyond regulation. "This report concludes there is not any single cause for the decline of the rail industry but rather a number of important factors, which, when taken together, constitutes an institutional framework that inhibits the industry from adjusting quickly or effectively to change."[105]

The report assessed the level of service in the railroad industry. As the truckers pointed out in other publications, price was not necessarily the most significant concern for transportation customers. "Poor service is one of the primary reasons that railroads have lost traffic to competing modes. Countless shipper surveys and many detailed analyses of rail operations have documented that railroads generally provide inferior service compared to competing freight transportation modes."[106] The report listed several factors as inadequate from the shippers' viewpoint including: late delivery (36%); unavailability of specified equipment (35%); late pickup (27%); arrivals with loss or damage (17%).[107] Some blame regulation for the poor service level of the railroads; however, the trucking

[104] Waters, Leslie (Professor of Transportation. Indiana University School of Business, Bloomington, Indiana). "Transportation Above, on and Underground and on Water." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1971. (P.158)
[105] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.3)
[106] Ibid. (P.19)
[107] Ibid. (P.19)

industry was also highly regulated, and there were few complaints regarding service from truckers. The railroads actually lost many customers to the truckers, another regulated industry, because of their higher service level.

The demographic shift from rural to urban settings was also cited in the report. One of the problems that the trucking industry experienced; backhauling empty or two way uneven movements, became a rail problem with the shift to urban environments. When a large portion of the population was living in rural areas, manufactured goods from the cities could be shipped to rural areas and find a market, and bulk rural goods shipped to the cities. By 1976, less than 4% of the population was living in a rural setting, the market for manufactured goods in the countryside was greatly diminished, and with it, the backhaul and its associated profits to the railroads.[108] Yet the railroads were not fighting for certain lost traffic either. Less-than-carload traffic fell out of favour. However, a less-than-carload load may be a full truckload – and any refusal by the railroads to carry these shipments only enhanced their competitors – the truckers. Refusing less-than-carload traffic was not an isolated decision, it was systemic. "About a year ago we told a Congressional committee that of the 49,448 rail stations all over the country, 74 per cent either refused less-carload traffic or restrict it. One-third bars it entirely."[109]

The report delved into many other problems plaguing the industry. Rail overcapacity was a concern, and abandonment, consolidation, and rationalization were all potential

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[108] Ibid. (P.40)

[109] Brothers, David (President. American Trucking Associations, Inc.). "Problems of Success." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1968. (P.47)

solutions. There were other concerns examined as well, including regulation and labour. The remainder of the report is examined in detail in chapter 5 of this paper.

2.11 The Penn Central Bankruptcy

The bankruptcy of the Penn Central Railroad in 1970 was a rallying point for pro-deregulation forces. The public perception was that the Penn Central was a very strong, well managed company. The rapid and sudden collapse was a surprise. The railroad industry had many bankruptcies throughout its history, a sign of the competitiveness of that business. Usually the weaker carriers were under price pressure from the stronger carriers. However, the Penn Central was not considered a weak carrier.

The Penn Central bankruptcy was preceded by protracted merger talks between the Pennsylvania Railroad and the New York Central Railroad (to form the Penn Central Railroad). Although the merger was completed on 01 February 1968, the original idea was conceived over ten years earlier, on 01 November 1957. Many mergers result in the weakening of the entities involved. "I would remind you that the usual result of mergers of companies of relatively equal size is a reduction in earnings by the combination as compared with the earnings prior to merging."[110] Furthermore, in the case of the Pennsylvania Railroad merging with the New York Central, "it was expected to take five to eight years to physically integrate the two railroads."[111]

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[110] Waters, Leslie (Professor of Transportation. Indiana University School of Business, Bloomington, Indiana). "Transportation Above, on and Underground and on Water." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1971. (P.158)

[111] Daughen, Joseph, and Peter Binzen.. *The Wreck of the Penn Central.* Boston: Little, Brown and Company, 1971. (P.9)

The major players in this era include PRR CEO James Symes and NYC CEO Robert Young. Young committed suicide in 1958, which resulted in the NYC installing a merger averse CEO, Alfred Perlman. Merger talks were halted under Perlman until 25 October 1961, after the B&O and C&O merger provided an incentive to resume negotiations. ICC hearings lasted 14 months after the boards of the two railroads approved the idea of consolidation, and the regulatory agency gave its approval on 27 April 1966. By this point, James Symes had been replaced by Stuart Saunders as CEO of the PRR. After two years of court hearings, the merger took place on 01 February 1968. The new Penn Central installed Saunders as CEO, Perlman as President (to be replaced by Paul Gorman a year later), and David Bevan as Financial Officer. The saga takes an interesting turn at the end of the 1960's. A severe winter reputedly cost the Penn Central $20 million. By mid 1970, the CEO, President, and Financial Officer were all fired, two weeks before the company filed for bankruptcy on 21 June 1970.[112]

From the very first day of the merger, it was evident that the Penn Central was planning to involve itself with many activities outside of the railroad industry. "The new Penn Central stock certificates had finally been released from the vault of the Security-Columbian Banknote Company in West Philadelphia, where they had rested since their engraving in July 1966. The new certificates showed clearly the direction in which the nation's largest railroad company intended to go. The face of each certificate was adorned with drawings of a locomotive, an airplane, a ship, a pipeline, a truck, and clusters of houses and office buildings. It would not take a particularly alert shareholder

[112] Timeline created by referencing: Daughen, Joseph, and Peter Binzen.. *The Wreck of the Penn Central.* Boston: Little, Brown and Company, 1971.

to sense, upon receiving one of these certificates, that the Penn Central was thinking conglomerate."[113]

Most of the difficulties behind Penn Central were kept from the public. However, from the onset, there were problems with melding the workforces of the PRR and NYC; two competitors who were now forced to cooperate. Personality issues extended to infighting at the executive level. "The railroad's three top officers scarcely spoke to one another. They could not, or would not, work together."[114] Former NYC CEO Alfred Perlman was opposed to the merger from the beginning. Now he was second in command to his former rival. There was also considerable controversy surrounding the Financial Officer. There were allegations that Bevan used Penn Central finances to benefit his investors club, Penphil.[115] "For a long time, Saunders, for example, was unaware of the existence of Penphil."[116] There were also allegations that Bevan attempted to get Penn Central involved (illegally) in the aviation industry, through involvement in Executive Jet Aviation.[117]

The issue of Penn Central as a conglomerate involving itself in multiple industries was completely exposed during the bankruptcy process. "Was it wise for a railroad whose very life depended on a fast flow of cash to own five New York hotels, huge chunks of

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[113] Daughen, Joseph, and Peter Binzen.. *The Wreck of the Penn Central.* Boston: Little, Brown and Company, 1971. (P.6)
[114] Ibid. (P.14)
[115] Details of the allegations are outlined in: Daughen, Joseph, and Peter Binzen.. "A very Small Affair." *The Wreck of the Penn Central.* Boston: Little, Brown and Company, 1971. (P.9) Joseph R. Daughen and Peter Binzen. "The Wreck of the Penn Central". Little, Brown and Company. Boston 1971 (P.148 – P.175)
[116] Daughen, Joseph, and Peter Binzen.. *The Wreck of the Penn Central.* Boston: Little, Brown and Company, 1971. (P.126)
[117] Ibid. (P.176 – P.205)

real estate in California and Florida, pipeline and trucking companies, amusement parks, and interests in Madison Square Garden, the New York Knickerbockers basketball team and the New York Rangers ice hockey team?"[118] "The Penn Central was like a gigantic octopus, its tentacles reaching into hundreds of board rooms, affecting universities, touching virtually every major bank in the nation, influencing government. When the Department of Transportation attempted to retain attorneys and accountants to untangle the corporate spaghetti, it was forced to search for days before it could locate firms that did not, in one way or another, have some relationship with the railroad or its subsidiaries."[119]

The inability of Penn Central to eliminate passenger service played a part in its difficulties. The unwillingness of public agencies to mandate but not pay for money losing passenger transportation can partly be blamed. It was not until the creation of Amtrak that the railroads were freed from that burden. Even so, the idea of passenger rail *necessarily* being a money losing operation was questioned by the success of Penn Central's own New York to Washington service known as the Metroliner. "The Metroliner was the only serious attempt by the railroad in more than a generation to do something positive about improving passenger service. And, if it did nothing else, it proved that travelers *will* patronize trains that are clean and modern, that keep to schedule and are convenient. It also proved that this type of service can make a profit, which was the railroad's basic concern."[120] There was a significant difference between the quality-of-service provided on the Metroliner and the quality-of-service provided on other Penn

[118] Ibid. (P.13)
[119] Ibid. (P.13 – P.14)
[120] Ibid. (P.134)

Central passenger-service lines. On the Metroliner, "the stainless-steel cars were *clean*. The seats were padded with foam rubber and reclined like seats on a jetliner, slowly and smoothly, not like the old reclining seats that reacted like berserk barbers' chairs, flinging you backwards at the slightest touch or refusing to budge at all. The heating and the air conditioning worked the way they were supposed to. There was carpeting on the floor. Riders could make or receive telephone calls. The windows were large, free of grime, and you could see the boats and the water as you traveled through Delaware and Maryland. Best of all, the Metroliner was usually on time."[121] Compare that with the complaint relayed by Harold E. Kohn, "a law partner of former Philadelphia Mayor Richardson Dilworth"[122] to Stuart Saunders on 04 February, 1970. Kohn "was a commuter on the Paoli Local. He was also enraged. The 5:53 train had been a half hour late leaving Thirtieth Street Station. When it had finally got underway, it wheezed and puffed and halted periodically to catch its breath. Kohn had arrived at the Devon Station at 7:30, instead of 6:25, and had found his wife waiting for him, chilled and anxious."[123] "He told Saunders the Penn Central's service on its six Philadelphia area commuter lines was abominable. He said he was sick and tired of late trains, filthy stations and slave-ship conditions."[124]

A generation of monetary losses on Amtrak has provided ample evidence of the difficulties of providing profitable passenger rail service. Yet the Metroliner was one example of how the railroads could have experienced passenger rail success. The

[121] Ibid. (P.134)
[122] Ibid. (P.133)
[123] Ibid. (P.133)
[124] Ibid. (P.133)

condition of the Philadelphia area commuter lines was one example of how the railroads *themselves* exacerbated their own passenger rail problems.

The issue of pricing and the fact that rates did not keep up with inflation was another reason regulators were blamed for the Penn Central's demise. However, that argument can be questioned in light of the fact that railroad rates fell precipitously after the passage of the Staggers Act when from "1982 through 1996, average real (inflation-adjusted) rail rates for Class I railroads had fallen about 46 percent."[125]

2.12 Conclusion

Although the original mission of the ICC was to diminish the monopolistic powers of the railroads, as the nature of the overall transportation network evolved into a highly competitive one, the ICC's regulatory stance changed. The ICC's policy on issues such as rate-setting and track abandonments was adjusted on various occasions. When the ICC was legislated regulatory powers over the trucking industry, potentially destructive competitive practices were brought under control. The erosion of the railroad's customer base by the truckers might have resulted in deleterious effects to the railroad industry. On the other hand, an unchecked monopolistic railroad industry might not have even allowed the trucking industry to get established. Either way, the ICC played a role in allowing both industries to coexist in a period of time when one or the other might have been irreparably damaged. The ICC protected the trucking industry from "cutthroat competition" and allowed a methodical growth of the industry through the issuance of

[125] General Accounting Office. "Railroad Regulation: Changes in Railroad Rates and Service Quality since 1990." GAO/RCED.99-93, April 1999. (P.5)

operator certificates. Regulators, through minimum railroad rate requirements, also protected the infant trucking industry from a potentially destructive rate war with the railroads. That same trucking industry eventually relieved the railroads of many small and unprofitable shipments. One of the major claims of regulation opponents – that the ICC did not allow for rail mileage abandonments – is not supported by the facts. Although the pace of abandonments was high during the decade after deregulation, the rate at which the ICC allowed track abandonment in the 1970's indicates that it was responding to the railroad's need to reduce mileage. Before the 1970's, abandonment proceeded at a relatively stable rate of 5% per decade - which was keeping with the notion that the ICC was not going to let the railroads build track on speculative potential only to abandon it when quick profits were had. The ICC through its dealings with the railroads (and the truckers) viewed the transportation network from an overall systems perspective and did not forget the needs of isolated communities (many of whom were created as a direct result of the expansion of the railroad network) or small shippers. Yet when the railroads really wanted to abandon track in the 1970's, the ICC allowed it to happen. The network was reduced by 16% in the 1970's. Beyond the abandonments issue, the ICC also allowed higher shipping rates (and by extension higher revenues) for the railroads in the 1970's than what was experienced in the post Staggers Act era. Yet despite these measures, railroad profitability in the 1970's was low. If the railroads were unprofitable despite abandoning track at an unprecedented rate in the 1970's while enjoying the privilege of collecting high revenue from the customers, some other factor must have caused the problems. The bankruptcy of the Penn Central provides clues that some of the railroad industry problems could be attributed to a variety of non-regulation

related reasons. These reasons include mismanagement, poor attitudes towards passenger rail services, merger mania, and a general unwillingness of railroad managers to work in a cooperative manner within the framework of regulation. This evidence indicates that the level of blame assigned to the ICC for the railroads' ills is exaggerated. This exaggeration can be considered part of a wider misrepresentation, as indicated by the railroaders' attempt to portray the difficulties of the Northeast railroads as a system-wide problem, when in fact there were profitable railroads in other parts of the country. For the many decades before the 1970's deregulation debate, the ICC witnessed the survival of the railroads through significant economic and political changes, including increased competition, the changing nature of industrial markets, high interest rates, inflation, urbanization, and two World Wars. This was all done while allowing the *overall* transportation network to evolve into a ubiquitous, competitive system.

Chapter 3 Regulation and Innovation

3.1 Introduction

Some of transportation's leading professionals have blamed the ICC for stifling innovation. "Keen observers such as Meyer and James Nelson pointed out that, regulatory and other institutional constraints on railroad firms dulled entrepreneurial spirit, leading potential managerial talent to choose other careers."[126] These experts suggest that progress in managerial methods and new technologies was stymied due government supervision and stifling regulations. To be fair, those that blame the ICC for these acts readily admit that they *suspect* such a situation was the case, since by their own admission, "such a causal relationship is impossible to prove statistically because of multicollinearity and the absence of a naturally occurring "laboratory experiment" in the data."[127] Opponents of regulation cite several circumstances as examples where innovation was discouraged. A case in point as stated by Gallamore, "the ICC's application of Rail Form A costs in a minimum rate case could (and did) lead to a ruling that lower rates designed to induce volume movements in the new freight cars were unlawful. Minimum rate regulation and use of Rail Form A by the ICC had thus

[126] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.503 – P.504)
[127] Ibid. (P.495)

dampened railroad incentives to develop and deploy innovative equipment. "The propensity to innovate on the part of both carriers and suppliers is seriously curbed by the very existence of such formulas" Gellman says."[128] The famous "Big John" aluminum rail cars incident in the 1960's is the focal point for those who need an example of the railroads' innovations being thwarted by regulators. Yet when Big John's were eventually allowed, the railroads did not have the track structure to carry them.[129] Other incidents were also cited, such as the expansion of short line rail service after deregulation. "Another example of innovation that had been stifled by the regulatory regime before passage of the Staggers Act, but which flowered after 1980, is the proliferation of short line railroads to serve light density markets."[130] It should be noted that the abandonment process was worked out in the 1960's and 1970's and that short line rail movement began well before 1980.[131] There is circumstantial evidence which (on the surface) indicates that the ICC stifled innovation. Some examples are egregious, and the regulators should shoulder the blame. Other examples deserve further examination. However, from a macroeconomic standpoint, the claim that regulators systematically hindered innovative trends in railroading is a questionable claim.

3.2 Schumpeter and other Economics

If statistical evidence is not available to "prove" that the ICC obstructed innovation, then the same kind of circumstantial evidence that has been used to show their malevolence

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[128] Ibid. (P.510)
[129] Martland, Carl. Personal interview. 05 September 2003
[130] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.517)
[131] Martland, Carl. Personal interview. 05 September 2003

can also be used to show that they did not exhibit stifling behaviour. A good start would be looking at twentieth century growth theory, specifically that of Joseph Schumpeter who worked on a theory of economic development and cyclical behaviour in his book *Theory of Economic Development.* His ideas deviated from the classical economics, which modeled mechanisms for economic expansion, and neo-classical economics, which assumed total output was fixed and that allocation of resources was the primary concern.[132] "What Schumpeter set out to do was to identify an endogenous source of productivity growth and a mechanism which would generate long-term continuity, but persistent fluctuations, in the growth of real output."[133] The answer, according to Schumpeter, was the behaviour of profit-maximizing entrepreneurs and their innovative ideas. His theory suggests that in the early and mid stages in the life of a corporate entity, entrepreneurs have an incentive to generate new ideas, from which they can approach financiers for the requisite capital to implement those ideas. In order for financiers to generate that capital, they expand the money supply through credit. The entrepreneur carries the new idea to fruition, realizes excess profit, until the time when imitators enter the market and competition forces the profit down to normal levels. Schumpeter used this theory to explain the cyclical growth of the capitalist economy. However, there is an added component to his hypothesis. Companies and industries, just like the human body (from which he derived an allegory for his growth theory), grow old. These mature industries become bureaucratized and set in their ways. Innovation is slowed down or becomes non-existent. This behaviour continues until new, more agile companies

[132] Deane, Phyllis. *The Evolution of Economic Ideas.* Cambridge: Cambridge University Press. 1978. (P.190 – P.193)
[133] Ibid. (P.190 – P.193)

displace the predecessors in the same industry, or new industries evolve that supplant the old ones. Schumpeter coined the phrase "creative destruction" to identify and characterize this type of economic behaviour. A prime example in the 20th century economy was Microsoft displacing some of the old computer giants.

How does Schumpeterian economics relate to railroad history? There are many similarities to what he outlined in his theories. For example, in its early history, the railroads set the standard for technological and other innovations – just as predicted by Schumpeter. Later, as the railroads matured, much of their technological progress, such as the dieselization of their fleet, was a result of inventions *borrowed* from other industries. "Standard economic history declares that railroads were, at any time, mainly a large and specialized application of contemporary technology... although an oversimplification, it is true that railroads massively adapted generic technologies developed elsewhere – such as steam engines, steel, electricity, diesel engines, two-way radios, and computers."[134]

In the early days of railroading, excess profits through expansion and improvement were readily found. Just as Schumpeter suggested, as more entities entered the industry, profits were being reduced. Furthermore, as the industry matured, there was less profit incentive to continually generate new innovations – each new innovation would perhaps only create a small improvement, as compared to the tremendous improvements provided by such inventions as the Janney Coupler or Bessemer Steel. The behaviour of the

[134] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.501) [Footnote 12]

financial sector also mimicked Schumpeter's prediction. In the early days, financing from government and private sources were readily available for expansion and improvement. On the other hand, financing for railroads was not easily realized in the 1970's. Finally, the most significant prediction has also been realized. That is the displacement of the older industry by a newer, more versatile competitor – the truckers.

Some might suggest that regulation interfered with the process, and the industries involved were forced into Schumpeterian-like behaviour. Perhaps without government involvement, innovations and progress in the railroads would have taken a different path. It might be the case that regulatory involvement did change some of the history of railroading (and trucking); however, the suggestion that these industries would not have followed the Schumpeterian model in a perfectly competitive, non-regulated market is questionable. The primary basis of Schumpeter's model is that the behaviour he predicted occurs in a *perfectly competitive capitalist market.* The fact that the railroads exhibited the same historical behaviour *despite* them being under a regulated environment is indicative of just how powerful a force Schumpeter's model described. In the case of the railroads, regulators were easy targets for the "stifling of innovation" accusation. Yet capitalist economics as proposed by Schumpeter, a highly respected theorist, predicted that innovation would have declined anyway, simply because the industry had *matured.*

There are many other economic factors that could be analyzed as well. For example, rail is a high fixed cost, long term investment industry. There is not a high degree of turnover in their assets as compared with other industries, such as computers. As a result, there is

less opportunity for innovation. If a company spends a significant amount of capital investing in a certain asset, an asset with a lifespan of 10, 20, or even 50 years, they are not likely to then quickly replace that asset, just because a new innovation is created (especially if that innovation provides marginal benefits). A prime example is that of the railroads using steam for many years after the onset of diesel engines – it took time for the assets to turnover. In some ways, this phenomenon can be related to the supply chain theory of "clock-speed" that was invented by MIT faculty member Charles Fine. Certain firms, such as software companies, run at a faster clock-speed than other firms, such as tool makers. While clock-speed has been used as a supply chain analysis tool, it can also be used to describe innovation. As given in one example, just as a fruit-fly evolves faster than a mammal,[135] some industries evolve faster than others. Mature railroads certainly do not resemble a quickly evolving and changing industry. "With billions of dollars worth of sunk, long-lived investments, it is impractical for railroads to replace old technology with new instantly."[136]

3.3 Innovation under the ICC

The argument can certainly be made that by the nature of the industry, the railroads were not natural innovators. The innovations that did occur were in their early history. Later on, new innovations were borrowed from other industries. Finally it can be argued that these realities would have been no different under a perfectly competitive environment or under a heavily regulated one. However, a pro-ICC argument is the suggestion that

[135] Fine, Charlie. *Clockspeed : Winning Industry Control in the Age of Temporary Advantage.* New York: Perseus Books, 1998.
[136] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.512)

regulation actually spurred the diffusion of some technologies when a perfectly competitive environment would have accomplished that innovation at a slower pace. "Interspersed with history-making surges and shifts, railroads experienced long periods when change was gradual or external environments brought internal improvements to a standstill. Sometimes the delay in deployment of a powerful new technology was due to its network characteristics. Examples are the Robinson track circuit-based signaling system, Janney couplers, and Westinghouse air brakes. In the latter two cases, federal legislation actually accelerated what may have been an exceptionally long diffusion process related to the cost and difficulty of wholesale change over an entire network (underline added)."[137] The ICC has been accused in many academic texts of eliminating the incentive for innovation. The most outrageous example is the aforementioned "Big John" fiasco in the 1960's. Actually, with the exception of some vague accusations that regulators prevented railroads from "improving management techniques," the Big John is one of the only specific examples of ICC interference that is routinely mentioned. A more balanced approach would recognize, along with the aforementioned Schumpeterian example, that the ICC promoted innovation during certain times, and also, in some cases, prevented certain progress when 20/20 hindsight suggests that they should have done otherwise. For example, Gallamore believes that "it would be difficult to assert that ICC regulation in the 1930's and 1940's slowed dieselization or other innovations beyond what the trauma of the Great Depression or the extraordinary conditions of World War II would have caused in any event."[138]

[137] Ibid. (P.523)
[138] Ibid. (P.509)

One of the previously mentioned arguments against the ICC is the notion that minimum rate regulation reduced the incentive for railroads to implement new cost-cutting measures. There seems to be some disingenuousness with this suggestion. True, railroads in some cases were not allowed to reduce rates to their customers as a result of new improvements. Why would that prevent the railroads from implementing the measures anyway? Just because they could not reduce the rates to their customers does not mean they could not have utilized the cheaper methods -- and realize greater profits through more efficient operations, while charging the same rate as their competitors to their customers. It would seem that proponents of this argument are quick to confuse the economics definitions of profit, total revenue and total cost. If railroads could still reduce their total costs through innovative measures, while maintaining their revenue stream under ICC protection (and not pass the savings on to their customers), their profits will increase. Those who argue that minimum rate regulation stifled change seem inclined to believe that the first railroad that made an improvement, if they could lower their prices charged to their customers, would be able to increase their profitability through the increase in the number of shippers utilizing their services at the lower cost. What proponents of this argument do not mention is that in such an environment, as soon as one railroad innovates, all the others will soon "copycat", in order to match the new price decrease and retain their customers. The deregulation era after 1980 shows ample evidence of this contention. A more likely explanation contrary to "minimum rate regulation stifling innovation" would be that railroads did not seize upon the profit opportunities of fixed revenue and lower costs. However, there was an industry that was

quite capable of finding methods to improve technologically and managerially, while still experiencing regulated pricing from the ICC – the truckers.

3.4 Truckers Innovating under the ICC

The truckers improved the technology and the equipment used in their business during the time they were regulated by the ICC. As early as 1956, the idea of using light weight materials, such as aluminum, was a consideration for the trucking industry. "The use of light weight metals both in trailers and tractors has been growing by leaps and bounds in recent years since the shortage of aluminum occasioned first by World War II and then by the Korean War has eased. There are still a large number of the older, heavier trailers in operation and as they live out their useful life they presumably will be replaced with the newer types."[139] The truckers recognized the profit opportunities of reducing their own costs without necessarily having the ICC reduce the rates charged to customers. The truckers also had in their possession long-lasting equipment, which experienced a relatively slow turnover (although not as slow as their counterparts in the railroads). Truckers were quick to take advantage of the lightweight materials more readily abundant after the war. "Trailer manufacturers also have developed new type trailer designs that have proved highly successful and appear to have substantial potentialities for increasing the profit margins of the trucking companies."[140] In many other areas of research, the truckers also explored the possibilities of increasing their margins. "Tires and tubes are improving in wearing characteristics every year and, of course, the manufacturers of

[139] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.36)
[140] Ibid. (P.36)

tractors have not been standing still. Here again light weight metals are being adopted more and more as metallurgical advances make possible their expanded use. Important improvements have been made in diesel design and this power unit, while it still represents only a small fraction of the tractors and trucks in service today, is gaining steadily in acceptance by truck operators."[141]

The truckers, an industry regulated by the ICC, found many creative ways to deal with the various problems that characterized different historical eras. For example, while some eastern railroads were filing for bankruptcy in the 1970's, evidence suggests that the truckers dealt with inflation creatively. "Despite the problems [with inflation and other 1970's maladies], motor carrier management, with typical ingenuity turned some of the adversity into advantage. Recognizing the inevitability of increased costs some companies sought and found new operating efficiencies both in utilization of power units as well as improved utilization of cargo space. New marketing programs were devised and additional computer applications were instituted for controls and productivity."[142] It seems that there were two separate cultures viewing regulation differently. The truckers, many of whom saw regulation as the "lifeline" which prevented chaos in the early years of their industry, worked hard to succeed in their environment. The railroads, many of whom viewed regulation negatively, did not appear to work as cooperatively in their environment. The truckers' culture from the beginning was one of succeeding in their regulatory environment. That attitude was reflected in a 1956 report on their industry.

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[141] Ibid. (P.37)

[142] Lankford, Ronald (Vice President – Finance. Spector Industries, Inc., Chicago, Illinois). "The Economy – Where Have we Been, Where are we Going?" *NAFC Award Winning Papers. National Accounting and Finance Council.* Washington D.C., 1975. (P.20)

"Over the years there have been wide technological advances in equipment, both motor power and trailers, and substantial improvement in techniques, both in over-the-road and in terminal operations. With constantly mounting costs (and most labour contracts now carry provisions for automatic yearly increases in wages) *the industry cannot afford to rest on its laurels and shows no inclination to do so* (italics added)."[143] The report discusses many areas where the trucking industry improved their operations in order to lower their costs. These steps included modernizing terminals, installing conveyors, pallet stacking, fork-lift utilization, improving terminal layouts, joint terminal operations, mechanizing accounting procedures, and improved communications systems.[144]

3.5 Railroads' Slow to Adapt Management

In contrast to the relatively versatile mentality exhibited by the trucking industry is that of the hardened attitude reputed to rail managers. "Throughout the postwar decline, railroad managements typically were slow to adapt to changes in their competitive environment. Critics noted the industry's dearth of product innovation and its slowness to invest in modernized plant and equipment. They blamed management (rightly so, because innovation is not only inventive activity, but also management's decision to invest scarce capital in deploying technological improvements)."[145] Rail labour and their associated costs are also blameworthy. "Labour unions and management have been unable to agree on methods for full implementation of innovations designed to improve productivity

[143] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.36)
[144] Ibid. (P.36)
[145] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.503)

despite sizeable increases in wages and benefits."[146] Labour, management, and regulators have been blamed for the state of affairs in the industry. The blame included high labour costs, uninventive managers, and powerful regulatory authorities. "Internally within the railroads, labour costs were too high – more than half of operating expenses. Physical plant and equipment had been allowed to deteriorate, and new investment was not expected to earn its cost of capital. Rail managements were regarded as stodgy and uninventive. And regulatory authorities in Washington had enormous power over railroad business decisions large and small."[147] Labour costs were higher in the trucking industry during ICC regulation as well. However, the truckers were able to maintain their innovativeness throughout that period. As for the regulators, truckers were also subject to regulation (albeit to a lesser degree than the railroads), and found ways to be creative in that environment. The noticeable difference however, is the way the management was regarded. While numerous examples of trucking management trying to be flexible and innovative can be found, the amount of evidence suggesting that railroad management behaved in that fashion is limited. The powers examining the deregulation issue in 1978 recognized railroads' management lethargy in implementing new innovations. In the report to the Secretary of Transportation, it was noted that "railroads have been slow in adapting new technology, while rival modes have been more successful in making use of new developments."[148]

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[146] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.3)
[147] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.498)
[148] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.3)

3.6 Railroads in the New Competitive Environment

Many transportation experts have suggested that deregulation has allowed the managers to innovate. However, some analysts might be substituting *invest* with innovate. For example, "concrete ties and wheel flange lubricators are not new concepts; it is today's competitive marketplace that provided the impetus for making these investments."[149] The fact that railroad managers are *investing* in equipment that should have been acquired a long time age does not mean that deregulation has spurred on *innovation*. Furthermore, the question of whether regulation was the reason that railroad managers did not make appropriate investments is also debatable. There were many reasons investments were not made, including non-regulatory ones such as high interest rates, inflation, and tight lending from financiers. However, the post-deregulation era has seen an area of investment significantly reduced; and this investment is directly linked to innovation: industry research. "Since 1980, most observers would say, the belt-tightening ethic has prevailed over research and development and direct investment in service quality improvement."[150]

Figure 3.1 Railroad Industry Research Allocations – Post Staggers Act

Year	Annual Research Budget	CPI	Adjusted Research Budget (1980 Dollars)
1980	$20,000,000[151]	100	$20,000,000
2001	$9,600,000[152]	214.93	$4,466,500

1980: Railroad industry research budget was $20 Million (1980 dollars)
2001: Railroad industry research budget was $9.6 Million (2003 dollars)

[149] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.513)
[150] Ibid. (P.521)
[151] Martland, Carl. Personal interview. 05 September 2003
[152] Martland, Carl. "Performance-Based Technology Scanning: Overview and Application to Containerizable Freight Traffic." Submitted to *Journal of the Transportation Research Forum.* June 2002. Revised October 2002. (P.5)

Competition has forced the research and development budget downwards. As one transportation professional suggested, the railroads faced a Hobson's choice in the post Staggers environment, "cut research and development and defer investment in new technology to husband current cash, or stimulate development and deployment of better plant, equipment, and information systems to improve capital and labour productivity."[153] It seems that the choice is clear as to the path the railroads chose. Research and development was reduced. It has been suggested that "research and development, by its nature uncertain, is exceptionally difficult to justify when budgets are tight."[154] It would appear that deregulation forced the railroads into a situation where budgets were tight. This means that even the suggestion that the level of investments prospered under deregulation is open for scrutiny.

3.7 Conclusion

Those who blamed ICC minimum-rate regulation as creating a disincentive to innovation appear to have confused the economics definition of cost, revenue and profit. A company that can reduce its own costs while maintaining the same level of revenue from its customers will have higher profits. Conversely, if a company reduces the price it charges to its customers (due to new innovation), the lower prices will provide an incentive to competitors to match the innovation and lower their prices to retain customers. The benefits of the new innovation would eventually diffuse to all entities in the industry.

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[153] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.521)
[154] Ibid. (P.521)

Minimum rate regulation would actually provide an umbrella to those railroads that innovated and lowered internal costs by allowing them to *keep* the same prices charged to customers without attracting industry competitors. The innovator would retain (for itself) the benefits of the new invention. The railroads were blaming the ICC with a faulty economics argument. On the other hand, a respected economic argument, Schumpeterian theory, suggests that the railroads were behaving exactly as expected. Railroads' lack of innovation was not a result of the actions of regulators, but of the nature of the industry and its position in its own economic life cycle. The days of significant railroad innovation had ceased to exist a century earlier. Indeed regulators actually hastened some innovation in the railroad industry - especially in the area of safety. The newer trucking industry brought many innovations in its early days (as would be expected under Schumpeterian economics). Those in the railroad industry who blamed the ICC for stifling innovation appeared to rely on a fault economic argument to support their questionable premise while ignoring many other possible reasons for the lack of railroad innovation, such as stodgy, unresponsive management. The problem with blaming the ICC for stifling regulation is twofold. First, the truckers were innovators under regulation and second, after the ICC was eliminated, there still appeared to be little desire on the part of the railroads to innovate as witnessed by the decrease in their post-Staggers Act research budget.

Chapter 4 Railroad Performance

4.1 Introduction

Many detractors argued that regulation stifled innovation, took away profit incentives, did not allow rationalization of capacity, and prevented the railroads from improving themselves. Yet the reality is far different. The railroads of the early 20th century were an industry of steam locomotion, passenger transportation, and high competition with well over 1000 different firms. Contrast that to the day before the passage of the Staggers Act; the railroads were primarily freight haulers with passenger services transferred to Amtrak, steam was replaced by diesel, and the number of firms was 1/3 the level of early regulation.

4.2 Changes in Technology

Despite all the discussion about rail managements' slowness to adapt to (or invest in) technological and structural change, progress was made in the regulatory era when technology became available. There is no better example than the dieselization of the locomotive fleet. When diesel became available, the railroads converted their fleets. However the speed of the conversion was not the same for all firms. "Mansfield's careful study showed that five factors explained about two thirds of the variation in the speed of dieselization by different railroads: "profit expectation of the investment in diesel

locomotives, the date when a firm began to dieselize, size of firm, the age distribution of its steam locomotives, and a firm's initial liquidity."[155] The first noticeable characteristic of this last statement is that regulation was *not* mentioned as one of the factors for the variable speed of fleet dieselization. Many of the reasons why some firms took advantage of this new technology while others waited for a significant period of time were reasons related to *business* activities. The age distribution of steam locomotives is indicative of the capital intensive long-life nature of the industry. One hypothesis however is that regardless of the regulatory apparatus in place, the railroads were obligated to adapt paradigm shifting technology; failure to do so would result in losing competitive advantage. The dieselization of the fleet adds credence to one theory – the pace and level of innovation is partly determined by the effect it had on the industry. It appears that the railroads were willing to innovate when a new technology made a *significant* difference in their business operations and efficiency. However, in a capital intensive industry such as the railroads, when few innovations could substantially change the bottom line, there would be little need to innovate – and having slowly reactive management only added to that situation. To blame regulation for stifling innovative trends and for not allowing the railroads to improve is to ignore an accumulation of evidence that suggests other factors were equally or more significantly responsible. Furthermore, even when these technologies were grandiose enough to spur industry-wide changes, the rate of changes was determined by a host of factors, most of which had nothing to do with regulation. "For the rail industry as a whole (and as is the case for

[155] Gallamore, Robert. "Regulation and Innovation: Lessons from the American Railroad Industry." *Essays in Transportation Economics and Policy. A Handbook in Honor of John R. Meyer.* Jose Gomez-Ibanez, William B. Tye, Clifford Winston. Washington, D.C.: Brookings Institution Press, 1999. (P.508)

diffusion of new technologies in most capital-intensive industries), Mansfield found a significant threshold or "learning curve" effect; acquisition of diesels was slow to begin, then took off as railroaders became comfortable with the new technology, before tapering again as conversion opportunities were saturated."[156]

The trucking industry also credited the railroads for achieving satisfactory equipment utilization through the use of scheduling and proper planning in a 1968 report. "Equipment utilization is an even more potent lever on our operating ratios. Sophisticated scheduling and control of equipment utilization can release large segments of equipment investment, relieve recurring equipment shortages or service embarrassments, reduce unnecessary time losses for maintenance. Since 1958, the railroads have been making significant advances in this direction – reaping major service and equipment-investment savings from increased freight-car and locomotive utilization."[157] The use of computer simulations and analysis was recognized as helping railroads improve as well. "Most major airlines and many railroads are turning to large, detailed, system-wide computer simulations to analyze, plan, and control their equipment fleets and key operating personnel schedules."[158] Several observations can be gleaned from the technological advances that improved certain aspects of railroading. First, all the examples cited in studies before the Staggers Act were improvements which occurred *during regulation*. Secondly, when the rails did see that the changes would be significant for their industry, they adopted them, despite the perceived regulatory constraints and

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[156] Ibid. (P.508)
[157] Paden, David (Senior Economist and Manager. Transportation Sciences - Midwest Research Institute, Kansas City, Missouri). "What the Individual Carriers Can Do." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1968. (P.133)
[158] Ibid. (P.133)

management inefficiencies. Most importantly however, is how many factors outside of regulation were responsible for the level and speed of innovation and change in railroading; and calls into question many of the allegations that regulation stifled the railroads.

4.3 Changes in Customer Relations

One method of improvement that the regulators deserve full credit for is in the ways the railroads enhanced their relationship with their customers. Part of the credit goes to the ICC's attitude of dissuading monopoly behaviour and part goes to the regulators promoting the emergence of a competitive industry – the truckers. In the late 1800's, "the attitude of the companies toward the public was sometimes most insolent. Travelers and shippers were treated discourteously. Shippers hesitated to demand their legal rights for fear of greater injuries in retaliation... The railroads were pictured as a giant octopus sucking the lifeblood of the people, and railway managers were likened to the robber barons of the Middle-Ages."[159] How much would the railroads have concentrated on improving their relations with their customers if the ICC was not available to check the industry's monopoly power? The behaviour of the railroads in the late 1800's, especially towards the agriculture sector, was one reason that the Granger movement and subsequent regulation was conceived in the first place. One can suppose that without the ICC to regulate monopolistic behaviour in the absence of outside industry competition, and later on with the absence of the trucking industry to provide a notable competitor,

[159] Locklin, Philip. *Economics of Transportation*. Sixth Edition. Illinois: Richard D. Irwin, Inc., 1966. (P.200)

that the railroads would have continued to exhibit their old ways of conducting business – a methodology where the customer was not the primary consideration.

4.4 Other Considerations

Issues such as abandonment have previously been discussed – it is quite clear that the regulators did allow a certain level of abandonment and consolidation in the rail industry. The creation of Amtrak and the loss of passenger service also provided improvement to the railroads during regulation. The one blame that government could potentially shoulder is the fact that they may not have moved fast enough on this issue.

As a final thought before looking into the 1970's deregulation era, it should be noted that some officials in the ICC were able to demonstrate contradictions in the arguments of their critics. A case in point is the following argument proposed by John Weller. "There is a school of economic thought which persistently advocates what might be termed a "devil-take-the-hindmost" approach to transportation rate making, and which foretells with evangelical fervor the resultant wholesale "disappearance of inefficient firms." The imagination boggles in the endeavor to conceive of two more classic examples of "inefficient firms" than the City of New York and the Penn Central Railroad; but when the occasion for their disappearance was presented no one, including those economists, appeared to have the stomach for it."[160] (The Rock Island did disappear soon thereafter).

[160] Weller, John (Rail Services Planning Office; Interstate Commerce Commission; Washington D.C.). "Problems of the Capital Crunch." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1976. (P.35)

4.5 Conclusion

This chapter provides various amounts of evidence that indicates that the railroads did improve at times during the regulatory era. The railroads converted from steam locomotives to diesel locomotives under regulation. When a technological change (such as diesel) became available, regulation had little to do with the rate at which railroads adopted the new inventions. Business decisions and the "learning curve" determined the rate at which this conversion took place. Railroads also made use of computers and improved scheduling to allow better use of resources and personnel (especially clerical). The ICC can be credited for improving relations between customers and the railroads. The emergence of another mode of competition, one that there is little doubt experienced significant improvements during regulation, the truckers, also forced the railroads to change certain aspects of their behaviour. Although opponents blamed the ICC for reducing railroad performance, evidence indicates that such accusations can be called into question.

Chapter 5 Goals of Deregulation

5.1 Introduction

What was being said about deregulation by its proponents and opponents during the 1970's? It is important to explore this aspect of the issue because with 20/20 hindsight, many people (on both sides of the discussion) can data-mine twenty years of deregulation information to their benefit. The best test however, is to examine what was being said before the Staggers Act and soon after, and if those predictions came true many years later. In this section, the arguments for and against deregulation will be outlined, but not commented upon. Chapter 7 will endeavor to test the validity of the arguments, and whether the predictions came to fruition.

5.2 Methodology

The numerous opinions and articles available regarding deregulation required that a method of selecting and presenting a sample of information be developed. The sources of information were taken from three general groups: government, industry and academia. Since the objective of the remainder of this essay is to compare the outcome of deregulation with what was being said prior to deregulation, the direct quotes were chosen on the basis of their *predictive* powers. A lot of the reviewed material pertained to regulation but was still not included in any discussion. The inclusion or exclusion of

certain quotations from different works or articles is based on how close they address what the authors *believed* deregulation would bring about or what the authors *promised* deregulation would accomplish. For example, much of the material involved items such as historic perspectives or name-calling of opponents. These items were reviewed but not included. Sometimes the authors would indirectly address a relevant issue, and if an interpretation could be gleaned as to their thought process towards deregulation, then the work was included.

The arguments are divided into categories that can be described as "pro-regulation", "pro-deregulation" and "neutral". There is no specific order in which the quotes are provided within each category. Chapter 6 will attempt to further categorize the debate into a testable framework. Sources were chosen with the intent of providing a complete coverage of the opinions of the major players. The major players in the deregulation debate have been defined, for the purpose of this essay, as government and industry. Since both the government and industry relied on academic references as well, some of the opinions provided by academics have been included.

The government commissioned a study called *The Prospectus for Change in the Freight Railroad Industry* that outlined that state of railroading in the 1970's. Since this was the primary official study prior to the Staggers Act, the quotations from this document pertaining to the question of what deregulation might accomplish are used as the representative sample of the government perspective. The other primary source of information from the government is transcripts of Congressional hearings. However,

these sources do not represent the government's viewpoint *per se*, since a wide variety of parties (both government and non-government related) offered testimony.

From the perspective of both the railroad and trucking industry, quotations that meet the "predictability" criterion were included from several sources, with the intent of providing a satisfactory picture of the overall industry opinion. Publications from the AAR were used to represent the railroad industry opinion. Likewise, publications from the American Trucking Associations - National Accounting & Finance Council were used to represent the trucking industry opinion. Therefore, the two largest lobbying associations, one representing the railroads and the other the truckers have been accounted for. A number of opinions from academics are found in the publications provided by those two groups. With the exception of a study conducted at MIT, the sources from the AAR and the NAFC are generally what provide the "academic" opinions in this essay. Beyond the AAR and NAFC sources, relevant quotations found in traffic press were used to determine industry (and some government) opinion. Some of the popular press sources include, *Traffic World*, *Modern Railroads*, *Railroad Age*, *Traffic Quarterly*, and *Business Week*.

5.3 Pro-Regulation Arguments

Before further discussing the pros and cons of deregulation suggested by various individuals in the 1970's, it is interesting to note that there was a lively debate regarding whether the system needed any change at all. In fact, those who were pro-regulatory often accused their opponents of being dogmatic and highly prone to complaint, simply because they had a relatively easy target (the ICC) as compared with other unregulated

industries, which interestingly enough, experienced their own share of problems. "I was reminded of the old story about the rich Texan who turned in his two-day-old Cadillac for a new one, complaining that the ash trays were full... It seemed to me that many of the witnesses were willing to precipitate financial chaos in transportation because of complaints which, to the extent they were justified at all, could be accommodated within the present system."[161] The following section outlines various pro-regulation arguments in bullet form, quoted from the source.

• Investors preferred a regulated environment

"Another important area that investors focus on is the regulatory environment. It seems ironic that for years many investors cited regulation as one reason why they were not interested in motor carrier equities, because now many of those same people view the threat of deregulation with much concern. Most investors now recognize that the regulatory environment for the trucking industry in the past has been, for the most part, beneficial. Regulation has helped to preserve stability, while retaining probably a higher level of entrepreneurial incentives than can be found in other regulated industries."[162]

• The system should be reformed but not eliminated

"However, we can be fairly sure that reforms will be made, with some legislatively mandated, and others the product of administrative decisions. These changes will be designed to encourage more competition, particularly relating to operating rights and

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[161] Weller, John (Paine, Webber, Jackson and Curtis, Inc., New York, New York). "Transportation Regulation and the Investor." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.101)

[162] Schlesinger, Paul (Investment Analyst. L. F. Rothschild & Company, New York, New York). "An Analyst Looks at the Motor Carrier Industry." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.31)

rates, and to streamline the regulatory process."[163] "The regulation of transportation does deserve thoughtful criticism, but there is a serious question whether the problem rests with the basic concept of regulation or its execution."[164]

• Railroads did not take advantage of previous attempts to reform/reduce regulation

"Has the 4R Act worked? We don't know if the act has worked, because the railroads have not really used it... They have filed only for a handful of innovative rate increases. They haven't used its provisions in a way to establish new pricing, marketing and operating strategies that would allow them to become more competitive."[165]

• Transportation regulation mitigates problems that can disrupt the national economy

"Regulation of transportation is required because of the indispensable function that transportation plays in an industrial economy. Each producing unit in an industrial economy is part of a network of functions reaching, on the one hand, into multiple sources of raw materials, and, on the other, into multiple markets for finished products. A bottleneck at any point of this process may disrupt the entire economy, not just the interests immediately involved; traffic must flow or the economy stops. Any manufacturing unit, locality, or region shut off from this chain of industrial activity

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[163] Ibid. (P.31)

[164] Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Boston, Massachusetts). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.17)

[165] O'Neal, Daniel (Chairman. Interstate Commerce Commission). Quoted in: "Watching Washington." Railway Age 29 January 1979. (P.12)

perishes. The power over transportation facilities is the power of economic life and death."[166]

• Price discrimination is inconsistent with national transportation requirements

"The unrestrained efforts of private transportation firms in pursuit of their separate interests lead to results incompatible with the transportation requirements of our national economy. These detrimental results are identifiable by the terms of their legal prohibition: unjust, unreasonable, discriminatory, preferential, and prejudicial rates and practices."[167]

• Deregulation will reduce competition

"There is a further dilemma introduced by the structural characteristics of the rail industry. Recent evidence suggests that there are substantial economies of density and economies of scope (i.e. vertical integration); concomitantly, there appears to be too many rail carriers, largely as a consequence of anti-merger regulation, one presumes. If the industry has these economic characteristics, deregulation should cause industry consolidation into many fewer rail firms (through mergers, if allowed, through bankruptcy if not). In terms of economic efficiency, we might applaud that rationalization for its effects on costs and quality of service. Yet the consequence of that consolidation will be a reduction in the degree of intra-industry competition. Hence the

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[166] Hardin, Dale (Commissioner. Interstate Commerce Commission, Washington D.C.). "Deregulation and the Public Interest." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1973. (P.73)
[167] Ibid. (P.73)

dilemma, we deregulate on the grounds that the industry is competitive; the effect of deregulation is a less competitive industry."[168]

• Regulation facilitates smooth interchange of freight traffic

"It was discovered early in the development of the railroads that the economy would be deprived of the full use of railroad technology if the separate lines were left to their own devices in interchanging freight. Separate rates and contracts of carriage including the transfer of lading at interchange points made no sense, and intolerably frustrated the flow of traffic. But frequently, one line or the other stood to gain, at least momentarily by refusing to agree to reasonable interchange terms. The public interest prevailed. Railroads were required to establish through routes and joint rates to permit traffic to flow under one contract of carriage without transfer of laning."[169]

• Regulation reduces industry concentration, predatory behaviour, and monopoly

"The economic and operating characteristics and shippers' behaviour in the LTL market produces pressures leading to concentration arising from advantages of size. Such concentration will lead to predatory behaviour and monopoly practices that are not being effectively controlled presently in other American industries by an over-worked FTC and Justice Department."[170]

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[168] Harris, Robert (Berkeley). "Deregulation Panacea or Reform?" Presented *to Midwest Economics Association*, Chicago, Illinois, 28 March 1980. (P.8)

[169] Hardin, Dale (Commissioner. Interstate Commerce Commission, Washington D.C.). "Deregulation and the Public Interest." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1973. (P.74)

[170] Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Boston, Massachusetts). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.21)

In the 1970's, there were many deregulation proposals from various advisors that generated interesting debates. One of those memorandums was from the Council of Economic Advisers. The 09 December 1970 paper, signed by Harvard University Economics Professor and Council of Economic Advisers member, Dr. Hendrik S. Houthakker, proposed "that ICC control over rates, entry and exit be terminated; that rate bureaus be outlawed; and that rates for all modes be encouraged to descend to a floor of marginal cost."[171] It was the reaction from one opponent against the proposal that provided several more reasons favourable to regulation.

• Abandonment under deregulation can lead to unemployment and small rail bankruptcy

"Indeed, if a railroad should obtain permission to stop providing service in regions generating unprofitable traffic, smaller railroads participating in the movements could be put out of business through a loss of divisions. Abandonment of rail lines could generate unemployment not readily absorbed in the affected industry, conflicting with the objective of a full employment economy. A loss of essential service could put small businesses and shippers out of business, increasing economic concentration and adverse community impacts."[172]

• Deregulation would not reduce labour's "excessive" bargaining power

"The panacea mentality contains a third fallacy: that if regulation has induced negative side effects, deregulation will eliminate those side effects. It is often argued, for

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[171] Weller, John (Paine, Webber, Jackson and Curtis, Inc., New York, New York). "Transportation Regulation and the Investor." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.101 – P.102) [*Numbers in brackets refer to page numbers of the Houthakker memo]

[172] Francese, Albert. "Rail and Truck Deregulation: Palliative or Panacea." Traffic World 19 March 1979. (P.114)

example, that a substantial share of the power of organized labour in railroading and trucking can be attributed to regulation. Thus, it is argued, market forces would eliminate that excessive bargaining power in a deregulated environment. The fallacy in that line of reasoning is that it is a-historical; human institutions do not come and go at the flick of a deregulation switch."[173]

• Railroads favour deregulation in order to take advantage of captive shippers.

"Indeed the railroad complaints are not so much that the ICC has not allowed them to compete, but rather that the ICC has not allowed them more freedom where they need not compete – where they have monopoly power... Some carriers have concluded that they cannot make money where they have to compete with other carriers – that is, in those areas where the 4R Act lifted rate regulation almost entirely. They feel they can only make sufficient money where they have no competition. Where, in other words, they have shippers who have no real choice of competitors – that is, captive shippers."[174]

• Deregulation would reduce trucking industry profits and investments would decrease

""In terms of financial conditions, without question trucking industry profits would be depressed."(18)* By the third year, "With truck traffic on the decline, firms would continue to exit and total truck investment would decrease. (10)... Overall equilibrium would be reached within an additional few years, when natural attrition and secular

[173] Harris, Robert (Berkeley). "Deregulation Panacea or Reform?" Presented *to Midwest Economics Association*, Chicago, Illinois, 28 March 1980. (P.3)
[174] O'Neal, Daniel (Chairman. Interstate Commerce Commission). Quoted in: "Watching Washington." Railway Age 29 January 1979. (P.12)

growth in demand would return trucking (and barge operations) to a normal rate of return." (11)"[175]

"The airline industry was deregulated, we were told, because of a deteriorating financial situation. The entire case for deregulating the railroad (industry) is a deteriorating financial situation. But the same people behind airline and railroad deregulation want to deregulate the trucking industry because we are doing too well. That is odd. They want to deregulate airlines and railroads into financial solvency and the trucking industry into bankruptcy..."[176]

• Deregulation would result in a decrease of carrier incomes and trucker employment

"These changes will have diverse impacts on carriers and shippers. The reduction of freight rates will reduce carrier incomes to the benefit of shippers." (12) "Immediate deregulation would decrease trucking employment between 200,000 and 300,000 (out of an estimated total employment of 1.7 million)." (14) However, "the transportation employees would be cushioned from loss of jobs and relocation expenses by appropriate assistance provisions (ideally financed from the general treasury."(9) No similar "cushion" is suggested for investors... At page 12A of Dr. Houthakker's memorandum is a table estimating that truckers would lose $2.14 billion in revenues annually, railroads

[175] Weller, John (Paine, Webber, Jackson and Curtis, Inc., New York, New York). "Transportation Regulation and the Investor." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.101 – P.102) [*Numbers in brackets refer to page numbers of the Houthakker memo]

[176] Shay, Harold (First Vice Chairman. American Trucking Associations). Statement: Traffic World 07 May 1979. (P.49)

would gain $640 million through diverting 20% of truck traffic by rate cutting, and shippers would gain a $3.32 billion windfall from the rate war."[177]

• Deregulation would generally result in higher rail rates

"There is though a strong implicit argument that in many cases deregulation is a necessary and sufficient medicine for the industry's ill health. It is additionally argued that deregulation is an essential component in macroeconomic policy, especially in reducing the rate of inflation and improving lagging productivity.... There are serious faults in these excessive claims for deregulation. For one thing, there is little evidence that traditional economic regulation has contributed much to inflation, or, correspondingly that deregulation will do much to reduce inflation. Relative to other causes of inflation and poor productivity, economic regulation is probably insignificant. In some cases, most notably the railroads, deregulation would have the almost certain effect of increasing – not decreasing – prices."[178]

• Railroad rates would be increased to the detriment of certain geographic areas

The memorandum does suggest delicately (p. 8) that perhaps the railroads would raise rates "somewhat" on non-competitive traffic, and presumably there would be more opportunities for this following the wholesale departure of motor carrier and barge operators from the scene. The Fourth Section of the Interstate Commerce Act would be repealed, enabling the railroads to target their out-of-pocket rates more pointedly at motor

[177] Weller, John (Paine, Webber, Jackson and Curtis, Inc., New York, New York). "Transportation Regulation and the Investor." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.101 – P.102) [*Numbers in brackets refer to page numbers of the Houthakker memo]

[178] Harris, Robert (Berkeley). "Deregulation Panacea or Reform?" Presented *to Midwest Economics Association*, Chicago, Illinois, 28 March 1980. (P.2).

and water competition, and restoring to the citizens of the Great Plains and Rocky Mountain areas the privilege of paying rates higher than those on the West Coast would be charged for a longer haul." [179]

"Deregulation is one variable that could give carriers the managerial flexibility to adjust routes and pricing to the desired markets. Deregulation however, may not be the panacea for remedying poor quality service because the benefits from deregulation may provide the incentive to reduce service in some markets and geographic regions."[180]

5.4 Pro-Deregulation Arguments

The following section outlines those arguments which suggested that deregulation was favourable to the sectors affected.

• Deregulation will allow pricing flexibility which will benefit *shipping customers*

"What are we talking about – and particularly, what are we talking about in trucking [regarding deregulation]? First, no more collective price fixing where rates can be set independently and competitively. Second, easing up on this multitude of specifications and limitations on carrier operating rights. And third, when rates and services are offered without as much restraint by rate bureaus and the ICC, more freedom and flexibility for individual carrier managements to make price and service decisions as they see fit, taking into account their customers' desires as much as they think is healthy. You don't have to

[179] Weller, John (Paine, Webber, Jackson and Curtis, Inc., New York, New York). "Transportation Regulation and the Investor." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.101 – P.102) [*Numbers in brackets refer to page numbers of the Houthakker memo]

[180] Francese, Albert. "Rail and Truck Deregulation: Palliative or Panacea." Traffic World 19 March 1979. (P.113)

look very far to see that this kind of change is designed with a major goal in mind – match up closely and actively the fellows, or groups, and companies, who can do each particular job best, as proved by bidding and performing against others, with the transport jobs to be done, in aid of getting the most we can out of the trucking industry."[181]

• Deregulation will allow pricing flexibility which will benefit the *railroads*

"If an act can now emerge from conference between the House and the Senate similar to the bill passed today, for Conrail it will mean greater flexibility in setting freight rates to cover operating costs and to meet market conditions. By allowing Conrail to take such action, and in effect allowing the dynamics of the marketplace to be a more important force in Conrail's pricing actions (both in raising and lowering rates), Conrail will be in a position to take a major step forward toward its goal of self sustainability as a private, for-profit corporation."[182]

• Deregulation will promote more efficient utilization of trucking capacity

"Now let's do a quick rack up of the benefits claimed for changes like this. In general, the net over-all benefit is claimed to be trucking service on terms a few billions of dollars more advantageous than is currently the case, for end-product consumers, over time. This is expected to contribute to the over-all economic health and welfare of the country –meaning the individual citizens in it. This benefit is expected to come from a better matching of price-service capacities to buyer needs, lessening the amount of empty or

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[181] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.9)

[182] Jordan, Edward (Chairman and CEO. Conrail). Quoted in: "House Okays Rail Deregulation Bill Following Approval of Compromise." Traffic World 15 September 1980. (P.18)

light loaded truck movements, inducing and allowing trucking companies with relatively poor route patterns, traffic consists, and operating practices to improve those characteristics of their operations, cutting down on the amount of empty or light loaded mileage involved in private and exempt trucking and the like."[183]

• The ICC has unjustly restricted general rate increases

"Thus, as to general rate increases, the ICC has been restrictive to the point of absurdity by aiming to require more and more statistical information of less and less value with the aim of measuring economic results which are incapable of precise measurement."[184]

"The problems stem in large part from governmental policies which impose on the industry growing social responsibilities while at the same time exerting severe downward pressure on transportation prices."[185]

• Price competition is preferable to fighting with the ICC over rates

"With competition between carriers taking over more of the burden of keeping rates reasonable, regulatory overview of maximum rate levels should be lessened. With more freedom to shape operating and service patterns, as well as more freedom to price compete, the regulated sector could do some of the job private trucks and exempt trucks do now. With less of the industry's talent and money tied up in hand-wrestling the ICC over general freight rate increase and each other over who gets to by whom or operate

[183] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.9)
[184] Todd, Arthur (Director of Purchasing. Lincoln Electric Company, Cleveland). Traffic World 30 October 1978. (P.23)
[185] The Transportation Association of America. "Transportation – A Call for Action." March, 1976. (P.1)

where, more of your talent and available funds could be spent on doing what you do best – moving freight."[186]

• Deregulation will allow the railroads to attract better managers

"Dedicated people have been holding the fort on the nation's railroads for a long time, and they are leading off the big change that is coming. But many more will be needed. Very few of the "best and brightest" from our colleges and universities go to work for the railroads now, but that will change dramatically when word gets out that the railroad leaders are once more free to manage their own destiny."[187]

• The ICC regulators are either biased or not competent

"For example, there are those, such as the several writers and editors of the Wall Street Journal, who argue that regulation of transportation should be eliminated because the regulators are incompetent, dominated by companies they regulate, and are subject to compromise of their integrity (the Regulators, the Wall Street Journal, October 9, 15, 25, and November 1, 1974). Without commenting on the correctness of such observations, I will acknowledge that it is difficult to recruit persons who are qualified by judgement, training, and experience in all matters of transportation law, economics, and operation who have not also been associated with some part of the industry. Obviously, even the

[186] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.10)

[187] Martin, Albro (Harvard University Graduate School of Business). "Needed Return to Entrepreneurship." Modern Railroads October 1981. (P.55)

most objective person from an industry background might be accused of some latent bias. Those who are free from this taint also usually lack qualifications."[188]

• Regulation stifles the ability of railroads to change their structure and operations

"Inability to Restructure Operations – Even minute changes in rail plant and corporate organization frequently require years to process. Yet the need for rationalizing 194,000 miles of plant, most of which was built decades ago before the advent of highway competition, is obvious. Today two-thirds of all rail traffic moves over 20 percent of the system. At the other extreme, 10 percent of the track accounts for only one-half of 1 percent of the traffic. In addition, there is significant duplication of main lines between many major points."[189]

• It is too easy to cheat under a regulatory regime

"It might be said that we do not really know what true regulation of this traffic would result in; we certainly do not have it now, except in the situation where a carrier is intimidated by threat of loss of other valuable authorities. The problems are:

1. It is too easy to avoid compliance
2. The ICC has too small an enforcement staff and budget
3. Shippers promote avoidance of compliance

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[188] Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Boston, Massachusetts). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.17)

[189] AAR/I&PA. "Regulatory Handicaps Stifle Improvements in Rail Service." Document. 05 February 1979. (P.3)

If we really want to test regulation, we must enforce it and this means penalties for the errant shippers as well as carriers."[190]

• Deregulation will lower barriers to entry

"Alright, what are some cons? What are the scars on the face of the brave new world? Some say that with prices more competitive and entry easier – whether by lessening restrictions on existing certificates or allowing easier access to new certificates – the value of existing certificates would go down."[191]

• Deregulation will not destroy the small carriers

"Some might fear, or assert, that some firms in the industry would improve their relative standing and some would come out poorer in relative standing, if there were fewer constraints on pricing and operating patterns. I think this is likely to happen. However, I don't buy the argumentation that the big carriers are going to wipe out all the little carriers. Experience in the exempt trucking sector, experience in regulated trucking, academic studies from the 1920's to date, experience in other countries, and common sense indicate that many types of truck operation don't have to be big to be good, or, to say it the way economists do, for most types of truck operation, economies of scale are not great."[192]

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[190] Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Boston, Massachusetts). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.18)

[191] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.10)

[192] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.10)

• Deregulation will allow railroads to make decisions based on market dynamics

"Conrail seeks no more than the ability to confront directly the realities of the market it serves and to make its pricing decisions on the basis of the dynamics of that market. It seeks no veto power over the pricing structure of any other railroad; it seeks no advantage for its shippers at the expense of those shippers served by other railroads. Quite simply, it seeks to do business in a business-like way... The continuation of the status quo in the joint rate structure means that shippers served by Conrail face unnecessarily high rate adjustments that will benefit disproportionately other railroads, or that status quo will allow other railroads to veto Conrail's efforts to adjust its prices and thus suppress Conrail's efforts to become self-supporting and to free itself of the need for Federal funds."[193]

• There are many missed market opportunities under regulation

"Many people feel the regulated industry as a whole makes more money because it is regulated. But does this hold up, and if so, how long? You have private and exempt carriage to face; you can't control capacity competition very well; and you miss market opportunities you probably can't even be aware of."[194]

• Deregulation will require railroads to re-examine their methods of conducting business

"[The new day would require railroads to shed some old myths, such as] "the myth that long hauls are always better than short hauls," the myth that "railroads can only make

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[193] Jordan, Edward (Chairman and CEO. Conrail). Formal statement before the *Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce* 16 October 1979.

[194] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.12)

money serving the big guy, the main line, and the major shipping points," and the myth that "mergers are the only solution to every problem.""[195]

• The open market will not be injurious to small shippers and small centres

"Let's go to arguments I am strongly led to want to call garbage arguments in this discussion over ICC regulation. There undoubtedly are true believers for each of these contentions. I believe their content nevertheless to be insubstantial. First let's take the argument that small towns and small shippers will lose service if rate competition ends motor carrier cross subsidies in their favour. Over a decade in and around Washington has given me repeated demonstrations that the small towns and small shippers are at a great disadvantage in affecting the existing regulatory mechanism, in the particulars of individual rate and licensing situations. It would be hard to see how a more open market, with fewer ICC decisions, could serve them any worse."[196]

• Deregulation will not return the motor carriers to pre-regulation chaos

"How about the 'chaos' argument? The assertion that we will see a full scale replay of the 1930's in the midst of the 1970's. In the depression, almost everyone was in trouble... Today is a great deal different from the 1930's. If we put aside trumped-up hysteria about the 1930's, we can nevertheless recognize that an immediate, complete wipe-out of all ICC rate and entry controls would shake up a lot of people. For a while, things could be pretty unsettled. For this reason, those of us who have wanted less ICC

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[195] Gaskins, Richard (Chairman. Interstate Commerce Commission). Quoted in: "Deregulation: What happens next?" Railroad Age 27 October 1980 (P.10)

[196] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.13)

rate and entry controls have proposed that the changes be phased and that people already in the business get restrictions eased or removed before new entrants get the benefits of the changes. Put another way, no one begrudges you some time to adjust to changes – so long as you don't try to make that time forever."[197]

• The ICC routinely interferes with the day-to-day management of the railroads

"Interference with Management Control of Rail Operations – The ICC controls what rental rates will be charged on freight equipment. It also frequently directs how the cars must be routed, how many cars and locomotives should be assigned to specific commodities, how many cars can be used in unit trains, how the cars shall be moved and what charges the railroads can apply for accessorial services. Recent months have witnessed an across-the-board expansion of ICC intrusion into daily operational control of railroads, even to the point where the Commission has proposed to set priorities for car repairs for even the most marginal carriers. (The cars proposed for top priority were the least used equipment.)."[198]

• Deregulation will still allow for price stability

"Stability. People who operate in markets without entry barriers and price fixing know they can be reasonably stable. I venture that if we got down to brass tacks, many or most

[197] Ibid. (P.14)
[198] AAR/I&PA. "Regulatory Handicaps Stifle Improvements in Rail Service." Document. 05 February 1979. (P.3)

of you know it too. How about the argument that rate barriers and ICC regulations equalize shipper relationships and shippers want this kind of stability?"[199]

• Regulation has stifled pricing flexibility

""On the one hand," he said, "the ICC has frustrated and continues to frustrate the railroad industry in its attempts to generate additional revenues on that traffic which is capable of paying higher rates... On the other hand, the fine-grained web of ICC rate regulation has not merely discouraged, but effectively prevented the railroad companies from making short-term upward adjustments in their rates to damp down otherwise unmanageable demands on finite amounts of rail transportation capacity.""[200]

"Pricing Inflexibility: Because all their rate changes are subject to ICC rejection, railroads cannot quickly adjust rates to either demand or competition. Major changes – both up and down – can be litigated for months and sometimes years at enormous expense. Prompt adjustments to handle peak loads have been impossible. Meanwhile, rates are artificially set by Federal fiat to protect port, agricultural and regional interests and must comport with antiquated rules governing discrimination and preference. State regulation of intrastate rail rates has, in many jurisdictions, been even more time consuming. Reform legislation in 1976 to give the railroads the ability to effect pricing

[199] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.14)
[200] Dempsey, Jack (President. AAR). Quoted in: Traffic World 31 July 1978 (P.25)

changes more quickly has been cut back by the ICC to the point were it no longer applies to over half of all rail traffic."[201]

• The free market will produce an orderly rate structure

"Without rate bureaus, rates would lack any nationwide integrating rationale or effect. With rate bureau's publication, but without rate bureau price collusion, rates would more closely approximate the costs of particular services, plus reasonable profits. Individual carriers would set rates that made sense for their system; shippers could ship among different carriers; and the net result should be a much more discriminate and fully developed set of truck prices and services. Open markets can and do produce ordered rate structures."[202]

• Deregulation will lead to better quality of service and elimination of inefficiencies

"In theory, by removing barriers to entry, route limitations, and rate regulation, deregulation would result in increased competition causing quality of service to increase, rates to decline, and efficient transportation companies to prosper. Inefficient companies would go out of business because they are unable to offer adequate service and competitive rates to shippers in a changing market environment. Continued ease of entry would avoid undue economic concentration. If this scenario should occur, deregulation will have furthered many of the goals of national transportation policy. The consequences of deregulation on railroads and the trucking industry are not that

[201] AAR/I&PA. "Regulatory Handicaps Stifle Improvements in Rail Service." Document. 05 February 1979. (P.3)

[202] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.15)

predictable, however. The brief experience of the airline industry with deregulation appears to have improved overall financial performance of the airline industry. Passenger fares have generally declined, but some rates for cargo have increased."[203]

• The free market will "work" better than the regulated system

"The free market has never worked. After making adjustment for the many kinds of regulation US markets operate with, and thus causing the assertion to read that markets without price fixing and entry barriers have never worked, the absurdity could be uttered only by someone who hasn't looked outside the ICC's narrow domain, or refuses to believe what he sees."[204]

• Regulation leads to railroad equipment shortages

""While the industry is moving both coal and grain in all-time record quantities," said Mr. Dempsey in his prepared statement, "It is not hard to find the causes of...'shortage' situations experienced from time to time over recent years. They derive simply and solely from the economic regulation of the industry by the (ICC).""[205]

• The ICC inhibits competition

"Most people involved in trade regulation learned a long time ago the difference between encouraging competition and preserving competitors... let's not kid ourselves. The most direct and obvious effects of ICC activities in the licensing area are to block, limit, slow

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[203] Francese, Albert. "Rail and Truck Deregulation: Palliative or Panacea." Traffic World 19 March 1979. (P.113)
[204] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.14)
[205] Traffic World 31 July 1978. (P.25)

down, or contain competition, in motor carriage. The economic characteristics of trucking do not seem to present the kind of situation in which shelters are needed to promote useful diversity which would not otherwise obtain – if such conditions do in fact ever obtain."[206]

• Resource savings and increased railroad employment would be achieved

(Quoted from the adversary opposed to the aforementioned 09 December 1970 Council of Economic Advisers memorandum, signed by Harvard Economist Dr. Hendrik S. Houthakker)

"Elsewhere in the memorandum, without explanation of his escalation, the good doctor says the "resource saving" would be "more than $2 billion a year." [Houthakker] admits to some uncertainty as to the "impact in the first year on the precarious financial health off the railroads." (9) However, he shrugs off that concern and predicts confidently that "by rate adjustments, traffic diversions from the other modes, economies of operation and branch line abandonment, the railroad industry's condition should improve overall." Railroad employment, he asserts, would increase by 50,000 – 100,000..."[207]

• The railroads are no longer monopolies; therefore the ICC is not needed

"There is a serious question whether the railroads are still natural monopolies. Today they are surrounded by highly competent and aggressive intermodal competitors. Today,

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[206] Pearce, Jack (General Counsel. Committee on Modern Efficient Transportation (COMET), Washington D.C.). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.15)

[207] Weller, John (Paine, Webber, Jackson and Curtis, Inc., New York, New York). "Transportation Regulation and the Investor." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1972. (P.101 – P.102) [*Numbers in brackets refer to page numbers of the Houthakker memo]

there are other forms of regulation in place that could provide many of the watchdog services that the ICC does perform for the investor community."[208]

• Deregulation would provide more efficient rationalization of services

The ICC has been sluggish in regulating the railroads compared to the motor carriers. And, the railroads often find themselves competing with unregulated (or de facto unregulated) carriers who have greater flexibility to conduct their operations and set prices. Deregulation of the railroads today would allow wholesale rationalization of services and revitalization, free of the political system that is continuing to promote unnecessary services and capacity."[209]

• The ICC interfered with track abandonment and railroad conglomeration

"Proposals to abandon just a few miles of hopelessly losing trackage can take months and considerable expense to process through the ICC. Rail merger proposals which promise better service and reduction of duplicate service take years. Even the new "expedited" procedure has a 2 1/2 year regulatory timetable, plus the opportunity for court litigation. Significant roadblocks have been erected by the ICC to limit rail operation of truck services. And rail ownership of barge operations has all but been prohibited."[210]

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[208] Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Boston, Massachusetts). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.18 – P.19)

[209] Ibid. (P.18 – P.19)

[210] AAR/I&PA. "Regulatory Handicaps Stifle Improvements in Rail Service." Document. 05 February 1979. (P.3)

• Regulation primarily benefited the railroads by limiting trucking competition

"Why were trucks regulated to begin with? Some would argue that it was to protect an infant and developing industry that could not regulate itself from predatory actions in 1935. I would acknowledge this, but believe that it was more of an attempt to protect the structure of railroad regulation from excessive competition from truckers."[211]

• Deregulation would lead to better development of certain rail markets

"The railroad industry is cash-starved; deregulation could provide an opportunity to develop the most lucrative markets and increase rates on commodities concerning which there is no effective competition."[212]

• Deregulation would allow for higher concentration of well managed trucking companies

"It's possible that five years or so from now there could be far fewer companies in the trucking industry, with many of the managements of those companies that don't make it being all too aware that one by-product of more competition is often fewer competitors, and what some had decried as regulatory lag was what others considered their right to due process... I believe that concentration will increase, particularly among LTL-oriented general freight carriers, because the emerging environment should favour those who today are larger, more efficient, and better financed carriers."[213]

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[211] Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Boston, Massachusetts). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.19)

[212] Francese, Albert. "Rail and Truck Deregulation: Palliative or Panacea." Traffic World 19 March 1979. (P.113)

[213] Schlesinger, Paul (Investment Analyst. L. F. Rothschild & Company, New York, New York). "An Analyst Looks at the Motor Carrier Industry." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.31)

5.5 Neutral Arguments

Many academics, government officials, and industry players issued statements and opinions regarding deregulation without necessarily indicating a preference in the debate. These statements are outlined in this section and are referred to as "neutral arguments". Some of the statements, without necessarily blaming regulation, outline the difficulties that railroads experienced in the 1970's. Other statements provide insight into how the author believes deregulation *should* unfold. At the end of this segment, a previous study conducted by MIT faculty proposing a framework for sound track abandonment policy will be reviewed. That study can also be classified as "neutral" since it did not explicitly address the issue of deregulation, but instead discussed how railroads can improve within the already established regulatory environment.

• The railroad industry was in a deteriorated state in 1960's and 1970's

"By the 1960's, the railroad industry was replete with bankrupt or financially weak carriers. Deteriorating capital stock, intense competition from motor carriers, changing markets, and poor management had brought much of the industry to the edge of collapse. In 1976, more than 47,000 route-miles, approximately 25 percent of the nation's total, were operated at reduced speeds due to dangerous conditions."[214]

[214] United States Department of Transportation. "The Changing Face of Transportation." Washington D.C.: Bureau. of Transportation Statistics (BTS), Final Edition, 2000.

• Measures to deregulate the railroads had to have provisions to protect captive shippers

"Adequate protection for shippers of captive traffic is an essential element of any acceptable bill."[215]

• Certain policy directions, such as reasonable rates, are in the best public interest

"The ICC shall consider as being in the public interest maximum reliance on competitive market forces, avoidance of undue concentration of market power, reduction of barriers to entry and exit, maintenance of fair wages and working conditions, and encouragement of safe transportation operations. The Commission is also required to encourage reasonable rates for transportation without undue discrimination or destructive competitive practices, the elimination of un-compensatory rail rates and to promote energy conservation."[216]

• Protectionism can reduce the advantages of competition

"The push for deregulation, in its present historical phase, was instigated by one aspect of consumerism – which is to say, a question as to whether business is taking unfair advantage of us (other businesses). It has been implemented by economists, whose main theme is that any form of protectionism dilutes the advantages of competition, protecting the weak against all kids of sin, management or otherwise and thus raising prices to the detriment of the consumer who – by this mechanism, is in effect taxed to support the weak sisters."[217]

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[215] Oberdorfer, John (Principal Spokesman: The Rail Shipper Committee). Statement: Traffic World 29 October 1979. (P.13)
[216] Cannon, Howard (Senator. (D-Nevada)). Traffic World 05 November 1979. (P.44)
[217] Todd, Arthur (Director of Purchasing. Lincoln Electric Company, Cleveland). Traffic World 30 October 1978. (P.22)

• Reduced regulations in the air-cargo industry resulted in higher rates and more service

"Many restrictions as to rates and routes for air cargo were eliminated in the fall of 1977 and most will be by November 1, 1978. The end result has been an increase in rates by an average of 10 per cent, and a vastly broadened service by some carriers."[218]

• Low earnings is the largest problem in the railroad industry

"The overriding problem faced by the railroads is inadequate earnings. Last year, the industry attained a 3.45 percent rate of return. This return is the highest in 8 years, but it is still far below the 10 percent required to replace worn-out equipment and facilities, to modernize, and to offer a reasonable return to investors. To meet these requirements, the railroads need $5 billion per year in revenues more than they now produce, based on 1975 traffic expense levels."[219]

• Transportation pricing decisions results in better performance in an ideal environment

"Certainly one important factor has been the lagging rate of increase in transportation rates and fares over the years. In an optimum operating environment – political, social, and economic – the carriers might well have been able to equal or even better their pricing performance over this period without the kind of damage that has in fact resulted; but such conditions did not, and do not, exist."[220]

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[218] Ibid. (P.24)

[219] Report on Joint Conference ENO Foundation Board of Directors and Board of Consultants. Traffic Quarterly 22-23 October 1975. (P.198)

[220] The Transportation Association of America. "Transportation – A Call for Action." March, 1976. (P.19)

• Deregulation will result in reduced trucking rates

"Significant numbers of new entrants into the trucking industry could cause intense competition and a reduction in trucking rates."[221]

• Deregulation will both improve and worsen conditions in the rail and truck industry

"Deregulation may foster the financial health of larger rail or truck carriers, but disadvantage others. Deregulation may improve service in some markets, but cause a deterioration of service in other markets. The Congress must determine whether, on balance, the benefits of deregulation exceed the detriments of the existing regulatory system."[222]

• Railroad deregulation will have a different outcome than truck or airline deregulation

"Deregulation of railroads is not at all the same thing as deregulation of airlines and trucking. Freeing air and truck competition is designed to lower prices, encourage travel, and perhaps even lower pressure on the inflation rate. But with railroads, the avowed goal is to increase profits and capital through higher revenues and increased borrowing power."[223]

One research study at MIT in the 1970's focused on improving the railroad system within the confines of regulation. The thrust of the study surrounded developing a methodology for rationalizing the railroad networks. The idea proposed was that one of the major

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[221] Francese, Albert. "Rail and Truck Deregulation: Palliative or Panacea." Traffic World 19 March 1979. (P.113)
[222] Ibid. (P.114)
[223] Businessweek 14 May 1979. (P.56)

difficulties experienced by the railroads was the "large numbers of low density branch lines and nearly parallel main lines."[224] As a result of these vast numbers of route miles, the railroads could not "capitalize on the scale economies inherent in both yard and line operations."[225] Excess rail mileage "prevents railroads from achieving long average train lengths, thereby increasing crew costs. The same factors cause higher maintenance and signaling costs, because these costs, on a ton-mile or train-mile basis, decrease as volume increases and the railroads employ automatic block signaling, centralized traffic control, or automatic traffic control. At very high densities, electrification may allow significant operating savings."[226]

These problems can partly be blamed on the history of railroad development. When the federal government and other agencies were promoting the construction of railroads, there was little plan for a national network. Each rail line was constructed as a single entity without thought to its fit in the grander framework. As a result, when the final network was completed, there was excess capacity. The railroads discovered that while early opportunities to expand rail routes were plentiful, reduction and abandonment was a more difficult proposition. There were now issues of labour, affected communities, and regulation amongst others that made it more difficult for railroads to rationalize capacity. Even though opponents of the ICC alleged that the agency hindered railroads' ability to abandon light density lines, "an intensive analysis of abandonment proceedings before the ICC during the years 1968-1970 inclusive showed that 88% were ultimately approved

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[224] Martland, Carl, and Marc N. Terziev. "Railroad Rationalization Methodology" *Studies in Railroad Operations and Economics* (Volume 18). January 1976. (P.1)
[225] Ibid. (P.2)
[226] Ibid. (P.2)

and of these, 63% were decided within 6 months of the date of filing."[227] "The results of these analyses indicate that the abandonment proceedings of the ICC have been, in fact, relatively short and that most decisions ultimately went in favour of the railroad."[228]

In developing a methodology for reasonable railway abandonment, it was suggested that "abandonments authorized between 1920 and 1970 were piecemeal in nature."[229] One explanation for the high rate of ICC approval of abandonment was the notion that since the railroads had to invest considerable time and effort in assembling an application; they were going to do so with winning conditions already in place. Some of these winning conditions could be viewed as detrimental to the industry as a whole. Sloss, Humphrey, and Krutter identify a "predictable sequence of events" that led to railroads applying for abandonment.[230] These events are listed as follows:

1. Long period of deferred maintenance of roadway structures.

2. Deterioration of service frequency and imposition of highly restrictive speed limits.

3. A natural calamity, such as flood or storm, causing severe damage to a bridge or other portion of the road bed and necessitating a large capital investment to restore the line to serviceable condition.

4. Scrap value of the line higher than cost of rehabilitation."[231]

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[227] Sloss, James, Thomas Humphrey, and Forrest N. Krutter. "Railroad Rationalization Methodology." *Studies in Railroad Operations and Economics* (Volume 16). February 1975. (P.2)
[228] Ibid. (P.58)
[229] Ibid. (P.68)
[230] Ibid. (P.67)
[231] Ibid. (P.67)

With these difficulties in mind, researchers at MIT proposed a framework of reasonable rail *rationalization* for the ICC to implement. If the proposition that the piecemeal nature of abandonment along with the related issue of "generating winning conditions" was a major cause of the railroad problem was accepted as an underlying premise, then MIT researchers proposed that a logical *rationalization* framework would allow the railroads to improve their condition *in a regulated environment.* It should be noted that abandonment is a component of rationalization. Rationalization of the industry involved many aspects including improving interchange and yard operations, modernizing facilities, improving cooperation with agencies, and restructuring the network through abandonment and other tools. The framework was divided into three major categories.

A. changes in rail operations

B. investment in equipment or facilities

C. changes in institutional arrangements[232]

The changes in rail operations *within a regulatory framework* involved improving train trip times and reliability by utilizing run-through trains, faster trains, more frequent trains, and revised train schedules.[233] These changes also involved improving blocking and routing policy through better local and interchange operations, improved schedule adherence and dispatching, and revised yard operations.[234] Additionally, changes in rail operations included improving operating efficiency through revised power distribution, revised empty car distribution, revised inspection procedures, and reduction of peak

[232] Martland, Carl, and Marc N. Terziev. "Railroad Rationalization Methodology" *Studies in Railroad Operations and Economics* (Volume 18). January 1976. (P.20)
[233] Ibid. (P.21)
[234] Ibid. (P.21)

volumes in yards and on line segments.[235] There was also a plan for consolidating duplicate rail services.

Investment in equipment and facilities involved consolidating duplicate facilities by eliminating: redundant yard facilities, parallel main lines, parallel branch lines, and unnecessary repair and computer facilities.[236] Further changes in investment included modernizing and upgrading yard and line facilities and obtaining new or rehabilitated freight cars, yard and road locomotives, and other equipment.[237]

The institutional alternatives proposed by MIT in the 1970's were numerous. These included restructuring of the physical network and reallocation of operating responsibilities through abandonment, mergers, trackage rights, jointly operated terminals, reciprocal switching agreements and cooperative interchange agreements.[238] The proposal also included improving cooperation and coordination between departments, between railroads, with shippers and potential shippers, with other modes, and with local, state, and federal governments.[239] A final component was a plan to revise management and labour practices. This involved improved "control over car movements by developing an operation plan, monitoring service and car utilization, [and] establishing profit centers or service control groups."[240] There was also a plan to revise labour agreements. This revision would "allow smaller crew size, more flexible

[235] Ibid. (P.22)
[236] Ibid. (P.22)
[237] Ibid. (P.22)
[238] Ibid. (P.23)
[239] Ibid. (P.23)
[240] Ibid. (P.23)

operations, and more rational methods of payment."[241] Accounting procedures would be subject to reform as well. The new procedures would "allow better knowledge and control of operations, costs, profitability, and service."[242] A new evaluation process for investments was also proposed.[243]

The idea of making changes to the framework of the railroads *within the realm of regulation* was not adopted. By 1978, the Carter Administration had commissioned a report to examine the feasibility of deregulating the railroads.

5.6 Prospectus for Change

The US Department of Transportation's October 1978 Preliminary Report, *A Prospectus for Change in the Freight Railroad Industry* was an attempt to examine the condition of the railroads and to determine the best course of action beyond that point.

John Meyer once proposed that there are four reasons for regulators to interfere in the operation of the free market.

"1. To prevent unreasonable prices that produce excessive earnings arising from natural monopolies.

2. To insure sufficient profits for development and expansion of an industry.

3. To prevent discrimination between various groups of customers with unequal bargaining power.

[241] Ibid. (P.23)
[242] Ibid. (P.23)
[243] Ibid. (P.23)

4. To provide services to meet a broad public need that would not normally be fulfilled."[244]

When the DOT decided to commission its 1978 report, some individuals argued that the conditions outlined by Meyer no longer existed. Have any of those conditions returned after two decades of deregulation?

According the Prospectus, US railroads "hauled 1.4 billion tons of freight at an average of 568 miles; received more than $20 billion in operating revenues; employed more than 500,000 people at an average salary of $18,000; spent $2.29 billion for new plant and equipment."[245] In order for deregulation to be considered a "success", then there should be significant improvement, in real dollars, in these metrics. There was also a call for further abandonment. "Unnecessary lines must be abandoned and traffic consolidated onto parallel or connecting lines, so that service can be maintained, but costs can be reduced."[246] The result of this measure would be an increase in rail line density.

The Prospectus also discusses capital returns in the railroading industry. Not only was there little return on investments, few private dollars were available to upgrade the condition of the facilities. The prediction was that, "competitive changes in some markets will be balanced by the strengthening of competition in markets where coordination will permit upgraded facilities and service. Intermodal competition and

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[244] Meyer, John. (qtd in. Wyckoff, D. (Faculty Member. Harvard University Graduate School of Business Administration, Boston, Massachusetts). "Deregulation Pros and Cons." *National Accounting and Finance Council Annual Meeting Presentation.* Washington D.C., 1975. (P.18))
[245] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.1)
[246] Ibid. (P.5)

Federal regulation will guard against abuses from reduction in rail competition."[247] The Federal government was accused of preventing managers from adjusting rates, completing mergers in a timely fashion, providing new services, and abandoning obsolete facilities.[248] It was estimated that deferred maintenance, by 1978, was near $5.4 billion.[249] Profits were not helped by this situation either, "in 1977 the industry's profits fell to $347 million, the lowest figure since 1932."[250] How did deregulation affect this situation? Did competition provide for the promises as indicated in the Prospectus? Did the deferred maintenance bill get reduced because of track abandonment or did the financial situation change enough to allow for investments in repairing facilities?

The following are a series of quotations taken directly from the *Prospectus for Change in the Railroad Industry*. These quotes are provided as further evidence of what was being said in an official capacity before the actual passage of the Staggers Act.

• Regulation did not allow for adequate industry profits and rates of return

"Railroad regulation has failed to assure adequate industry profits and rates of return and has retarded the industry's ability to compete with competitors... If railroads are to regain lost traffic, they must be able to lower their rates, innovate new services, and respond to new and changing circumstances. If railroads are to increase their revenues and attract the resources necessary to revitalize the industry, they must be able to raise their rates in

[247] Ibid. (P.5)
[248] Ibid. (P.3)
[249] Ibid. (P.2)
[250] Ibid. (P.2)

a timely fashion, free from regulation in markets sufficiently competitive to prevent abuses of monopoly power."[251]

• Regulation distracted the attention of management

"In placing a premium on the status quo and focusing management's attention on the intricacies of the complex regulatory schemes, the present regulatory system has sapped the ability of railroads to respond, compete, innovate, and develop their full service capacity. Less restrictive rate regulation is essential to the achievement of these goals."[252]

• Umbrella ratemaking hurt the railroads

"If for example, a commodity could move either by barge or rail, and the railroad sought to lower its rates to compete with the unregulated barge rate, the ICC often held the rail rate higher than the lower cost barge rate, because lower costs were thought to be an inherent advantage of water movements. Thus, a ratemaking standard originally intended to assure railroads a fair rate of return became the basis for protecting motor and, later, water carriers from rail competition."[253]

• The ICC did not have a clear direction in setting rates

"The concept of fair return on fair value, embodied in the original rule, disappeared entirely. No clear direction was ever provided to the ICC regarding the use of its ratemaking authority to reconcile the needs of railroads to earn revenues adequate to

[251] Ibid. (P.115)
[252] Ibid. (P.115)
[253] Ibid. (P.119)

sustain a fair rate of return with the concepts of inherent advantage, intermodal competition, and low rates for shippers."[254]

• There is a regulatory imbalance between railroads and other modes of transportation

"All railroad companies are common carriers, subject to the common carrier obligation that requires a railroad to serve at any time any shipper who is willing to pay the published tariff charge... On the other hand, the interstate motor carrier industry includes regulated carriers, private carriers, exempt carriers, and individual owner-operators. Regulated carriers comprise only about 40 percent of the motor carrier industry in ton-miles. Only this segment of the industry is regulated in ways essentially similar to the railroads."[255]

• Regulation constrains the railroads during times of equipment shortages

"From time to time, every mode of transportation runs short of equipment. While primary attention has focused upon the supply of railroad freight cars, there also have been occasions when the supplies of barges and trucks were inadequate to meet the demands of shippers. In the case of unregulated barge and truck traffic, however, the ability to price and offer services provides a means of rationing equipment in response to demand and alleviating shortages. In times of great demand, the rates charged by motor and water carriers hauling unregulated commodities are quickly raised to a level where a shortage no longer exists because the market for transport by these carriers clears at the new price level. Thus, the pricing mechanism used by carriers of unregulated commodities permits a workable solution to equipment shortages regardless of the supply

[254] Ibid. (P.119)
[255] Ibid. (P.128)

or demand for service at any particular time. By contrast, railroads are hampered in their ability to react to changes in market conditions because of the rigidity of regulated rates... One result of rail-pricing rigidity is that the railroads must attempt to maintain a supply of cars throughout the year sufficient to meet peak-period demand. Those cars sit idle for the rest of the year, and the rates charged for their peak-period use are not permitted to reflect their year-round use."[256]

• Rate regulation causes severe fluctuation in rail demand

"The continuing growth and expansion of private truck and barge operations and the inroads of contract carriage have further undermined the foundation of rail traffic to the point where rail rate flexibility has become a matter of competitive necessity. Trucks with rates that vary over the year experience a far less severe fluctuation in demand. For example, the variation in demand for produce movements between California and Chicago over the year is approximately 200 percent. The variation in demand for rail service for the same commodities and between the same points is over 600 percent."[257]

• Procedural conditions restricts the railroads' competitiveness

"The ability of other carriers to attract traffic from railroads is made a great deal easier by imposing upon the railroads procedural conditions not imposed on other carriers."[258]

One aspect of the Prospectus for Change is that it did not explicitly endorse complete deregulation. Indeed, many of the recommendations proposed in this document outlined methods by which the ICC could reform itself and its own way of doing business.

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[256] Ibid. (P.128 – P.129)
[257] Ibid. (P.129)
[258] Ibid. (P.129)

Nowhere did the Prospectus suggest that the ICC should be eliminated. This leaves one final area to explore in trying to ascertain who pushed for outright deregulation, and exactly what they said the benefits of those actions would be.

5.7 Congressional Testimony

Once the Prospectus was published and once the Carter administration and Congressional leaders decided to move ahead with deregulation, hearings in the Senate and in the House of Representatives provided an opportunity for all interested parties to indicate their opinion on the matter of deregulation. One of those hearings was chaired by Representative James Florio (D – New Jersey) on 31 March 1980 and on 02 April 1980. The official title of these proceedings was, the *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry – March 31 and April 2, 1980.* The following statements outline both pro and anti deregulation arguments, as well as neutral arguments. The quotes chosen and outlined in this section are taken from the entire transcript of the two-day hearings. The quotes were selected based on their predictive qualities of deregulation. They represent all the key arguments presented during the hearings and they also represent the relative frequency in which each of those arguments was discussed in the testimony. Although they are quoted exactly as was entered into the Congressional Record in 1980, they have been sorted into smaller categories for ease of reference. Some of these categories tend to overlap. For example, there are many points made about railroad rates. There are also many points made about captive shippers.

These are two separate categories. Yet the issue of railroad rates is undoubtedly a part of the concerns of captive shippers.

• The debate over railroad conditions

Some of the testimony offered to Congress suggested that the railroads were in systematic trouble. Other testimony indicated that certain railroads were experiencing problems and that others were quite profitable. The following quoted testimony regarding the overall condition of the railroad industry indicates that there was no general consensus on this issue.

"Indeed, the symptoms that precede market failure are, even to the causal observer, already too apparent: the deterioration of railroad facilities, the lack of adequate equipment and frequent substandard service, low productivity growth, a declining market share, and a worsening financial situation."[259]

"Proponents of minimizing or eliminating the common carrier rail concept say that the nation can no longer afford a common carrier system in light of the poor financial condition of the "railroad industry". That theory cannot stand analysis. There is no railroad "industry," as such. There are 31 individual Class I railroad corporations of varying financial condition. The majority of them are in robust financial condition, prospering in a regulated common carrier setting. They have reported record financial

[259] Johnson, William (Assistant Secretary for Policy and International Affairs. US Department of Transportation). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.8)

earnings in recent years. They have superior financial ratings by the bond rating services and encounter no difficulty in borrowing funds for plant and equipment. At the other extreme are Conrail, Rock Island and Milwaukee Road, but their financial plight is in no way traceable to the common carrier system."[260]

"In 1978, railroad "industry" profits were $369.2 million; for the year ended September 30, 1979, such profits were $856.1 million. All indication is that railroad profits in the last quarter of 1979 and the first quarter of 1980 increased even far more dramatically compared to previous periods."[261]

"The increased revenues the full cost percentage standard would provide would accrue largely to railroads which are already financially solid. For the most part the major coal hauling roads are among the most prosperous."[262]

"Thus to the extent that this provision is intended to address the railroad problem which we believe is more accurately defined as certain "problem" railroads it is largely misdirected."[263]

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[260] McFarland, Thomas (Counsel. Grain and Feed Association of Illinois), Herb Hoemann (Executive Vice President. Grain and Feed Association of Illinois), Fred Crawford (Chairman. Transportation Committee), and Reeder C. Miller. Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.135)

[261] Ibid. (P.135 – P.136)

[262] McNeese, Craig (Houston Lighting & Power Company (on behalf of the Western Coal Traffic League). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.491)

[263] Ibid. (P.491)

• The debate over regulatory adequacy

On both sides of the issue were questions about whether there was too much regulation or not enough. Some argued for deregulation as a way to promote industry efficiency while others suggested that regulation was needed to reign in destructive competition. There were others who felt the need for better enforcement of regulation while others thought that the system was not responsive to the needs of carriers.

"Our regulatory system is simply too rigid to accommodate the ever-changing demands being placed upon the railroad industry. The system is inadequate; it needs to be scrapped; and it needs to be replaced with something better."[264]

"We at the association are not impressed with the argument that the common carrier obligation should be junked just because it is difficult to enforce. We think it is no answer to throw your hands in the air when a railroad won't do what the law requires it to do. The short-line railroad suggestion, though perhaps well intentioned, would aggravate the service problem, not solve it."[265]

"TAA believes that the rationalization of rail work rules will also prove beneficial to rail employees in the long run. Such action should help to improve rail services, stimulate

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[264] Johnson, William (Assistant Secretary for Policy and International Affairs. US Department of Transportation). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.8)

[265] McFarland, Thomas (Counsel. Grain and Feed Association of Illinois), Herb Hoemann (Executive Vice President. Grain and Feed Association of Illinois), Fred Crawford (Chairman. Transportation Committee), and Reeder C. Miller. Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.130)

more traffic, and strengthen the financial condition of the carriers. This, in turn, should improve job opportunities to the railroad field."[266]

"We should like to call to your attention that the Senate-passed S.1946 contains a provision (Section 110) which specifies that present statutes governing the relationships between rail and water carriers shall remain unchanged with respect to the coordination of services and competition. Thus, the ICC would retain its authority to prohibit unfair, destructive, or predatory competitive practices in this area of transportation. TAA supports such a provision and recommends that a similar Section be added to the final version of the Rail Act of 1980."[267]

"Railroads can be financially rejuvenated not only by increasing railroad traffic which provides adequate revenue and adjusting rates for such railroad transportation to fully cover costs; but also by actions that achieve cost reductions, such as expedited railroad merger transactions and cessation of unprofitable transportation service. Regulatory reform is especially necessary in such non-ratemaking areas to assure that railroads are able to function efficiently. The establishment of firm deadlines for prompt decisions with respect to railroad mergers and abandonment of unprofitable lines should be a first priority of regulatory reform."[268]

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[266] Tierney, Paul (President. Transportation Association of America). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.639)

[267] Ibid. (P.640)

[268] Romanick, Conrad (Manager. Traffic Economics and Government Relations – Dow Chemical USA, Midland, Michigan). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.467 – P.468)

"TAA is in complete agreement on the need for such legislation, as time is running out for many of our railroads, with a growing number facing the problems of bankruptcy and un-profitability. The Rail Act of 1980 does address these problems forcefully – as must be done – and we are hopeful that differences among the affected interests can be resolved in time for a final rewrite of a House-Senate bill and passage into law this year."[269]

"From the outset we have taken the position that deregulation of the railroad industry is sound in principle and that it should result in a stronger and more efficient rail system."[270]

"It seems incredulous to us that a system that has worked so smoothly is under attack by people who want to destroy it. Maybe it is because they do not understand it, especially people who have never been involved and have not participated in proceedings of the rate bureaus."[271]

"NCA supports changing existing law to remove unnecessary regulation of railroads, to improve competitiveness of railroad transportation, and to preserve private ownership of

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[269] Tierney, Paul (President. Transportation Association of America). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.631 – P.632)

[270] Taylor, Carl (President. ITEL Rail). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.621)

[271] Hansen, John (Assistant VP Transportation. The Board of Trade of Kansas City, Missouri, INC.). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.559)

railroads, as long as adequate service and reasonable rate protection is provided for captive shippers. Reform of railroad regulation is desirable in order to enable railroads to reduce costs and to seek a mix of market-determined transportation contract rates together with rates which are governed by maximum reasonableness regulation."[272]

"The other observation I would like to make is since 1969 our statistics, and we refer to the US Bureau of Labor statistics in this regard, indicate that rail rates have increased 164.7 percent whereas coal rail rates have increased 191.6 percent.

When I appeared before you on October 25, 1979, I said that the primary concern of the electric utility industry is that any railroad regulatory reform legislation contains adequate provisions to prevent exploitation by the railroads of the monopoly power which they enjoy over most movements of coal.

No one quarrels with the concept that unnecessary economic regulation should be removed from the railroad industry where the railroads encounter effective competition. However, it is essential to recognize that many railroads have a monopoly over the transportation of coal to electric utilities. It is as necessary to the public interest to regulate the railroads where they exercise this monopoly power as it is to regulate any other public utility where they exercise monopoly power."[273]

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[272] Baylor, James (Senior Vice President. A.T. Massey Coal Company (on behalf of the National Coal Association)). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.464)

[273] Cox, Ellis (Executive Vice President. Potomac Electric Power Company (on behalf of the Edison Electric Institute)). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.486)

•The debate over network makeup

There was a lot of discussion regarding the consequences of liberalizing abandonment procedures. Would deregulation allow railroads to abandon lines and reduce the size of the network to few main lines? Was there excess rail? What would happen to small railroads (i.e. short-lines) that were dependent on the large railroads if certain areas were abandoned?

"Less stringent abandonment standards are also essential. Too many light-density rail lines operate to the detriment of the entire railroad system. These lines are a severe financial burden that the railroad industry can ill-afford. Continued branch-line operations force carriers to use equipment and personnel that could be more effectively employed providing service elsewhere in the system."[274]

"Another argument sometimes advanced against the common carrier rail system is that where service under that system results in profits which amount to less than the railroad's average profits or rate of return, it is more appropriate to require local interests to perform the service themselves than to require the railroad's other customers to customers to cross-subsidize the less profitable service. That argument has no parallel or precedent in law. The "small community" service subsidy provisions of current law relate to situations in which such service would purportedly be performed at a loss, not at a less-than-average profit. Moreover, the argument is impractical and unpersuasive. Rate and

[274] Johnson, William (Assistant Secretary for Policy and International Affairs. US Department of Transportation). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.18)

fare structures, both within and beyond the transportation industry, in which a certain amount of cross-subsidy of less profitable business by more profitable business exist are not only commonplace, but are also a practical necessity. That some ivory-tower economists may argue that such cross-subsidy may be theoretically undesirable is hardly a sound reason to revolutionize laws governing railroad service by junking the common carrier system."[275]

"If a railroad can prove that it is losing money in operating a line despite its best efforts to provide service, current abandonment law does not block extinguishment of the common carrier service obligation as to such line."[276]

"Since passage of the 4-R Act four years ago, 92 percent of track miles subject to abandonment applications have been permitted to be abandoned."[277]

"The merger and abandonment provisions of the Draft [the Draft deregulation bill] surely would result in stripping our rail network of all but a few main lines and insure the reduction of the number of railroad corporations in this country to a very few."[278]

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[275] McFarland, Thomas (Counsel. Grain and Feed Association of Illinois), Herb Hoemann (Executive Vice President. Grain and Feed Association of Illinois), Fred Crawford (Chairman. Transportation Committee), and Reeder C. Miller. Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.137)

[276] Ibid. (P.140)

[277] Ibid. (P.141)

[278] Snyder, J. (Chairman. Legislative Committee, Railway Labor Executives' Association; National Legislative Director. United Transportation Union). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.232)

"Railroad mergers, market swaps, track agreements and consolidation should continue to be reviewed by the ICC under expedited procedures. In exercising its authority as to mergers, the Commission shall consider it to be in the public interests to encourage and promote the consolidation of the railroads and the coordination of railroad facilities to the extent that such actions will improve the efficiency and the effectiveness of railroad services. In giving priority to the elimination of excess railroad plants, the Commission shall also consider the effect of a proposed action on the adequacy of rail services and the financial stability of the national railroad system."[279]

"In brief, TAA believes that railroad mergers and consolidations should be encouraged and acted on by the ICC or DOT in the shortest possible time, consistent with public interest."[280]

"A large railroad could afford to have a number of its routes cancelled under this provision because of the ability to counterbalance any adverse effect with revenues and income from other routes. A smaller railroad, however, would have virtually no ability to make up for a canceled route because few of them have anything more than one significant route. The fact that the cancellation is for commodity rates over such joint routes would seem to provide very little protection since the traffic of many short lines is

[279] Tierney, Paul (President. Transportation Association of America). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.637)
[280] Ibid. (P.637)

made up of a limited number of commodities, sometimes only one commodity of any real significance."[281]

"We find nothing in the bill that would guarantee the right of the small carrier to protect itself in this manner even if it were possible to do so. The large carrier would have the right to cancel its rate and no obligation to join in a higher joint rate or accept a portion of the division of the small carrier. If it were in the best interests of the large carrier to force that traffic over a competing single line route or even over a competing joint line route, nothing under this bill's provisions would require the canceling carrier to restructure the rate or increase it. More importantly, the section as now written specifically provides that the cancellation of a route pursuant to this Subsection would not constitute unreasonable discrimination or a destructive competitive practice. We see no justification for permitting unreasonable discrimination or destructive competitive practices as this provision would do."[282]

"New paragraph (j) would permit any carrier (a large Class I carrier, for example) to cancel a joint rate without the concurrence of any connecting carrier (a small Class II or III railroad, for example) unless the connecting carrier could show that the canceling carrier's division is less than 110% of its variable cost of providing service over that route. Such a license for unilateral cancellation for a joint rate leaves the small railroad with no protection against a large connecting carrier, even though its very existence may

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[281] Galassi, John (President. Green Bay and Western Railroad). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry*. Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.604)
[282] Ibid. (P.601)

depend upon the continuation of a joint rate over that through route. A large railroad could cancel a joint rate in which a small railroad participates but continue to provide competitive service over an alternate route even though its rate over the alternate route also produced less than 110% of its variable cost. The result would be that the large carriers would be given a license to eliminate the small railroads by forcing the traffic over preferred routes, even though the latter routes themselves do not produce 110% of variable cost. The highly discriminatory action would clearly not be in the public interest."[283]

"The rail industry is made up of carriers of many sizes and configurations. Not all have the economic strength or bargaining power of others. I am very concerned that the smaller carriers not be put in a position where they are at the mercy of large connecting carriers. Whatever the resolution of the joint rates problem, smaller carriers must be protected."[284]

"Our chief concern with this bill is the threat posed by section 303, entitled "compensatory joint relief." While we do not think any railroad should be forced to carry traffic at less than its variable costs, we also do not think that one partner to a joint rate should have the unfettered discretion to alter an existing joint rate by imposition of a surcharge. We understand that many major railroads have now agreed on the approach reflected in section 303; that may be well and good for them, but we do not think it is well and good for most short lines. Whereas a major railroad will usually have a number

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[283] Ibid. (P.599)

[284] Florio, James (D – New Jersey). Opening Statement: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives.* 16 October 1979.

of available routes and gateways; that is not generally the case with a short line. It has one partner and one partner only; if that partner imposes a surcharge on its traffic, there is no way it can be avoided, and if the traffic no longer moves because of lower cost competition, for example, it will be the short line that is hurt because its traffic is limited. A commodity that is the life blood of a short line may be totally insignificant to a major road that has a large mix of traffic and an equally large number of shippers."[285]

"By the virtue of their size, proximity to their shippers and receivers, and the familiarity with the needs of these customers, short lines provide an efficient and economical service responsive to the demand of those located on their tracks. However, the best service on an origin or destination haul by a short line cannot compensate for poor service by its major railroad connection. It is imperative, therefore, that the railroad industry continue to be viewed as a national system and that any changes legislated in the regulatory framework be carefully structured to enhance rather than disrupt this system."[286]

"Certainly, we cannot afford to permit Railroad Deregulation to strip the nation of its rail lines and create railroad monopolies which in years to come will control almost all intercity transportation."[287]

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[285] Croft, Howard (President. The American Short Line Railroad Association). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.510)

[286] Ibid. (P.509 – P.510)

[287] Snyder, J. (Chairman. Legislative Committee, Railway Labor Executives' Association; National Legislative Director. United Transportation Union). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.231)

•The debate over rates

The testimony regarding potential rates that railroads would charge customers in a deregulated environment was one of the few areas where witnesses speaking to Congress were generally in agreement. Virtually all the testimony indicated that rates would go up and that captive shippers would be negatively affected. It is interesting that one of the areas that presented a unified consensus – the debate over rates – was one of the areas where the predictions generally did not come to fruition.

"For example, the ICC is already taking action to put an end to the railroads' practice of applying for and obtaining general rate increases. There are many in the railroad industry who believes that general increases are the only practical way that the railroads can offset increased costs, especially in a period of rapid inflation. I believe that this view is probably correct; at least until the railroad industry has been rationalized to a nationwide network of five or six systems."[288]

"Nevertheless, I think the proposal that the railroads should try to solve this problem by greater reliance on selective rate increases should be tried, and the ICC has taken steps in that direction. If this fails, however, the ICC can respond promptly and permit the railroads to pursue other alternatives. If, however, general increases are barred by statute, no such prompt response can be made."[289]

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[288] Fishwick, John (President. Norfolk and Western Railway Company). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.397)
[289] Ibid. (P.398)

"In our previous testimony we outlined the principles which we believe should inform sound maximum rate regulation. These principles were as follows:

1. The railroads should be permitted without ICC review to raise rates to a certain "threshold."

2. The railroads should be allowed to increase rates for individual movements to cover increased costs due to inflation without regulatory review. The ICC should be charged with establishing this inflation figure annually."[290]

"CORS believes that the effect of this provision would be to remove regulatory restraint from almost all rail rates, regardless of the impact such unrestricted rate freedom would have on the shipping public, and particularly on the captive shipper. When coupled with the liberal provisions of the joint-rate section (which I shall discuss shortly) these provisions portend rate levels well above what the traffic will bear. Therefore, CORS opposes them."[291]

"We much prefer the maximum rate provisions of S.1946. CORS supports those provisions, even though we think that rates may very well increase substantially under that legislation. In that bill, rates are allowed freely to rise within certain stated zones, and inflationary costs can be passed on to the shipper."[292]

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[290] Boggs, Thomas (Committee of Railroad Shippers). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.412)

[291] Ibid. (P.415 – P.416)

[292] Ibid. (P.416)

"One of the most significant provisions of the working draft concerns contract rates. CORS thinks it essential that new rail legislation explicitly provide for enforceable agreements to be entered into between shippers and carriers governing a wide range of topics. The bill should expressly recognize that contract service is separate from common carrier service. We see contract service as the vehicle whereby shippers, and especially captive shippers, can gain assurance of adequate service at a predictable price. We also think that with binding contracts in place, carriers will be able to plan better for the future and indeed with these contracts will be able to finance a substantial portion of expenditures."[293]

"When we testified before this Subcommittee last October, the ICC had just granted the industry another general rate increase. Only last week the ICC once again permitted a 4% across-the-board rail rate hike. In the last 10 years, over 90 percent of rail rate increases have come by way of general rate increases. It is now absolutely clear that, unless carriers are barred by law from this technique of price adjustment, carriers will continue to rely on it as the primary mode of effecting rate changes."[294]

"We believe the railroad industry has always had the right to increase rates on numerous commodities which failed to meet variable cost or only contributed very marginally to profits if at all. Why have they failed to take more positive steps in this direction? They frequently cite the possibility of loss of volume as a deterrent and fall back on general increases which enable them to charge the greatest dollar increases on the highest rated commodities regardless of the cost involved. We believe this loss of volume argument is

[293] Ibid. (P.419)
[294] Ibid. (P.423)

a very general statement of convenience offered without substantive proof time and again."[295]

"Railroad transportation rates have been rising rapidly from 1974 to 1978. Bureau of Labor Statistics data indicate that the Producer Price Index rose about 32 percent and the Gross National Product Deflator grew about 31 percent, whereas the Railroad Index for all traffic increased about 43 percent and for coal traffic about 48 percent during this period. Thus, railroad rates have been increasing appreciably faster than overall economic indicators and railroad rates for moving coal have been growing at a somewhat higher rate than for other commodities."[296]

"Coal producer and user concerns have grown in recent months because the ICC has sustained high coal rates established by railroads."[297]

"Railroad rates for transporting coal, moreover, increased significantly in 1979. For instance, last year ICC-supported rate increases for coal traffic originated on the Louisville and Nashville Railroad resulted in an increase of 40 percentage points (up to 169 percent) in the ratio of revenue-to-variable costs attributed to such traffic. In 1979, the ICC also upheld several coal tariffs for western coal that generate ratios of revenue-

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[295] Romanick, Conrad (Manager. Traffic Economics and Government Relations – Dow Chemical USA, Midland, Michigan). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.449)

[296] Baylor, James (Senior Vice President. A.T. Massey Coal Company (on behalf of the National Coal Association)). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.463)

[297] Ibid. (P.466)

to-variable costs in a range of 170 percent to more than 200 percent for movements using efficient unit coal trains – often with shipper-owned and maintained railcars."[298]

"While TAA does not have specific policy positions that permit an expression of views on the details of this Section, we do favor giving the railroads broad leeway in setting rates beyond ICC regulatory control. We believe that competition, rather than regulation, should be relied upon to a greater extent, but that sufficient ICC regulatory authority should be retained to prevent unreasonable and discriminatory rates. We believe such regulatory constraints are needed to permit so-called captive shippers the opportunity to protest rates that would impose an unfair burden on them. We do not, however, have a policy position on the party that must assume the burden of proof. We do fully support the goal set forth in this Section that the ICC must recognize the need for rail carriers to earn an adequate rate of return."[299]

"In general, TAA is in agreement with the broad policy goals set forth in this Section, as they stress competition, with protection against excessively high rates, as well as the need to make the railroads efficient and financially viable. One concern is the goal in paragraph (6) of limiting the automatic pass-through of inflationary cost increases through rate increases of general applicability. As will be commented later on in this

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[298] Ibid. (P.463 – P.464)

[299] Tierney, Paul (President. Transportation Association of America). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.633)

statement, TAA favors continuation of the use of general rate increases for rapid recovery of across-the-board cost increases such as fuel."[300]

"If the car supply is inadequate and if the rate of compensation is one cause of the inadequacy, an increase in the rate of compensation will produce additional cars of that type. This has been proven by experience with incentive per diem. With the Nation's energy and defense needs and the expected long term growth in rail traffic, care should be exercised to assure that the freight car fleet will be adequate and that this means of encouraging an adequate supply will work.

The following revision of this provision in Preliminary Working Draft No. 2 would eliminate the doubt and make it workable:

"If the Commission finds that the level of ownership of any type of freight car is inadequate because of and that the rate of compensation for such type of freight car is a cause, the Commission shall increase such rate of compensation to a level that is adequate to attract capital for investment in such type of freight car.""[301]

"As to the second course of action (i.e., agree to an increase in the joint rate) increases in the joint rate in some cases would result in losing the traffic to highway competition, the rail route would be effectively closed, and the small carrier would be wiped out. No route should be allowed to be closed if each of the participating carriers receives revenues of not less than 100% of variable costs. Any traffic or route that makes a contribution to

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[300] Ibid. (P.632)

[301] Taylor, Carl (President. ITEL Rail). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.625)

fixed costs (i.e., 100.1% of variable cost) is economically worthwhile and should never be turned away. There is no justification for setting the cancellation level at 110% of variable cost. If such a standard is retained it should be at 100% of variable cost."[302]

"Overall, this bill could destroy the cash and futures markets as they exist paired together to help make a stable grain industry. Allowing different rates to apply between the same end points via different routes would distort the important relationship between the futures and cash markets. The Commodities Futures Trading Commission (CFTC) is charged with maintaining stability in futures markets. With the type of ratemaking proposed in this preliminary working draft, the CFTC could lose control as there would be no stability in rates, thereby raising many problems for the hedging of grain."[303]

"The Florio Bill would also deal with contract rates. It states that a complaint may be filed by a shipper or other complainant only on the basis of allegations that such complainant individually will be harmed because the proposed contract will reduce the present ability of contracting carrier or carriers to meet their normal obligations under the Interstate Commerce Act.

This gives the small shipper no protection from the low discriminatory rates that could be granted to a substantial shipper by contract rates. It also does not offer protection to captive shippers.

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[302] Galassi, John (President. Green Bay and Western Railroad). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.602)

[303] Hansen, John (Assistant VP Transportation. The Board of Trade of Kansas City, Missouri, INC.). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.561)

Proposed Senate Bill 1946 would also allow contract rates, but it gives some protection to the small shipper; whereas, this bill does not. We are not entirely happy with the Senate Bill and have so voiced our concern about its treatment of contract rates, but it appears that this bill would leave the small shipper totally unprotected from the type of discriminatory ratemaking that could evolve from contract rates."[304]

"The proposed Florio Bill on Page 15 also provides that carriers will not be mandated to maintain the same rates if they serve the same points. Eight railroads serve Kansas City and Chicago, and no matter which railroad you use, the rate on any given commodity would be the same. It is our belief that if carriers who compete between the same two points were allowed to charge "what they want," there would be swapping of business among carriers who serve the same points and rate determination and pricing would be a day-to-day bargain system. No carrier or shipper could work efficiently in this kind of atmosphere."[305]

"Railroads could raise rates on specific captive commodities to subsidize below-cost rates on competitive traffic without consideration of the extent to which one commodity should subsidize another."[306]

"Railroad rate legislation must recognize that much rail traffic, and notably coal traffic, has no practical competitive alternative to transportation by a particular rail carrier

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[304] Ibid. (P.560)
[305] Ibid. (P.561)
[306] Gonze, Ruth (Assistant Legislative Director. American Public Power Association). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.554)

between points which, once set, become fixed and extremely difficult to change. A study done by the National Coal Association has shown that 85 percent of the coal tonnage transported by rail is captive to one railroad.

Further, a rail policy which discourages conversion by utilities of electric generating facilities from oil and gas to coal by eliminating the economic benefits of coal through high rail rates will slow or defeat the most critical present national policy goal – to reduce oil imports through the achievement of energy self sufficiency."[307]

"The railroads would be able to impose massive increases in these already extremely profitable rates. Based on the estimate of 185 percent as the full cost percentage standard, our rough approximation, utilizing railroad data submitted in the most recent general rate increase proceeding, of the rate increases which could be imposed on steam coal is $1.4 billion on a national basis."[308]

"Further, we believe that their effect would be to deprive the rail industry of any incentive to improve its earnings position on its presently unprofitable traffic by allowing it to obtain whatever earnings levels are deemed to be appropriate by simply running up rates on captive traffic."[309]

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[307] Ibid. (P.546 – P.547)

[308] McNeese, Craig (Houston Lighting & Power Company (on behalf of the Western Coal Traffic League). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.497)

[309] Ibid. (P.495)

•The debate regarding small and captive shippers

There was a strong argument that with the onset of trucking and the airlines, the railroads had a viable competitor. While in many situations railroads certainly lost business to the truckers, for captive shippers who were dependent on a single railroad, there was a justifiable fear that deregulation could damage their business. There are certain types of industries, such as coal, where shipping by rail is the most viable form of moving goods. It was these industries that offered testimonials in favour of the common carrier requirement mandated by the ICC.

"We are also concerned by the railroads' tendency to favour big grain companies over our interests. Our testimony, therefore, is directed to the railroad service and discrimination laws. The essence of our position is that the common carrier standard for the provision of railroad service should be retained."[310]

"We are speaking to you for the small grain shippers. For us the question all too often is not at what price we will be served by the railroads, but whether they will serve us at all."[311]

"Where a railroad can make x number of dollars of profit serving one shipper, but it can make 10 times that profit serving another, the common carrier standard obliges the

[310] McFarland, Thomas (Counsel. Grain and Feed Association of Illinois), Herb Hoemann (Executive Vice President. Grain and Feed Association of Illinois), Fred Crawford (Chairman. Transportation Committee), and Reeder C. Miller. Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.129)

[311] Ibid. (P.129)

railroad to serve both shippers without discrimination. That standard, we think, is firmly rooted in our heritage from English law."[312]

"Small grain shippers were largely responsible for the passage of the Interstate Commerce Act 93 years ago. Congress determined to act because if left unchecked, railroads tended to favour large powerful shippers at the expense of smaller shippers and to otherwise abuse smaller shippers in the matter of service and rates. Much has changed in the years since the Act was first passed, but that instinctive railroad tendency has not."[313]

"Therefore, unlike some of the larger companies who have more power and influence with the railroads, the country grain elevators are primarily concerned with the laws governing the transportation service obligation; abandonment of rail service, car supply and car service; and reasonably-related, non-discriminatory freight rates."[314]

"In a word, the common carrier obligation ensures equity among shippers in rail transportation."[315]

"The question often is raised as to why economic regulation for railroads is required on those commodities exempt from economic regulations by truck or barge. We submit the following: grain shippers are not captive of a particular truck or barge operator. The shipper has freedom of entry for trucking and to a lesser degree by water. When purchasing truck or barge transportation, the shipper has many alternatives as to choice of

[312] Ibid. (P.129)
[313] Ibid. (P.132)
[314] Ibid. (P.133)
[315] Ibid. (P.134)

trucker or barge operator. Consequently, a competitive environment exists where market forces are controlling. Generally, this environment does not exist as far as shipper use of railroads is concerned. Therefore, a greater degree of regulation is necessary to insure that a shipper has the practical alternative of using rail as well as motor or water transportation."[316]

"We strongly disagree with this provision's findings, "(3) today, most transportation within the United States is competitive." We find no basis for the draft's underlying assumption that all modes constitute effective competition within one mode. Rail, truck, and barge transportation offer distinctly different services to meet the varying needs of shippers. Railroads are one of the most efficient modes for hauling bulk commodities. No matter how many trucking companies also serve an area, it just is not cost effective to move many commodities other than by rail. Although the barge industry can compete with the railroads for bulk movements, use of this mode is totally dependent on the origin and destination both being near water. Barge transportation offers no competition when commodities are moving between two landlocked points. Further, once a shipper has made substantial investments in plant facilities to allow for rail operations at a manufacturing site, it cannot shift to other modes of transportation without substantial capital losses. Marketplace economics dictate that if a shipper was able to secure other, less costly transportation for its goods, it already would be doing so."[317]

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[316] Ibid. (P.151)

[317] Boyes, Donald (President. National Industrial Traffic League). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.185)

"As to antitrust immunity, the league believes that a better approach would be to continue ICC maximum rate regulation as reformed by our three-tier plan and to continue antitrust immunity with reformed rate bureau operations. This type of approach would achieve our commonly shared goal of providing the carriers sufficient maximum rate freedom to respond to the marketplace, while protecting those shippers who have no competitive alternative for moving their goods to market."[318]

"The most objectionable finding is that regarding the competitive nature of transportation in the United States, for it is upon that erroneous premise that the bill's maximum rate provisions are based. The failing of those provisions is the inadequate protection provided for captive traffic. This is essentially the same approach that was fatal to the future of the Department of Transportation's proposed legislation. We would urge serious revision of both the findings and the maximum rate provisions. This would recognize the need to maintain regulatory protection for shippers and receivers against the abuse of market power."[319]

"Throughout the history of railroads the primary complaint has been directed to those situations where a railroad was exercising the power to inhibit the free flow of commerce by preferring one shipper over another. This protection for shippers is essential to ensure the free flow of commerce and to make possible a competitive economy. Accordingly,

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[318] Ibid. (P.196)

[319] Boggs, Thomas (Committee of Railroad Shippers). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.412)

the remedy against discrimination should be continued with respect to all rates where there is no economic alternative to railroad transportation."[320]

"With these recent events in mind, coal producers and users are seeking assurances that coal to be moved by railroads in the 1980's is not called upon to contribute more than an equitable amount required to cover costs of providing transportation service plus a reasonable return on investment."[321]

"With a single exception, we are in general agreement with the broad findings set forth in the bill. That exception is paragraph (3), which says "today, virtually all transportation within the United States is competitive." Because of the captive shipper problem in the railroad industry, we believe this statement is too strong and perhaps should be qualified to reflect that there are exceptions."[322]

"Our primary concern regarding any rail reform legislation is protection for the captive shippers. Reform legislation should afford "captive" shippers with access to the Interstate Commerce Commission for the prompt redress of unjustly discriminatory or unreasonable rates imposed by the railroads. We believe that this basic protection for the

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[320] Ibid. (P.422 – P.423)

[321] Baylor, James (Senior Vice President. A.T. Massey Coal Company (on behalf of the National Coal Association)). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.464)

[322] Tierney, Paul (President. Transportation Association of America). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.632)

consumer interest must be an indispensable part of any reform legislation enacted by the Congress."[323]

"Rail carriers have a superior bargaining power with respect to terms and conditions in contracts of carriage. Shippers often have no voice in these terms, particularly when they are located on a single railroad. Receivers virtually have no voice in the terms of contracts entered into between shippers and carriers.

Therefore, the public interest must be protected by a federal agency charged with insuring reasonable terms and conditions of carriage, and to prevent the abuses that have developed in the past."[324]

"By means of the "potential transportation alternative" test for effective competition, shippers are denied a regulatory remedy for abuses of the monopoly power available to railroads. Such license for monopoly exploitation should not be tolerated in this legislative proposal, which is premised on the claim that deregulation will foster free competition."[325]

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[323] Rodgers, Paul (Administrative Director and General Counsel. National Association of Regulatory Utility Commissioners (NARUC)). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.518)

[324] Augello, William (Executive Director and General Counsel. Shippers National Freight Claim Council, INC). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.529)

[325] Gonze, Ruth (Assistant Legislative Director. American Public Power Association). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.552)

"About 85 percent of railroad coal traffic has no practical alternative transportation available and 80 percent of all railroad car-loadings of coal across the Nation are originated by 6 railroads, each of whom serve selected coal producing areas. Thus, coal frequently is captive to the railroads and requires timely recourse to the Interstate Commerce Commission for relief from unreasonably high transportation rates. The jurisdiction of the ICC over maximum reasonableness of railroad rates and the associated powers of rate suspension and investigation are, therefore, critical to coal."[326]

"These rate regulation provisions if enacted into law would largely deprive captive rail shippers particularly coal shippers, of any meaningful protection from exorbitant freight rates and would result in immediate unjustifiable increases of hundreds of millions of dollars per year in the cost of transporting coal.

This huge increase in profits would go for the most part not to troubled railroads but to roads which are already financially sound."[327]

5.8 Conclusion

This chapter attempted to provide an unfiltered presentation of what various parties believed would be the outcome of deregulation prior to the passage of the 1980 Staggers Act. There are several central issues that most parties tended to gravitate around,

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[326] Baylor, James (Senior Vice President. A.T. Massey Coal Company (on behalf of the National Coal Association)). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.468)

[327] McNeese, Craig (Houston Lighting & Power Company (on behalf of the Western Coal Traffic League). Testimony: *Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry.* Washington D.C.: US Government Printing Office Serial 96-186, 02 April 1980. (P.489)

including rate setting, line abandonment, and captive shippers. Chapter 6 will delve further into these patterns. The primary source for the government point of view was the 1978 *Prospectus for Change in the Freight Railroad Industry* whereas the largest representatives for the railroads (the AAR) and the truckers (the ATA/NAFC) were the source of industry opinions. The publications by these entities also included perspectives from academia. Congressional hearings provided many individuals and group-representatives the opportunity to expound their views on the matter as well. Popular transportation press sources such as *Traffic World* rounded out the sources of information. As many quotes as possible from all these sources were provided in this chapter; as long as those quotes provided some clue as to what the author/speaker believed would be the outcome of deregulation. When all these sources of information are combined, chapter 5 provided a comprehensive survey of what people were saying about deregulation prior to the Staggers Act.

Chapter 6 Framework for Assessing Deregulation

6.1 Introduction

The numerous opinions provided by various experts can be grouped into a small number of categories. For example, in 1959 James Nelson wrote that "the original regulatory task was to curb such excesses of rail monopoly power in the interest of small shippers..."[328] while in 1979, Albert Francese wrote that "a loss of essential service could put small businesses and shippers out of business..."[329] and in 1980, Thomas McFarland testified to Congress that "we are speaking to you for the small grain shippers. For us the question all too often is not at what price we will be served by the railroads, but whether they will serve us at all."[330] All of these statements can be grouped under a general heading of Deregulation's effects on Small Shippers' Service.

With each argument provided throughout this essay can be attached a question regarding deregulation. For example, when the Transportation Association of America wrote that

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[328] Nelson, James. *Railroad Transportation and Public Policy.* Washington D.C.: The Brookings Institute, 1959. (P.112)

[329] Francese, Albert. "Rail and Truck Deregulation: Palliative or Panacea." Traffic World 19 March 1979. (P.114)

[330] McFarland, Thomas (Counsel. Grain and Feed Association of Illinois), Herb Hoemann (Executive Vice President. Grain and Feed Association of Illinois), Fred Crawford (Chairman. Transportation Committee), and Reeder C. Miller. Testimony: Hearings before the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce – House of Representatives – Ninety Sixth Congress – Second Session on Regulatory Reform Legislation for the Rail Industry. Washington D.C.: US Government Printing Office Serial 96-186, 31 March 1980. (P.129)

"the problems stem in large part from governmental policies which impose on the industry growing social responsibilities while at the same time exerting severe downward pressure on transportation prices,"[331] it can be interpreted that the Association believes that without certain government policies (in this case railroad regulation) in place, there will no longer be a "severe downward pressure on transportation prices". In other words, with deregulation, transportation prices will increase. The matching question to this statement would be: did deregulation allow for railroad rates to increase? Since there were many statements (and matching questions) regarding which way experts believed that railroad and trucking rates would react under deregulation, all of these assertions can be grouped under the general heading of Deregulation's effects on Rates.

This chapter summarizes the matching questions that have been generated as a result of what was being said by various experts and academics before the passage of the Staggers Act. Then the questions are grouped into general categories. This framework will allow for individual tests of how deregulation affected each category. By summarizing and grouping arguments made *before* the implementation of the Staggers Act, a true picture of what deregulation achieved compared to what it was *expected* to achieve can be established. In the previous chapters, the selection of "what was being said" represents the viewpoints of the major players in the pre-Staggers Act discussion – both in government and in industry. By analyzing the arguments of the major players prior to deregulation, the issue of 20/20 hindsight and data-mining can be avoided For example, it can be argued that railroad deregulation is a success because rates have been significantly reduced and that lower prices have been passed on to customers. Yet if the

[331] The Transportation Association of America. "Transportation – A Call for Action." March, 1976. (P.1)

expectation before 1980 was that deregulation would have allowed railroads to *increase* their prices in order to cover their costs (which the ICC was not permitting them to do), then it is disingenuous twenty years after the fact to boast about the "success" of deregulation's lower prices. In the 1970's, not many railroads (or any other individuals for that matter) provided testimony that free-market railroad rates would be significantly *lowered* instead of increased.

6.2 The Framework

Many concerns were expressed about the effects of deregulation on railroad and trucking customers. Some of those concerns extended to captive shippers; those shippers who had no alternative but to transport their products using a single provider. How did deregulation affect those parties? Figure 6.1 outlines the first general category of the framework: Deregulation's effects on Shippers' Service. Figure 6.1 provides both the question that is being implied and the number of occurrences (frequency) of the question throughout this essay.

Figure 6.1 Category 1 Deregulation's effects on Shippers' Service

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
There was harm to captive and small shippers?	5
There was adequate/improved service provided to (captive) shippers?	3
Railroads favored large shippers at the expense of small shippers?	2
There was adequate rate protection for captive shippers?	2
There was monopolistic exploitation of captive shippers?	1
Large shippers took advantage of railroads and truckers?	1
Railroads increased rates on captive shippers in order to cross subsidize unprofitable routes?	1

The next major area of discussion throughout the pre-Staggers Act era is that of the effect of deregulation on railroad and trucking rates. A review of the testimony provided by

those closely related to the coal industry will show that there was significant concern regarding the prices that railroads would charge to ship coal under a free-market system. Many in the coal industry felt themselves to be captive shippers to the railroads. Figure 6.2 outlines the general category: Deregulation's effects on Rates.

Figure 6.2 Category 2 Deregulation's effects on Rates

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
There was an increase in railroad rates?	7
There was pricing flexibility?	4
There was pricing stability / an orderly rate structure?	2
Railroad rates on coal increased (justifiably/unjustifiably)?	2
Railroads were allowed to increase rates to cover inflationary increases?	1
Lower trucking rates were experienced?	1
There was unjust and discriminatory pricing?	1
Trucks (at times) charged rates at below cost?	1

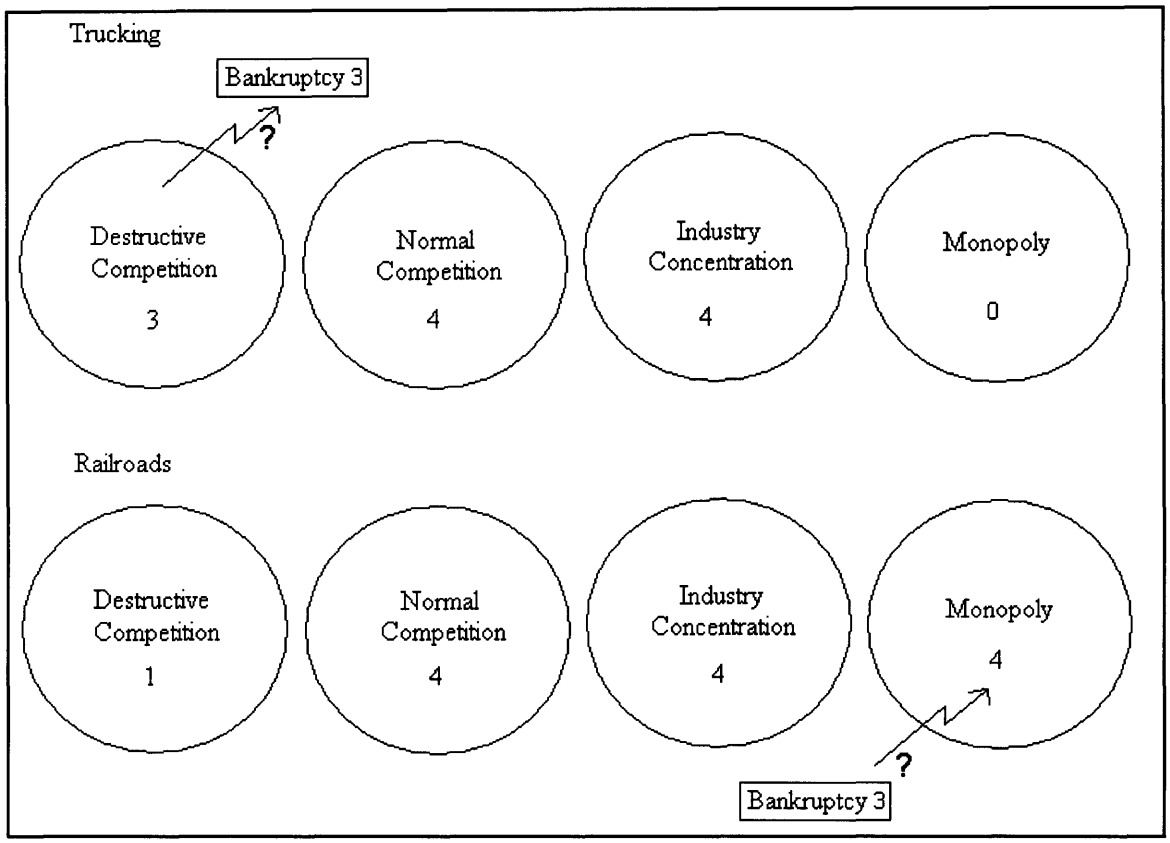
The railroads were certainly concerned with their ability to abandon unprofitable routes. Furthermore, many proposals to rationalize the railroads (including abandonment provisions) were proposed by industry representatives and academics. The issue of a rational network was even studied by researchers at MIT. These discussions have generated another category of analysis. Figure 6.3 outlines the general category: Deregulation and Railroad Track Abandonment / Railroad Rationalization.

Figure 6.3 Category 3 Deregulation and Railroad Track Abandonment / Railroad Rationalization

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
Railroads more easily abandoned lightly used tracks?	3
Railway route miles were reduced?	1
Small railroads experienced bankruptcy due to track abandonment by large railroads?	1
Communities were adversely affected by track abandonment?	1
Railroads could more easily restructure operations?	1

One of the most fervently discussed topics regarding deregulation was the question of its effect on the competitive environment for the railroads and the truckers. Figure 6.4A outlines the general category: Deregulation and Competition. Figure 6.4B provides a more detailed breakdown of the questions asked.

Figure 6.4A Category 4 Deregulation and Competition



Note: For the trucking industry, the concern of destructive competition leading to carrier bankruptcy was an issue. For the railroad industry, the concern of carrier bankruptcy eventually leading to industry monopoly was an issue. (The numbers in Figure 6.4A are relative frequencies of each category).

Figure 6.4B Category 4 Deregulation and Competition

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
There was destructive competition in the railroad industry?	1
There was destructive competition in the trucking industry?	3
There was improved competitiveness among railroads?	2
There was improved competitiveness among truckers?	2
Unfair, destructive, predatory practices were eliminated?	1
Railroads were exposed to trucking competition?	1
Barriers to entry were lower in the trucking industry?	1
Railroad loss-of-service abuses were prevented through intermodal competition?	1
Small motor carriers were allowed to survive?	1
There was industry concentration / economies of scale in the trucking industry?	3
Small motor carriers were experiencing difficulties?	1
Short-line railroads were harmed in their ability to provide service?	2
There was industry concentration in the railroad industry?	2
Inefficient railroads and trucking companies were eliminated?	1
Truckers priced their backhaul competitors out of business?	1
Trucking company bankruptcies increased?	1
Small railroad bankruptcies increased?	1
Large railroads eliminated smaller ones by manipulating joint rates?	1
Railroads abused market power?	1
Railroad monopolies / railroads had monopoly power?	2
Railroads exploited monopoly power over coal?	1

There is an interesting difference with Category 4 compared to the other three categories. In the other three categories, one question tends to dominate the others. For example, the question of whether railroad rates will increase under deregulation is asked numerous times. Yet when it comes to competition, no one area tends to dominate. Instead various degrees (or shades) of levels of competition are asked. For example, the most extreme competition question is whether there will be destructive competition amongst railroads and truckers. On the other end of the spectrum is whether there will be railroad monopolies. Due to the various degrees of questions, Figure 6.4B is not ordered in

accordance to question frequency. Instead, Figure 6.4B is ordered in accordance to the various "areas of concentration" depicted in Figure 6.4A.

Two patterns start to emerge from Figure 6.4A. First, little deregulation discussion was concerned about trucking monopoly and destructive railroad competition. Second, on the other hand, there was a higher degree of concern about the railroad industry having monopoly power and the trucking industry devolving into destructive competition. The other degrees of competition are evenly discussed with both railroads and trucking. So, an ideal test regarding deregulation and its effects on competition is the level of concentration in both the trucking and railroad industry.

Figure 6.5 and Figure 6.6 categorizes the questions regarding labour and management. The main issues for management is whether the railroads would be able to attract "more talented individuals," and whether those individuals would have new flexibility to "conduct the business of railroads" instead of "fighting with regulators".

Figure 6.5 Category 5 Deregulation and Management

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
Railroads attracted better managerial talent?	2
There was more innovative / flexible railroad management?	1

The questions surrounding labour tend to focus on the level of employment in the railroad industry, and to a lesser extent in the trucking industry. There is also a focus on the remuneration for labour under deregulation.

Figure 6.6 Category 6 Deregulation and Labour

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
The level of railroad employment changed from 500,000 workers?	3
Average wages of railroad labour improved from $18,000 / year (in 1978)?	1
The bargaining power of labour was reduced?	1
Truckers lost jobs?	1

The next three general categories deal with equipment condition and usage. The railroads suggested that pricing inflexibility as a result of ICC regulation did not allow them to reduce equipment shortages by temporarily increasing rates during periods of high demand. The railroads also argued that freedom from regulation would allow them to attract more business and as a result, ship greater tonnage.

Figure 6.7 Category 7 Deregulation and Tonnage Shipped

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
Railroad ton miles improved?	2
Railroad ton miles improved above 1.4 Billion tons at an average of 568 miles (1978)?	
Railroad ton miles capacity reduced?	1
Trucking ton miles improved?	1

Figure 6.8 Category 8 Deregulation and Condition of Facilities

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
Alleged deterioration of railroad facilities stopped?	1
The level of deferred maintenance changed from $5.4 Billion (1978)?	1
Rail miles stopped operating at reduced speeds due to dangerous conditions?	1

Figure 6.9 Category 9 Deregulation and Equipment Utilization and Shortages

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
Railroads could price away shortages?	2
Alleged chronic railroad equipment shortages stopped?	
The number of idle railroad cars reduced?	1
Trucking facilities were more efficiently used (i.e. fewer empty loads)?	1
Demand fluctuations for railroad services reduced?	1
Difficulties interchanging railroad traffic reduced?	1

The final area of interest (and the subject of the last two categories (below)), involve investors, markets, and profitability. The debate over profitability was contentious. Pro-regulation advocates contended that the railroads conveniently singled out the 'North-East' lines experiencing financial difficulties and did not focus on the rest of the industry which was able to generate profits. The railroads argued that the 'North-East' problem was a symptom of a greater issue that would eventually spread to the other railroads if not addressed.

Figure 6.10 Category 10 Deregulation and Profitability

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
The railroads' financial situation (profitability) improved?	4
Railroad industry profits improved compared to the $347 Million (1978)?	
A higher railroad rate of return than 1.5% (1978) occurred?	
US railroads received more than $20 Billion (1978) in real operating revenues?	3
Trucking industry profits reduced?	1

Figure 6.11 Category 11 Deregulation and Investment and Markets

Question (Note: all questions are prefaced by: Is there evidence to indicate that after deregulation in 1980...)	Frequency
Private ownership of the railroads was preserved?	1
Railroads increased capital through increased borrowing power?	1
Railroads developed new markets?	1
Investment improved in the trucking industry?	1
US railroads spent more than $2.29 Billion (1978) for new plant and equipment?	1

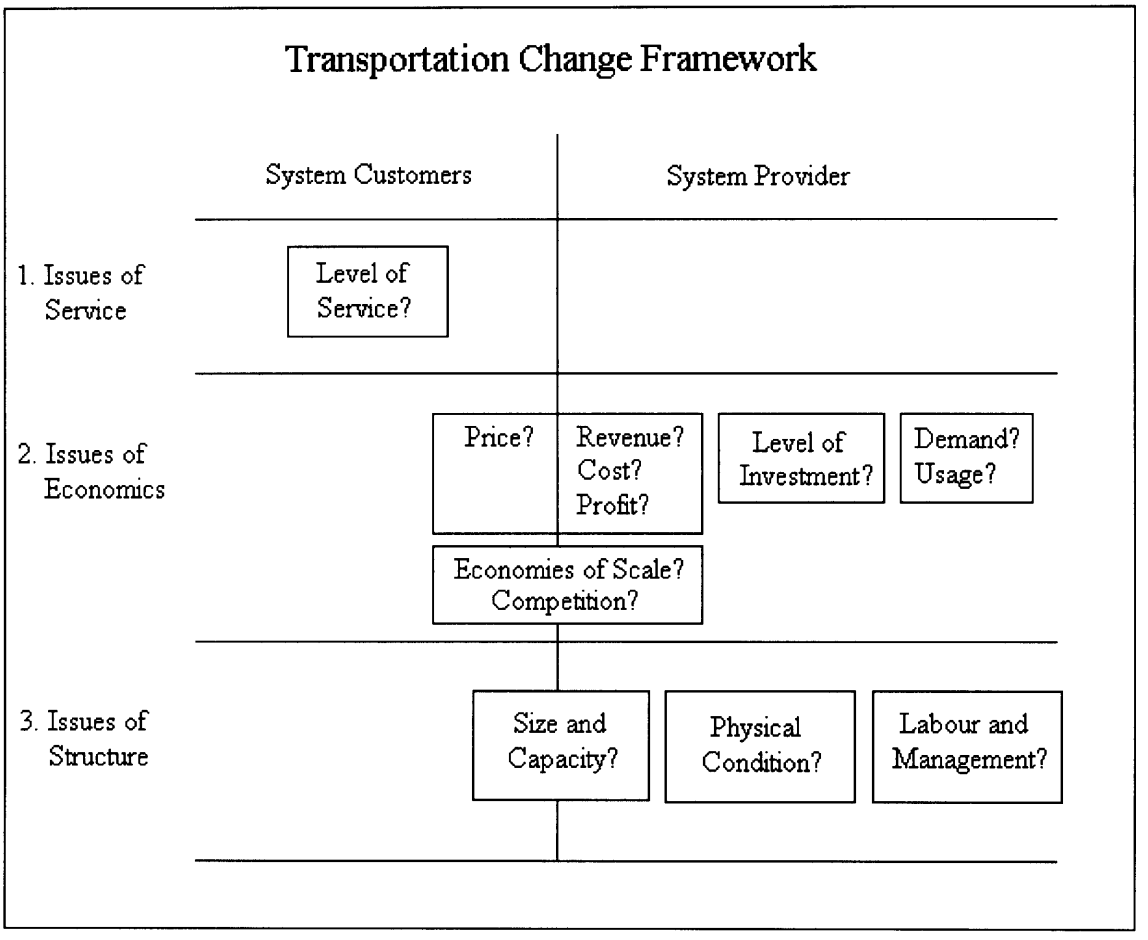
6.3 Generalizing Deregulation into a System Analysis

There were many disparate groups who proposed various different arguments about what they believed the effect of deregulation would be on the industry in question. Despite the sheer volume of beliefs expounded during the century of railroad regulation and the half century of trucking regulation, the opinions expressed by these numerous entities can be categorized and filed into a small number of general categories. The opinions of various groups and individuals are used to build a general framework/model to assess how a change affects a transportation system.

There is justification for using the approach of modeling people's opinions. First, when proponents and opponents of deregulation offered their viewpoints, the baseline question they were trying to answer (even if they did not recognize it) was what would be the effects of deregulation on the railroad/trucking system. Second, these individuals offered their opinions from a semi-independent state. That is, while there might have been some familiarity between individuals regarding other people's arguments, many of the opinions were given from *unique* perspectives. There were regulators, academics, businessmen, customers, and many other groups offering their beliefs. Some were

motivated through self interest and others through detached research. Third (and finally), there were many individuals who offered testimonials from different geographic and temporal locations.

Figure 6.12 Framework



Using the various categories as developed in Figure 6.1 to Figure 6.11, the questions asked and issues addressed by various parties can be further grouped into 3 major categories.

The first category is that of service. When captive shippers testified to Congress, their main concern was whether the service they enjoyed at the time would remain. In other words, what would be the effect of deregulation on the level of performance of the

system? The issue of whether the system can deliver service is a significant concern to *customers* (especially captive customers) more so than the provider. Service issues should be looked upon from the viewpoint of the customer, which is why in Figure 6.13; the "Level of Service?" topic is in the customer column.

The second category centres on questions of economics. Most of these questions are more important to the service provider than to the customer. Effect on price however is an issue more of concern to the customer. Revenue, costs, and profit (which are related to price) are of interest to the provider. On the surface, demand and usage might appear to be the same item. It is not. Demand might go unfulfilled due to the system's inability to provide service. Comparing actual usage and demand helps measure how much the system is providing for its customers. Finally, the questions of investors' outlook on a specific industry will answer inquiries regarding how the state of the system is perceived by outsiders.

The third category deals with the actual structure and make-up of the entity in question. The deregulation debate raised concerns about the railroad line abandonment as well as questions regarding the disposition of both labour and management.

6.4 Conclusion

When various individuals, groups, and experts provide opinions surrounding a specific topic, sometimes they are clearly aware of what others might be saying. However, when those people originate from diverse and wide-spread geographic locations, and when they speak from different eras in history, there is more independence to what they are saying. When patterns can be found in the beliefs expounded by independent entities, regardless

of their stated "side" in the debate, those patterns can be used to design a general framework. This chapter diagramed a potential framework. Since the arguments used to create this framework were given *before* the major change took place (i.e. the Staggers Act), there is no benefit of 20/20 hindsight. This makes the framework useful in evaluating the effects of deregulation, which will be done in the next chapter.

Chapter 7 Assessing Deregulation

7.1 Introduction

At the time of the writing of this paper, almost a quarter century of deregulated trucking and railroading has passed. There are ample trends and evidence that can be used to assess the impact of both the Staggers Act and trucking reforms. Using the framework developed in Chapter 6, this section will examine various statistics to explore the state of each industry.

7.2 Level of Service

The debate regarding captive shippers was most contentious during Staggers Act deliberations. Would deregulation harm small or captive shippers? What would be the impact on service to captive shippers? Would captive shippers experience unfair prices? Would large, non-captive shippers be allowed to take advantage of railroads and truckers under deregulation?

It is difficult to truly assess how customers feel about services provided. Even with resources to distribute level-of-service questionnaires, the responses given in 2003 cannot really be compared to the responses given in 1973. Customers change. Expectations change. Relationships change. Service that might have been considered adequate thirty years ago might not be acceptable today. Level-of-service questions are very subjective.

Using rates as an indicator of service level shows that shippers have benefited from deregulation. Both trucking and railroad rates in real terms have decreased. Winston, speaking on the issue of railroad deregulation, found that "during the first decade of deregulation... the annual benefits to shippers from lower rates and improvements in service time and reliability amounted to at least $12 billion (1999 dollars)... A major factor in deregulation's success has been the widespread use of contract rates."[332] Coal, one of the captive industries quite concerned about rail rates, experienced reduced costs under deregulation. According to the AAR, rail revenue per ton mile collected from coal fell from approximately 4 cents in 1981 to under 2 cents in 2001 (constant 2001 dollars).[333]

As a metric, using carrier rates as a proxy for customer level-of-service indicates that deregulation was beneficial. Rates have declined. However, other issues have not been addressed and certainly have an effect on service. For example, railroad abandonment has left some communities without rail service. A truck no longer making "daily runs" to certain small communities also indicates a loss of service. Many pro-deregulation advocates discuss the savings in reduced economic deadweight-loss that they contend was a benefit of deregulation. Yet it is possible that the savings was in reality a transfer of costs from the carriers to the customers who lost service. A study the size that would be required to assess the costs to captive shippers who lost service as a result of deregulation is outside the scope of this essay. However, from a systems perspective, if

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[332] Winston, Clifford, and Sam Peltzman. *Deregulation of Network Industries: What's Next?* Washington D.C.: AEI – Brookings Joint Center for Regulatory Studies, 2000. (P.44)

[333] Association of American Railroads. "The Impact of the Staggers Rail Act of 1980." Washington D.C., January 2003. (P.4).

one were to factor in the costs of relocating business entities along with the costs imposed on smaller communities as a result of abandonment, then the savings from deregulation might be smaller.

No discussion of railroad customer level-of-service would be complete without mentioning the well-publicized service collapse of the Union Pacific in the mid-1990's. In a somewhat similar fashion as the merger of the Pennsylvania and the New York Central, when the Union Pacific acquired Southern Pacific, it attempted to join two former competitors. The reduction in infrastructure associated with the merger resulted in the new railroad not being able to ship its customers' traffic out of the Midwest. Shipments such as grain piled up - costing producers millions. It took several years before the UP was able to recover from this disastrous situation.

7.3 Price and Revenue

Deregulation resulted in a decrease in railroad rates. Most of the testimonials regarding the fear of increased rates due to deregulation were not correct. While most parties indicated that railroad rates would increase, the results of deregulation were that rates decreased substantially. Figure 7.1 provides some of the rate changes as reported by the General Accounting Office. The percentages provided in Figure 7.1 have been indexed by the GAO to account for inflation during the time-span presented.

Figure 7.1 Average Annual Percentage Change in Railroad Rates[334]

Commodity	1982 – 1989	1990 – 1996
All Commodities	-4.6%	-4.1%
Coal	-3.3%	-7.9%
Food	-6.9%	-3.7%
Lumber	-6.2%	-4.0%
Petroleum and Coal Products	-5.6%	-3.0%

Revenue per ton-mile is often used as "a surrogate for railroad rates."[335] This is not a precise measure of what rates are charged by the railroads, but it is a reasonable approximate. Figure 7.2 shows the unadjusted rates as well as the adjusted rates using the Consumer Price Index and the Producer Price Index as a baseline.

[334] General Accounting Office. "Railroad Regulation: Changes in Railroad Rates and Service Quality since 1990." GAO/RCED.99-93, April 1999.
[335] Association of American Railroads. "Railroad Facts. 2001 Edition." Washington D.C., 2001. (P.30)

Figure 7.2 Railroad Revenue Per Ton Mile (1990=100)[336]

Year	RPTM (Unadjusted)	CPI (1990=100)	RPTM (CPI Adjusted)	PPI (1990=100)	RPTM (PPI Adjusted)
1970	1.428	29.71	4.81	N/A	N/A
1971	1.593	30.99	5.14	N/A	N/A
1972	1.618	32.01	5.05	N/A	N/A
1973	1.617	34.01	4.76	N/A	N/A
1974	1.853	37.74	4.91	N/A	N/A
1975	2.041	41.19	4.96	N/A	N/A
1976	2.191	43.56	5.03	N/A	N/A
1977	2.286	46.37	4.93	N/A	N/A
1978	2.358	49.92	4.72	N/A	N/A
1979	2.605	55.54	4.69	N/A	N/A
1980	2.867	63.06	4.55	N/A	N/A
1981	3.178	69.60	4.57	N/A	N/A
1982	3.212	73.86	4.35	N/A	N/A
1983	3.119	76.24	4.09	N/A	N/A
1984	3.090	79.48	3.89	N/A	N/A
1985	3.043	82.32	3.70	N/A	N/A
1986	2.921	83.90	3.48	85.94	3.40
1987	2.733	86.97	3.14	88.12	3.10
1988	2.720	90.52	3.00	91.18	2.98
1989	2.669	94.86	2.81	95.72	2.79
1990	2.657	100.00	2.66	100.00	2.66
1991	2.594	104.24	2.49	101.22	2.56
1992	2.597	107.38	2.42	102.53	2.53
1993	2.523	110.55	2.28	104.02	2.43
1994	2.493	113.44	2.20	105.41	2.36
1995	2.401	116.63	2.06	108.47	2.21
1996	2.352	120.06	1.96	111.00	2.12
1997	2.396	122.84	1.95	111.35	2.15
1998	2.342	124.76	1.88	110.22	2.12
1999	2.280	127.49	1.79	112.05	2.03
2000	2.257	131.78	1.71	116.59	1.94

The nominal values for revenue per ton mile suggest that there has been little change during the 25 years examined in Figure 7.2. However, when inflation is factored into the calculations, there is a precipitous drop in the value. From 1970 to 1980, the reduction (real) in revenue per ton mile (using CPI) was 5.4 percent. During the 1970's, there were

[336] Association of American Railroads. "Railroad Facts." Washington D.C., 1986, 1991, 1999, 2000, 2001. (Note: Producer Price Index and Consumer Price Index adjustments were calculated separately.)

some years (1971, 1976) when RPTM increased. From 1980 to 1990, RPTM (real) decreased 41.5 percent. From 1990 to 2000, RPTM (real) decreased 35.7 percent. For the twenty years after the passage of the Staggers Act (1980 to 2000), railroad RPTM (real) decreased 62.4 percent. Since the earliest general producer price index available is 1986, the PPI that is used in Figure 7.2 starts in 1986. From 1986 to 2000, the PPI adjusted RPTM reduction was 42.9 percent. Therefore, the two major concerns regarding prices expressed by opponents of deregulation both failed to occur. General railroad rates did not increase and coal rates[337] (one of the major groups of "captive" shippers) also did not increase.

Trucking prices followed a similar trend when the rates are adjusted for inflation. The American Trucking Associations (ATA) does not keep the same kind of revenue-per-ton-mile statistics as does the Association of American Railroads. However, by piecing together various statistics from the ATA *Trends* publication, an approximation of trucking revenue-per-ton-mile can be given. The statistics provided by the ATA do not distinguish between LTL and TL traffic. The statistical information provided by the ATA refers to all truck traffic. However, in the study, *The Motor Carrier Industry in Transition*, revenue per ton mile for LTL and TL traffic was compiled separately. This study will be discussed in the next paragraph.

[337] Utility deregulation helped lower coal rates.

Figure 7.3 Total (TL & LTL) Trucking Revenue Per Ton Mile (1990=100)[338]

Year	Freight Revenue (Billions)	Ton Miles (Billions)	Trucking Revenue Per Ton Mile (RPTM)	CPI	CPI RPTM	PPI	PPI RPTM
1978	129	599	0.22	49.92	0.43	N/A	N/A
1979	142	608	0.23	55.54	0.42	N/A	N/A
1980	155	555	0.28	63.05	0.44	N/A	N/A
1981	165	527	0.31	69.60	0.45	N/A	N/A
1982	162	520	0.31	73.86	0.42	N/A	N/A
1983	182	575	0.31	76.24	0.42	N/A	N/A
1984	199	606	0.33	79.48	0.41	N/A	N/A
1985	205	610	0.34	82.31	0.40	N/A	N/A
1986	213	632	0.34	83.90	0.40	85.93	0.39
1987	224	663	0.34	86.97	0.39	88.12	0.38
1988	239	700	0.34	90.52	0.38	91.18	0.37
1989	257	716	0.36	94.86	0.38	95.72	0.38
1990	272	735	0.37	100	0.37	100	0.37
1991	274	758	0.36	104.24	0.35	101.22	0.36
1992	293	815	0.36	107.38	0.34	102.53	0.35
1993	312	871	0.36	110.55	0.32	104.01	0.34
1994	362	908	0.40	113.43	0.35	105.41	0.39
1995	381	921	0.41	116.63	0.36	108.47	0.38

On a nominal basis, trucking ton mile revenue appears to increase. However, when the numbers are adjusted for inflation using an index such as the CPI, a stark downward trend becomes quite evident. The early 1980's witnessed trucking rates at approximately 43 – 45 cents per ton mile. By the early 1990's, those rates had fallen by almost 10 cents per ton mile. Using the producer price index, the drop in rates is not as noticeable. Rates fell about 4 cents per ton mile between 1986 and 1992.

In the study, *The Motor Carrier Industry in Transition*, revenue per ton mile for LTL and TL traffic has been compiled separately. The trend of declining prices remains the same regardless of whether the trucking industry is examined as a whole or is split between

[338] American Trucking Associations. "American Trucking Trends." Alexandria, Virginia, 1988, 1989, 1990-1991, 1991-1992, 1993-1994, 1995, 1996, 1997. (Note: Statistics from Figure 7.3 has been compiled from the above 8 editions of "American Trucking Trends".)

LTL and TL. The truckload sector assumed the significant portion of price decline (due to the fact that most carriers decided to enter and compete in the TL market), yet the LTL sector experienced flat earnings since 1983 as well.[339] The index provided by the study showed that revenue per ton mile for TL and LTL remained steady with inflation until the early 1980's. From 1983 to 1994, TL revenue fell far below the level of inflation while LTL stagnated.

7.4 Cost and Profit

In 2000, Cambridge Systematics published a working paper for the Federal Highway Administration Office of Freight Management and Operations. They wrote that "rail freight revenues have remained flat and profits low. The rate of return on net investment has increased from less than two percent in the mid-1970's to approximately seven percent today. Even so, this has not been enough to sustain interest from Wall Street. The industry continues to earn less than its cost of capital, which the Surface Transportation Board estimated at 10.8 percent for 1999. The railroads' struggle to finance their operations under a deregulated market will dominate their business over the next several years."[340]

The Association of American Railroads, an organization that is in favour of deregulation, admitted that the returns exhibited by the railroads post-Staggers Act have been inadequate. Figure 7.4 is taken from an AAR publication called "Railroad Profitability."

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[339] Roth, Ronald. "The Motor Carrier Industry in Transition." Transportation Technical Services, 1995. (P.96)

[340] Cambridge Systematics, Inc., and Reebie Associates, Inc. "Regulation from Economic Deregulation to Safety Regulation." For the Federal Highway Administration Office of Freight Management and Operations. Contract DTFH61-97-C-00010, BAT-99-020. December 2000.

Figure 7.4 Median Return on Equity of Class I Railroads vs. Fortune 500 Companies[341]

Median Return on Equity of Class I Railroads vs. Fortune 500 Companies: 1985–2002

	Median ROE		Number of	Class I
	Class I	Fortune	Fortune 500	RR
Year	RRs	500 Cos.	Industries	Rank
1985	5.3 %	11.6 %	26	25th
1986	0.0	11.6	25	25th
1987	7.0	13.2	25	24th
1988	8.6	16.2	25	23rd
1989	4.3	15.0	25	25th
1990	8.3	13.0	25	23rd
1991	1.0	10.2	25	23rd
1992	7.6	9.0	25	14th
1993	8.0	11.9	35	26th
1994	11.3	13.7	35	27th
1995	5.9	14.0	36	35th
1996	11.6	14.1	38	30th
1997	10.4	13.9	37	30th
1998	11.5	13.4	38	28th
1999	8.8	15.2	41	34th
2000	9.4	14.6	48	39th
2001	7.2	10.4	48	30th
2002	8.7	10.2	48	30th

1986 and 1991 were years of poor returns while 1994, 1996, 1997 and 1998 had seen improvements. The Median ROE was relatively high from 1996 to 1998, during the same period of the Union Pacific service collapse. Consistently throughout the deregulation era, the rate of return on equity of the railroads trailed the rate of return on equity of Fortune 500 companies. The average rate of return over the period from 1985 to 2002 was approximately 7.5 percent. This is an improvement compared with the rate of return in the 1970's, however, in comparison to other industries, the railroads were still behind.

[341] Association of American Railroads. "Railroad Profitability." AAR Policy and Economics Department, Washington, D.C., July 2003. (P.1)

Assessing railroad profitability is not an easy task. Accounting standards changed twice (1978 and 1983). As a result, data before, during, and after these years are somewhat incompatible. The railroads use Net Railway Operating Income as their proxy for profitability. Figure 7.5 provides the NROI numbers.

Figure 7.5 Measure of Railroad Profitability (1990=100)[342]

Year	NROI	CPI	CPI Adjusted	PPI	PPI Adjusted
1962	728	23.15	3,145	N/A	N/A
1963	806	23.43	3,440	N/A	N/A
1964	878	23.74	3,699	N/A	N/A
1965	961	24.14	3,980	N/A	N/A
1966	1,045	24.83	4,208	N/A	N/A
1967	676	25.55	2,646	N/A	N/A
1968	677	26.62	2,543	N/A	N/A
1969	654	28.05	2,331	N/A	N/A
1970	485	29.71	1,632	N/A	N/A
1971	595	30.99	1,920	N/A	N/A
1972	653	32.01	2,040	N/A	N/A
1973	649	34.01	1,908	N/A	N/A
1974	768	37.74	2,035	N/A	N/A
1975	350	41.19	850	N/A	N/A
1976	451	43.56	1,035	N/A	N/A
1977	343	46.37	740	N/A	N/A
1978	427	49.92	855	N/A	N/A
1979	837	55.54	1,507	N/A	N/A
1980	1,338	63.06	2,122	N/A	N/A
1981	1,360	69.60	1,954	N/A	N/A
1982	742	73.86	1,005	N/A	N/A
1983	1,837	76.24	2,410	N/A	N/A
1984	2,537	79.48	3,192	N/A	N/A
1985	1,746	82.32	2,121	N/A	N/A
1986	506	83.90	603	85.94	589
1987	1,756	86.97	2,019	88.12	1,993
1988	1,979	90.52	2,186	91.18	2,170
1989	1,894	94.86	1,997	95.72	1,979
1990	2,648	100.00	2,648	100.00	2,648
1991	(37)	104.24	(35)	101.22	(37)
1992	1,955	107.38	1,821	102.53	1,907
1993	2,517	110.55	2,277	104.02	2,420
1994	3,391	113.44	2,989	105.41	3,217
1995	2,858	116.63	2,450	108.47	2,635
1996	4,338	120.06	3,613	111.00	3,908
1997	3,948	122.84	3,214	111.35	3,545
1998	3,698	124.76	2,964	110.22	3,355
1999	4,047	127.49	3,174	112.05	3,612
2000	3,926	131.78	2,979	116.59	3,367

[342] Association of American Railroads. "Railroad Facts." Washington D.C., 1976, 1981, 1986, 2000. (Note: Statistics from Figure 7.5 has been compiled from the above 4 editions of "Railroad Facts".)

The late 1990's were, in real terms (CPI adjusted), a profitable period for the railroads. On the other hand, 1991 was a year when the railroad industry *as a whole* lost money. The railroad industry (as a whole) did not lose money during a single year from 1962 to 1979. 1975 to 1978 were very lean years in terms of profitability. The railroads were starting to increase profits in 1979, the year before deregulation occurred. More data over the next several years will give much more illumination to the profitability status of the railroads. For example, many industries were extremely profitable in the late 1990's due to the technology boom; which may distort the overall figures for the railroads. There does not appear to be significant differences in real-term railroad profits between the 1960's and the 1990's; however, there is a substantial difference in real-term railroad profits between the mid-1970's and the late 1990's (regardless of the technology bubble).

Trucking industry profitability figures are easier to present. The information is provided as a primary statistic by the American Trucking Associations. However, there are some difficulties with making comparisons with these numbers as well. Accounting standards changed in 1988. Also, the figures are a "snapshot" of trucking companies selected by the ATA. So it is only a representative figure of the entire industry and not a complete statistic. However, the profitability information is still useful to make a general comparison – but the same caveat applies to the trucking statistics as it did to the railroad statistics – these numbers are for illustrative purposes only.

Figure 7.6 Approximate Measures of Trucking Profitability (1990=100)[343]

Year	Net Income (Billions)	CPI	Net Income (Billions) CPI Adjusted	PPI	Net Income (Billions) PPI Adjusted
1978	0.99	49.92	1.98	N/A	N/A
1979	0.75	55.54	1.35	N/A	N/A
1980	0.68	63.06	1.08	N/A	N/A
1981	0.68	69.60	0.98	N/A	N/A
1982	0.3	73.86	0.41	N/A	N/A
1983	1.1	76.24	1.44	N/A	N/A
1984	1.1	79.48	1.38	N/A	N/A
1985	0.94	82.32	1.14	N/A	N/A
1986	1.18	83.90	1.41	85.94	1.37
1987	0.71	86.97	0.82	88.12	0.81
1988	1.11	90.52	1.23	91.18	1.22
1989	0.86	94.86	0.91	95.72	0.90
1990	0.92	100.00	0.92	100.00	0.92
1991	0.93	104.24	0.89	101.22	0.92
1992	1.26	107.38	1.17	102.53	1.23
1993	1.49	110.55	1.35	104.02	1.43
1994	1.81	113.44	1.60	105.41	1.72
1995	1.22	116.63	1.05	108.47	1.12
1996	0.81	120.06	0.67	111.00	0.73
1997	1.04	122.84	0.85	111.35	0.93
1998	1.56	124.76	1.25	110.22	1.42

The profitability of the truckers appears to have experienced a reduction after deregulation. In 1990 dollars, 1978 was the most profitable year for the carriers in question, with almost $2 Billion. Four years later, that number was at nearly 25 percent. Of course, there was a massive recession in 1982; and there was a significant recovery by 1983. Yet in the twenty years after trucking deregulation, the level of profitability has not reached that of 1978. There were other lean years as well, such as 1996. The year 1996 was when the railroads experienced one of its highest levels of profitability; this happened to be the year when the trucking companies in question experienced one of its lowest levels of profitability.

[343] American Trucking Associations. "American Trucking Trends." Alexandria, Virginia, 1988, 1989, 1990-1991, 1991-1992, 1993-1994, 1995, 1996, 1997. (Note: Statistics from Figure 7.3 has been compiled from the above 8 editions of "American Trucking Trends".)

7.5 Investment

"The cost of funds from the capital markets depends, in part, on the financial rating of railroads. In general, railroads' ratings are at the bottom of so-called "investment grade" bonds, below those companies which are judged to possess "high quality" or "favorable investment attributes" and just above those companies which "face major ongoing uncertainties" and which "lack characteristics of desirable investment.""[344]

The Association of American Railroads provided (above) a very candid assessment of the desirability of its own industry to financial investors. If one of the intentions of deregulation was to improve the investment outlook of the railroads, that aspect has not succeeded. Figure 7.7 provides a snapshot as to why the railroads are not considered a "good investment".

[344] Association of American Railroads. "Railroad Profitability." AAR Policy and Economics Department, Washington, D.C., July 2003. (P.2)

Figure 7.7 Statistics about Railroad Investment, Dividend Yields and Earnings[345]

Price/Earnings Ratios and Dividend Yields of Class I Railroads vs. S&P 500 Industries

	P/E Ratio		Dividend Yields	
	RRs	S&P 500	RRs	S&P 500
1985	9.1	12.9	3.5%	4.3%
1990	12.0	15.3	3.6%	3.8%
1991	21.5	22.4	3.5%	3.4%
1992	16.2	21.9	2.3%	3.0%
1993	16.6	20.6	2.3%	2.8%
1994	14.1	15.1	2.4%	2.9%
1995	14.8	15.9	2.2%	2.6%
1996	14.7	17.2	2.0%	2.3%
1997	16.8	27.5	1.9%	1.5%
1998	22.1	32.8	2.0%	1.3%
1999	17.5	32.1	2.0%	1.2%
2000	11.6	24.7	2.9%	1.2%
2001	14.9	47.8	1.5%	1.4%
2002	14.9	28.4	1.4%	1.8%

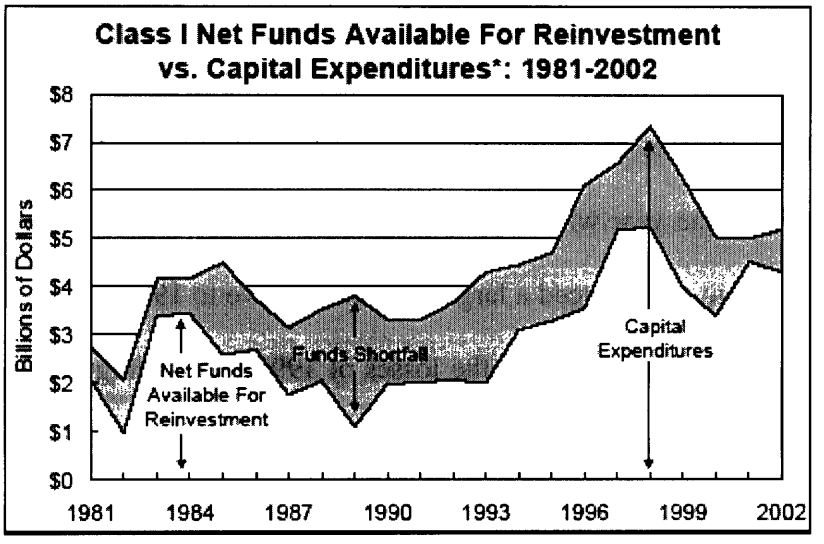
Price to earnings ratios of the railroads trailed the S&P 500 for the entire period in question. In 1991, the year when the railroads lost money as an industry for the very first time, the P/E ratio experienced a large increase relative to 1990. This might indicate that investors at the time believed that the losses of 1991 were a singular occurrence. A jump of this sort would occur if the earnings fell precipitously without a concurrent fall in the price of the shares. The high P/E ratio (given that earnings were flat in 1991) suggests that there was not a massive sell-off of railroad equity. Interestingly, 1991 was also one of the first years when railroads paid out a higher dividend than the average S&P 500 company. 1997 to 2000 also witnessed higher railroad dividends than the S&P 500. Given that many S&P 500 companies experienced the benefits of the technology boom, it makes sense that railroad stocks would pay higher dividends in order to attract investors.

[345] Ibid. (P.2)

When the technology bubble burst in 2001 – 2002, dividends between the "high tech" S&P 500 and the "low tech" railroads started to become level. There was less need for the railroads to attract/retain investors with lucrative dividend payments once the technology boom ended in 2001.

As Figure 7.8 indicates, "in each year since 1980, internally-generated cash has been insufficient to cover the rail industry's massive capital investment needs. Indeed, railroads traditionally rely on outside funds to cover more than one of every three dollars of their capital expenditures."[346]

Figure 7.8 Railroad Net Funds Available for Reinvestment vs. Capital Expenditures[347]



During the debate prior to the Staggers Act, there was some concern about the government having to nationalize the railroads. The deregulation era resulted in the majority of railroads remaining private. In that sense, deregulation did preserve private

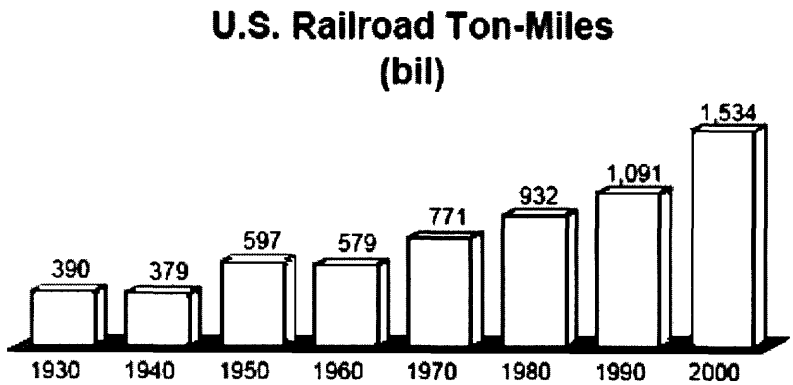
[346] Ibid. (P.2)
[347] Ibid. (P.2)

ownership. However, the attractiveness of railroads as a private investment remains questionable.

7.6 Demand and Usage

In both percentages and in raw values, the ton miles of the railroads increased since deregulation.

Figure 7.9 A Snapshot of United States Railroad Ton-Miles from 1930 - 2000[348]



From 1960 to 1970 (during the regulatory period), railroad ton-miles increased by 33.16 percent. From 1970 to 1980 (also during the regulatory period), railroad ton-miles increased by 20.88 percent. From 1980 to 1990 (after deregulation), ton miles increased by 17.06 percent. Even when the growth from 1980 to 1990 is compared with a 1970 baseline (i.e. [(1091-932)/771]), ton miles increased during that decade by 20.62 percent, which is still less than the growth in the 1970's. During the 1990's, the increase in ton-miles takes significance. That decade witnessed a growth in ton-miles of 40.60 percent. When compared with 1980, the twenty year span after deregulation resulted in a ton-

[348] Association of American Railroads. 'US Freight Railroad Statistics." Washington D.C., 10 January 2003. (P.2)

miles growth of 64.59 percent. The deregulation era taken as whole indicates that the first half (i.e. the 1980's) had a ton mile growth rate that was below the level experienced in the 1960's and 1970's; while the second half (i.e. the 1990's) experienced explosive growth. An interesting statistical project would be to determine how much of that growth in the 1990's was a result of the expansion of the US economy and how much was a result of deregulation.

Figure 7.10 Breakdown of Ton-Mile Percentages 1978 – 1988 – 1998[349]

Mode	1978 percentage	1988 percentage	1998 percentage
Rail	35	37	40.2
Truck	24.2	25.2	28.7
Pipeline	23.8	21.9	17.3
Water	16.7	15.5	13.4

As a percentage of the total available ton-miles, the railroads experienced approximately 5 percent growth during deregulation. During the same period of time, trucking grew at just under 5 percent. In relative terms, pipelines and water carriers experienced reductions in ton miles. Rail and trucking, both having been deregulated in the early 1980's grew in comparison to the two other modes (which did not experience the same level of change in regulatory status). As a whole, the deregulated industries did comparatively well. On the other hand, the explosive growth in raw ton-miles experienced by the railroads during the 1990's is placed within a different perspective when looking from the viewpoint of percentages. The nearly 65 percent total growth in railroad ton-miles from 1980 to 2000 translated into only 5% relative growth during

[349] American Trucking Associations. "American Trucking Trends." Alexandria, Virginia, 1989, 2000. (Note: Statistics from Figure 7.3 has been compiled from the above 2 editions of "American Trucking Trends".)

(essentially) the same period of time. That might indicate that external economic factors also played a large role in the increase in railroad ton miles during the 1990's.

7.7 Competition and Economies of Scale

Most of the questions surrounding competition and deregulation in trucking and railroading can be narrowed to two essential queries. Did the Staggers Act result in greater competition in the railroad industry or greater concentration? Did trucking deregulation result in a return to the destructive competition characteristic of the 1930's?

By December 2000, there were seven Class I railroads compared to 36 when the Staggers Act was passed.[350] The opposite trend occurred in the trucking industry. According to study by Cambridge Systematics, "the number of trucking companies increased dramatically. Existing carriers expanded into new services with new routes, and new smaller carriers entered the business. The number of interstate motor carriers increased from 18,000 in 1975 to over 500,000 in 2000."[351] Deregulation and the removal of entry barriers permitted greater numbers of the intercity trucks onto the road. However, the number of failures of in the industry increased significantly as well, as outlined in Figure 7.11.

[350] Cambridge Systematics, Inc., and Reebie Associates, Inc. "Regulation from Economic Deregulation to Safety Regulation." For the Federal Highway Administration Office of Freight Management and Operations. Contract DTFH61-97-C-00010, BAT-99-020. December 2000.
[351] Ibid.

Figure 7.11 Total Trucking Business Failures[352]

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986
Failures	162	186	382	610	960	1228	1410	1539	1561
Year	1987	1988	1989	1990	1991	1992	1993	1994	1995
Failures	1345	1242	1263	1593	2297	2223	1650	1259	1403

There has also been a concentration of economic power with some of the largest trucking companies. For example, Schneider National, which was founded in 1935, surpassed $1 Billion in revenue in 1992.[353] Four years later, Schneider National surpassed $2 Billion in revenue.[354] So the trucking industry under deregulation is characterized by two opposites: increased competition that puts more strain on the smaller carriers coupled with the largest carriers experiencing substantial revenue growth and greater market dominance.

7.8 Size and Capacity

"Ninety-one thousand miles of rail line were abandoned or sold by major railroads. The Class I railroads now own approximately 100,000 miles of road (route-miles), a decrease from 192,000 in 1975. Many of the lines were sold to new regional and short-line railroads. In 1998, regional and short-line railroads operated 50,000 miles of road, some

[352] American Trucking Associations. "American Trucking Trends." Alexandria, Virginia, 1988, 1997. (Note: Statistics from Figure 7.11 has been compiled from the above 2 editions of "American Trucking Trends".)
[353] Schneider National. [Online], Available: http://www.schneider.com/aboutSchneider/history.html [01 September 2003].
[354] Ibid.

of it owned by state governments anxious to preserve rail access to rail-dependent manufacturers and shippers."[355]

7.9 Physical Condition

According to the Union Pacific, "major freight railroads have spent more than $200 billion since 1980 and more than $100 billion since 1990 to maintain and improve equipment and track."[356] Through abandonment and more investment in track maintenance, deferred maintenance has been significantly reduced from the levels found in 1976 as outlined in Figure 7.12.

Figure 7.12 Deferred Maintenance and Delayed Capital Improvements of Class I Railroads[357]

30 June 1976 (Thousand $)	Deferred Maintenance of Way	Deferred Maintenance of Equipment	Delayed Capital Improvement of Roadway	Delayed Capital Improvement of Equipment	Total deferred maintenance capital improvements	Ration of total to 1976 operating revenue
Total	1,345,772	200,410	1,461,845	1,134,117	4,142,144	.22

7.10 Labour and Management

The railroads contend that labour benefited from deregulation. For example, according to Union Pacific, "average hourly wages and benefits for railroad employees have increased 116 percent since 1980, compared with a 103 percent increase in average hourly wages for all American workers, leaving railroad workers among the top 2 percent of all American wage earners."[358] Furthermore, those high wages are part of the increased

[355] Cambridge Systematics, Inc., and Reebie Associates, Inc. "Regulation from Economic Deregulation to Safety Regulation." For the Federal Highway Administration Office of Freight Management and Operations. Contract DTFH61-97-C-00010, BAT-99-020. December 2000.
[356] Union Pacific. "Staggers Rail Act. A Boon to Safety and Efficiency." Position Paper. [Online], Available:http://www.uprr.com/newsinfo/position/pos5.shtml [01 September 2003].
[357] United States Department of Transportation. "A Preliminary Report for the Secretary of Transportation - A Prospectus for Change in the Freight Railroad Industry." Washington, D.C, October 1978. (P.24)
[358] Union Pacific. "Staggers Rail Act. A Boon to Safety and Efficiency." Position Paper. [Online], Available:http://www.uprr.com/newsinfo/position/pos5.shtml [01 September 2003].

labour productivity as a result of the fact that "revenue-ton-miles per employee are approximately four times higher today than in 1980."[359]

Figure 7.13 Railroad Labour Statistics (1967 – 2000)[360] [*Figures in thousands]

	Industry Total Employees*	Class I Total Employees*	Class I Total Wages*	Class I Annual Wages	Class I Hourly Wages	CPI	Adjusted Hourly Wages	Cents/Dollar Expenditure on Labour
1967	N/A	610	N/A	N/A	3.36	25.55	13.15	N/A
1968	N/A	590	N/A	N/A	3.54	26.62	13.30	N/A
1969	N/A	578	N/A	N/A	3.79	28.05	13.51	N/A
1970	640	566	5,711,280	10086	4.14	29.71	13.93	N/A
1971	N/A	544	5,999,968	11023	4.6	30.99	14.84	N/A
1972	N/A	526	6,424,920	12213	5.03	32.01	15.71	N/A
1973	N/A	520	7,088,383	13627	5.54	34.01	16.29	N/A
1974	N/A	525	7,475,834	14235	5.84	37.74	15.48	N/A
1975	548	488	7,474,750	15324	6.39	41.19	15.52	52.4
1976	N/A	482	8,278,413	17144	7.09	43.56	16.28	N/A
1977	N/A	482	8,939,411	18518	7.66	46.37	16.52	N/A
1978	N/A	471	9,700,565	20573	8.43	49.92	16.89	N/A
1979	N/A	482	10,903,887	22585	9.22	55.54	16.60	N/A
1980	532	458	11,318,452	24695	10.21	63.06	16.19	46.5
1981	N/A	436	11,650,802	26698	11.14	69.60	16.01	N/A
1982	N/A	379	11,021,403	29087	12.26	73.86	16.60	N/A
1983	N/A	322	10,345,294	32125	13.29	76.24	17.43	N/A
1984	N/A	323	11,003,829	34064	13.84	79.48	17.41	N/A
1985	372	302	10,563,033	34991	14.3	82.32	17.37	46.9
1986	N/A	276	N/A	N/A	N/A	83.90	N/A	N/A
1987	N/A	249	N/A	N/A	N/A	86.97	N/A	N/A
1988	N/A	236	N/A	N/A	N/A	90.52	N/A	N/A
1989	308	228	N/A	N/A	N/A	94.86	N/A	N/A
1990	296	216	8,654,186	39987	15.83	100.00	15.83	N/A
1991	285	206	8,695,146	42131	16.82	104.24	16.14	N/A
1992	276	197	8,752,862	44336	17.77	107.38	16.55	N/A
1993	271	193	8,731,848	45354	17.87	110.55	16.16	N/A
1994	266	190	8,873,890	46714	18.47	113.44	16.28	N/A
1995	265	188	9,069,696	48188	18.99	116.63	16.28	N/A
1996	257	182	9,201,506	50611	20.05	120.06	16.70	N/A
1997	253	178	9,235,302	51889	20.28	122.84	16.51	N/A
1998	256	178	9,938,346	55764	21.26	124.76	17.04	N/A
1999	256	178	9,602,659	54082	20.96	127.49	16.44	N/A
2000	246	168	9,622,940	57157	21.54	131.78	16.35	32.6

[359] Cambridge Systematics, Inc., and Reebie Associates, Inc. "Regulation from Economic Deregulation to Safety Regulation." For the Federal Highway Administration Office of Freight Management and Operations. Contract DTFH61-97-C-00010, BAT-99-020. December 2000.

[360] Association of American Railroads. "Railroad Facts." Washington D.C., 1976, 1981, 1986, 2000. (Note: Statistics from Figure 7.13 has been compiled from the above 4 editions of "Railroad Facts".)

During the ten years before the Staggers Act, total industry employment fell by 110,000 workers. During the ten post-Staggers Act years, total industry employment fell by an additional 235,000 workers. In the 1990's, the rate of reduction of total industry employees slowed down. 50,000 industry-wide jobs were lost in this period of time. On a nominal level, wages did go up, as was claimed by the Union Pacific. However, when inflation is factored into the equation, real wages remain fairly stagnant – they essentially maintained pace with inflation. In this case, it is quite justified to utilize only the Consumer Price Index. The labourers to whom these wages are being paid are consumers. Real wages witnessed steady increases from 1967 until 1983. The 1990's were characterized by stable real wages. This trend of lowering and eventually stabilizing real wages fits with the changing cost structure of the railroads. In 1975, over half of Class I railway expenditures was spent on labour. By the year 2000, that figure was closer to 32 percent. So labour did not experience the optimistic results as expounded by Union Pacific. On the other hand, they did not lose a significant portion of their real wages. However, the growth of rail labour's real wages that was experienced in the late 1960's was not repeated during the deregulation era.

In 1956, outside the agriculture sector (farming) the trucking industry was credited with being the largest employer in the United States. "More than 7 million men and women are directly employed in trucking, and many thousands more get indirect employment in manufacturing tractors, trailers, tires, etc. By way of comparison, the railroads directly employ slightly more than 1 million people and the steel industry approximately

650,000."[361] In 1956, motor carrier industry wages were quite generous compared with other related industries. "Wages which absorb some 53% of gross revenues in the case of the Class I motor carriers are good. Average wages per employee throughout the industry were $4884 in 1954 as compared with $3734 for all US industry."[362] Those wages continued an upward trend as well. In 1960, the percentage of gross revenues dedicated to wages had increased to 54%; which allowed for average wages to be $5810, compared to $4565 for the rest of US industry.[363]

Evidence indicates that deregulation reversed the upward wage trends of the truckers. Real trucking wages experienced a continual decline during the 15 post deregulation years. Again, the Consumer Price Index is used to adjust wages for inflation. From 1978 to 2000, over 1 million new truckers were hired. Deregulation increased the number of truck drivers (and competition) while adjusting real wages downward. Figure 7.14 provides details.

[361] Shields and Company. "The Motor Carrier Industry." New York, October 1956. (P.7)
[362] Ibid. (P.7)
[363] Ibid. (P.6)

Figure 7.14 Truckers Employment and Wage Statistics (Available Figures 1978 – 1995)[364]

Year	Truckers Thousands	Hourly Wages	CPI	Adjusted Wages
1978	1951	7.92	50	15.86
1979	1997	8.51	56	15.32
1980	1878	9.33	63	14.80
1981	1878	10.11	70	14.53
1982	1841	10.44	74	14.13
1983	2195	10.60	76	13.90
1984	2373	10.64	79	13.39
1985	2414	10.71	82	13.01
1986	2452	10.89	84	12.98
1987	2543	11.00	87	12.65
1988	2608	11.15	91	12.32
1989	2616	11.54	95	12.16
1990	2607	11.86	100	11.86
1991	2666	12.02	104	11.53
1992	2694	12.27	107	11.43
1993	2786	12.59	111	11.39
1994	2815	12.83	113	11.31
1995	2861	13.07	117	11.21
1996	3019	N/A	120	N/A
1997	3075	N/A	123	N/A
1998	3097	N/A	125	N/A
1999	3116	N/A	127	N/A

7.11 Conclusion

Chapter 7 has examined each area established in the framework of Figure 6.12 – issues of service, issues of economics, and issues of structure. First, how did deregulation affect *Issues of Service*? The evidence indicates mixed results. The rail network became significantly smaller. Those customers whose lines were no longer being serviced by the railroads would have experienced a decrease in the level of service. There was also a brief but significant service collapse of the railroads precipitated by the Union Pacific merger with Southern in the mid 1990's. The level of service experienced by the

[364] American Trucking Associations. "American Trucking Trends." Alexandria, Virginia, 1988, 1995, 1996, 2000. (Note: Statistics from Figure 7.14 has been compiled from the above 4 editions of "American Trucking Trends".)

customers whose goods were not shipped would have been adversely affected. It is difficult to equate and compare level of service between different eras. What might have been considered unsatisfactory service in the 1970's might have been considered, by a new generation of customers, acceptable in the 1990's. The status of captive shippers is uncertain. Coal customers have experienced lower rates. However, those captive shippers who lost railroad service due to line abandonment would have experienced the effects of either relocating business or ceasing operations. From the available evidence, the question of level of service improvements as a result of deregulation is inconclusive.

Regarding the *Issues of Economics* category in Figure 6.12, from a price perspective the customers certainly benefited from deregulation's lower shipping rates. However, during the early days of competition between railroads and truckers, there were some in the trucking industry who contended that price was not necessarily the primary force that attracted customers away from the railroads. Some truckers contended that customers would be willing to pay extra for some of the perquisites offered by truckers – such as door-to-door delivery. So although customers did achieve benefits from lower prices from both truckers and railroads, what were the costs of those lower prices? Some communities lost railroad service as the network became smaller. Revenues per ton (in real dollars) fell for both the truckers and the railroads. Lower rates in railroading and trucking were not a prediction that was widely made in the 1970's. There was no upward trend in railroad or trucking profitability either as a result of deregulation. The railroads as an industry experienced its only year of negative profits after the passage of the Staggers Act. Railroads never experienced industry losses during any of the difficult years in the 1970's. While regulators were a scapegoat for the railroads' ills in the

1970's, they were not around to be blamed when the industry lost money in the 1990's; nor were they around for the service collapse of the mid 1990's. Railroads continue to be looked upon by Wall Street as a less-than-ideal investment compared with other Fortune 500 industries' return on equity. Economies of scale have been revealed in the railroading industry (once again) as the number of Class I railroads have declined substantially. The trucking industry generally has more competitors now than twenty five years ago. However, the largest trucking companies have also grown more powerful. If the trends in the decline in Class I railroads continue, there may be the potential for monopolistic problems.

Regarding *Issues of Structure*, the size of the railroad network in terms of areas of access has decreased, while ton miles increased. The physical condition of the railroads has improved. However, judging by the funds shortfall for capital expenditures as provided in Figure 7.8, the improved physical condition might not be because of better railroad economics but instead as a result of the smaller network. Trucking wages have dropped dramatically (in real terms) since deregulation; and competition has grown fierce within the industry. The railroads downsized their labour force while keeping their wages (in real terms) stagnant since the Staggers Act. Deregulation does not appear to have brought significant benefits to labour.

7.12 Summary

Given all this evidence, what are the major conclusions regarding the effects of deregulation on the trucking and railroad industry? First, the pre-Staggers Act story was not the same as the one given post-Staggers Act. The Association of American Railroads

illustrates falling rates as a major success of deregulation. Yet there was little discussion by either the railroad industry or their captive shippers in the 1970's of railroad rates expecting to decline after deregulation. Expounding deregulation as a success based on the reduction in railroad rates is disingenuous. Lower rates for shipping customers are a positive benefit; however, in the railroad debate, those lower rates are a success due to the luxury of 20/20 hindsight.

Second, there are numerous other problems with the success of deregulation based on the *promises made* in the 1970's by its proponents.

- Evidence for improved level of service is inconclusive
- Rail freight profits remained flat
- Trucking profits fell
- Railroads remained unfavourably viewed by Wall Street investors
- Railroads experienced annual capital investment shortfalls
- The railroad industry experienced increased concentration of Class I railroads
- The trucking industry experienced severe competition among the smaller carriers
- The trucking industry experienced increased dominance among the larger carriers
- Business failures in the trucking industry increased significantly
- The size of the railroad labour force decreased
- Real wages in the railroad industry remained stagnant
- Real wages in the trucking industry fell

Based on many of the pre-deregulation indicators provided by government, industry and academia; whether it is trucking or railroad profitability, investor confidence, benefits to

labour, level of bankruptcies, or economies of scale, deregulation did not fulfill many promises made prior to the Staggers Act and the Motor Carrier Reform Act.

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