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A financial analysis of the interstate commerce commission (ICC) termination act of 1995 on the motor carrier industry

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A FINANCIAL ANALYSIS OF THE INTERSTATE COMMERCE COMMISSION (ICC) TERMINATION ACT OF 1995 ON THE MOTOR CARRIER INDUSTRY

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Since the late 1970's the United States has progressively deregulated the motor carrier industry. Throughout the 1980's, deregulation was viewed as a positive trend by most industry practitioners. Past research has determined that, despite the fact that bankruptcies have increased since deregulation, the motor carrier industry has benefitted by less government intervention. The current study attempts to ascertain if motor carrier deregulation is still perceived positively in the mid-1990's. This research uses an event study methodology to examine the immediate financial impact of the ICC Termination Act of 1995 on 44 motor carrier industry participants. The results indicate deregulation is still perceived positively by shareholders as illustrated by the average publicly traded motor carrier benefitting by between $1.25 million and $6.1 million during the period surrounding termination of the Interstate Commerce Commission. In all likelihood, shareholders of companies in this industry benefitted due to the perception that industry deregulation leads to the ability to expand and pursue business opportunities previously restricted while operating under a more regulated regime.

INTRODUCTION

Prior to termination of the Interstate Commerce Commission, one of the primary responsibilities of the ICC was to observe surface transportation providers and monitor their compliance with economic regulations. Primarily due to dramatic deregulation of U.S. surface transportation over the last twenty years, U.S. lawmakers determined the ICC was no longer necessary. As a result, the Interstate

Commerce Commission (ICC) was terminated effective January 1, 1996.

Considerable speculation exists in the transportation industry about the economic and/or strategic impacts associated with a public policy change like termination of the ICC. Past research into market structure has examined the impact of a public policy change on the strategies pursued by members of the transportation industry (Smith & Grimm 1987, Corsi & Grimm 1989). However the authors were unable to identify previous transportation research specifically examining the immediate financial impact created by a public policy change. Therefore the current research focuses on examining the immediate financial response experienced by publicly traded motor carriers when news of termination of the ICC was publicized.

BACKGROUND

Since the late 1970's a major trend in the United States has been to reduce or eliminate economic regulation in the transportation industry. During this era industry practitioners successfully argued that motor carrier regulation made entrance into the motor carrier industry extremely difficult and dramatically reduced or completely eliminated price competition and service enhancement (Chow 1980). As a result the ICC began to reduce enforcement of regulatory policies in the late 1970's (Pickett & Kletke 1984, Pustay 1985). In 1980 Congress responded to pressure to deregulate this mode of surface transportation by passing the Motor Carrier Act of 1980. The act dramatically reformed the regulatory structure of the motor carrier industry and began the process of restoring the industry to a free market.

Since passage of the Motor Carrier Act of 1980 the trend towards further deregulation of the

motor carrier industry has continued. Subsequent acts have facilitated the process of deregulation by abolishing additional regulations. The ICC Termination Act of 1995 was seen by many in the motor carrier industry as a continuation of the trend to reduce government intervention into private enterprise.

As recently as the mid-1990's industry participants have successfully argued that the federal government needs to continue the trend of deregulation. They argue that eliminating some existing regulations is necessary if the motor carrier industry is to operate in a totally free market environment. The ICC Termination Act of 1995 addressed several of the regulatory concerns of industry lobbyists by reducing or eliminating regulations perceived by many to be restrictive. A few key areas addressed in the 1995 ICC Termination Act include: elimination of restrictions on contract carriers, reduction in tariff filing requirements, and further reduction in rate regulation.

STUDY

Past research indicates that the net impact of motor carrier deregulation from 1980 to 1990 was positive (Winston, Corsi, Grimm & Evans, 1990). However, past research also indicates motor carrier deregulation has been a troublesome event for many as evidenced by the significant number of bankruptcies occurring in the years since industry deregulation began (Corsi, Grimm, Smith, & Smith 1991, Harper & Johnson 1987, LaLonde 1984-1985). Therefore, the current research attempts to determine if the trend toward motor carrier deregulation is still perceived positively in the mid-1990's. To accomplish this the researchers look at one specific public policy change (termination of the ICC) perceived by most industry observers and participants to be a move towards further deregulation. If this act of deregulation was

viewed favorably (unfavorably) by the motor carrier industry, then one should find that the stock prices of motor carriers increased (decreased) when it was announced that the ICC would be terminated. Focusing on the stock price reaction to the announcement of the ICC Termination Act will not only permit one to determine the response of the industry to deregulation, but it will also provide information on the financial benefits of deregulation.

DATA COLLECTION AND METHODOLOGY

Compared to previous studies examining the net impact of motor carrier deregulation, the methodology for this study is somewhat unique. Previous transportation studies have traditionally focused on the long-term financial performance of motor carriers subsequent to deregulation. While the traditional approach can provide researchers with valuable insight, there is no certainty the net change in financial performance is solely attributable to deregulation.

The purpose of the event study methodology is to determine whether motor carriers benefitted financially from the ICC Termination Act of 1995. More specifically, we examine stock price changes to determine the stock markets' response to the announcement that President Clinton signed the ICC Termination Act into law.[1] Concentrating on the stock price reaction to this announcement will not only allow us to determine the financial markets' immediate response to the ICC Termination Act, but it also allows us to examine the strategic implications for managers in the motor carrier industry. It is clear from previous research (Chow 1980) that it is costly for motor carriers to comply with governmental regulations. Previous research (Winston, Corsi, Grimm & Evans, 1990) has also shown that deregulation benefits motor carriers because it reduces the costly

burdens of governmental regulation. Our primary goal is to determine if there is an immediate and significant stock price reaction to passage of the ICC Termination Act and to examine the financial impact on industry participants.

We form a sample of motor carriers using the 1996 CRSP[2] database that includes firms that trade on the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX), and the Nasdaq stock market. To be included in the sample, the firm's primary SIC code must be 4210 (trucking courier), 4213 (trucking, except local), or 4215 (courier services, except by air). Each motor carrier must also be publicly traded and have daily returns over an eleven-day event period. Furthermore, the motor carrier must not have had any major news announcement during the eleven-day event period.[3]

For each firm we search the *Wall Street Journal Index* for major news announcements to determine whether or not we have a clean event period. If there is another major announcement concerning a firm during this time period, then we do not have a clean event period and cannot determine the impact of the ICC Termination Act on that firm. If a clean event period can not be determined for a firm, it is eliminated from the sample. For example, assume a motor carrier firm received a large federal government contract on the same day it was announced that President Clinton signed the ICC Termination Act. If the firm's stock price increased drastically, the event study methodology cannot determine whether the increase was a result of the government contract or the ICC Termination Act. However, if there are no other major announcements during our event period, then our event study methodology can examine that portion of the stock's return that can be attributed to the ICC Termination Act and that portion attributable to the overall market.

TABLE 1
SAMPLE OF MOTOR CARRIERS, THEIR TICKER SYMBOLS, THE STOCK MARKET ON WHICH THE STOCK IS PUBLICLY TRADED, AND THE SIC CODES

Number	Name	Ticker	Market	SIC Code
1	3 C I Complete Compliance Corp	TCCC	Nasdaq	4210
2	Aasche Transportation Svcs Inc	ASHE	Nasdaq	4210
3	Allied Holdings Inc	HAUL	Nasdaq	4210
4	American Freightways Corp	AFWY	Nasdaq	4210
5	Ampace Corp	PACE	Nasdaq	4210
6	Anuhco Inc	ANU	AMEX	4213
7	Arkansas Best Corp Del	ABFS	Nasdaq	4210
8	Arnold Industries Inc	AIND	Nasdaq	4210
9	Arrow Transportation Co	ARRW	Nasdaq	4210
10	Boyd Bros Transportation Inc	BOYD	Nasdaq	4210
11	Builders Transport Inc	TRUK	Nasdaq	4213
12	Cannon Express Inc	CANXA	Nasdaq	4210
13	Celadon Group Inc	CLDN	Nasdaq	4210
14	Consolidated Freightways Inc	CNF	NYSE	4213
15	Country Wide Transport Svcs In	CWTS	Nasdaq	4210
16	Covenant Transport Inc	CVTI	Nasdaq	4210
17	F R P Properties Inc	FRPP	Nasdaq	4210
18	Frozen Food Express Inds Inc	FFEX	Nasdaq	4210
19	General Parcel Service Inc	GPSX	Nasdaq	4210
20	Heartland Express Inc	HTLD	Nasdaq	4210
21	Hunt J B Transport Services In	JBHT	Nasdaq	4213
22	Intrenet Inc	INET	Nasdaq	4210
23	K L L M Transport Svcs Inc	KLLM	Nasdaq	4210
24	Kenan Transport Co	KTCO	Nasdaq	4210
25	Knight Transportation Inc	KNGT	Nasdaq	4210
26	Landair Services Inc	LAND	Nasdaq	4210
27	Landstar System Inc	LSTR	Nasdaq	4210
28	M S Carriers Inc	MSCA	Nasdaq	4210
29	Mark VII Inc	MVII	Nasdaq	4210
30	Marten Transport Ltd	MRTN	Nasdaq	4210
31	Matlack Systems Inc	MLK	NYSE	4213
32	MTL Inc	MTLI	Nasdaq	4210

Table 1
(continued)

Number	Name	Ticker	Market	SIC Code
33	O T R Express Inc	OTRX	Nasdaq	4210
34	Old Dominion Freight Line Inc	ODFL	Nasdaq	4210
35	P A M Transportation Svcs Inc	PTSI	Nasdaq	4210
36	Simon Transportation Svcs Inc	SIMN	Nasdaq	4210
37	Swift Transportation Co Inc	SWFT	Nasdaq	4210
38	Trism Inc	TRSM	Nasdaq	4210
39	U S 1 Industries Inc	USO	NYSE	4215
40	U S A Truck Inc	USAK	Nasdaq	4210
41	U S Environmental Solutions In	USES	Nasdaq	4210
42	U S Xpress Enterprises Inc	XPRSA	Nasdaq	4210
43	Werner Enterprises Inc	WERN	Nasdaq	4210
44	Yellow Corp	YELL	Nasdaq	4213

In addition, we also check for any industry announcement during this period that would contaminate the stock returns for all companies in the industry. No industry announcements were found during the eleven day period. Since no firm specific or industry wide announcements were made during the eleven days under study, our event study methodology can determine if there is an abnormal change in stock price that can be attributed to termination of the ICC.

Our sample includes 44 motor carriers that are listed in Table 1.[4] Our sample includes three motor carriers that trade on the NYSE (Consolidated Freightways, US 1 Industries Inc., and Matlack Systems Inc.) and one motor carrier that trades on the AMEX (Anuhco Inc.). The other forty motor carriers trade on the Nasdaq stock market and include firms like J.B. Hunt, Werner Enterprises, Arnold Industries, Swift Transportation, Heartland Express, and Yellow Corporation. The mean capitalization value for the sample of motor carriers is $151 million and the standard deviation is $221 million.[5] The median capitalization for the sample is $66 million and the capitalization values range from $3.3 million for Country Wide Transport to $1.1 billion for Consolidated Freightways.

An event study methodology is used to examine the reaction of motor carriers' stock prices to the passage of the ICC Termination Act of 1995. The event study methodology is well established and commonly used to analyze the impact of an event on stock prices. The event study breaks the stock price change into two components. The first component is the stock price change that is a result of a general stock market price change. The second component is the stock price change that is a result of an informational event. In the current study the ICC Termination Act serves as the informational event. The first step of an event study is to define an event period that is usually centered on the announcement date which is called day zero ($t=0$). The announcement date in this study is

December 29, 1995, the date that *The Wall Street Journal* reported that President Clinton signed the ICC Termination Act into law.[6] Since the event period should capture all the event's effects on stock prices, an eleven-day event period is often used. Day minus one, (t=-1), is defined as one trading day prior to the announcement, day plus one, (t=1), is one trading day after the announcement, and so forth. Thus, day minus five, (t=-5), is defined as five trading days prior to the announcement and day plus five, (t=5), is defined as five trading days after the announcement.

The next step of an event study is to calculate the predicted (or normal) return for each day in the event period for each firm. The predicted return is the return that would be expected if no event took place. Since the return on the market index is commonly used as the predicted return, we use the return on the S&P 500 Index as the predicted return.

The S&P 500 is a market index of 500 large domestic corporations whose market capitalization represent around 75% of all publicly traded corporations in the United States. Hence, the S&P 500 return is an excellent proxy for the market return. Then we calculate the daily excess return for each stock for each day over the eleven-day event period. An excess return represents that portion of a predicted return that is not due to overall market fluctuations, but is a result of the unique characteristics of the individual firm. The daily excess returns for each individual motor carrier i on day t, ER_{it}, is defined as:

$$ER_{it} = R_{it} - R_{mt} \qquad (1)$$

where R_{it} is the return on the stock of motor carrier i on day t and R_{mt} is the return on the market portfolio (S&P 500 Index) on day t. The daily excess return represents the return that is not predicted by the overall market and is an

estimate of the change in the stock price on that day. By summing together the daily excess returns of the 44 motor carriers each day we can calculate the average excess return. The average excess return allows the creation of what can be viewed as a diversified portfolio with firms only within a specific industry. This diversified portfolio-like technique eliminates the unique individual firm returns by offsetting random positive stock return movements with random negative stock price movements. The result is an average excess return that captures only the unique characteristics of the ICC event under examination in this paper. The average excess return for each day of the event period is calculated as:

$$AER_t = [\sum_{i=1}^{N} ER_{it}]/N \qquad (2)$$

where N is equal to 44, the number of motor carriers in our sample, and ER_{it} is the daily excess return for motor carrier i on day t. Any non-event or insignificant event should result in an AER_t that is not significantly different from zero. Statistical tests of significance are based on the Z statistic defined as:

$$Z_t = \sqrt{N_t} [AER_t / \delta_t] \qquad (3)$$

where δ_t is the standard deviation of the daily excess returns on day t and N_t is equal to 44, the number of motor carriers in our sample, and AER_t is the average excess return for day t of the event period.

It is also important to examine the cumulative average excess return, CAER, because information is often leaked to the financial market just prior to the event's announcement and the market often takes several days to completely digest the financial impact of an event upon a firm's future financial performance as captured by the stock price.

The cumulative average excess return, $CAER_{-1,t}$, is defined as:

$$CAER_{-1,t} = \sum_{t=1}^{T} AER_t \qquad (4)$$

where $CAER_{-1,t}$ is determined for a defined interval from day minus one to some day such as day zero ($CAER_{-1,0}$) or day plus five ($CAER_{-1,+5}$). The $CAER_{-1,t}$ is an estimate of the change in stock price that is caused by the event over a period of time. The market participants may quickly begin figuring into the stock price the effect of an anticipated, though unannounced, event. This typically happens the day before the announcement and the amount of change in the stock price is based on the perceived probability of the event occurring. The market will continue to make adjustments over several days following the announcement as analysts and market participants attempt to determine the magnitude of the event on each firm. For example, an announcement that one firm in an industry has much higher earnings than expected will drive up that company's stock price, but the full adjustment may take from hours to days for the market to digest. The smaller the firm the more likely it will take longer for the market to completely adjust and completely reflect the updated news about earnings.

The NASDAQ market is generally considered to trade smaller capitalized stocks whose prices would take slightly longer to adjust to an event. Since our sample has 40 of 44 firms that trade on the Nasdaq market, we expect that it may take several days for the market to completely price the event (termination of the ICC). For robustness and completeness, we examine the $CAER_{-1,t}$ over several different intervals. Again, any non-event period or an insignificant event period should result in a $CAER_{-1,t}$ that is not significantly different from zero. Statistical tests of significance are based on the Z statistic defined as:

$$Z_t = \sqrt{N_t} \, [CAER_{-1,t}/\delta_t] \qquad (5)$$

where δ_t is the standard deviation the average excess returns over the interval, and N_t is equal to 44, the number of motor carriers in our sample, and $CAER_{-1,t}$ is the cumulative average excess return over the interval.

RESULTS

We examine the AERs of the entire sample for each of the eleven days and the CAERs over six time intervals. Table 2 presents the AERs for each day of the eleven-day event period. The AERs range from a low of -1.2% on day minus two to a high of 1.7% on day minus one. As expected, most days have positive AERs (days -3, -1, 0, 1, 2, 3, 4) and two of the seven days have significantly positive average excess returns (AER_{-1} at 1.7% and AER_3 at 1.0%).

The major tests in this methodology involve testing the CAERs over time intervals that allow the financial markets to decipher the effect of the passage of the ICC Termination Act on motor carriers. Thus, we examine the cumulative average excess return, $CAER_{-1,t}$, over six time intervals that are presented in Table 3. If the ICC Termination Act of 1995 is perceived as favorable by the stock market, then the CAERs should be significantly positive. Conversely, if the Act is perceived as unfavorable, then the $CAER_t$ should be significantly negative. The CAER for each time interval is positive (with $CAER_{-1,0}$ the lowest at 1.9% and $CAER_{-1,4}$ the highest at 4.1%). Additionally, every CAER is highly significant (with Z-statistics from 1.527 to 2.779). Thus, on average, motor carriers saw their stockholders' wealth increase somewhere between two and four percent when President Clinton signed the ICC Termination Act of 1995.

The next part of our analysis is to measure the dollar effect on motor carriers and these results are presented in Table 4. If we multiply the smallest cumulative average excess return, $CAER_{-1,0}$ by the mean (median) capitalization value for the sample, we find that the average motor carrier gained over $2.87 million ($1.25 million) by President Clinton signing the bill. Conservatively, motor carriers gained between $1.25 million and $2.87 million when Clinton signed the ICC Termination Act. Applying the same method to the highest cumulative average excess return, $CAER_{-1,4}$ we find that the average motor carrier gained over $6.1 million ($3.9 million). Thus, in the best case scenario, motor carriers may have gained between $3.9 million and $6.1 million with the passage of the ICC Termination Act. In addition to statistical significance, it is clear that the results are economically meaningful. Shareholders in the motor carrier industry economically benefitted dramatically from the passage of the ICC Termination Act. In fact, over the two- to seven-day event period window around which the bill was signed, the owners of these forty-four motor carriers cumulatively gained somewhere between $55 million and $272 million.

TABLE 2
AVERAGE EXCESS RETURNS (AER_t)

Day	AER_t	Z-Statistic[1]
-5	-0.479%	-0.470
-4	-1.190%	-1.077
-3	0.372%	0.500
-2	-1.225%	-1.768
-1	1.681%	1.529*
0	0.220%	0.341
1	0.178%	0.230
2	0.573%	0.772
3	1.037%	1.410*
4	0.389%	0.559
5	-0.251%	-0.380

[1] The Z-statistic is a test of the null hypothesis that the AER_t is significantly greater than zero.
***, **, * Denote significantly different from zero at the 1%, 5%, and 10% levels, respectively.

TABLE 3
CUMULATIVE AVERAGE EXCESS RETURNS (CAER$_{-1,t}$)

Interval	CAER$_{-1,t}$	Z-Statistic[1]
(-1,5)	3.826%	2.482***
(-1,4)	4.078%	2.779***
(-1,3)	3.689%	2.588***
(-1,2)	2.652%	2.150**
(-1,1)	2.079%	1.527*
(-1,0)	1.901%	1.759**

[1] The Z-statistic is a test of the null hypothesis that the CAER$_{-1,t}$ is significantly greater than zero.

***, **, * Denote significantly different from zero at the 1%, 5%, and 10% levels, respectively.

TABLE 4
FINANCIAL GAINS TO OWNER'S OF MOTOR CARRIERS FROM THE PASSAGE OF THE ICC TERMINATION ACT OF 1995 (DOLLAR FIGURES IN MILLIONS)

Interval	CAER$_{-1,t}$	Average Motor Carrier Gain in Wealth using the Mean (Median) Cap Value[1]	Cumulative Wealth Gain for Industry using Mean (Median) Cap Value[2]
(-1,5)	3.826%	$5.788 ($2.528)	$254.7 ($111.2)
(-1,4)	4.078%	$6.169 ($2.694)	$271.5 ($118.5)
(-1,3)	3.689%	$5.581 ($2.437)	$245.6 ($107.2)
(-1,2)	2.652%	$4.012 ($1.752)	$176.5 ($77.1)
(-1,1)	2.079%	$3.145 ($1.374)	$138.4 ($60.4)
(-1,0)	1.901%	$2.876 ($1.256)	$126.5 ($55.3)

[1] The average motor carrier gain in wealth using the mean cap value is calculated by multiplying the cumulative average excess return (CAER$_{-1,t}$) by $151 million ($66 million) which is the mean (median) cap value of the firms in our sample.

[2] The cumulative wealth gain for industry using the mean (median) cap value is calculated by multiplying the 44 firms in the sample by the average motor carrier gain using the mean (median) cap value.

MANAGERIAL IMPLICATIONS

"The essence of any applied discipline is to accumulate sufficient knowledge to guide practitioners toward successful achievement of their responsibilities" (World Class Logistics 1995). The current research attempts to assist practitioners in accumulating knowledge about the importance of a public policy change on their industry. Since government regulation is costly to motor carriers and deregulation is welcomed by the financial markets, these results have several implications for managers in the transportation industry.

The results of the current research illustrate that the shareholders of the average motor carrier gained between $1.25 million and $6.1 million with the passage of the ICC Termination Act. The positive stock price reaction to deregulation should clearly justify to transportation executives that they should consider providing significant resources to trade associations designed to pursue a free market agenda for the motor carrier industry. Motor carrier executives should also consider participating in an active coalition that meets annually with key Representatives and Senators in Washington.

Since the motor carrier industry as a whole recognizes significant gains from deregulation, the industry needs to participate in a coalition designed to work toward a common goal. Establishing a long-term coalition with other executives in the motor carrier industry could dramatically improve the industry's Congressional lobbying power in Washington. Effectively constructed coalitions can provide carriers with a long-term relationship where all the coalition members can benefit from the strong pursuit of further industry deregulation. The popularity of implementing coalition type relationships with other businesses appears to be rising as firms realize the high level of achievement available by pooling resources with other companies and employing networking techniques.

Building coalitions and pooling resources with other carriers not only provides companies with a better resource base but also allows individual carriers to concentrate on specific lobbying efforts where they have developed an expertise. Properly designed, an effective coalition provides the industry with a powerful cohesive entity while at the same time allowing each participant of the coalition to utilize individual strengths to pursue specific goals. However, for the coalition to work effectively all of the members must feel each participant is willing to dedicate resources to the common efforts of the coalition.

Competition levels in the motor carrier industry have increased dramatically since deregulation (Harper 1982 & 1983). As the U.S. continues to pursue a strategy of industry deregulation it is likely that downward pressure will continue to be placed on prices. Downward pressure on prices often reduces profit margins and increases the importance of each carrier understanding their individual operating costs. In response to the changing operating environment management must have a strategy in place to continually track and monitor costs. Effective implementation of such a strategy allows managers to more accurately determine the costs associated with each movement and adjust the price when necessary.

CONCLUSIONS

Although the study only measures the financial gain to motor carriers by the passage of the ICC Termination Act of 1995, it should be pointed out that deregulation also produces financial gains for other stakeholders, including taxpayers, shippers, and consumers. Taxpayers who do not have to pay the cost of

operating unnecessary government agencies (e.g., ICC) realize a financial benefit since they are no longer required to fund the agency through Federal tax dollars. Customers (e.g., shippers and consumers) also benefit financially since deregulation tends to increase motor carrier service levels and decrease costs. The result is a better overall value for the many customers of the motor carrier industry.

Current participants in the motor carrier industry appear fully aware they may continue to face big adjustments in order to remain competitive in the aggressive environment created by further deregulation (Corsi, Grimm, Smith, & Smith 1991). Nevertheless, it appears the trend towards industry deregulation is perceived positively by owners and stakeholders throughout the motor carrier industry. The results of our investigation indicate a strong positive reaction to deregulation. The forty-four publicly traded carriers in the current study gained an astonishing $55 million to $272 million over the period surrounding termination of the ICC. Therefore, the researchers conclude a strategy of continued deregulation is good for the motor carrier industry and should be pursued vigorously.

ENDNOTES

[1] There are two characteristics of stocks that allow one to examine the impact of an event on an industry or firm. First, stock prices are determined by a firm's expected future earnings. Second, stock prices react quickly and efficiently to news that will impact expected future earnings of the firm. Therefore the announcement of an event that is perceived by investors as favorable (unfavorable), to increase (decrease) future earnings, will result in an immediate stock price increase (decrease). Thus, examination of a firm's stock price reaction to an event via an event study methodology provides a venue by which managers can immediately gauge the expected economic impact on an industry or a firm.

[2] CRSP stands for the *Center for Research in Security Prices* and is located at the Graduate School of Business at the University of Chicago. The daily stock returns and the S&P 500 Index returns used in this study were also taken from the 1996 CRSP database.

[3] Since the event window spans two years (December 21, 1995 through January 8, 1996), we searched the *Wall Street Journal Index* for 1995 and 1996 for major news announcements during the eleven-day event period.

[4] There are initially 45 firms with primary SIC codes of 4210, 4213, and 4215. Thus, only Rollins Truck Leasing Corp. was deleted from the sample because it is primarily an equipment leasing company.

[5] The capitalization value of a company represents the market value of its owners' equity. The capitalization value is calculated by multiplying the motor carrier's stock price by its number of shares outstanding. Our event study methodology measures the gain or loss to the capitalization value of motor carriers that can be attributed to the event examined.

[6] The order of events leading up to the passage of the ICC Termination Act of 1995 is as follows. The House of Representatives passed their version of the bill in June 1995 and the Senate

passed their version in November 1995. Although the House and Senate both passed versions of the bill, President Clinton opposed the ICC Termination Act and according to the December 21, 1995 *Wall Street Journal*, Clinton threatened to veto the bill. This means that there was a clear signal sent to the financial markets that passage of the Act was unlikely. However, over the next week Clinton changed his position and signed the bill into law.

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APPENDIX

FIGURE 1: AERs and CAERs
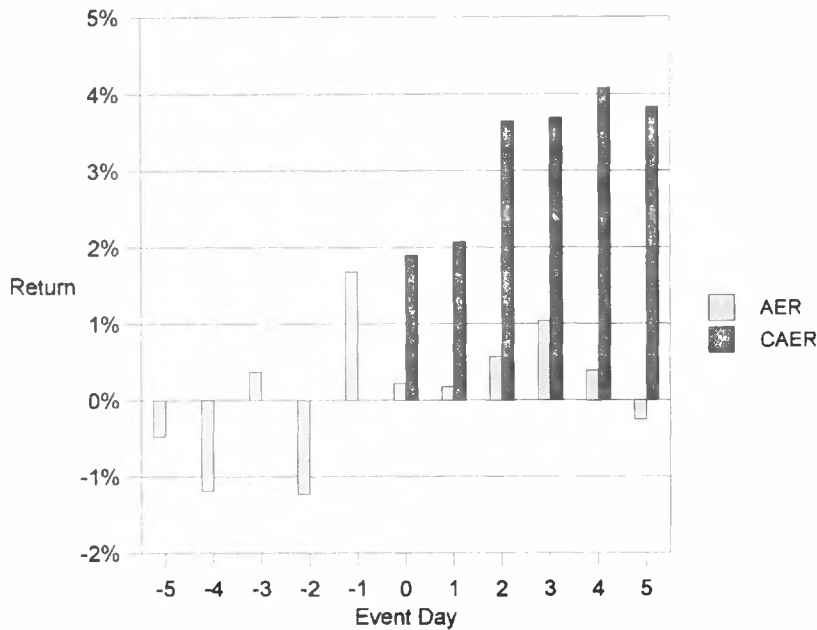
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