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The Effects of Railroad Deregulation

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THE EFFECTS OF RAILROAD DEREGULATION

Patrick H. Murphy, B.S.

An Abstract Presented to the Faculty of the Graduate
School of Lindenwood College in Partial
Fulfillment of the Requirements for the
Degree of Master of Business Administration

1992

ABSTRACT

This thesis focuses on the hypothetical question: Would American railroads meet their obligation to provide freight service at reasonable cost if no regulation restrictions were imposed?

Railroads were originally regarded as great industrial giants spearheading the development of this country. Wild West movies depicted men driving a golden spike where the railroad from the West met the railroad from the East. This was pictured as a very exciting and romantic time in our history.

However, there were too many abuses. In 1887, the Congress decided to control special rates, the pass system, rebates and discrimination, and passed into law an act to regulate interstate commerce. Since that time, many laws were passed to protect the public from the railroads' monopolistic power. Admittedly, many of these laws were too restrictive and railroads would suffer hard times during the various enforcement periods.

In 1980, almost 100 years later, Congress decided that all the railroad "robber barons" were gone and that the railroad industry should be deregulated by passing of the Staggers Rail Act of 1980.

The purpose of this study is to determine if it is essential that railroads be regulated in order to ensure public protection from

economic manipulation. The railroads' economic survival is also an issue. Specifically, it is hypothesized that railroads should have the same freedom to set prices and conduct business in other ways without regulation the same as any other American industry acting in the best interest of the overall economy.

My research was compiled from historical data. The results of the study show the public suffering overwhelming abuses in the history of railroads. Also, economic problems for highly leveraged railroads are highlighted. The conclusions are that regulating the amount a railroad can charge for its services, assuring the public open access to competing railroads and reinvestment criteria are all necessary to ensure the protection of the public.

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COMMITTEE IN CHARGE OF CANDIDACY:

Assistant Professor, Daniel W. Kemper,
Chairperson and Advisor

Adjunct Assistant Professor Jan Kniffen

Adjunct Assistant Professor Pat Akers

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Chapter I

INTRODUCTION

Railroad Regulation

Railroad regulation has been with us since 1887 when the Congress of the United States enacted the Interstate Commerce Act. Since that time, many additional acts and/or laws have been passed to protect the public from the power of the railroad industry of the United States.

Railroads were not regulated at first. In 1826, the first railroad to haul freight in the country was built from Quincy, Massachusetts to the Neponset River, a distance of about two and three-quarter miles and was built for private use (Knorst 1).

The first public use railroad was the Baltimore and Ohio Railway which was 13 miles long and was opened in 1830. Initially, it was driven by horses on rails and after an unsuccessful attempt to power it with sails, a steam locomotive was used. The first steam engine for use on rails had been around since 1815 (8).

At the conclusion of the Civil War, the Union Pacific and Central Pacific Railroads built a transcontinental railroad from coast to coast which was completed in 1869. By 1890, railroads had grown so quickly that they covered 93,296 miles. By 1900, miles had

increased to 163,597, and to 429,883 miles by 1930. Today, railroads operate about one-half that amount of track because of low density (traffic volumes), which was created when trucks started to take business away from the railroads in the 1940's (8).

Railroad tracks and rail cars have been upgraded and can now move 100-ton payload cars in trains over 100 cars in length. This is a big improvement from the 28-ton weight units of 1902, and even the 56-ton weight limits of 1962 (9).

The efficient movement of our products and goods, both in domestic and foreign commerce, is critical to American competitiveness. The nation's highways, waterways and rail networks have important roles to play; indeed, healthy competition among them exerts strong downward pressures on prices. That is why today all modes are virtually free of economic regulation.

History of Regulation

While growth and expansion was occurring, the public paid the price through high freight rates (compared to cost) and many railroad owners became very wealthy. Common laws and State laws were used in an effort to prevent railroads from becoming too profitable. However, many states believed that granting special rights to railroads would serve to help public service by enhancing profits. States passed laws, therefore, which allowed huge freight rates and almost prevented smaller shippers from making significant

financial gains. The laws were passed to promote investment and growth in the railway industry.

In the absence of adequate regulation, it was only natural for railroad owners to make their own rules, or to ignore the laws that were not being enforced. This absence of adequate laws resulted in the public being abused by the railroads' actions.

In 1887, railroads had a virtual monopoly over efficient, convenient passenger and freight transportation. Concerned about abuses that accompanied the monopoly, Congress passed the Interstate Commerce Act, which created the Interstate Commerce Commission (ICC) to regulate rates and protect rail shippers (AAR Background 3).

In the following decades, conditions changed. Transportation via trucks, buses, barges and planes grew and prospered. By 1950, more people traveled by bus and plane than by rail. By the mid-1950's, the rail share of the commercial intercity freight market dipped below 50% (3).

Despite intense competition, railroads continued to be regulated. This regulation became even more stringent. Ultimately, there was regulatory oversight for almost all railroad management decisions. These regulations had an enormous impact on railroads. Initiative was stifled, technological development was slowed, costs were increased, and revenues were reduced. The following will illustrate this point:

In the early 1960's, Southern Railway (today part of Norfolk

Southern) developed a new service for grain shippers. Utilizing jumbo hopper cars moving in multiples of five, Southern proposed reducing grain shippers' rates by up to 60%. These rates were called the "Big John" rates (3).

One might have thought that this move would be welcomed since it offered potentially great savings for consumers. However, the ICC rejected the plan, not because it was unsuitable for Southern's customers, not because it was unsuitable for consumers, not even because it was unprofitable, but because it would hurt competing carriers, especially government-subsidized water carriers (4).

In the late 1960's, Illinois Central Railroad developed a plan called "Rent-a-train", involving the lease of entire trains to shippers. The ICC hailed the plan as an important "innovation in rail transportation pricing". However, the ICC finally disallowed key provisions that involved guaranteeing train schedules, contending violation of the Interstate Commerce Act's prohibition against granting rebates, since the plan offered an economic penalty if the railroad did not meet the schedule that was promised (4).

During the late 1970's, the ICC ordered railroads to break up unit trains that operated at lower per-unit costs than cars in single-car service. (In unit-train service, all cars carry the same commodity and the shipper pays a reduced multiple-car rate.) The ICC took this action because railroads were experiencing some grain car shortages at the time. The ICC thought these shortages should

be more evenly spread among all shippers since the railroads were not allowed to discriminate in car supply. What the ICC action guaranteed was that shortages would mushroom, since cars pulled out of unit-train service made fewer trips per harvest season (5).

At the same time, the ICC was requiring railroads to continue service on some rail lines in which revenues did not come close to matching operating costs.

While there are no records showing railroad profitability or revenue prior to 1929, it is evident that railroads (Table I and Table II), as a group, have not improved from an operating revenue or a net operating income viewpoint today (1988) than in 1929 (AAR Railroad Facts 17). Operating revenue and net income grew initially, but continues to be flat since 1980.

Regulation has been a vicious circle. First the absence of regulation and public abuse by railroads existed; second, regulation and the overprotection of the public; currently, deregulation (some call it re-regulation) allows the railroads the opportunity to further abuse the public. In order to understand this concern about abuses, we should review the past evils and laws which led to the original Act to regulate interstate commerce.

Evils

Prelegislative evils which plagued the railroad industry in the early years were:

1. **Rebates**

   One of the most prevalent abuses was the railroads' offer and acceptance by preferred shippers of secret rebates.

2. **Discrimination**

   Railroads would discriminate by offering rates and services to one shipper over other shippers under substantially similar circumstances and conditions.

3. **Special Rates**

   Railroads would offer extremely low rates to favored shippers. These rates were awarded to larger shippers, leaving smaller shippers a higher freight charge.

4. **Railroad Pass**

   The railroads would provide free passage to influential politicians.

5. **Unpublished Rates**

   Rates were not published. Railroads could, therefore, abuse shippers in yet another way (Knorst 25).

Laws were then passed to counter these evils.

Laws

In 1886, the Supreme Court, in the case of the Wabash, St. Louis and Pacific Railway Company against the State of Illinois, 118 U.S. 224, 247, made reference to a previous holding in the case of Peik versus C & NW Railroad Company, 94 U.S. 164, as follows:

> As to the effect of the statute as a regulation of Interstate Commerce, the law is confined to State Commerce, or such Interstate Commerce as directly affects the people of Wisconsin. Until Congress acts in reference to the relations of this company to Interstate Commerce, it is certainly within the power of Wisconsin to regulate its fares, etc. so far as they are of domestic concern. With the people of Wisconsin, this railroad company has domestic relations. Incidentally, these may reach beyond the state. But certainly, until Congress undertakes to legislate for those who are without the state, Wisconsin may provide for those within, even though it may directly affect those without (Knorst 31).

This opinion, and pressure from the public, finally impressed Congress that there was a need to regulate Interstate Commerce via rail. In 1887, Congress passed the Act to regulate all Interstate Commerce. The Act's major provisions are shown in Appendix A and are the important parts of the first act to regulate commerce. These provisions prescribed railroads' duties and obligations which, by its passage, were brought under Federal regulations.

While the legal basis for U.S. transportation consists of common law, Federal and State constitutions and statutes passed by legislative bodies plus the Interstate Commerce Act, railroad abuses have prompted Americans repeatedly to seek legal remedies in the court. Appendix B is a partial listing of those cases indicating the seriousness of the problem.

Statement of Problem

At one time the railroads were symbols of progress, power and

Table I

Net Railway Operating Income
(Amounts Shown in Thousands)

Year	United States	East	West
1929	$1,251,698	$ 767,276	$ 484,422
1939	588,829	410,713	178,116
1944	1,106,327	618,568	487,759
1947	780,694	407,124	373,570
1951	942,542	539,417	403,125
1955	1,127,997	678,557	449,440
1960	584,016	290,095	293,921
1965	961,516	515,444	446,072
1970	485,854	106,147	379,707
1975	350,682	(8,747)	359,429
1979	860,684	183,005	677,679
1980	1,338,551	424,042	914,509
1981	1,360,611	622,966	737,645
1982	742,231	262,544	479,687
1983	1,837,854	870,047	967,807
1984	2,536,673	1,318,599	1,218,074
1985	1,746,386	760,143	986,243
1986	506,591	739,971	(233,380)
1987	1,756,460	644,916	1,111,544
1988	**1,979,719**	**830,256**	**1,149,463**

SOURCE: Association of American Railroads. Railroad Facts. 1989 Edition. Washington, DC 1989.

Table II

Operating Revenue
(Amounts Shown in Thousands)

Year	United States	East	West
1929	$6,279,521	$3,886,879	$2,392,642
1939	3,995,004	2,480,208	1,514,796
1944	9,436,790	5,416,089	4,020,701
1947	8,684,918	5,137,930	3,546,988
1951	10,390,611	6,083,725	4,306,886
1955	10,106,330	5,815,997	4,290,333
1960	9,514,294	5,291,650	4,222,644
1965	10,207,850	5,651,838	4,556,012
1970	11,991,658	6,544,073	5,447,585
1975	16,401,860	8,535,831	7,866,029
1979	25,352,257	12,659,147	12,693,110
1980	28,257,548	13,588,703	14,668,845
1981	30,898,610	14,879,268	16,019,342
1982	27,503,503	13,357,745	14,145,758
1983	26,729,392	12,217,397	14,511,995
1984	29,453,446	13,566,348	15,887,098
1985	27,586,441	12,918,574	14,667,867
1986	26,204,122	12,235,170	13,968,952
1987	26,622,482	12,302,246	14,320,236
1988	**27,934,285**	**12,490,320**	**15,443,965**

SOURCE: Association of American Railroads. Railroad Facts. 1989 Edition. Washington, DC 1989.

growth and were credited with helping to build and unite a nation.

By the end of the 1970's, the railroads' condition had changed dramatically. Progress and growth were seemingly in the past, not in the present or future.

By the 1970's, the railroads financial condition had deteriorated significantly. More than 20% of the industry was bankrupt. Railroad return on investment hovered near 2%. Needed improvements were delayed because low earnings could not attract the required capital. Maintenance programs were slashed because railroads sought to conserve cash. Some railroads sought out other ways to improve earnings, investing in everything from hotels and amusement parks to truck lines and barge lines (AAR Background 12).

Earnings from operations were so bad on the railroads that, because of the lack of money, nothing was spent on maintenance and a new term emerged in railroad language--the standing derailment. The derailment occurred when freight cars fell from the track while standing perfectly still because inadequately maintained track and roadbed collapsed beneath them (12).

Almost 50,000 miles of track could be operated only at reduced speeds, some as slow as 10 miles per hour. Service deteriorated and marketshare spiraled downward as shippers found other modes which satisfied their demands for reliable service (12).

Yet, this ailing industry was still vital to the nation's economy, since it supplied some 37% of its intercity freight

transportation, was responsible for tens of billions of dollars worth of economic activity, and employed hundreds of thousands of workers (12).

Clearly, something had to change if railroads were to continue performing a vital role in the economy. Nationalization seemed a likely choice. But, nationalization would cost taxpayers at least $100 billion to acquire railroad assets. Billions more might be necessary in annual subsidies to keep the trains running.

Congress, shippers and railroads agreed that a solution addressing the root causes of the so-called "railroad problem" were necessary. Congress studied the forces which had combined to bring about the railroads' deterioration. Ultimately, sound policies were formulated which could restore the railroads' ability to help build America's economy without massive infusions of federal funds.

Studies by Congress and studies conducted by others at Congress' direction led this legislative body to conclude that a successful railroad industry could be recreated only through partial economic deregulation. Thus, the Staggers Rail Act was born.

The Staggers Rail Act of 1980, with few exceptions, is proving to be a piece of legislation that is close to accomplishing what Congress had intended. The Interstate Commerce Commission can help through stricter enforcement. If stricter enforcement is provided, this legislation can actually meet its expectations.

The Staggers Rail Act restored an industry on the brink of

collapse and possible nationalization. Also, it enabled Conrail, once dependent on government ownership for survival, to be returned to public ownership through a successful public stock offering.

Deferred maintenance, once rampant, is now a rarity. Accidents, fatalities and freight damage have dropped as safety has improved. Erosion of marketshare has been arrested, although not reversed. Rates have moderated.

Deregulation has not ended the railroad industry's financial problems, however, and the industry must continue to improve productivity to gain economic health.

An example showing what the railroad industry will do given new freedoms is detailed in Table III. Since Staggers, millions of dollars have been diverted from equipment purchases and into the roadbed. American industry is experiencing a shift in the investment burden for railcars from railroads to the public. This is an unexpected result of the railroads' new freedom.

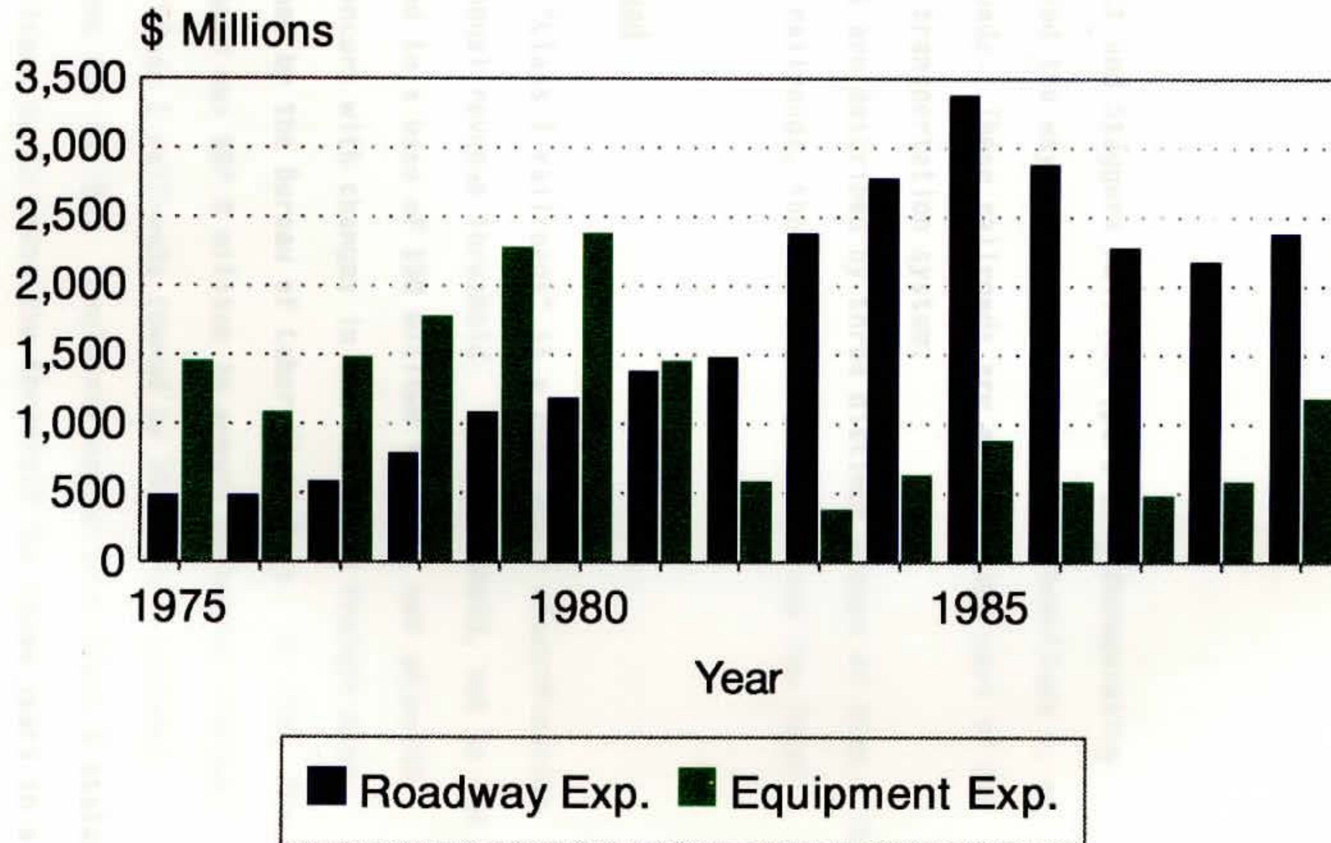
Regulate and you hamper initiative, growth and profitability. Deregulate and you run the risk of the public being abused. A review of the pros and cons will enable us to arrive at a solution.

The purpose of this study will be to examine the ability of the nation's railroads to function effectively without economic regulation and decide if a return to regulation will be required to prevent abuses arising from the railroads' new economic freedoms allowed under the Staggers Rail Act.

Table III

U.S. Class I Railroads

Capital Expenditures



USDA Study 1990

Chapter II

LITERATURE REVIEW

Railroads

The 4R Act and Staggers Rail Act (partially deregulating railroads) eased the way for the creation of new non-Class I, or "small" railroads. These railroads are an important part of our nation's rail transportation system.

Railroads are described by three distinct groups of size. The large Class I railroads, the regional railroads, and the local railroads.

Class I Railroad

The term "Class I railroads" is a regulatory classification based on an annual revenue threshold. This threshold, set by the ICC, is indexed to a base of $50 million in 1978, and adjusted annually in concert with changes in the "Railroad Freight Rate Index" published by the Bureau of Labor Statistics. In 1987, the Class I threshold was $87.9 million in annual operating revenue. There were 18 Class I railroads (owned by 16 Class I systems) reporting to the ICC in 1987. Declassification from Class I status requires a railroad to be below the threshold for three years in a

row. The Commission also sets annual revenue criteria for "Class II" and "Class III" railroads. In 1987, the revenue criterion was between $17.6 and $87.9 million for the Class II railroads, and $17.5 million or under for Class III railroads. Neither Class II nor Class III railroads report their operating and financial statistics to the ICC, and annual revenue levels of these railroads are not publicly available (Statistics 1).

Regional Railroad

"Regional railroad" is a term defined by the Economics and Finance Department (E&F) of the AAR. The rationale for the change from the traditional "class" designation (which was established solely for regulatory purposes) is that smaller railroads have characteristics other than revenue which make them distinct from the large Class I, ICC-regulated, railroads, as well as distinct from each other. Aside from revenue, these characteristics could include such factors as miles of track operated, level of traffic, and size of plant. At this time, because of limited data, E & F has defined "Regional railroads" as those non-Class I, line-haul, freight railroads which operate at least 350 miles of road and/or earn at least $40 million in revenue. At the beginning of 1988, there were 27 Regional railroads in the United States (1).

Local Railroad

Like "Regional railroad", the term "Local railroad" is also designated by E&F, and defined as freight railroads which are not Class I or Regional; they operate under 350 miles of road and earn less than $40 million annually. At the beginning of 1988, there were 457 Local railroads in the United States, including 172 "Switching and Terminal railroads". This latter sub-category is comprised of railroads which are not primarily line-haul carriers, but rather perform switching and/or terminal services for other railroads. These railroads usually have a relatively large number of employees per mile of track operated (2).

A profile of the rail industry by ownership of railroads is shown in Table IV. Table V shows the principle commodities hauled by type of railroad.

4R and Staggers Acts

Deregulation of the nation's railroads and the growth in the number of "smaller" railroads began with the Railroad Revitalization and Regulatory Reform Act of 1976 (4R Act) and continued with the Staggers Rail Act of 1980 (Railroads 99-101).

The 4R Act was the first significant revision of the Interstate Commerce Act. The original act was extended to include motor carriers by the Motor Carrier Act of 1935, Part II; the Water Carrier Act of 1940, Part III; the Freight Forwarder Act of 1942, Part IV; and the Transportation Act of 1958, Part V, which provided

TABLE IV

PROFILE OF THE RAIL INDUSTRY BY OWNERSHIP

OF RAILROADS

OWNERSHIP OF RAILROAD	NUMBER	MILES OF ROAD OPERATED	EMPLOYEES
CLASS I SYSTEMS	80	153,294	244,267
Class I Railroads	18	147,568	235,814
Regional Railroad Subsidiaries	6	2,854	2,145
Local Railroad Subsidiaries	27	1,751	902
Switching & Terminal Subsidiaries	29	1,121	5,406
REGIONAL RAILROADS	19	11,601	6,925
Regional Railroads	19	11,601	6,925
LOCAL RAILROADS	177	9,338	3,754
Local Railroads	168	9,228	3,727
Local Railroad Subsidiaries	8	107	21
Switching & Terminal Subsidiaries	1	3	6
SWITCHING & TERMINAL RAILROADS	90	2,222	706
Switching & Terminal Railroads	86	1,924	636
Local Railroad Subsidiaries	1	260	23
Switching & Terminal Subsidiaries	3	38	47
SHIPPER-OWNED RAILROADS	97	2,759	5,473
Regional Railroad Subsidiaries	1	175	1,349
Local Railroad Subsidiaries	61	1,974	1,414
Switching & Terminal Subsidiaries	35	610	2,710
PUBLICLY-OWNED RAILROADS	31	1,558	1,127
Regional Railroad Subsidiaries	1	470	508
Local Railroad Subsidiaries	15	783	214
Switching & Terminal Subsidiaries	15	305	405
CAR LESSOR-OWNED RAILROADS	8	441	242
Local Railroad Subsidiaries	5	431	235
Switching & Terminal Subsidiaries	3	10	7
TOTAL, ALL ROADS	**502**	**181,213**	**262,494**

Source: Statistics of Regional and Local Railroads Economics and Finance Department Association of American Railroads 1988.

TABLE V

PRINCIPAL COMMODITIES BY TYPE OF RAILROAD

Class I	Regional
Coal	Metallic Ores
Chemicals	Coal
Farm Products	Pulp and Paper
Food Products	Lumber and Wood
Non-Metallic Minerals	Non-Metallic Minerals
Local	**Switching and Terminal**
Coal	Coal
Lumber and Wood	Farm Products
Pulp and Paper	Non-Metallic Minerals
Metallic Ores	Primary Metal Products
Farm Products	Waste and Scrap

Source: Transportation Deregulation What's Regulated and What Isn't. Sweeney, McCarthy, Kalisa and Cutler. Washington, DC 1986.

financing guarantees for the railroads.

Congress decided that the 4R Act did not provide adequate deregulation. In 1980, Congress enacted the Staggers Rail Act of 1980, which further amended the Interstate Commerce Act. As interpreted by an Interstate Commerce Commission comprised of deregulation advocates, the Staggers Rail Act led to radical changes in railroad regulation. The Act also authorized the Commission to carry on the process of railroad deregulation by allowing exemptions for transactions or services not specifically deregulated by the statute. The law gave the Commission, a body of political appointees largely without any significant transportation experience, the authority to set laws pertaining to regulation versus deregulation of commerce via rail in the United States.

The Commission's authority to set laws was authorized by 49.U.S.C. Section 10505. Details are available in Appendix C (2).

Railroads continue to be regulated in many ways. The ability to enter the business remains under the Commission's jurisdiction. Railroad employee job protection when lines are sold and pooling of traffic, services or earnings among railroads continue to be under the jurisdiction of the Commission. All mergers, consolidations and trackage rights (the right of one railroad to run over the tracks of another) require Commission approval. Rail carrier acquisition of motor carrier and abandonments of active rail lines continues to be governed by the Interstate Commerce Commission.

Shippers Rights

A shipper has few options if he finds that his rates are too high and the rate levels prevent him from retaining his market or seeking new markets. The Staggers Rail Act made it almost economically impossible for a shipper to prevent these situations. The solutions are four separate statutory provisions found in the Act which provide information about the ability to prevent the abuses of high rates. These provisions are further detailed in Appendix D. The problem is that the Interstate Commerce Commission has never fully exercised the power to protect shippers that was given to them by Congress. Instead, the Commission was, and is still, concerned mostly with the railroads earning adequate revenue.

Revenue Adequacy

Congress was very concerned with railroad revenue adequacy. A railroad is considered revenue adequate when its return on investment exceeds its cost of capital. When this happens, shippers can object to increases in rates (Traffic World 5).

The ICC announced November 17, 1989, that it had finally found two Class I railroads, the Florida East Coast Railway Company (FEC) and the Norfolk Southern Corporation (NSC), to be revenue adequate in 1988. Two other railroads, the Burlington Northern (BN) and the Chicago and North Western Transportation Company (C & NW) were

"tentatively" found to be revenue adequate, subject to a final review (5).

The ICC said the cost of capital for all railroads during 1988 was 11.7 percent. The rate of return for the FEC was 14.6 percent. The return for the Norfolk Southern was 13.1 percent. The rates of return for the Burlington Northern and C & NW were tentatively set at 11.8 percent and 11.9 percent, awaiting further analysis. The weighted industry average return for all 15 surveyed carriers was 7.0 percent, up from 5.9 percent in 1987 (5).

The ICC's revenue adequacy findings were reported in Ex Parte No. 483. The ICC's decision, the first time in seven years it has found a Class I railroad to have a rate of return on investment at least equal to the industry's current cost of capital, will seriously inhibit those railroad's ability to raise rates on so-called captive shippers without undergoing government review.

In addition to losing zone or rate flexibility (where the railroads are permitted to raise rates up to 4% without regulatory review), the revenue-adequate railroads should expect the ICC to apply a much tougher standard in reasonable rate cases. However, 11 other Class I railroads failed to meet the ICC's revenue adequacy threshold. The four railroads found to be revenue adequate, tentatively or otherwise (FEC, NSC, BN and CNW), operated 74,186 miles of track in 1988, only 31 percent of all Class I railroad track in operation (6).

The last time Class I railroads were judged revenue adequate was 1982. The two lines were the Clinchfield Railroad and the Fort Worth & Denver, both of which have since been absorbed by CSX Transportation and the Burlington Northern, respectively (6).

While the nation's railroads bemoan their fate, arguing of unfair advantages by motor carriers and arcane labor laws that are bleeding them dry, their own numbers would seem to indicate a far different story. Even though the railroads defend the ICC revenue adequacy determination for 1988 by noting that it is just one year, the fact remains the industry has used the decade of deregulation following passage of the Staggers Act judiciously (7).

In 1987, revenue ton-miles per employee hour was up 17.6 percent. Between 1978 and 1987, revenue ton-miles per employee hour has doubled. From 1980 to 1987 total wages paid decreased 18 percent (AAR 56). Total labor costs in 1987 represented 42.5 percent of the railroads' revenue dollar. Ten years ago the figure was 50 percent (6).

Operating expenses declined 4.1 percent in 1987 to $23.9 billion from $24.9 billion in 1986. Net railway operating income in 1987 totaled nearly $1.8 billion, more than three times the level in the previous year. Excluding special charges, the increase in 1987's net railway operating income would have been 13.3 percent (6).

Since 1985, the average rate of return on investment has been

5.27 percent. In the years preceding this decade, the rate of return has gone over 4.22 percent just twice, at 4.70 percent in 1944 and 5.30 percent in 1929 (8).

The rate of return on shareholders' equity increased dramatically in 1987 to 8.05 percent from 2.1 percent in 1986. The average rate of return on equity from 1983 through 1985 was 8.01 percent. The average rate of return on equity for the last three years, before deregulation, was 4.26 percent (9).

New issuances of equipment debt fell to a modern-day low of $140.3 million in 1987. Total outstanding debt on equipment has been reduced to $3.5 billion, the lowest it has been in 27 years (9).

Revenue ton-miles reached a record level in 1987 of nearly 944 billion. In 1987, for the first time in memory, railroads increased on a ton-mile percentage basis the share of the intercity freight market, while trucks registered a slight decrease (11).

The average freight train in 1987 carried a record 2,644 tons of freight. The net ton-miles per train-hour, a statistic reflecting both the number of tons hauled and miles traveled during an average hour of freight train's operation averaged a record 58,703 in 1987 (11).

Ton-miles per loaded car rose in 1987 to 45,808. In the past decade, the average has increased 20 percent. In 1987, railroads generated 307 ton-miles for every gallon of fuel consumed, measuring

a 5.9 percent increase over 1986. Over the past 10 years, this measure of energy efficiency (ton-miles per gallon) has increased by 40.2 percent (12).

The measure of ton-miles per employee is sometimes used as an estimate of employee productivity. The railroads reported freight revenue ton-miles per unit of employment as 3.8 million ton-miles per employee and 1,531 ton miles per employee hour in 1987, a 17.6 percent boost over the 1986 figures (13).

These figures all indicate that the railroads are becoming healthier since Staggers deregulated interstate rail commerce. However, the individual states still regulate intrastate commerce and some continue to have an effect on railroad efficiency and profitability.

States Rights

States rights are vague with the new law. Jurisdiction over intrastate rail rates is covered in 49 U.S.C. Section 11501(a-d)(86). The Act provides that the ICC shall certify a state to set law if the Commission determines that the State's standards and procedures are acceptable. If the Commission denies certification to a state, the ICC assumes full jurisdictional authority over intrastate rates in such state. A summary of such authority as of December 24, 1985 is shown in Table VI.

The table indicates that states differ with the Federal

governments view on deregulation and its citizens continue to seek protection through economic regulation of the railroads. Therefore, most states have requested certification by the ICC to set its own laws.

Hearings on Staggers

The requests for more regulation leaves us with one question remaining about the effects of rail deregulation on our economy. Imagine that you are listening to testimony from various groups involved in the controversy about more or less regulation and that you have to decide the degree of regulation to be mandated.

The following groups expressed their views at the 1985 oversign hearing on the Staggers Rail Act before the Surface Transportation Subcommittee of the Senate Committee on Commerce, Science and Transportation.

Chairman Reese H. Taylor, Jr., submitted the views of the ICC:

> In our view, the Staggers Act and our implementation of it have been generally successful in removing unnecessary regulation, encouraging efficient carriers to earn adequate revenues and to respond quickly to satisfy shippers' changing needs, and balancing the interests of the parties in accordance with the goals of the Act. The ultimate result, we believe, has been, and will continue to be, a more healthy, competitive, and responsive rail industry (Sweeney 97-106).

He also cited the railroad industry's improved earnings in 1984 as evidence of the Staggers Rail Act success and noted that the

Table VI
State Intrastate Rail Rate Authority

States Which Have Final Certification	States Which Have Provisional Certification	States In Which ICC has Jurisdiction	States In Which No Jurisdiction Exists
Alabama	Colorado	Florida	South Dakota
Arkansas	Illinois	Idaho	Arizona
Georgia	Louisiana	Nebraska	Hawaii
Indiana	Minnesota	New Jersey	Maine
Iowa	Oklahoma	Ohio	Massachusetts
Kansas	Utah	Pennsylvania	Rhode Island
Kentucky	Washington	Wyoming	Vermont
Maryland		Texas	District of Columbia
Michigan		Alaska	
Mississippi		California	
Missouri		Connecticut	
Montana		Delaware	
New Hampshire		Nevada	
New Mexico		North Carolina	
New York			
North Dakota			
Oregon			
South Carolina			
Tennessee			
Virginia			
West Virginia			
Wisconsin			

[1] These states withdrew their applications for final certification and, consequently, the ICC has assumed jurisdiction in those states.
[2] Texas has been decertified and the ICC has assumed jurisdiction there.
[3] The Governor of Alaska filed a request asking the ICC to assume jurisdiction with the provision that it may seek certification at a later date.
[4] These states filed requests asking the ICC to assume jurisdiction.
[5] South Dakota filed a request specifically asking the ICC not to assume jurisdiction.
[6] These states took no action whatsoever.

Source: Transportation Deregulation What's Regulated and What Isn't. Sweeney, McCarthy, Kalisa and Cutler. Washington, DC 1986.

industry's rate of return on investment was the highest in 40 years.

The National Industrial Transportation League

The National Industrial Transportation League (NITL), an organization representing shippers, shippers' associations and other transportation purchasers believes that the Staggers Act has achieved a workable balance between the goals of assuring the railroads revenue adequacy and maintaining and fostering effective competition within the railroad industry.

The NITL feels the Staggers Act promotes a new environment in which shippers and railroads act as business partners and seek solutions to problems instead of bringing suit before the Interstate Commerce Commission.

However, the NITL has also mandated that it is not satisfied with the ICC's interpretation and administration of the Staggers Rail Act, criticizing the ICC for failure to give adequate emphasis to the 1980 reform law's goal of maintaining and fostering competition in this industry. NITL's testimony concluded with this caveat:

> While we would prefer a negotiated, regulatory solution to our problems, the League will not hesitate in the future to seek Congressional action to assure that the Staggers Act's competitive objectives become a reality for all shippers (99).

Consumers Union for Rail Equity

Consumers United for Rail Equity (C.U.R.E.), a leading group of shippers campaigning for legislative relief from the Staggers Act, testified at the Oversight Hearing through Edward F. Mitchell, President of Potomac Electric Power Company and Chairman of C.U.R.E. Formed in July 1984, 80 members were identified as 62 electric-generating companies and 18 coal producers. Beyond immediate membership, C.U.R.E. noted that a number of other groups and associations are working under the C.U.R.E. Coalition.

C.U.R.E.'s position on the Staggers Rail Act was summarized as follows:

> We believe the Interstate Commerce Commission's implementation of the Staggers Rail Act has focused almost exclusively on improving the financial health of the railroads and has failed to achieve two other major goals of the Staggers Act: the protection of captive shippers against unreasonable rail rates and the assurance of maximum competition between the railroads. The Staggers Act was a compromise that balanced the need for partial deregulation of the railroad industry with the need to protect captive shippers against unreasonable rates and the need to maintain railroad competition. Since efforts to achieve Commission action that implements this balance have not been successful, the members of C.U.R.E. and the C.U.R.E. Coalition now support the enactment of the Consumer Rail Equity Act, S. 477, which was introduced by Senators Andrews, Long, Ford and Stevens and has now been co-sponsored by six members of this committee, including Senators Exon, Gore and Rockefeller. These Senators all represent the view that new regulation is needed (101).

Mr. Mitchell acknowledged the ICC for working hard to improve the financial health of the railroads but criticized it for doing little to protect captive shippers or to assure competition among

railroads. He stated that captive shippers are without protection against unreasonably high rates, and underscored C.U.R.E.'s complaint by noting that the ICC has so interpreted the Staggers Rail Act that no railroad is considered revenue adequate. The Commission has yet to order any captive shipper's rate to be reduced.

Based on the ICC's performance to date, C.U.R.E. is convinced that competition among railroads and reasonable rates for shippers can only be obtained through further legislation. As examples of the inadequacy of remedies for captive coal shippers before the ICC, Mitchell noted that the situation of (1) Potomac Electric Power Company, whose coal rates increased by 80 percent from 1979 to 1984 and which has had two unresolved rate complaints pending before the ICC since 1980; and (2) the experience of Kansas City Power & Light Company, which filed a complaint about rail rates from the Powder River Basin which increased 47 percent since the Staggers Rail Act (as compared with a corresponding 27 percent increase in the Rail Cost Adjustment Factor), only to be told by the ICC that no relief is available because the Burlington Northern is not revenue adequate.

Procompetitive Rail Steering Committee

The Procompetitive Rail Steering Committee, a group consisting of major shippers and the Grand Trunk System Railroads, presented

views regarding the current status of rail regulation at the National Industrial Transportation League's Annual Meeting on November 20, 1985. Spokesman, Fred M. Zitto, explained that the group's experience under the Staggers Act has generally been excellent in situations in which there is competition.

> The problems that we have experienced have not been with the Staggers Act itself, but with the failure of the Interstate Commerce Commission to administer the Act as intended by Congress. The refusal to protect shippers and railroads alike against the anticompetitive actions of some railroads is the major complaint. (101)

Zitto pointed to the examples of the Commission's failure to promote competition in the railroad industry through cancellation of thousands of joint rates and routes, the cancellation of numerous reciprocal switching arrangements, the increase of numerous reciprocal switching charges, and the Commission's unwillingness to find a single rail rate unreasonable since the passage of the Staggers Act.

Zitto also expressed his concern that the Procompetitive Committee has become increasingly pessimistic about prospects for attaining meaningful improvement without further legislation (102).

Committee Against Revising Staggers

A contrary view was expressed before the subcommittee by the Committee Against Revising Staggers (CARS), which has 320 rail

shippers in its coalition, including shippers of manufactured goods and bulk commodities (103). Its position was presented by its Co-chairmen, William Melville of the Kennecott Company, and John Archer of Crown Zellerbach. This group's support of the Stagger Rail Act and opposition to efforts at revision is grounded on conclusions that the Staggers Rail Act is working well for shippers by providing better service and market-oriented rates. The Act is assuring shippers reliable future rail service by restoring the rail industry to financial health (103).

There are various reactions to the Staggers Rail Act among railroads. So far, the larger the railroad the greater the enthusiasm for the Act because of the railroad protection cited herein. Most of the benefits for the large railroads have come about through the enhanced ability to raise many rates free of Interstate Commerce Commission control. More importantly, it gave them broader authority to sign long-term contracts with major shippers and allowed them to abandon routes and branch lines more easily (Traffic World 11).

Since Staggers, major railroads have reduced their work force by 50 percent or nearly 250,000 people. This has resulted in an enormous reduction in operating cost. The downsizing of major railroads was eased by the ICC's policy of not imposing labor protection on line sales to regional carriers and by allowing railroads to obtain trackage rights (agreement between two carriers)

to operate over each other's lines (11).

The short line railroads believe their time has finally arrived however. "They may be longer, but we're just as wide." No one disagreed with those words at the American Short Line Railroad Association's annual meeting on September 24, 1990 (The Journal of Commerce 2B).

It is estimated that the feeder rail network (short lines) are now beginning to prosper and that they could grow to 25% of the national rail network by the year 2000. Forty percent of rail freight will then be touched by a short line (2B). The major lines problems with too much overhead, too little traffic, and too much railroad is being solved with the smaller companies low overhead and non-union status.

The American Short-line Railroad Association

The American Short Line Railroad Association (ASLRA), consisting of 285 short-line railroads, also testified at the Oversight Hearing in 1985 (Sweeney 103).

ASLRA expressed opposition to the ICC's decision to completely deregulate boxcar shipments. This ICC action eliminated any need for filing of rates and allowed railroads to quote any price they wished to charge for boxcar shipments on a day-to-day basis. ASLRA's complaint regarding an ICC boxcar deregulation decision is that it also "drastically altered the framework of car hire

compensation to favor the large Class I railroads, including the right to assess an empty movement charge of 35 cents per mile" (104).

Another concern of the short-line group relates to joint rates. Historically, short lines participated in joint single-factor rates and were accorded divisions. The Staggers Rail Act extensively revised the joint rate rules to give railroads freedom to depart from that arrangement. However, ASLRA complained that the ICC has gone too far in allowing railroads to depart from joint rates and cited court criticism of ICC in that regard (103). Regardless, "in spite of these court reversals, no solutions have been forthcoming from the Commission and joint rates have not been reinstated." ASLRA completed its testimony by issuing this warning:

> If the Commission does not respond promptly with actions that provide solutions for small railroads, then remedial action will be necessary and it may have to come from the Congress. . . (106).

Railroads Against Monopoly

Similar concerns were voiced by the MKT Railroad and Railroads Against Monopoly (RAM) through joint spokesman, Harold L. Gastler, President of MKT. He described RAM as a coalition of regional and smaller railroads which have united to remedy some of the abuses that have arisen under the Staggers Rail Act. Its membership includes the B & LE, the Florida East Coast and the Grand Trunk (104).

As primary abuses since the Staggers Act was passed, RAM cited (1) the cancellation of efficient joint rates in which members previously participated in the routes and rate negotiations with the larger railroads marketing departments and (2) the refusals of large rail connections to join with them in new joint rate proposals which again fostered monopoly by excluding the smaller railroads from involving themselves with the larger Class I railroads in the marketplace. RAM reported that the abuses cited have been brought before the ICC in various contexts, but the Commission has done nothing to rectify the problem. The regional railroads now expect no solutions from the ICC in the near future. Ultimately, RAM proposes joint rate legislation to amend the Staggers Rail Act in order to resolve these problems (104).

National Association of Regulatory Utility Commissioners

The National Association of Regulatory Utility Commissioners (NARUC) has a dual interest in the effects of the Staggers Rail Act. Member state agencies have the responsibility of regulating electric utility rates and of regulating intrastate rail transportation. Obviously, the Staggers Rail Act threatened the viability of the states' railroad regulatory systems. NARUC is deeply concerned with the prices electric utilities pay to transport domestic coal (105).

A major factor in increasing the price of coal transport as well as other commodities for captive shippers is the Interstate

Commerce Commission's startling interpretation of the Staggers Act. The rate-making standards used by the ICC bear no real relation to the cost of providing service and are different from those standards used by state regulatory commissions who are generally still regulated.

The intent of the Staggers Act was to apply regulation early to those markets where competition did not provide effective control. A market was presumed to be competitive if the revenue to variable cost was below the jurisdictional threshold (originally 160 percent and now 180 percent using the ICC's rail form, a costing method), and no rate regulation was needed for such markets. If the rates were above the threshold, rates were regulated <u>only if</u> it were shown that the railroads involved had market dominance (Railroads 100).

The dilemma was what was considered market dominance. With the role of the rate bureaus reduced, railroads were encouraged to act with greater independence. This created difficulties in an industry whose structure required a high degree of interdependence. By eliminating routes from joint rate tariffs or closing interchanges, a railroad could unilaterally close a through route (route involving two or more carriers) or relegate it to minor importance. Using this leverage a railroad could increase its revenue by seeking its longest possible haul on traffic. The removal of alternate routes meant a reduction in competition, particularly when intermediate railroads were bypassed. The same

logic promoted an acceleration of the merger movement, also intended to result in fewer, but healthier, competitors. This allowed the merged company to control more shipments over a greater portion of their hauls, reducing the need to negotiate with connecting railroads. Ultimately, the railroad industry might be reduced to a handful of giant companies, maybe even only two as in Canada (101).

In particular, NARUC is concerned with the ICC's revenue adequacy test and use of stand-alone costs to determine when monopoly rail rates are unreasonable. NARUC believes that a legislative solution is necessary to provide captive coal shippers with adequate protection against unreasonable transportation rates. NARUC wholeheartedly supports S. 477, the Consumer Rail Equity Act, which clarifies the intent of Congress in the Staggers Rail Act of 1980 by constraining the ICC from using aberrant regulatory practices; also would provide rail shippers access to rail service that is competitive and priced fairly and reasonably (Sweeney 105).

NARUC is strongly opposed to unwarranted Federal pre-emption of State Authority to regulate intrastate rail matters. Therefore, the ANRUC seeks repeal of the State certification requirement contained in the Staggers Rail Act of 1980, 49 U.S.C. Section 1150(b) while leaving the ICC free to engage in appellate review of State intrastate ratemaking decision under 49 U.S.C. Section 11501(c) as revised (105).

Brookings Institute Study

Shippers and their customers have saved $20 billion a year in transportation costs because of surface freight deregulation since 1980, a Brookings Institution study reported June 5, 1990 (Traffic World 48).

Using economic models, the Brookings study found that rail profitability increased by $2.9 billion a year, largely because the rails were allowed to reduce excess capacity by abandoning routes, cutting labor costs and other measures. The truckload sector of the trucking industry has benefitted slightly from the Motor Carrier Act of 1980, the report said. But the LTL sector has lost $5.3 billion in profits annually and that portion of the industry has lost jobs through consolidation of the industry (48).

The report states the net effect on surface freight deregulation has been a redistribution of wealth from labor and the LTL carriers to shippers, consumers and the railroads (48).

A report entitled, "The Economic Effects of Surface Freight Deregulation," found that truck service to small communities had been maintained or even improved and came at the expense of rail service abandoned by large Class I carriers or left to short-line railroads.

The report also noted that optimal rate levels have been reached in the trucking industry. Shippers could gain another $6

billion in 1977 dollars if rail rates fell to marginal costs. If rail rates fell to the marginal cost level, the rails' financial plight would worsen.

While the report did not indicate how the changes should be made, it recommended several steps to enhance competition and increase efficiency in surface transportation. These included the following items in the rail sector:

- Encouraging rails to further reduce excess capacity, improve labor productivity and increase efficiency of freight car use.
- Oppose anti-competitive mergers and promote reciprocal switching among carriers.

In the truck sector, the authors favored:

- Fully deregulating interstate and intrastate rates.
- Promoting safety by stricter enforcement and more inspections.
- Promoting carrier efficiency by making user charges more rational.

If shipper benefits or rail profitability seriously worsen, the report recommends a contingency policy that would separate rail operations and ownership of the infrastructure.

According to the report's authors, Clifford Winston, a senior fellow at Brookings; Thomas M. Corsi, a professor at the University of Maryland; Curtis M. Grimm, associate professor at Maryland; and

Carol A. Evans, a former research assistant at Brookings, this would create an interstate rail bed system similar to the interstate highway system with the users (railroads) paying a fee (toll) to operate over the system.

Railroad Unifications

The railroads have been consolidating. This may be because of the lack of sufficient return on investment which will further reduce the possibility of a "choice" when shipping rail. Appendix E shows the merger and control takeovers since 1957.

At the same time, larger Class I railroads are spinning off unprofitable portions of their railroads. These spin offs make up a large part of the growing number of regional and local carriers as shown in Appendix F, Profile of the Rail Industry by Type of Railroad; Appendix G, showing Average Size of the Various Types of Railroads; Appendix H, showing the Distribution of Railroads by State.

Conclusion

The research shows that a number of powerful groups oppose aspects of the Staggers Rail Act. Others oppose the way in which the Act has been implemented and administered by the ICC, and continue to seek legislative remedies from Congress. The results from those efforts will not be known for some time.

In a recent article in The Notice, a newsletter published by the National Industrial Transportation League, it was reported that the Senate Commerce, Science and Transportation Committee has released a General Accounting Office (GAO) study which finds that the 1980 Staggers Rail Act "has resulted in the nation's freight railroads being more competitive, efficient, and financially healthy" (157).

The GAO report, which is the first comprehensive look at the industry since enactment of the 1980 law, said shippers "have benefited in a number of ways. Real rail rates have declined an average about 22 percent since 1980, rail service has improved for many shippers, and railroads generally are more responsive to shippers' needs."

The GAO Report further states that, "Some shippers, however, have not benefited. Shippers transporting certain commodities - coal, for example - have found that rail rates did not decline as much as the average or that rates increased after passage of the Staggers Rail Act." No one railroad type can be blamed for coal, however, since all types participate in the handling of coal as shown in Table V.

Some small shippers have been unable to obtain contracts from railroads or negotiate terms as favorable as those offered large shippers. In some cases, this situation has made these shippers less competitive (157).

Other shippers have experienced increased costs and/or lost transportation alternatives because of line abandonments and the cancellation of joint rates. These outcomes were not unexpected in the transition to a more market-oriented, economically efficient system of railroad regulation (158).

As for the Interstate Commerce Commission's implementation and administration of the Act, GAO said that shippers believe that ICC's relief procedures are burdensome, time-consuming, and expensive. Shippers also believe the ICC has not acted affirmatively to curb market power abuse and/or increase railroad competition, actions the shippers believe would protect their interest (158).

Hypothesis

Based on the research, it is hypothesized that total deregulation of the nation's freight-carrying railroads is not in the public's best interest. The Interstate Commerce Commission must provide the economic protection that the Staggers Rail Act so clearly empowers it to provide.

Chapter III

SELECTIVE REVIEW AND EVALUATION OF RESEARCH

Does history always repeat itself? If it does the Railroads will return to some of the abuses that plagued us in the past and the American public will be subjected to rebates, discrimination, special rates, etc., which brought about regulation in the first place. This will come about because the Interstate Commerce has consistently acted in the interest of the railroads instead of enforcing the protections to the public that were written into the Staggars Act of 1980.

The controversy focuses on those parts of the Staggers Act where the Staggers Act did not remove the railroads from the regulations which were put in place over time starting with the Interstate Commerce Act of 1887. These continuing protections for certain railroad shippers were the subject of the compromise between those who wanted complete deregulation and those who wanted to maintain regulation and stated that certain economic regulation would remain. This compromise allowed the Staggers Act to be enacted. The allegation of captive shippers is that the Interstate Commerce Commission has, through regulatory actions, nullified these Congressional shipper protections and effectively deregulated the railroads in areas where the Congress refused to do so in 1980. The

areas of controversy between shippers and the railroads include:

1. The process and criteria by which the ICC determines if a complaining shipper is a "captive shipper" and, thus, eligible for rate relief if the ICC finds the rate in question to be "unreasonable". A captive shipper has access to only one railroad and is therefore subject to possible price gouging.
2. The process and criteria by which the ICC determines whether a railroad is, either by the price charged or by the absolute refusal to enter into an agreement with a second railroad, attempting to deny a shipper competitive transportation alternatives. This practice would keep a shipper from developing competition via another rail route, rail truck or rail barge combinations.
3. The accuracy of certain ICC accounting standards, including the index (Rail Cost Adjustment Factor) that is maintained by the ICC to adjust railroad tariffs for inflation and the test by which the ICC determines if a railroad is revenue adequate. The rail cost adjustment factor also determines how much a railroad can raise tariff rates.

Captive Shipper Issues

Captive shippers are subject to all of the economic abuses that

have plagued shippers for decades. They have complained to the Congress about: (1) the ICC's test for determining if a shipper is captive and, thus, subject to regulatory protection from unreasonable railroad rates; and (2) the test by which the ICC determines if the captive shipper rate is "reasonable." From 1980 until September 1986, on the eve of House Energy and Commerce Committee consideration of ICC reform legislation, no captive shipper had ever won a rate reduction at the ICC. Today, under Congressional pressure, the ICC has found in favor of six captive shippers, but the rate reasonableness process remains confused, burdensome, and unduly expensive.

Who is a Captive Shipper

No shipper is a captive shipper under the law and the rules of the ICC unless and until the Commission has found the shipper to be captive in a specific fact situation. A shipper may be a captive in some situations and not captive in others.

Essentially, captive shippers are those shippers who have no alternative but to ship on a single railroad. These shippers are found to be subject to "market dominance" by that railroad and, thus, have no market force that operates to assure that the rate in question is reasonable. These shippers tend to move bulk commodities that are too heavy, wide, dangerous, or uneconomic to move on the highway and have no available water or alternate rail

transportation. The ICC has found at least 12 commodities to be captive in certain circumstances. The 12 commodities include coal, wheat and barley, chemicals, corn syrup, soda ash, heavy electrical equipment, and spent nuclear fuel.

To be found to be captive, the shipper must show the ICC that (1) the rate of which he complains yields a revenue to variable cost ratio of at least 180% and (2) the shipper has no transportation alternative. The railroad defends their high rates by attempting to show that the revenue to variable cost ratio is less than 180%, or that the shipper has the benefit of "product" or "geographic" competition.

Captive shippers have no problem with the showings they must make. Captive shippers, however, are concerned about the "product" and "geographic" showings which tend to be time consuming and costly. For instance, in McCarty Farms versus Burlington Northern, a famous captive grain case at the ICC, the cost "product" and "geographic" dispute continued for five years and cost the complaining shippers approximately $1 million in consulting fees and other costs.

Captive shippers seek the removal of the "product" and "geographic" competition showings in the market dominance determination. These considerations are not required by the Staggers Act and could be removed by ICC action.

Captive shipper rates must be at least 180% of variable cost.

Variable cost refers to those costs that are directly attributable to a specific railroad movement. The revenue to variable cost ratio refers to the ratio between the rate being charged and the variable costs incurred. For instance, if a railroad charges $25 for a shipment with variable costs of $10, then the revenue to variable cost is 250%. By comparison, so-called "piggyback" rates average 112%. Most competitive rates are in the 120% to 140% range and the ICC says the railroads must average 150% across all traffic to be "revenue adequate."

Captive shippers do not complain about the 180% minimum but are concerned at how high above 180% the rate may be. ICC rate cases have revealed revenue to variable cost ratios ranging as high as 1200%.

Under the ICC's implementation of the Staggers Act, the captive shippers carry the burden of proof on rate reasonableness and all benefits of the doubt run with the railroads. The basic rate reasonableness test of the ICC is "stand alone cost" - how much it would cost the shipper to provide his own hypothetical, efficient transportation alternative. This test has worked well for some captive shippers where the volumes are great and the transportation corridor is densely traveled. However, in other fact situations, the test is unrealistic and appears to be in the process of being rejected by the ICC for non-coal commodities. In all circumstances, the test is burdensome and costly. A small army of consultants and

experts is used to structure and cost out, line item by line item, a complete but hypothetical railroad (or other alternative).

Captive shippers seek the same test for all commodities and a more simplified test that can be based on "stand alone cost." In the summer of 1988, the captive shippers and the CSX and Union Pacific railroads agreed on a simplified rate reasonableness test that was included in Senator Rockefeller's compromise ICC reform legislation considered by the Senate Commerce Committee.

The Staggers Act does not require the ICC's present rate reasonableness test and the ICC has the authority to simplify this test.

Rail Cost Adjustment Factor

A prominent and legitimate railroad complaint during the 1979 hearings that led to the Staggers Rail Act was that "regulatory lag" at the ICC frustrated the railroads' ability to increase their rates to reflect increases in their costs of goods and services. The Staggers Act, therefore, created a rail inflation index, called the Rail Cost Adjustment Factor (RCAF), to be calculated on a quarterly basis by the ICC, and provided that a railroad would be allowed (but not required) to increase any rate by the RCAF adjustment free of any rate challenge from the ICC.

The proper implementation of the RCAF mechanism is of concern to many shippers who are otherwise not captive, since the RCAF is

used as the inflation escalator clause in many of the 55,000 railroad contracts that have been entered into since 1980.

Shippers argue that there have been two principal problems with the ICC's implementation of the RCAF: its failure to reflect corresponding decreases in rail rates when railroad costs decrease, and its failure to reflect railroad productivity gains.

After close and quite hostile questioning from the Congress about the failure of the RCAF to reflect rate decreases based on rail cost decreases in the wake of the collapse of OPEC in December 1985, the ICC revised the RCAF in 1986 such that the index and those tariffs that implemented changes in the index would move down as well as up, in accordance with changes in costs.

The second problem, the productivity issue, has been the subject of a controversy that began in 1981. As implemented by the ICC, the RCAF would only measure changes in the prices railroads pay for goods and services, and not actual costs including productivity. For example, the railroads today employ half as many workers while moving the same volume of freight as they did in 1980, but average annual wage rates have increased by 87% during the same period. The RCAF, as currently implemented, reflects the 87% increase in wage rates but not the 50% reduction in work force. After a 1982 court order, two rounds of administrative rulemaking, the report of the Railroad Accounting Principles Board (see discussion below) and receipt of an independent consultant's report,

the ICC finally proposed in November 1987 to include a productivity adjustment to the RCAF. A number of technical and subsidiary policy issues are included in the rulemaking, but the ICC did recently complete the rulemaking. The public won on this issue and railroads must now adjust for productivity when calculating the RCAF.

Competitive Access

Shippers have focused their complaints about the ICC on the so-called "competitive access" issues. These issues concern several long-standing, traditional railroad industry practices known as joint rates, reciprocal switching and terminal trackage rights. In all these cases, one railroad which controls service at the point of origin or destination agrees to allow another railroad to provide competitive service over the portions of the route that both carriers serve. In the previously regulated scheme, where rates were effectively equalized between points, these arrangements were quite common.

Since 1980, railroads have cancelled hundreds of thousands of such arrangements, significantly diminishing the number of competitive choices available to shippers. Railroads argue that they are merely streamlining the rail system and eliminating circuitous and inefficient routings. However, the General Accounting Office has identified anticompetitive motivations behind many such cancellations, and Judge Richard Posner of the United

States Court of Appeals for the Seventh Circuit has criticized the ICC's reliance upon mere economic theory in allowing such cancellations to take place without adequate regulatory scrutiny.

The negotiations with the railroad industry in general, and the CSX and Union Pacific railroads in particular, revealed that the railroads view the competitive access issues as being very important to them. Nonetheless, Congress did give the ICC enhanced authority in the Staggers Rail Act to promote railroad-to-railroad competition. The ICC can, under its existing authority, improve competitive alternatives to some shippers and, therefore, let the marketplace rather than regulators govern transportation arrangements for those shippers. By withholding access from their competition, railroads can raise prices and even discriminate between shippers, or show favoritism to industries or regions which help them economically or politically.

Revenue Adequacy

The Interstate Commerce Act directs the ICC to generally assist rail carriers in achieving "revenue adequacy," which is defined by law as earning sufficient revenues to cover all fixed and variable costs and a reasonable profit. The concept of "revenue adequacy" was introduced in 1976 by the 4R Act and since then railroads and their customers have feuded almost continuously before the ICC on how revenue adequacy should be measured. After the passage of the

Staggers Act, the ICC revised its revenue adequacy test even though the relevant law was not changed. This revised test broke away from long settled concepts and experience used in state utility regulatory agencies, and was virtually unique in regulatory law. As a direct result, the ICC then found virtually no major railroad to be revenue adequate - a finding repeated every year since the adoption of the revised test.

As cash-rich railroads continued to acquire each other, their truck and barge competitors, and numerous diversified investments such as oil and gas properties and resorts, and as former Transportation Secretary Elizabeth Dole urged Congress to sell Conrail to the "highly profitable" Norfolk Southern, the ICC's annual findings that all railroads were severely "revenue inadequate" became increasingly indefensible. Finally, at Senate hearings in February 1986, several weeks after a singularly unsuccessful defense of the revenue adequacy test in House hearings, ICC Chairman Gradison conceded that the test was badly flawed and did not accurately reflect the railroads' financial health.

Shortly thereafter, the Commission formally proposed to make several far-reaching changes to more closely align its revenue adequacy test to settled regulatory principles. However, after ICC reform legislation failed by one vote in the House Energy and Commerce Committee in September 1986, the Commission reversed course and adopted just one significant change.

In the years immediately following passage of the Staggers Act, numerous ICC rulemaking and rate case decisions favoring the railroads were premised on the Commission's perception (based on the test it subsequently conceded to be flawed) that the railroad industry was revenue inadequate. More recently, the ICC has de-emphasized the concept of revenue adequacy in its decision making, while acknowledging that railroad revenue adequacy remains an important policy goal.

The de-emphasis of revenue adequacy has diminished shipper interest in all but one facet of the revenue adequacy test. In its 1986 revisions, the ICC directed the railroads to convert to depreciation accounting for their track structures and said it would permit railroads to "write-up" certain assets already expensed under the previous accounting system. According to the Railroad Accounting Principles Board (RAPB), which is discussed in greater detail below, this change may have added as much as $7 billion to railroad investment base. This investment base will significantly distort for a number of years the picture of railroad revenue adequacy. Although the RAPB's Final Report urged the ICC to reconsider this issue, the agency has refused to do so.

Railroad Accounting Principles Board

The ICC's regulatory responsibilities require it to maintain a substantial involvement in many detailed accounting issues. The

variety and complexity of these issues put them far beyond the reach of a policy level discussion, but there is no question that these accounting issues can and do substantially affect the outcome of the policy issues. Recognizing this importance, the Staggers Act created the Railroad Accounting Principles Board (RAPB) to study the ICC's accounting functions and issue accounting principles, which the agency is obligated by law to adopt. Congress failed to provide funding for the RAPB for several years, however, the Board's Final Report was not issued until September 1987.

As it was finally constituted, the Board consisted of representatives from the ICC's competing constituent communities and accounting experts, and was chaired by the Comptroller General. The Board and its Final Report were virtually unanimously perceived as being impartial, unbiased, and firmly grounded in sound accounting as opposed to regulatory or policy premises. Some of the Board's significant regulatory recommendations are disputed by the railroads, including its recommendation that the ICC include a productivity adjustment to the Rail Cost Adjustment Factor and its recommendation that the ICC revisit the revenue adequacy "double write-up" issue discussed previously. Nonetheless, the Board's Report and its general accounting principles remain touchstones of impartiality in an otherwise often contentious arena.

Ninety-ninth Congress (1985-1986)

The Consumer Rail Equity Act was first introduced in the Senate and House in February 1985. This legislation, which was referred to the Senate Commerce Committee and the House Energy and Commerce Committee, contained the reforms sought by the captive shippers.

Hearings were held in 1985 and 1986 in two subcommittees of the House Energy and Commerce Committee. The primary House proponents of the legislation were Representatives Billy Tauzin (D-LA), Hal Rogers (R-KY), Nick Rahall (D-WV), and Tom Tauke (R-IA). The ICC reforms were added to the Conrail Privatization Act of 1986 in subcommittee and were stripped from the bill in full committee the next day by a one-vote margin. Several Republican members of the committee, including one co-sponsor, voted against the reforms under very heavy lobbying from the Administration to report a "clean" Conrail bill.

Hearings were held in the Senate Commerce Committee in both 1985 and 1986. The primary proponents were Senators Russell Long (D-LA), Mark Andrews (R-ND), Wendell Ford (D-KY), Ted Stevens (R-AK), and John D. Rockefeller, IV (D-WV). Chairman John Danforth (R-MO) refused to allow a markup on the legislation during the 99th Congress.

One Hundredth Congress (1987-1988)

During the fall of 1986, following the September defeat in the House Energy and Commerce Committee, captive shippers seriously

considered dropping the legislative effort. The members of the House Committee were pressuring the ICC for reforms and the ICC had promised reforms in a number of pending matters. However, between October 1986 and January 1987, the ICC issued a series of decisions that indicated that the promised reforms were not to be. Captive shippers recommitted themselves to legislative action.

Hearings were held in the Transportation Subcommittee of the House Energy and Commerce Committee during the first six months of 1987. The major House proponents were now Representatives Rick Boucher (D-VA), Tom Tauke (R-IA), Billy Tauzin (D-LA), Michael Bilirakis (R-FL), Hal Rogers (R-KY), and Nick Rahall (D-WV). Following the hearings, Subcommittee Chairman Tom Luken (D-OH) instituted a process of negotiation between the shippers and railroad that produced no consensus. Chairman Luken then proposed a compromise ICC reform bill that was reported by the subcommittee on November 5, 1987 by a vote of 9-6. The legislation was never considered by the full House Energy and Commerce Committee, where it enjoyed the support of Chairman John Dingell (D-MI).

Hearings were completed in the Transportation Subcommittee of the Senate Commerce Committee during the first six months of 1987. The major proponents of reform in the Committee were Senators John D. Rockefeller, IV (D-WV), Ted Stevens (R-AK), and Brock Adams (D-WA). After the Hearings, there followed a long period of negotiation between the shippers and railroads; Senators

Rockefeller, Stevens, Adams and their colleagues; and, finally, several chief executive officers of railroads and shipper companies.

These efforts resulted in Senators Rockefeller, Stevens, Adams and Nancy Kassebaum (R-KS) submitting compromise legislation to the Senate Commerce Committee in September 1988. The compromise was defeated by a vote of 10-9 on September 20, 1988, with the assistance of the active opposition of the Administration, the full Committee chairman and Subcommittee Chairman and the ranking minority members of the full Committee and Subcommittee. The margin of error was again provided when a co-sponsor was prevailed upon by the Administration to vote against the legislation. Following the vote, a bipartisan group of 14 of the 20 Committee members wrote a letter to the Commission warning that the Commission must reform its practices or face Congressional action in 1989.

The Administration

The Reagan Administration strongly supported partial deregulation of the railroads and consistently advocated the complete deregulation of the motor carrier, household goods, freight forwarder, bus, and inland water transportation industries and termination of the ICC. Under this Administration's plan, ICC rail activities would be transferred to the Department of Transportation and rail antitrust matters would be policed by the Department of Justice. The handling of

consumer protection complaints regarding household goods movers would be administered by the Federal Trade Commission. Labor has opposed the further efforts at deregulation by the Bush Administration, and Congress has never seriously considered legislation to abolish the ICC. President Bush has said very little about further transportation deregulation. The President, however, chaired the Reagan Administration's Task Force on Regulatory Reform and has generally been sympathetic to many of the initiatives proposed by the Reagan Administration. In general, the President is in favor of greater competition and lessening of regulation where it is possible to do so.

It would seem that without the abolishment of the ICC or stronger Congressional action, the Interstate Commerce Commission will continue to ignore its responsibilities to the public as so clearly stated in the Staggers Act. It would also seem that for some reason members of the Interstate Commerce Commission believe they understand the issues better than Congress did when they agreed to enact Staggers.

Leveraged Railroads

1989 Results In Brief

(Expressed as a Percentage of Gross Revenue)

	ATSF	CNW	IC	SP[b]
Gross	100.0	100.0	100.0[a]	100.0
Operating expenses	92.1	93.2	84.4	101.0
Operating income	7.9	6.8	25.6[a]	(1.0)
Other income	4.3	6.6	1.9	12.6
Fixed charges	0.3	12.8	15.0	5.5
Pretax margin	11.9	0.6	2.5[a]	6.1

[a]Through a purchase accounting adjustment, depreciation charges equal to about seven percentage points of revenue were magically eliminated; cash flow did not change. Without this "adjustment," a loss equal to about 4.5% of gross would have been reported.

[b]Rough consolidation from statutory reports; known intercompany items eliminated. No consolidated figures available (Grants.11).

Chapter IV

RESULTS

The data introduced in previous chapters have shown that railroad deregulation has had a profound effect on the availability and cost of rail service in this country as well as the economic well-being of the railroads themselves. The railroads were too regulated, but now under deregulation, the railroads may have too much freedom without the Interstate Commerce Commission's involvement. This involvement was expected by Congress in the forming of the Staggers Rail Act of 1980.

The rail industry in this country is comparable to a utility in the sense that each and everyone of us depend on the rails for movement of commerce. If, and when, rail service is lost to a community or geographic area, the producers and consumers of that community have to depend on alternate modes for the movement of goods. Obviously, air is more expensive than rail and in most cases, so is truck. Therefore, the cost of everything you consume as well as what you produce, increases as transportation cost increase.

If you are a consumer you do without, substitute, or go ahead and pay the higher price. When you pay the higher price, it is called inflation. If you are a producer, you have to raise prices

to recoup the increased cost of transportation. The problem with this is you may lose the sale if you raise your price if your competitor's distribution mode (foreign or domestic) has not been affected by increased cost. When you lose enough sales, you lay people off. When people get laid off, they cannot pay their bills nor are they consumers to the degree they were in the past. This causes a ripple effect throughout the economy. If unemployment is high and, therefore, disposable income is low, people stop buying. This causes more jobs to be lost and the cycle starts all over again.

Railroads raising reciprocal switching charges (the charges one railroad charges another) or raising freight rates because of lack of competition, or closing an industry (effectively closing out your competition by refusing to switch your competition's freight) is not going to cause the demise of our economy, but it does have profound effects on those who are victimized by such actions.

Examples of actions which cause problems are those which parallel the actions of the Southern Pacific Railroad to raise reciprocal switching charges to $460 per car; or actions of Conrail to close all routes with competing carriers, forcing people to ship over their railroad; or the CSX Railroad not allowing a competing railroad to haul traffic into an industry which they serve. This is not intended to pick on any of these companies by naming them specifically, because all the railroads are guilty of these actions,

not just the ones named.

In Chapter Two, we saw some of the results of railroad deregulation. We reviewed the comments of various groups of people, companies, and industries that oppose deregulation and some who support it. The data presented in this chapter will show that railroad deregulation is additionally causing financial chaos in the rail industry itself.

Railroad Debt

Railroads typically have not fared very well economically. Debt-laden railroads are struggling again, and why shouldn't they? The average railroad is the photographic negative of the model debtor. Railroads are cyclical, capital-intensive and still somewhat regulated. They are characterized by low margins and high, fixed operating costs. Furthermore, there is only so much that a railroad can do to manage its way out of trouble. Business conditions, the flow of traffic, and the level of rates are beyond its control. Labor and raw materials are not a meaningful part of the total value of its finished product. You cannot push a button, or shut down a production line and thereby slash costs. Braking the cost on a railroad is a little like attempting to stop a speeding locomotive.

Capitalization and Reorganization

The cycle of railroad capitalization and reorganization is almost as old as the iron horse itself. In the 15 years up until 1899, for instance, 521 American railroads fell into receivership. The bankrupt lines were capitalized to the tune of $5 billion, about equally divided between stocks and bonds, a colossal sum for that day. When the railroads were not overexpanding or overborrowing, they were debating with the Interstate Commerce Commission over an adequate rate of return. "One fact you learn in ranching," a Wyoming man told writer Ian Frazier, "is that things have a tendency to die." Debt-bound railroads have a tendency to fail (Grants 6).

If J. P. Morgan could overburden the New Haven Railroad in a time of low-interest rates and more or less sane, financial practices, the odds are overwhelming that railroads could overburden themselves with debt today.

During the fall of 1990, Grant's reviewed the new CNW junk bonds prospectus. The bonds - $475 million's worth of 14 1/4 percent senior notes at par, due in 2001 - came to market, albeit at a higher yield than the issuer had hoped. The bid price was 90, having sunk into the 80's.

An unidentified railroad consultant states:

- Even in a time of nominal prosperity, leveraged railroads have been laboring.
- It is a cinch they will labor harder in any future business downturn, as they are capitalized for prosperity.

- Railroad financial results, in general, turned down in the second half of 1989.
- The Southern Pacific is suffering from cash-flow problems and may be the weakest sister of the lot.
- The CNW is falling short of bullish expectations, its success in reducing its operating expenses notwithstanding. Of the five Western railroads tracked by The Journal of Commerce for monthly changes in traffic, only the Chicago and North Western reported a decline for the four weeks ending March 3, 1990.

What the financial engineers of the 1980's did not know is that railroading is the most complex and difficult service business in the world. A railroad is selling a perishable commodity, space in time, which is moving. If that space is not sold, the cost is incurred, but no revenue results.

Typical Railroad Income Statement

Revenues	100%
Expense	89.7%
Gross Margin	10.3%
Other Income	4.5%
Fixed Charges	(3.4%)
Pretax Net Income	11.3 (Grants 10)

"In the first half of 1989, the gross margin and pretax net was slightly higher, up one point, or 10 percent. In the second half

results were considerably worse, and the full-year percentages are expected to be below the year 1987, which was in the middle of recent full-year outcomes (1988 and 1984 better; 1983, 1986, worse)" (Grants 7).

Putting this in context, the recent experience is the best that one can reasonably expect for a couple of reasons. We are probably at the end of a long uptrend in the economy. The industry has downsized severely, so that current expenses reflect major personnel cuts and branch-line sales or abandonments. Diesel-fuel prices were at a low point in 1987-88, and seem unlikely to fall lower. There is again serious talk of increasing load limits for truckers and some major waterway bottlenecks are being eliminated. Further, rain on the headwaters of the Mississippi/Missouri system in 1990 relieved a three-year drought that had helped rail rates and volume.

> "If there is not much upside, what happens on the downside? To hang on to volume, railroads always cut rates. Even if the business is protected by a contract, the rate structure is not commercially enforceable if a cheaper alternative is offered. Expenses do not go down, at the same volume level, and overheads are so small in relation to total expense that no amount of belt-tightening will have a meaningful effect on the bottom line. Consequently, the cuts in price (i.e. rates) made to hold volume come directly through to profitability. A cut of 5 percent in average rates in such a situation will reduce pretax net by nearly 50 percent" (Grants 11).

According to The Journal of Commerce, Congress is almost certain to give the Interstate Commerce Commission more power to

review leveraged buy-outs of railroads.

The House is expected to consider a House-Senate compromise version of a bill that gives the ICC greater authority to examine railroad sales financed with borrowed funds.

Congressional approval would mark a political defeat for the railroad industry because several major rail lines oppose the leveraged buy-out review plan. Under current law, the ICC must approve the acquisition of one railroad by another. Pending bill provisions would extend that authority by ordering the commission to approve the purchase of a major railroad by an individual or company that does not currently own one. Several issues must be addressed in the ICC review, including the amount of fixed charges resulting from the transaction and the railroad's ability to cover debt payments using cash flow and other accepted measures.

According to an article in Traffic World, leveraged buy-outs are occurring with greater frequency than ever in transportation. Some examples of LBO activity include:

- CNW Corporation, parent of Chicago and North Western Transportation Company, was taken over by Blackstone Capital Partners, an investor group including CNW management. Total debt load: $1.3 billion, twice what is was before the transaction.
- Illinois Central Transportation Company, parent of the Illinois Central Railroad Company, was bought out by

Rail Acquisition, Incorporated, a subsidiary of the Prospect Group, Incorporated; total price: $434 million, which included more than $5 million to Merrill Lynch Capital Markets, which arranged the transaction. During 1990, another LBO was launched making the railroad a separate and distinct company (Illinois Central Railroad).

- Union Pacific Corporation underwent an internal restructuring which had the same conceptual impact as a LBO.

Analysis

In short, for leveraged railroads, nothing less than prosperity will do. The new-era enthusiasts will say, "We can always sell assets," or, "we have this excess real estate." It would be nice to be able to sell one's real estate, but in a bear market it is not always possible to get the market price.

As we can deduce from the data submitted in this chapter and Chapter II, there are serious factors affecting the future of American Railroads and the industry they serve under the current regulation. The only choice railroads may have left to them will be to renew whatever practice that will increase revenues.

Chapter V

DISCUSSION

The public has been blinded to the real effects of railroad deregulation by the popular cry and general concensus that freight rates have gone down. It is the author's belief that the recent cost efficiencies of the railroads have been brought about primarily by new, innovative, market-oriented, top management teams that have brought the railroad industry out of the nineteenth century into the beginning of the twenty- first century. Admittedly, deregulation has helped in this process but it was certainly not the cause of it.

As new abuses are allowed under deregulation, the cry will ring out louder and louder for Congress, directly or through the Interstate Commerce Commission, to re-regulate those areas where economic abuses could be formulated. The areas where the public needs economic regulation today to protect them are in the following areas:

- Reciprocal switching charges: Do not allow a rail carrier to charge more than 180% of variable cost or 150% of full cost to the competing carrier.
- Access to industries: Open up all industry to allow for access by all rail carriers through reciprocal switching.
- Joint routes/joint rates: Obligate carriers to join in

such arrangements at the shippers request.

In addition, the railroads should be protected by insuring against highly leveraged buyouts of rail companies. Several railroads have been acquired in recent years through highly-leveraged purchases. As shown in Chapter III, the Atchison, Topeka and Santa Fe, CNW, Illinois Central and Southern Pacific railroads are all examples of this. A slight downturn in the economy could spell disaster for these railroads, making the government bail out of Penn Central during the last decade seem small in comparison.

In the next few years, all of these questions will be addressed and if we are smart enough to use our collective clout, they will be corrected. The Interstate Commerce Commission is already taking a fresh look at things with the new Commissioner and Chairman, Edward Phibin. This, coupled with the efforts of The Consumers United for Rail Equity (C.U.R.E.), a group of shippers advocating re-regulation and the National Industrial Traffic League (N.I.T.L.), a shippers group who acts as a watchdog against all carriers, gives us the opportunity to make the profound changes cited in this work.

Since the beginning of regulation in 1887 when Congress passed the act to regulate commerce, we have been inundated with continuous regulation. Regulation upon regulation was passed to protect the public from the railroads. The temptations of the free market were too numerous and the rewards so great that the railroads committed abuse after abuse followed by regulation after regulation as shown

in Appendix B.

This cycle of abuse and regulation continued for 93 years until the passage of the Staggers Act, which re-regulated or deregulated (depending on one's point of view) the railroad industry. Since that time, controversy about the intentions of Congress in passing the Act were continuing. The views that were expressed at the 1985 oversight hearings on the Staggers Act before the surface transportation subcommittee of the Senate committee on commerce, science and transportation (page 29) are examples of the continuing debate. After many of the country's largest shippers and shippers groups lobbied unsuccessfully in these hearings to get the Interstate Commerce Commission to enforce the shipper protection parts of the Act, the shipping public have given less attention to these issues and have focused more than ever on helping the railroads to become more cost efficient. Several initiatives have come about in recent years.

The Elkins Act exemptions is one area where the railroads were recently given an exemption by the Interstate Commerce Commission from its regulations. The Elkins Act exemptions permit railroads to engage in certain industrial market development activities that were previously classified as rebates. These exemptions were the result of a joint proposal made in 1990 by the National Industrial Transportation League and the Association of American Railroads (The Notice 357). This may be the vanguard of a new era of cooperation,

or is it a Trojan horse?

The list of issues/bills pending before the House and Senate this year has shrunk substantially over the past decade as demonstrated by the following: (The Reporter Circular 91-36)

Issue/Bill Number	House Status	Senate Status	Outlook
Ending the rail strike: H.J. Res. 222	4/17	4/17	Signed into law 4/18 as Public Law 102-29
Development of MagLev and High Speed Trains: H.R. 1087, H.R. 1452, H.R. 2941, S. 811	Commerce ordered H.R. 1087 reported 11/8 (H.Rep. 102-297). Public Works has sequential referral until 2/28. H.R. 2941 ordered reported 11/7 (H. Rep. 102-417). Commerce and Public Works each have sequential referral until 3/6. Issues also incorporated into H.R. 2950.	Passed 10/22 (S.Rep. 102-163). Issues also incorporated into H.R. 2950.	Chances of enactment are good.
Reauthorization of Short-Line and Local Assistance Programs: H.R. 947, H.R. 1425, S. 641, S. 1060	Incorporated into H.R. 2607	Incorporated into S. 1571	Chances of enactment are uncertain.
Rail coal rates Study: H.R. 776, S. 1220	Favorably reported by Commerce's Energy Subcommittee. Pending full committee	Pending floor consideration (S. Rep. 102-72)	Chances of enactment are likely.

Issue/Bill Number	House Status	Senate Status	Outlook
Reauthorization of Federal Rail Safety Programs: H.R. 2607, S. 1571	Passed 9/23 (H. Rep. 102-205)	Pending floor consideration (S. Rep. 102-219	Chances of enactment are good

This small number of issues reflects the changing relationship between railroads and shippers and has come about largely because of the public sharing of the benefits of deregulation. The Brookings Institute Study referred to in Chapter 2 (page 41) reported that shippers and their customers have saved $20 billion a year in transportation costs since 1980 because of surface freight deregulation, in part due to railroad deregulation. The railroads' gains have been largely in the arena of labor cost and efficiency. The most recent labor reductions were noted as tax write-offs announcements hit the financial newspapers this spring (Traffic World 33). It was reported that the Norfolk Southern took a special charge of $450 million. The charge was for severence pay for an unreported number of union employees. The Southern Pacific reported in the same article a $270 million special charge resulting from the elimination of 700 train crewmen. The Burlington Northern Railroad reported a special charge of $708 million for employee reductions, environmental clean-up costs, and federal employee liability association claims.

The railroad employees have seen work rule changes and train

crew reductions take place while their unions stand by almost powerless as the administration and Congress authorize presidential emergency boards to mediate. These Boards were ultimately given manditory arbitration powers. The union members have been disappointed by Congress and their rail labor leaders (Traffic World 34). It is almost like the focus of everyone has moved to labor and efficiency and away from abuse of the public as a way to raise revenues. Will the railroads return to the public to increase revenues? This remains to be seen.

Based on the research, it is hypothesized that total deregulation of the Nation's freight-carrying railroads is not in the public's best interest. The Interstate Commerce Commission must provide the economic protection that the Staggars Rail Act so clearly empowers it to provide.

The research clearly supports this hypothesis by showing that (1) the railroads can monopolize economic transportation; (2) that this monopoly can result in the uneconomic distribution of goods which disrupts domestic and foreign commerce; (3) that given this opportunity, railroads will take advantage; and (4) that the Congress recognized this and to protect the public empowered the Interstate Commerce Commission to control economic abuses.

Limitations

Collecting data for this study was flawed primarily by the long

history of the subject (100 years) and the vast amount of data available on both sides of the issue. Presenting the data in such a quality way to be supporting of the hypothesis was extremely difficult.

Suggestions for Future Research

It is recommended that a study of this type be compressed into a tighter time frame for completion. It is also recomended that the subject be limited to a shorter period of history for study. As an example, this study could have been limited to the post Staggers era.

APPENDIX A

MAJOR PROVISIONS OF THE INTERSTATE COMMERCE ACT

1. All charges made for services by carriers subject to the act must be reasonable and just. Every unjust and unreasonable charge is prohibited and declared to be unlawful.

2. The giving of any undue or unreasonable preference, as between persons or localities, or kinds of traffic, or the subjecting any one of them to undue or unreasonable prejudice or disadvantage, is declared to be unlawful.

3. Reasonable, proper and equal facilities for the interchange of traffic between lines, and for the receiving, forwarding and delivering of passengers and property between connecting lines is required and discrimination in rates and charges as between connecting lines is forbidden.

4. It was made unlawful to charge or receive any greater compensation in the aggregate for the transportation of passengers or the like kind of property under substantially similar circumstances and conditions for a shorter than for a longer distance over the same line in the same direction, the shorter being included within the longer distance. (Note - Since 1911, departures from this provision may be permitted by the Commission.)

5. Contracts, agreements or combinations for the pooling of freight of different and competing railroads, or for dividing between them the aggregate or net earnings of such railroads or any portion thereof, are declared to be unlawful. (Note - Since 1920, pooling may be permitted by permission of the Commission.)

6. All carriers subject to the law are required to print their tariffs for the transportation of persons and property, and to keep them open to public inspection at every depot or station on their roads.

7. An advance in rates is not to be made until after ten days' public notice, but a reduction in rates may be made to take effect at once, the notice of the same being immediately and publicly given. The rates publicly notified are to be the maximum as well as the minimum charges which can be collected

or received for the services, respectively, for which they purport to be established. (Note-The Act now requires 30 days' notice of all changes.)

8. Copies of all tariffs are required to be filed with this Commission, which is also to be promptly notified of all changes that shall be made in the same. The joint tariffs of connecting roads are also required to be filed, and also copies of all contracts, agreements or arrangements between carriers in relation to traffic affected by the Act.

9. It is made unlawful for any carrier to enter into any combination, contract or agreement, expressed or implied, to prevent, by changes of time schedules, carriage in different cars, or by other means or devices, the carriage of freight from being continuous from the place of shipment to the place of destination.

APPENDIX B

PARTIAL LISTING OF CASES AGAINST RAILROADS - 1887-1980

Adel Canning and Pickling Co. v. G&F R. Co.-287 I.C.C. 239; 293 I.C.C. 22.
Aerovias Sud Americana v. ACL R. Co.-286 I.C.C. 85.
Ahonen Lumber Company v. Copper Range R. Co.-284 I.C.C. 267.
Alabama Grocery Co. v. AT&SF R. Co.-182 I.C.C. 159; 197 I.C.C. 726; 206 I.C.C. 559.
Alabama & V. Ry. Co. v. J&E Ry.-271 U.S. 244.
Albany Port District Comm. v. A&W Ry.-219 I.C.C. 151.
Allenberg Cotton Co., v. AGS R. Co.-289 I.C.C. 71.
Allen Industries, Inc. v. Penna. R.R. Co.-280 I.C.C. 118.
Alliance Motor Co. v. CB&Q R. Co.-196 I.C.C. 408.
Allied Oil Co. v. A&S R. Co.-279 I.C.C. 95.
Alston-Lucas Paint Co. v. AGS R. Co.-286 I.C.C. 249; 288 I.C.C. 211.
Ambrose & Son v. AT&SF Ry. Co.-277 I.C.C. 17; 278 I.C.C. 433; 280 I.C.C. 1.
American Asphalt Roof. Corp. v. AT&SF Ry. Co.-156 I.C.C. 147.
American Barge Line Co. v. Alabama G.S.R. Co., 306 I.C.C. 167.
American Cotton Waste & Linter Exch. v. B&O R. Co.-169 I.C.C. 710.
American Insulated Wire & Cable Co. v. C&NW Ry. Co.-26 I.C.C. 415.
American Laundry Machinery Co. v. IC R. Co.-284 I.C.C. 788.
American Newspaper Publishers Assn. v. AT&SF Ry. Co.-288 I.C.C. 7.
American Newspaper Publishers Assn. V. B&A R. Co.-157 I.C.C. 729.
American Potash & Chem. Corp. v. AT&SF Ry. Co.-258 I.C.C. 743.
American Sand & Gravel Co. v. C&NW R. Co.-148 I.C.C. 343.
American Scrap Material Co. v. B&O R. Co.-197 I.C.C. 44.
Andrews Bros. v. A&G R. Co.-286 I.C.C. 579.
Anker Meat Co. v. GN R. Co.-281 I.C.C. 179.
Apex Tire & Rubber Co. v. NYNH&H R. Co.-277 I.C.C. 1.
Arco Trading Corp. v. Mo. Pac. R. Col, 314 I.C.C. 225, 227.
Arizona Flour Mills v. S.P.R. Co.-281 I.C.C. 123.
Arizona Grocery Co. v. AT&SF Ry. Co.-284 U.S. 370.
Arizona Sand & Rock Co. v. SP R. Co.-280 I.C.C. 285.
Arizona Seed & Floral Co. v. AT&SF Ry. Co.-198 I.C.C. 208.
Arkadelphia Milling Co. v. St.L&SW Ry. Co.-249 U.S. 134.
Arkansas Oak Flooring Co. v. L&A R. Co.-166 F. 2d 98.

Armour & Co. v. Alton R., 312 U.S. 195.
Armour & Co. v. AT&SF Ry. Co.-288 I.C.C. 243.
Armour & Co. v. CB&Q R. Co.-215 I.C.C. 537.
Armour & Co. v. CMStP&P R. Co.-188 F. 2d 603; 342 U.S. 860.
Armour & Co. v. Lou. Sou. Ry. Co.-190 F. 2d 925; 342 U.S. 913.
Armour & Co. v. NYC R. Co.-258 I.C.C. 641.
Armstrong v. A&R R. Co.-96 I.C.C. 595.
Armstrong Tire & Rubber Co. v. IC R. Co.-289 I.C.C. 635.
Armstrong Tire Co. v. Penna R.R. Co.-280 I.C.C. 752.
Associated Bristol, Tenn. Retail Coal Dealers v. Sou. Ry. Co.-283 I.C.C. 387.
Associated Tele. Co. v. C&NW Ry. Co.-251 I.C.C. 311.
Atlantic City Coal Dealers Credit Bur. V. AC R. Co.-203 I.C.C. 470.
Atlantic CL R. Co. v. Seaboard Air Line R. Co.-286 I.C.C. 669.
Atlas Novelty Co. of Chicago v. Penna R.R. Co.-277 I.C.C. 116.
Auburn Mills v. C&A R. Co.-216 I.C.C. 1.
Auburn Mills v. C&A R. Co.-222 I.C.C. 495.
Bacon Bros. V. AGS R. Co. (Fancy Farms Case)-263 I.C.C. 587; 266 I.C.C. 303; 269 I.C.C. 571.
Bacon Bros. v. AGS R. Co.-263 I.C.C. 596.
Badger Lbr. & Coal Co. v. AT&SF Ry. Co.-156 I.C.C. 427.
Baer Bros. Merc. Co. v. D&RGW R. Co.-233 U.S. 479.
Baker & Holmes v. ACL R. Co.-132 I.C.C. 723.
Bama Lbr. Corp. v. AC R. Co.-279 I.C.C. 550.
Banana Distributors, Inc. v. GM&O R. Co.-284 I.C.C. 709.
Barbasol Co. v. A&R R. Co.-274 I.C.C. 379.
Barber Asphalt Co. v. L&N R. Co.-88 I.C.C. 307.
Bardes Forge & Foundry Co. v. B&O R. Co.-273 I.C.C. 273.
Barnes Lbr. Corp. v. Sou. Ry. Co.-287 I.C.C. 44.
Barth Smelting Corp. v. CNJ R. Co.-279 I.C.C. 149.
Baumer Foods Co. v. AT&SF Ry. Co.-284 I.C.C. 38; 287 I.C.C. 471.
Bear Brand Hosiery Co. v. Atlanta, B&A Ry. Co.-140 I.C.C. 109.
Bolgiano v. B&O R. Co.-289 I.C.C. 169.
Borden v. Central of Ga. Ry. Co.-206 I.C.C. 85.
Brown Bros. Mfg. Co. v. CB&Q R. Co.-21 I.C.C. 513.
Buckerfields v. AT&SF Ry. Co.-278 I.C.C. 369; 280 I.C.C. 15; 283 I.C.C. 614.
Buhner Fertilizer Co. v. AC&Y R. Co.-178 I.C.C. 531.
Bunge, Corp. v. CMStP&P Ry. Co.-289 I.C.C. 495.
Burger Brewing Co. v. Penna R.R. Co.-255 I.C.C. 515.
Burrus Mill & Elevator Co. v. CRI&P Ry. Co.-131 F. 2d 532.
Cacardi Bros. v. ACL R. Co.-227 I.C.C. 67.
Calif. Cold Storage Co. v. AT&SF Ry. Co.-284 I.C.C. 326.
Calif. Cotton Oil Corp. v. Alton R. Co.-264 I.C.C. 5.
Calif. Cotton Oil Corp. v. AT&SF Ry. Co.-218 I.C.C. 97.

Calif. Railroad Comm. v. Sou. Pac. R. Co.-264 U.S. 331.
Cardwell v. CRI&P Ry. Co.-42 I.C.C. 730; 51 I.C.C. 390.
Carolina Shippers' Assn. v. Norfolk & S. R. Co.-173 I.C.C. 101.
Carpenter Hiatt Sales Co. v. AT&SF Ry. Co.-220 I.C.C. 540.
Carter Groc. Co. v. BSL&W Ry. Co.-168 I.C.C. 189.
Catz American Sales Corp. v. Erie R. Co.-268 I.C.C. 791.
Chamber of Commerce of Grand Island (Nebr.) v. A&R R. Co.-85 I.C.C. 502.
Chamber of Commerce of Kansas City (Mo.) v. AT&SF Ry. Co.-164 I.C.C. 302.
Chance & Co. v. Central of Ga. R. Co.-280 I.C.C. 93.
Chase v. ACL R. Co.-220 I.C.C. 400.
Chicago Live Stock Exch. v. AT&SF Ry. Co.-144 I.C.C. 175.
Christian Brokerage Co. v. CNO&TP R. Co.-281 I.C.C. 195.
Christie v. Mo. Pac.-94 Mo. 453; 2 I.C.C. 22.
Christopher Co. v. A&D Ry. Co.-289 I.C.C. 716.
Chronicle Publ. Co. v. GN Ry. Co.-243 I.C.C. 279.
Chrysler Corp. v. NYC R. Co.-234 I.C.C. 755.
Cities Service Oil Co. v. Erie R. Co.-237 I.C.C. 287.
Cities Service Oil Co. v. Penna. R.R. Co.-284 I.C.C. 140.
Citizens Gas & Coke Utility Co. v. A&S R. Co.-278 I.C.C. 717; 281 I.C.C. 705.
Citizens Gas & Coke Utility Co. v. IC R. Co.-283 I.C.C. 631; 286 I.C.C. 558.
Citizens Gas & Coke Utility v. Chicago & NW Ry. Co., 314 I.C.C. 271, 273-4.
Clark Equipment Co. v. CB&Q R. Co.-98 I.C.C. 465.
Cole & Sons v. MP R. Co.-198 I.C.C. 252.
Cole & Sons v. MP R. Co.-206 I.C.C. 313.
Columbia Metals Co. v. AT&SF Ry. Co.-276 I.C.C. 603.
Col-Tex Refg. Col. v. MP R. Co.-288 I.C.C. 589.
Commerce & Industry Assn. of N. Y. v. B&O R. Co.-272 I.C.C. 7; 288 I.C.C. 4.
Consolidated Mining & Smelting Co. v. B&O R. Co.-286 I.C.C. 313.
Consolidated Rendering Co. v. AT&SF Ry. Co.-287 I.C.C. 673, 677.
Consolidated Shippers v. AT&SF Ry. Co.-251 I.C.C. 541.
Consolidated Water Power & Paper Co. v. Sandersville R. Co.-288 I.C.C. 777.
Consumers Power Co. v. A&S R. Co.-286 I.C.C. 291; 288 I.C.C. 203.
Container Corp. of American v. Sou. Pac. R. Co.-284 I.C.C. 421.
Continental Steel Corp. v. NYC&StL R. Co.-243 I.C.C. 775.
Continental Steel Corp. v. NYC&StL R. Co.-256 I.C.C. 167.
Corp. Comm. of Oklahoma v. MP R. Co.-268 I.C.C. 195.
Crowley's Milk Co. v. Erie R. Co.-204 I.C.C. 30.
Cuneo Bros. v. NP Ry. Co.-229 I.C.C. 429.

Curtis Leather Co. v. AT&SF R. Co.-151 I.C.C. 610.
Dairymen's Supply v. Penna R.R. Co.-28 I.C.C. 406.
Dant & Russell v. Spokane P & S Ry. Co.-273 I.C.C. 284.
Darling & Co. v. AT&SF Ry. Co.-289 I.C.C. 316.
Deisel-Wemmer-Gilbert Corp. v. Penna. R.R. Co.-218 I.C.C. 137.
Delta Petr. Co. v. L&A Ry. Co.-289 I.C.C. 33.
Dolese Bros Co. v. AT&SF R. Co.-89 I.C.C. 122.
Doughboy Industries, Inc. v. B&O R. Co.-272 I.C.C. 687.
Dri-Gas Corp. v. A&S R. Co.-288 I.C.C. 797.
Dunn Sulphite Paper Co. v. GTW R. Co.-269 I.C.C. 595.
Durham Herald Co. v. CP R. Co.-280 I.C.C. 534.
Eagle Cotton Oil Co. v. GM&O Co.-286 I.C.C. 391.
Eastern Central Motor Carriers Assn. v. B&O R. Co.-314 I.C.C. 5, 44, 47.
Empire Carpet Corp. v. B&M R. Co.-258 I.C.C. 697.
Empire Oil & Refining Co. v. GC&SF R. Co.-161 I.C.C. 685.
Ethyl Gasoline Corp. v. CN Ry. Co.-253 I.C.C. 792; 256 I.C.C. 99.
Ezee Flow Corp v. IC R. Co.-287 I.C.C. 281.
Fadler v. CRI&P R. Co.-261 SW 2d 394.
Fairbanks-Morse v. A&S R. Co.-251 I.C.C. 181.
Falstaff Brewing Co. v. C&NW R. Co.-281 I.C.C. 340.
Faye v. AT&SF Ry. Co.-251 I.C.C. 108.
Feed Products Corp. v. B&O R. Co.-278 I.C.C. 545.
Ferro Enamel Corp. v. Penna R.R. Co.-280 I.C.C. 462.
Fidelity Cotton Oil Co. v. A&V Ry. Co.-47 I.C.C. 542.
Firestone Tire & Rubber Co. of Calif. v. SP Ry. Co.-243 I.C.C. 157.
Fleming & Sons v. GC&SF R. Co.-187 F. 2d 536.
Florida Planters, Inc. v. Florida East Coast Ry. Co.-262 I.C.C. 303.
Forrestal v. A&S Ry. Co.-236 I.C.C. 457.
Foster Bros. Mfg. Co. v. NYC R. Co.-273 I.C.C. 582.
Foster Wheeler Corp. v. Central R. Co. of N.J.-273 I.C.C. 110.
Frame Mfr. Assoc. v. Ann Arbor R. Co.-118 I.C.C. 154.
Fraser Paper Co. v. B&A R. Co.-203 I.C.C. 789.
French Lick Springs Hotel Co. v. CI&L Ry. Co.-148 I.C.C. 737.
Friedman v. C&O Ry. Co.-174 I.C.C. 273; 194 I.C.C. 455.
Fry Roofing Co. v. A&R R. Co.-284 I.C.C. 19.
Gallagher v. Penna. R.R. Co.-160 I.C.C. 563.
Gauger-Korsmo Const. Co. v. MP R. Co.-183 I.C.C. 531.
General Chemical Div. Allied Chem. Corp. v. AT&SF Ry. Co.-281 I.C.C. 189; 287 I.C.C. 415.
General Foods Corp v. L&N R. Co.-246 I.C.C. 142.
General Products Co. v. NYNH&H R. Co.-288 I.C.C. 439.
Gentile Bros. Co. v. CNO&TP R. Co.-216 I.C.C. 571.
Georgia v. Penna. R.R. Co.-324 U.S. 429.

Georgia Peanut Co. v. ACL R. Co.-280 I.C.C. 775; 284 I.C.C. 308.
Great A&P Tea Co. v. Alton R. Co.-231 I.C.C. 743.
Great Lakes Steel Corp. v. A7W R. Co.-270 I.C.C. 255.
Great Western Sugar Co. v. CB&Q R. Co.-226 I.C.C. 642.
Grovier Starr Co. v. AV R. Co.-190 I.C.C. 501.
Grovier Starr Co. v. CRI&P Co. 144 I. C.C. 507.
Gulf Minerals Corp. v. L&A R. Co.-288 I.C.C. 285.
Hackney Bros. v. NYC R. Co.-85 F. Supp. 465.
Hallet & Carey Co. v. CStPM&O R. Co.-227 I.C.C. 457.
Hardling Glass Co. v. StL&SF Ry. Co.-253 I.C.C. 550.
Harrison Construction Co. v. B&O R. Co.-274 I.C.C. 317.
Harrisonburg, City of, v. C&O Ry. Co.-34 F. Supp. 646.
Hart v. SAL Ry. Co.-142 I.C.C. 533.
Hateley Bros. v. C&EI Ry. Co.-234 I.C.C. 605.
Helix Milling Co. v. GN Ry. Co.-287 I.C.C. 77.
Hermann-Brownlow v. MP R. Co.-273 I.C.C. 193.
Hilldale v. Penna. R.R. Co.-237 Fed. 272.
Hofert v. A&S R. Co.-284 I.C.C. 313.
Hoffstot v. Monongahela R. Co.-248 I.C.C. 248.
Hopper Paper Co. v. B&O R. Co.-178 F. 2d 179.
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Hudson Pulp Paper Corp. v. B&M R. Co.-276 I.C.C. 668.
Humphreys Gold Corp v. FEC R. Co.-279 I.C.C. 107.
Hutchings Brokerage Co. v. L&N R. Co.-268 I.C.C. 373.
Hyatt Roller Bearing Co. v. Penna R. Co.-104 Atlantic 82, 106, Atlantic 891.
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I.C.C. v. L&N R. Co.-227 U.S. 88.
I.C.C. v. OWR&N Ry. Co.-288 U.S. 14.
Idaho v. OSL Ry. Co.-157 I.C.C. 501.
Illinois Oil Co. v. AT&SF Ry. Co.-165 I.C.C. 189.
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Jacob & Co. v. MC R. Co.-210 I.C.C. 433.
Jamestown Chamber of Commerce v. Penna. R. Co.-139 I.C.C. 491.
Jennison Bros. V. C&NW Ry. Co.-158 NW 398.
Jones & Cavanaugh v. Sou. Pac.-219 I.C.C. 105.
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Kanotex Refining Co. v. AT&SF Ry. Co.-34 I.C.C. 271.
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Keith Simmons Co. v. NC&StL Ry. Co.-256 I.C.C. 235.
Kellogg Grain Co. v. C&NW R. Co.-186 I.C.C. 709.
Keystone Steel & Wire Co. v. CB&Q R. Co.-279 I.C.C. 178; 292 I.C.C. 665; 177 F. Supp. 330.
Kilgore v. SAL Ry. Co.-151 I.C.C. 193.
Kirkland v. ACL R. Co.-167 F. 2d 529.
Kohlman Bros. V. L&N R. Co.-123 I.C.C. 56.
Kress, Co. v. CofG R. Co.-274 I.C.C.-272.
Kulin Waste Co. v. B&A R. Co.-253 I.C.C. 675.
Larrimore, Inc. v. UP R. Co.-273 I.C.C. 415.
Lawrence v. L&N R. Co.-120 I.C.C. 316.
Lever Bros. Co. v. B&O R. Co.-164 F., 2nd 738.
Levy & Zantner v. Sou. Pac. Co.-287 I.C.C. 299.
Lewis-Simas-Jones v. Sou. Pac R. Co.-283 U.S. 654.
Lignum-Vitae Products Corp. v. AGS R. Co.-268 I.C.C. 599.
Locarni Marble Corp. v. Mo. Pac.,-314 I.C.C. 65, 69.
Long Island R. Co. v. NY Cent. R. Co.-197 F. Supp 21, 22.
Louisville Cement Co. v. C&O Ry. Co.-222 I.C.C. 635.
Lumber Fabricator,s Inc. v. AGS Ry. Co.-283 I.C.C. 733.
Lustberg Nast Co. v. NYNH&H R. Co.-229 I.C.C. 684.
McAllen Chamber of Commerce v. A&LM R. Co.-273 I.C.C. 651.
McKesson & Robbins Co. v. GS&F Ry. Co.-288 I.C.C. 478.
McPhillips Mfg. Co. v. GH&N R. Co.-167, I.C.C. 207.
Maggioni & Co. v. ACL R. Co.-272 I.C.C. 127.
Magnolia Petrol. Co. v. AT&SF Ry. Co.-146 I.C.C. 592.
Maloney Tank Mfg. Co. v. AT&SF Ry. Co.-178 I.C.C. 450.
Mandell v. Penna. R.R. Co.-286 I.C.C. 655; 289 I.C.C. 244.
Maple Island Farm v. CB&Q R. Co.-280 I.C.C. 353.
Marcus v. B&O R. Co.-200 I.C.C. 455.
Markstein v. MP R. Co.-243 I.C.C. 345.
Mathes v. B&A R. Co.-209 I.C.C. 177.
Meeker v. LV R. Co.-236 U.S. 412.
Menasha Paper Co. v. C&NW R. Co.-241 U.S. 55.
Merchants Packing Co. v. UP R. Co.-279 I.C.C. 553.
Michelson v. CN R. Co.-256 I.C.C. 57.
Middleton v. NS R. Co.-215 I.C.C. 411.
Midland Coop. Wholesale Co. v. A&S Ry. Co.-258 I.C.C. 75.
Mid-State Horticultural Co. v. Penna. R.R. Co.-320 U.S. 356.
Midwest Assn. of Meat Packers v. Alton R. Co.-220 I.C.C. 227.
Midwest Wool Marketing Corp. v. Wabash R. Co.-286 I.C.C. 342; 288 I.C.C. 507.
Mills v. LV R. Co.-238 U.S. 473.
Mitchell Traffic Bureau v. CMStP&P R. Co.-190 I.C.C. 739.
Montana Horse Products Co. v. AT&SF Ry. Co.-203 I.C.C. 681.
Montgomery Ward & Co. v. B&O R. Co.-209 I.C.C. 243.
Moore Bros. v. CB&Q R. Co.-210 I.C.C. 95.
Morgan v. MKT R. Co.-12 I.C.C. 525.

Morris Buick Co. v. GTW R. Co.-299 I.C.C. 109.
Naph-Sol. Refg. Co. v. AT&SF Ry. Co.-280 I.C.C. 241.
National Cottonseed Products Assn. v. AB&C. R. Co.-256 I.C.C. 89.
National Pressed Steel Co. v. AGS R. Co.-289 I.C.C. 673.
National Salvage Co. v. C&O R. Co.-289 I.C.C. 89.
National Sash Weight Corp. v. Penna. R.R. Co.-203 I.C.C. 439.
National Water Carriers' Assn. v. Long Island R. Co.-287 I.C.C. 726.
Neil Products, Inc. v. Sou. Pac. Co.-286 I.C.C. 545.
Neuss Hesslein Co. v. L&N R. Co.-50 Sou. 2d 855.
News Syndicate Co. v. NYC R. Co.-275 U.S. 179.
New River Co. v. C&O R. Co.-245 I.C.C. 115.
North American Cement Corp. v. Western Maryland Ry. Co.-129 I.C.C. 90.
Nuckolls Packing Co. v. AT&SF Ry. Co.-163 I.C.C. 233.
Olean Glass Co. v. Penna R.R. Co.-213 I.C.C. 229.
Ontario Paper Company v. CN Ry. Co.-95 I.C.C. 66; 102 I.C.C. 365.
Osborn Mfg. Co. v. B&O R. Co.-278 I.C.C. 687.
Pacific Chem. & Fertilizer Co. v. Penna. R.R. Co.-268 I.C.C. 468.
Pacific Gamble Robinson Co. v. M&StL R. Co.-105 F. Supp. 795; 83 Fed. Supp. 960.
Pacific Inland Tariff Bur., Inc. v. Sou. Pac. Co.-288 I.C.C. 31.
Pacific Portland Cement Co., v. Western P.R. Co., 184 F. 2nd 34, cert. denied-340 U.S. 906.
Paducah Board of Trade v. IC R. Co.-43 I.C.C. 537.
Pankey v. R&D R. Co.-3 I.C.C. 33.
Parkersburg Rig & Reel Co. v. B&O R. Co.-234 I.C.C. 105.
Parsons v. C&NW Ry. Co.-167 U.S. 447.
Patterson v. A&R R. Co.-266 I.C.C. 45.
Patterson v. L&N R. Co.-269 U.S. 1.
Penn. Oil Co. v. AT&SF Ry. Co.-188 I.C.C. 351.
Peppard Seed Co. v. L&N R. Co.-243 I.C.C. 111.
Peppard Seed Co. v. T&P Ry. Co.-178 I.C.C. 409.
Phillips v. GTW R. Co.-236 U.S. 662.
Phillips Petroleum Co. v. AT&SF Ry. Co.-289 I.C.C. 39.
Pillsbury Mills, Inc. v. Sou. Pac.-268 I.C.C. 206.
Pittman Tractor Co. v. Alabama GS R. Co.-286 I.C.C. 575; 121 Fed. Supp. 162.
Plastic & Die Cast Pro. Corp. v. Pacific Elec. Ry. Co.-274 I.C.C. 500.
Porter Co. v. Central Vermont R. Co.-366 U.S. 272.
Public Service Elec. & Gas. Co. v. Reading Co.-80 Atl. 2d 473.
Pure Oil Co. v. AS R. Co.-284 I.C.C. 461.

Red Comb Pioneer Mills v. Alexander R. Co.-314 I.C.C. 83, 84.
Reid v. B&M R. Co.-286 I.C. 357.
Reliance Steel Prod. Co. v. B&O R. Co.-291 I.C.C. 695.
Republic Carloading and Distributing Co. v. B&O R. Co.-284 I.C.C. 441.
Republic Steel Corp. v. B&O R. Co.-253 I.C.C. 520.
Robertson Distri. Co. v. StL&SF R. Co.-286 I.C.C. 227; 287 I.C C. 600.
Robinson v. B&O R. Co.-222 U.S. 506.
Rogers v. CNO&TP R. Co.-258 I.C.C. 553.
Rogers v. L&N R. Co.-263 I.C.C. 545.
Rogers v. NYC R. Co.-284 I.C.C. 118.
Romeo Stores Co. v. UP R. Co.-203 I.C.C. 414.
Ross Powerhouse Contractors v. GN Ry. Co.-288 I.C.C. 1.
Roxbury Iron & Metal Co. v. NYNH&H R. Co.-195 I.C.C. 332.
Rundle Mfg. Co. v. C&NW Ry. Co.-251 I.C.C. 673.
Ryon Grain Co. v. LV R. Co.-215 I.C.C. 217.
SAL Ry Co. v. C 7 NW Ry. Co.-194 I.C.C. 183.
Salawitch Auto Parts Co. v. B&O R. Co.-284 I.C.C. 703.
Salem Brass & Iron Mfg. v. Central R. Co. of N.J.-156 I.C.C. 312.
San Francisco & Napa Valley R. Co. v. Sou. Pac. Co.-259 I.C.C. 319.
Schenley Industries, Inc. v. B&O R. Co.-276 I.C.C. 732.
Seatrain Lines v. AC&R R. Co.-243 I.C.C. 199.
Serra & Co. v. A&S R. Co.-238 I. C. C. 31; 245 I.C.C. 356; 251 I.C.C. 569.
Simmons Machine Tool Corp. v. NYC R. Co.-281 I.C.C. 442.
Sinclair Refg. Co. v. Penna. R.R. Co.-280 I.C.C. 75.
Singer v. UP R. Co.-311 U.S. 295.
Skelly Oil Co. v. Alton & Sou. R. Co.-291 I.C.C. 673.
Smalstig v. B&O R. Co.-256 I.C.C. 103.
Smith-Rowland Co. v. AGS R. Co.-256 I.C.C. 199.
Smokeless Fuel Co. v. N&W Ry. Co.-85 I.C.C. 395.
Somerville Iron Works v. DL&W R. Co.-287 I.C.C. 395.
Southern California Minerals Co. v. UP R. Co.-256 I.C.C. 1.
Southern Wyoming Coal Operators Assn. v. CB&Q-264 I.C.C. 593.
Southland Co. v. IC R. Co.-279 I.C.C. 594.
Southland Co. v. IC R. Co.-279 I.C.C. 594.
Southland Pecan Co. v. AGS R. Co.-159 I.C.C. 445.
Southland Pecan Co. v. AGS R. Co.-159 I.C.C. 445.
Southwest Steel Rolling Mills v. Apache R. Co.-278 I.C.C. 383.
Spiller v. AT&SF Ry. Co.-253 U.S. 117.
Standard Oil Co. v. AT&SF Ry. Co.-139 I.C.C. 297.
State Corp. Commission of Va. v. Penna. R. R.-208 I.C.C. 347.
Stimson v. AC&Y R. Co.-259 I.C.C. 348.
St. Louis Coop. Co. v. NYC R. Co.-258 I.C.C. 293.

Summer & Co. v. B&O R. Co.-284 I.C.C. 720.
Summer & Co. v. Erie R. Co.-255 I.C.C. 475, 262 I.C.C. 43.
Susskind v. FEC Ry. Co.-270 I.C.C. 239.
Swift & Co. v. ACL R. Co.-226 I.C.C. 709.
Swift & Co. v. Alton R. Co.-262 I.C.C. 783.
Swift & Co. v. Alton R. Co.-263 I.C.C. 245; 268 I.C.C. 103.
Swift & Co. v. AT&SF Ry. Co.-274 I.C.C. 557.
Swift & Co. v. B&O R. Co.-268 I.C.C. 85.
Thayer, Inc. v. B&M R. Co.-274 I.C.C. 50.
Thermoid Co. v. B&O R. Co.-288 I.C.C. 793.
Thermoid Co. v. B&O R. Co.-303 I.C.C. 743, 752.
Tidewater Assoc. Co. v. AT&SF R. Co.-278 I.C.C. 586.
Tidewater Assoc. Oil Co. v. Alton & Soul R. Co.-289 I.C.C. 42.
Tri-State Packers Assn. v. Penna. R.R. Co.-210 I.C.C. 507.
Trojan Scrap Iron Corp. v. B&M R. Co.-270 I.C.C. 727.
Tuthill Spring Co. v. NYC R. Co.-284 I.C.C. 793.
Union Asphalt Co. v. AT&SF Ry. Co.-264 I.C.C. 561.
Union Tank Works v. AT&SF Ry. Co.-200 I.C.C. 449, 451.
Union Underwear Co. v. F&C R. Co.-214 I.C.C. 695.
United Carbon Co. v. CB&O R. Co.-243 I.C.C. 51.
United Carbon Co. v. DT&I R. Co.-229 I.C.C. 405.
United States Trucking Corp. v. NYNH&H R. Co.-274 I.C.C. 552.
Universal Carloading and Distributing Co. v. Penna. R.R. Co.-276 I.C.C. 145.
Van Dusen Harrington Co. v. NP R. Co.-32 F. 2d 466.
Van Nostrand Saddlery Co. v. CB&Q R. Co.-169 I.C.C. 92.
Van Waters & Rogers, Inc. v. B&O R. Co.-268 I.C.C. 179.
Vernon Lbr. Co. v. AT&SF Ry. Co.-276 I.C.C. 793; 279 I.C.C. 253; 284 I.C.C. 39; 281 I.C.C. 789; 287 I.C.C. 277.
Virginia Corp. Comm. v. Penna. R.R. Co.-208 I.C.C. 347.
Vossler v. EJ&E. R. Co.-96 I.C.C. 75.
Wabash Screen Door Co. v. CP Ry. Co.-214 I.C.C. 653.
Wagner v. C&NW Ry. Co. 208 ICC-767.
Waste Materials Dealers Assn. v. CRI&P. R. Co.-226 I.C.C. 683, 688.
Wells v. CB&Q R. Co.-161 I.C.C. 145.
West Petroleum Co. v. AT&SF Ry. Co.-276 I.C.C. 429; 108 F. Supp. 644; 212 F. 2d 812.
Western Asphalt Paving Corp. v. CMStP&P R. Co.-229 I.C.C. 117.
Western Soybean Mills. v. GN Ry. Co.-280 I.C.C. 429.
Whatcom County Traffic Bur. v. CMStP&P R. Co.-283 I.C.C. 149; 286 I.C.C. 353; 287 I.C.C. 442.
Wheaton Co. v. B&O R. Co.-139 I.C.C. 636.
William W. Feinstein & Co. v. NYC R. Co.-313 I.C.C. 783, 791.
Wisconsin Bridge & Iron Co. v. IT R. Co.-88 F. 2d 459.
Wisconsin Railroad Comm. v. CB&Q R. Co.-257 U.S. 563.
Wisconsin Railroad Comm. v. C&NW R. Co.-87 I.C.C. 195.

Wood v. NYC R. Co.-286 I.C.C. 373.
Wood & Selick, Inc. v. Wabash R. Co.-104 NYS 2d 488.
Woodward & Dickerson v. IGN R. Co.-287 I.C.C. 296.
Wyoming Coal Co. v. Virginia Ry. Co.-98 I.C.C. 491.
Youghiogheny & Ohio Coal Co. v. B&O R. Co.-272 I.C.C. 493.

Source: Regulation of Transportation, by Marvin L. Fair and John Guandolo (1968).

APPENDIX C

ICC AUTHORITY TO SET LAWS

1. In a matter related to a rail carrier providing transportation subject to the jurisdiction of the Interstate Commerce Commission under this subchapter, the Commission shall exempt a person, class of persons, or a transaction or service when the Commission finds that the application of a provision of this subtitle:

    a. is not necessary to carry out the transportation policy of Section 10101a of this title; and

    b. either (A) the transaction or service is of limited scope, or (B) the application of a provision of this subtitle is not needed to protect shippers from the abuse of market power.

2. The Commission may, where appropriate, begin a proceeding under this section on its own initiative or on application by the Secretary of Transportation or an interested party.

3. The commission may specify the period of time during which an exemption granted under this section is effective.

4. The Commission may revoke an exemption, to the extent it specifies, when it finds that application of a provision of this subtitle to the person, class, or transportation is not necessary to carry out the transportation policy of Section 10101a of this title.

5. No exemption order issued pursuant to this section shall operate to relive any rail carrier from an obligation to provide contractual terms for liability and claims which are consistent with the provisions of Section 11707 of this title. Nothing in this subsection of Section 11707 of this title shall prevent rail carriers from offering alternative terms nor give the Commission the authority to require any specific level of rates or services based upon the provisions of Section 11707 of this title.

6. The Commission may exercise its authority under this section to exempt transportation that is provided by a rail carrier as a part of the continuous intermodal movement.

7. The Commission may not exercise its authority under this section (1) to authorize intermodal ownership that is otherwise prohibited by this title, or (2) to relieve a carrier of its obligation to protect the interests of employees as required by this subtitle.

APPENDIX D

PREVENTING ABUSES OF HIGH RATES

1. A rate cannot be challenged as unreasonably high unless it exceeds the threshold set out in Section 10709(d).(1)

2. The Commission has no jurisdiction unless it finds that the railroad has "market dominance" over the transportation to which the rate applies (Section 10709).(2)

3. Under Section 229 of the Staggers Rail Act, all rail rates in effect on October 1, 1980, the effective date of the Staggers Rail Act, which were not challenged during the 180-day period beginning on such effective date, or were not found as the result of such a challenge to be unreasonable, are conclusively presumed reasonable.

4. Rail rate increases are also immune from challenge so long as they are within the limits set forth in Section 10707a(3).

   In addition, the reasonableness of a rate may not be challenged if it is established by contract filed with the Commission.

   a. Threshold is defined as 180 percent of revenue/variable cost.

   b. Defined as an absence of effective competition from other carriers or modes of transportation.

   c. Rate increase cannot raise rates to a level more than 190 percent of revenue/variable cost.

APPENDIX E

RAILROAD UNIFICATIONS, 1957 TO PRESENT

Effctve Date of Unifction	Type of Unifction	Applicant Railroads	Controlling Railroad/ Company
08/31/57	Merger	Nashville, Chattanooga & St. Louis	Louisville & Nashville
01/01/58	Merger	Litchfield & Madison	Chicago & North Western
10/06/58	Control	Spokane International	Union Pacific
12/01/59	Merger	Virginian	Norfolk & Western
01/28/60	Control	Toledo, Peoria & Western	Atchison, Topeka & Santa Fe and Pennsylvania
01/01/60	Merger	Charleston & Western Carolina	Atlantic Coast Line
07/01/60	Merger	Missouri-Kansas-Texas of Texas	Missouri-Kansas-Texas
10/17/60	Merger	Erie & Delaware, Lackawanna & Western	Erie-Lackawanna
11/01/60	Merger	Minneapolis & St. Louis	Chicago and North Western
01/01/61	Merger	Minneapolis, St. Paul & Sault Ste. Marie, Duluth, South Shore & Atlantic and Wisconsin Central	Soo Line
10/31/61	Merger	Texas & New Orleans	Southern Pacific
05/17/62	Control	Lehigh Valley	Pennsylvania Railroad
02/04/63	Control	Baltimore & Ohio	Chesapeake & Ohio
06/18/63	Control	Central of Georgia	Southern
07/01/63	Control	Georgia & Florida	Southern
09/03/63	Control	Ann Arbor	Detroit, Toledo & Ironton
01/01/64	Merger	St. Louis, San Francisco and Texas	St. Louis-San Francisco
09/25/64	Control	Kansas-Oklahoma and Gulf	Texas & Pacific
10/16/64	Control	New York, Chicago and	Norfolk & Western

Effctve Date of Unifction	Type of Unifction	Applicant Railroads	Controlling Railroad/ Company
		St. Louis	
10/16/64	Merger	Akron, Canton & Youngstown	Norfolk & Western
08/01/65	Merger	Gulf, Colorado & Santa Fe and Panhandle & Santa Fe	Atchison, Topeka & Santa Fe
08/12/65	Merger	Pacific Electric	Southern Pacific
01/03/67	Control	Chicago, South Shore and South Bend	Chesapeake & Ohio
05/21/67	Control	Chicago & Eastern Illinois	Missouri Pacific
07/01/67	Merger	Atlantic Coast Line, Seaboard Air Line	Seaboard Coast Line
02/01/68	Merger	Pennsylvania Railroad, New York Central	Penn Central
03/29/68	Control	Western Maryland	Chesapeake & Ohio and Baltimore & Ohio
04/01/68	Control	Erie-Lackawanna	Norfolk & Western
07/01/68	Merger	Chicago Great Western	Chicago & North Western
07/01/68	Control	Delaware & Hudson	Norfolk & Western
08/01/68	Control	Alton & Southern	Missouri Pacific and Chicago and North Western
01/31/69	Merger	New Orleans & Northeastern	Alabama Great Southern
02/01/69	Merger	Penn Central and New York, New Haven & Hartford	
07/01/69	Merger	Piedmont & Northern	Seaboard Coast Line
03/02/70	Merger	Great Northern, Northern Pacific and Chicago, Burlington and Quincy	Burlington Northern
04/01/70	Merger	Kansas, Oklahoma & Gulf	Texas & Pacific
05/31/71	Merger	Central of Georgia, Georgia and Florida, Savannah & Atlanta & Wrightsville & Tenille	Central of Georgia
07/31/71	Merger	Monon	Louisville and Nashville
08/10/72	Merger	Illinois Central & Gulf	Illinois Central Gulf

Effctve Date of Unifction	Type of Unifction	Applicant Railroads	Controlling Railroad/ Company
		Mobile & Ohio	
06/15/73	Consolidation	Baltimore & Ohio, Chesapeake & Ohio and Western Maryland	Chessie System
01/01/74	Merger	Carolina & North Western	Norfolk & Western
04/01/76	Consolidation	Central Railroad of New Jersey, Erie-Lackawanna, Lehigh & Hudson River, Lehigh Valley, Penn Central, Reading and Ann Arbor	Consolidated Rail Corporation
10/16/76	Merger	Texas & Pacific and Chicago and Eastern Illinois	Missouri Pacific
11/01/78	Merger	Abiliene & Southern, Fort Worth Belt, Missouri-Illinois, New Orleans & Lower Coast, St. Joseph Belt, Texas-New Mexico and Union Terminal	Missouri Pacific
11/10/78	Control	Green Bay & Western	Itel Corporation
06/24/80	Control	Grand Trunk Western and Detroit, Toledo and Ironton	Grand Trunk Western
11/01/80	Consolidation	Chessie System and Family Lines	CSX Corporation
11/21/80	Merger	Burlington Northern and St. Louis-San Francisco	Burlington Northern
04/13/81	Control	Grand Trunk Western and Detroit and Toledo Shore Line	Grand Trunk Western
06/16/81	Control	Maine Central	Guilford Transportation Industries
01/01/82	Merger	Burlington Northern, Colorado and Southern, Fort Worth & Denver,	Burlington Northern

Effctve Date of Unifction	Type of Unifction	Applicant Railroads	Controlling Railroad/ Company
		Burlington Northern (Oregon–Washington) and Walla Walla Valley	
06/01/82	Consolidation	Southern and Norfolk and Western	Norfolk Southern Corporation
12/22/82	Merger	Union Pacific, Missouri Pacific and Western Pacific	Union Pacific Corporation
01/01/83	Consolidation	Family Lines and Louisville and Nashville	Seaboard System
07/01/83	Control	Boston & Maine	Guilford Transportation
01/05/84	Control	Delaware & Hudson	Guilford Transportation
02/19/85	Control	Soo Line and Chicago, Milwaukee St. Paul and Pacific	Soo Line
03/26/87	Control	Conrail – 85% Government Control	Conrail – Private Sector
08/12/88	Merger	Missouri–Kansas–Texas and Union Pacific	Union Pacific
10/13/88	Control	Southern Pacific Transportation Company	Rio Grande Industries

Source: Milling & Baking News, Kansas City, April 24, 1990

APPENDIX F

PROFILE OF THE RAIL INDUSTRY BY TYPE OF RAILROAD

Type of Railroad	Number	Miles	Employees	Revenue ($000)[2]
Class I	18	147,568	235,814	25,802,885
Regional	27	15,100	10,927	966,050
Local				
Linehaul	285	14,534	6,536	666,238
Switching & Terminal[1]	172	4,011	9,217	622,153
TOTAL	**502**	**181,213**	**262,494**	**28,057,326**
Class I	4%	82%	90%	92%
Regional	5	8	4	4
Local				
Linehaul	57	8	2	2
Switching & Terminal	34	2	4	2
TOTAL	**100%**	**100%**	**100%**	**100%**

[1] While identified separately herein, Switching and Terminal railroads are considered to be Local railroads.

[2] Revenue for some Regional and Local railroads has been estimated.

Source: Transportation Deregulation What's Regulated and What Isn't. Sweeney, McCarthy, Kalisa and Cutler. Washington, DC 1986.

APPENDIX G

AVERAGE SIZE: CLASS I, REGIONAL AND LOCAL RAILROADS

Type of Railroad	Annual Revenue ($000) High	Low	Average	Miles of Road Operated High	Low	Average
Class I	4,501,891	78,685	1,403,995	23,476	487	8,198
Regional	82,365	3,200	31,530	1,969	113	559
Local						
Line-haul	38,653	7	2,299	342	1	51
Switching & Terminal	42,921	1	3,695	217	1	23

Source: Transportation Deregulation What's Regulated and What Isn't. Sweeney, McCarthy, Kalisa and Cutler. Washington, DC 1986.

APPENDIX H

STATE DISTRIBUTION OF RAILROADS

State	Class I	Regional	Local	Switching & Terminal	Total
Pennsylvania	4	3	25	23	55
Illinois	11	5	8	18	42
New York	5	3	18	10	36
Texas	7	1	16	9	33
Indiana	7	1	10	14	32
California	4	0	16	10	30
Ohio	4	2	10	11	27
Arkansas	5	0	18	2	25
North Carolina	2	1	18	4	25
Missouri	11	1	3	9	24
Tennessee	6	1	14	2	23
Iowa	7	3	6	6	22
Mississippi	5	2	13	2	22
Oklahoma	6	1	11	3	21
Michigan	6	3	7	4	20
Georgia	2	1	14	2	19
Louisiana	8	1	6	3	18
Oregon	3	0	9	6	18
Alabama	4	1	9	3	17
Kentucky	6	1	8	2	17
Kansas	9	2	1	4	16
South Carolina	2	1	8	5	16
Minnesota	3	4	6	2	15
New Jersey	2	1	3	8	14
Wisconsin	3	2	7	2	14
Colorado	4	1	6	2	13
Florida	4	1	7	1	13
Washington	2	1	7	3	13
Virginia	4	2	4	3	13
West Virginia	3	0	9	1	13
Maryland	4	0	3	4	11
Massachusetts	2	2	5	2	11
New Hampshire	1	2	6	2	11
Nebraska	5	1	0	4	10
Vermont	1	1	6	1	9
South Dakota	3	1	4	0	8
Montana	3	1	3	0	7
Connecticut	2	2	1	1	6
Delaware	2	0	3	1	6
Maine	1	2	2	1	6
Utah	3	0	2	1	6
Arizona	1	0	4	0	5
Idaho	2	1	2	0	5
New Mexico	5	0	0	0	5
Wyoming	3	0	2	0	5

State	Class I	Regional	Local	Switching & Terminal	Total
North Dakota	2	2	0	0	4
Washington, DC	4	0	0	0	4
Alaska	0	1	1	0	2
Nevada	1	0	0	0	1
Rhode Island	0	1	0	0	1

Source: Transportation Deregulation What's Regulated and What Isn't. Sweeney, McCarthy, Kalisa and Cutler. Washington, DC 1986.

Works Cited

<u>AAR Railroad Facts</u>. 1989 Ed. Washington, DC, 1989: 6, 8, 9, 11, 12, 13, 14, 15, 17, 56.

Association of American Railroads, Office of Information and Public Affairs, <u>Background</u>, Washington, D.C., date unknown: 3, 4, 5, 12.

Brown, Geoffrey, <u>Journal of Commerce</u>, September 20, 1990: 2B.

Cawthorne, David M. "Congress Moves Ahead on Rail Buy-out Bill." <u>The Journal of Commerce</u> 9 May 1990: 58.

<u>Grants Review</u>. Washington D.C: 6, 7, 10, 11. Grants, March 30, 1990.

Knorst, William J. <u>Transportation and Traffic Management</u>. Chicago: College of Advanced Traffic, 1966: 1, 8, 9, 25, 31.

Levine, Harvey A., Wolfe, Reric, Keefer, Richard E., Wilson, Rosalyn A., Hardesty, Frank N., <u>Statistics of Regional and Local Railroads</u>, Association of American Railroads, Washington, D.C., 1989: 1, 2.

"News from the National Industrial Transportation League." <u>The Notice</u> December 1991: 357.

"News from the National Industrial Transportation League." <u>The Notice</u> May 1990: 157,158.

Overbey, Daniel L., <u>Railroads</u>, The Free Enterprise Alternative, Westport, Connecticut, Quorum 1982: 99-101.

<u>Reporter</u>, The National Industrial Transportation League, December 20, 1991: Circular 91-36.

Sweeney, Daniel J., Charles J. McCarthy, Stephen J. Kalish and John M. Cutler, Jr., <u>Transportation Deregulation: What's Deregulated and What Isn't</u> Washington, D.C.: Nasstrack, 1986: 97-106.

Traffic World, Washington, D.C. June 5, 1990: 48.

Traffic World, Washington, D.C. June 19, 1990: 5, 6, 7, 8, 9, 11, 12, 13.

Traffic World, Washington, D.C. October 15, 1990: 11.

Traffic World, Washington, D.C. February 3, 1992: 33, 34.