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# Losses in the Logistical System: The Case of Perishables\*

by

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## Abstract

The potential for losses in the logistical system is particularly great for perishables, as they are sensitive to time, climatic conditions, and handling. However, the literature is virtually silent regarding the extent and causes of such losses. This paper reports the results of a study of freight claims for produce and ornamentals. The results indicate that losses are of a magnitude that should merit the attention of shippers, carriers, and receivers. Various loss reducing measures are suggested.

## Introduction

Perishables are sensitive to climatic conditions (i.e., temperature, humidity, and gases), handling, and time (due both to mortality and value). Therefore, the potential for losses anywhere in the logistical system is always present. This is particularly true as it is common to hold perishables to the limits of their storage lives and to transport them over considerable distances. For example, innovations in storage technologies permit Pacific Northwest apples to be held up to 13 months and Northern potatoes up to 9 months. However, as they are held longer, they become less resistant to mechanical damage. The shelf lives of some commodities, such as lettuce, are so short, that even with expedited handling from field-to-store it is common for retailers to discount or discard 20 percent or more of each shipment due to time-related quality degradations (Jordan). Perish-

ables typically must travel considerable distances to market. Over half of the U.S. population and the large majority of the Canadian population still live northeast of the confluence of the Mississippi and Ohio rivers. However, over three-quarters of the produce (and, probably, of the ornamentals) shipped interstate originates west of the Great Divide, in Florida or in Texas (AMS). The large majority of red meats originates west of the Mississippi and the South is the dominant region for poultry.

Because there may be considerable delay from the time when damage occurs to the time it becomes evident, it is often difficult to identify the reason for losses. For example, lettuce may degrade in a store more quickly because it was held too long at the production site, not properly cooled prior to transport, transported with or displayed in the store near an ethylene-producing commodity (such as apples or grapefruit), or held in the store at too high a temperature. This leads to technical difficulties in designing loss-reducing techniques. Moreover, there is potential for deceptive practices, particularly as produce is not normally integrated from the producer to the retailer, except for local roadside sales.

Recognizing the potential for losses as perishables move through the logistical system, in 1930 Congress enacted the Perishable Agricultural Commodities Act (PACA). This legislation establishes procedures for the settlement of claims resulting from losses or fraudulent prac-

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tices between vendors and buyers. PACA protection, however, does not extend to carriers. Carrier groups, such as the National Agricultural Transportation League, have repeatedly called for such an extension. They allege that, due to a weak bargaining position, carriers often are forced to pay for damages they did not cause. To the author's knowledge, however, no studies or statistics exist to document the extent and severity of and reasons for perishables freight claims. Indeed, it is particularly difficult to document claims as many are settled informally by an exchange of money or a freight rate adjustment at the loading docks.

The study reported in this paper focuses on damages from the origin-region shipper to the first consuming-area receiver as indicated by freight claims for produce and ornamentals, two of the most important and injury-prone perishables types. The objectives of the study reported in this paper are to determine:

1. The frequency and severity of freight claims
2. Causes
3. Driver loss reducing behaviors (e.g., verifying load counts, taking of pulp temperatures, and use of temperature recording instruments)
4. Factors affecting freight claim probabilities
5. Attitudes regarding federal intervention

Clearly, the answers to the above are of interest to carriers. In addition, for shipper/receivers such information is of value in establishing carrier selection criteria and in developing loss reducing strategies.

#### Data

The study is based upon surveys of drivers and receivers of produce. On November 27 and 28, 1987, interviews were conducted with 301 drivers hauling produce or ornamentals from Florida at the three busiest Florida Agricultural Inspection Stations (located on U.S. I-10, U.S. I-75 and U.S. I-95). In all, there are 16 stations covering all roadways into the Florida peninsula. These stations are always open. Therefore, drivers have no incentives to select a route to avoid inspection. The three stations normally account for 85 to 90 percent of all traffic from the peninsula.

All trucks are required to stop for inspection. During the survey period,<sup>1</sup> interviews were attempted with all drivers of outbound trucks with produce or ornamentals. At each station, refusal rates were very low, between 3 and 5 percent. The high level of cooperation was due to several factors including: the enumerators dressed casually, displayed a University of Florida emblem, and identified themselves as students; respondents were assured of anonymity (names and companies were not recorded); and the survey length was short, about three minutes.

In pretesting and consultations with carriers, brokers, and officials of the National Agricultural Transportation League, it became clear that the term "freight claim" had to be carefully defined to ensure that claims not involving formal procedures or paperwork were included by the drivers. Therefore, at the start of the section in the questionnaire on freight claims, the following passage was read:

In the following questions, please consider a freight claim to be any of these:

1. A formal freight claim submitted in writing to the carrier or broker.
2. A request during unloading for you to pay cash for short, damaged, or spoiled product or for late delivery.
3. Reduced payment to you because of short, damaged, or spoiled product or for late delivery.

Ninety percent of those interviewed were carrying produce, rather than ornamentals. This is consistent with the overall flow of these commodities from Florida. Produce and, to a lesser extent, ornamentals carriers tend to be small firms. Forty-nine percent of the sample was owner-operators, 35 percent drove for for-hire fleets, and 16 percent identified their firms as private carriers. The average respondent had just over 16 years experience and indicated that 48 produce loads had been hauled over the preceding 12 months and that 67 percent of all loads carried were produce or ornamentals. Differences here across carrier types were not statistically significant at conventional levels. It should be pointed out that the drivers represented carriers operating across North America, rather than just in the Southeast. Respondents were based in 34 U.S. states and five Canadian provinces. Destinations for the loads carried at

the time of the interviews included 36 U.S. states and six Canadian provinces.

Also in November 1987, interviews were conducted with the owners of six firms that receive produce and are located on the Atlanta Farmers Market. The Atlanta Farmers Market is one of the nation's most important produce receiving facilities. It is estimated that over half of all produce shipped to the Atlanta area is distributed from this market (Beilock, Fletcher, and Mahan). The average respondent reported receiving the equivalent of 22 truckloads of produce per day.

## Results

### *Frequency and Severity of Freight Claims*

Drivers were asked how many claims they had in the past 12 months, and for the year and month of their last claim. For the average driver, a freight claim is not a common occurrence. Only 46 percent indicated that they ever had had a claim. Those reporting no claim averaged somewhat less driving experience (15.8 versus 17.4 years) and produce loads in the past 12 months (43.6 versus 49.5) than those reporting claims. Still, assuming that the number of produce loads carried in the past 12 months was not atypical, the average driver reporting no freight claims has hauled nearly 700 produce loads. By the same assumption, the average driver reporting that he/she has ever had a claim has driven for over 27 months and hauled 105 loads of produce since his/her last claim.

There appears, however, to be a small group of drivers prone to having claims. Nineteen percent (57) of the drivers stated that they had had at least one freight claim in the past 12 months (Table 1). Having one claim in the past 12 months in itself is not evidence of "claim proneness," and two claims in 12 months may be due to poor luck. But three or more in 12 months strongly suggests that a problem exists (though perhaps with a shipper or receiver, rather than the carrier). The 16 drivers with more than two claims represent only 5 percent of the sample, but account for over half of the 117 claims "generated" over the past 12 months. However, no statistically significant differences (at conventional levels) could be found between those with more than two claims in the past 12 months and all respondents reporting freight claims with regard to carrier type or operational characteristics (number of produce loads per year, use of brokers, use of recording thermometers, etc.).

Owner-operators were the most likely and private carrier drivers the least likely to have had a claim (53, 43, and 33 percent, respectively, of owner-operators, for-hire fleet drivers, and private fleet drivers reported claims). Among those reporting claims, it is estimated that since his/her last claim, the average owner-operator has driven for 25 months and hauled 94 produce loads, the average for-hire fleet driver has driven for 28 months and hauled 115 produce loads, and the average driver for a private carrier has driven for 33 months and hauled 116 loads. It is not surprising that private carriers have low freight claim frequencies. By definition, private carriers primarily haul their own cargos. When they make deliveries to themselves, there can be no freight claims, regardless of cargo condition.<sup>2</sup> Reasons for the very high incidence of claims among owner-operators is not clear. It may be that owner-operators are more aware of claims than are drivers. This would be expected to be particularly true when claims are filed at a later date for hidden damages. However, all of the receivers questioned indicated that between 95 and 100 percent of their freight claims are declared and settled while the truck is still at the loading dock.

Table 1

Freight Claim Experience for Past Year  
Of Produce Drivers Serving Florida,  
November 1987

Number of freight claims in past year	Number (%) of respondents	Number (%) of claims
0	244 (81)	0 (0)
1	27 (9)	27 (23)
2	14 (5)	28 (23)
3	7 (2)	21 (18)
4	5 (2)	20 (17)
5	3 (1)	15 (13)
6	1 (0)	6 (5)
Total	301 (100)	117 (100)

The 57 drivers with claims within the past 12 months were asked for specifics regarding the circumstances and amounts of their last claim. Among the 25 who could provide complete information, the median claim was \$350. As might be expected, the distribution of claims was very skewed (the average claim was \$2,508):

Dollar range of claims

Lowest 5th	2nd 5th	Middle 5th	4th 5th	Highest 5th
\$20-50	\$77-150	\$200-500	\$520-1,600	\$3,200-25,000

From the point of view of receivers, freight claims are much more common than is perceived by drivers. Driver responses suggest that freight claims occur with less than one percent of the shipments. However, only two of the six receivers questioned estimated freight claim problems with under 10 percent of the shipments they handle; two indicated problems with 30 to 40 percent of the shipments, and two with 75 to 80 percent of the shipments. It is not clear why there are such sharp differences in perception between drivers and receivers regarding freight claim frequencies. In part, it may be that drivers are unaware of claims filed at a later date. However, as mentioned above, receivers also indicated that virtually all claims are settled at the time the truck is at the loading dock. Moreover, owner-operators should be aware of freight claims, regardless of the timing of the filing. Part of the reason for the disparity undoubtedly is that many, if not most, claims are directed at the shipper, rather than the carrier. All but one of the receivers stated that shippers were to blame 50 percent or more of the time. Finally, it is possible that receivers included freight with minor problems for which claims were not actually filed.

Receivers were asked for the amounts of the smallest, largest, and average freight claims. As with the driver responses, the skewness of the receivers' answers suggest that the large majority of freight claims are for small dollar amounts, with comparatively few large claims. The average response for the smallest claim was \$12.50; the average for the largest claim was \$3,020; and the average claim was \$110. Receiver estimates of the percent of cargo values that freight claims represented ranged from 2.5 to 6.5 percent, averaging 4.5.

*Causes*

The 57 drivers with claims within the past 12 months were asked for the reason, as stated by the receiver, for their last claim. Receivers were asked to estimate the percentages of claims

due to various causes. Results are presented in Table 2. Drivers and receivers concur that load shifts/crushing is the most frequent cause of freight claims. Receivers appear to be much more aware of temperature/gases/humidity (T/G/H) problems than are drivers, and drivers are more cognizant of shortages as a reason for freight claims. T/G/H problems may result in damages not evident until after the truck has left. In some instances losses may be so slight that it is not worth it to file a claim. In other instances, losses may be traceable to the shipper (for example, improper precooling). It is not surprising, therefore, that drivers are less aware than are receivers of T/G/H as a source of product damage. However, it is likely that drivers would be painfully aware of virtually all shortage claims. Normally drivers have responsibility to verify that the items listed on the shipping documents correspond to what is actually loaded, and receivers normally check cargos against shipping documents as they are off-loaded. In almost all cases, therefore, shortage-related claims are immediately evident, with blame laid at the drivers' feet.

**Table 2**

**Freight Claim Reasons and Amounts**

Reason for claim	Percent of Claims		Average claim amount reported by drivers
	Reported by drivers	Average receiver response	
Transportation/gases/humidity	15	27	\$7,577
Load shift/crushing	37	40	\$ 353
Shortage	33	18	\$ 587
Timing of delivery	6	10	\$ 275
Other or unknown	9	5	\$ 50

Damages appear to be 13 to 21 times more severe, on average, from T/G/H than from load shifts/crushing or shortage (see Table 2). This result underscores the importance of having well-maintained refrigeration equipment and adequate insulation, and of not combining incompatible commodities in the same load.

*Methods of Reducing Freight Claim Frequency and Severity*

Carriers and drivers can take actions to reduce freight claim incidence. The obvious minimum requirement is the use and mainten-

ance of suitable equipment (i.e., the tractor and refrigerated trailer). Beyond this, the driver may ensure that the produce has been properly pre-cooled<sup>3</sup> by taking pulp (i.e., internal) temperatures before accepting the load. Forty-two percent of the drivers indicated that they always did so, while one-quarter stated that they never took pulp temperatures (Table 3). Drivers who never had a claim were nearly twice as likely never to take pulp temperatures as those who have had claims. This seemingly perverse result may reflect the learned behavior of drivers who have had to pay for the consequences of improperly precooled produce.

**Table 3**

**Load Monitoring and Use of Regular Shippers and Receivers by Driver Freight Claim Experience**

Item	Percent		
	All drivers	Ever had a claim	Never had a claim
Pulp temperature:			
always	42	43	40*
usually	8	9	8
sometimes	16	20	13
rarely	9	10	8
never	25	18	31
current load	47	46	47
Count load:			
always	72	76	69
usually	7	8	6
sometimes	7	6	9
rarely	3	3	2
never	11	7	14
current load	78	81	75
Recording thermometer:			
always	18	12	24**
usually	8	10	7
sometimes	23	28	17
rarely	19	23	15
never	32	27	36
current load	24	16	30***
Regular shippers	73	73	74
Regular receivers	73	78	68***

Note: Level of significance for differences between drivers who have and have not had freight claims:

\* .10  
 \*\* .05  
 \*\*\* .01

Clearly, drivers should directly verify that what is loaded corresponds to what is listed on the shipping documents. Nearly 80 percent responded that they always or usually count the load and 78 percent had counted the load with

them at the time of the interview (Table 1). As with taking pulp temperatures, those never having a claim were twice as likely never to count the load as those who have had claims. However, the differences between the two groups were not statistically significant at conventional levels.

Particularly due to the high claim amounts associated with T/G/H damages, it seems prudent to use recording thermometers, which provide records of the ambient temperatures in the trailer. Only 18 percent of the drivers always use these instruments, while nearly one-third indicated that they never do (Table 3). Those never having a claim were twice as likely as those who have had claims to always use recording thermometers and nearly twice as likely to have had one on the load with them at the time of the interview. This result is impressive considering, as argued previously, "learned behavior" from prior claims experiences should increase use among those who have had claims.

Drivers unfamiliar with the shipper or the receiver might be more likely to precipitate freight claims due to unintentional gaps in performance, such as having difficulty locating the receiver and arriving late. Moreover, shippers and receivers would have more incentive, *ceteris paribus*, to bother an infrequently used carrier with a minor claim or even to file a fraudulent claim than would be the case for carriers with which there has developed a working relationship. For this reason, drivers were asked to estimate the percentages of their produce loads that are with regularly served shippers and receivers. Across the sample, the mean responses for both regular shippers and regular receivers was 73 percent (Table 3). Between those who have and have not had claims, the mean responses were virtually identical with respect to shippers. However, those who have had claims, on average, serve regular receivers somewhat more than those who have not had a claim (78% versus 68%, difference significant at the .05 level).

*Factors Affecting Freight Claim Probabilities*

There is an important difference between believing that a factor, such as use of recording thermometers, should be associated with reduced claims frequency and demonstrating that it is actually the case. Such a demonstration should be multivariate to control for other factors. For example, it was earlier noted that owner-operators were more likely than other drivers to have had a claim. Owner-operators also were some-

what less likely to always use recording thermometers. Without a multivariate approach, it is impossible to determine if those not using recording thermometers or owner-operators or both are more likely to have freight claims.

To facilitate such an analysis, a model was developed to predict the likelihood of a driver having had a claim in the past five years (PR\_CLAIM). Only drivers with at least five years experience were used in the analysis. PR\_CLAIM was assumed to be a function of basic driver characteristics, exposure to possible claims situations, and loss-reducing behavior. The basic characteristics included were the carrier type and years of experience (EXPER). For carrier type, binary variables for owner-operator (OWNOP) and private carrier driver (PRIVATE) were specified, with for-hire fleet driver being the omitted category. The number of produce loads in the past twelve months (FFVYR) was used as a proxy for exposure to claims situations. The proxies for claim-reducing behavior were the percentage of produce loads with regularly used shippers (PRSHIP) and receivers (PRREC); and binary variables indicating if the load with the driver at the time of the interview had been counted by the driver (NCOUNT), if the driver took pulp temperatures prior to acceptance (NPULP), and if a recording thermometer was being used (NTHERM).

The estimated equation is statistically significant at the .05 level (and would be significant at the .02 level) (Table 4, equation 1). The equation correctly categorizes 66 percent of the sample. Consistent with the univariate analysis, the point estimates suggest that owner-operators are more likely and private carrier drivers are less likely than for-hire fleet drivers to have had a claim in the past five years. However, these relationships are not significant at conventional levels. Indeed, only the parameter estimates associated with PRREC and NTHERM are significant at the .05 level or better.

The positive sign of the parameter estimate associated with PRREC (.008230) is somewhat surprising, as it indicates a positive relationship between claims frequency and concentration on serving regular receivers. Moreover, drivers reporting that their last claim was with a then regularly served receiver indicated higher claim amounts, on average, than did those with claims from occasionally-served or never-before-served receivers (\$2,047, \$1,147, and \$206, respectively). Three-quarters of those having their last claim with a then regularly served receiver have served that receiver since

the claim. These results suggest that willingness to process freight claims is a normal service or requirement for being a regularly used carrier. It follows, then, that a cost to receivers of using unknown carriers may be willingness to absorb some freight damage losses. This is particularly likely if litigation costs are prohibitive.<sup>4</sup>

The strongest relationship is associated with the use of recording thermometers. At mean levels for the other variables, a driver with a recording thermometer on the current load has a probability of having had a claim in the past five years .219 lower, *ceteris paribus*, than a driver not using a recording thermometer (Table 4, column 2). It may be argued that the direction of causality is not clear; that is, recording thermometer use might be influenced by claims history instead of the other way around. However, as argued previously, claims experience-induced use of recording thermometers would act in the opposite direction to the observed relationship. Therefore, the estimated relationship may be viewed as a lower bound estimate of the true ability of recording thermometer use to reduce freight claims probabilities against carriers.

By the same reasoning, the insignificant and unexpectedly positive signs of the parameters associated with NPULP and NCOUNT may be artifacts of claims experience-induced behavior. If it were possible to control for this effect, it might be revealed that the taking of pulp temperatures and counting of the load does reduce claim probabilities.

To avoid possible simultaneity problems,<sup>5</sup> the three variables most susceptible to claims-induced behavior (NPULP, NCOUNT, and NTHERM) were omitted (Table 4, equation 2). PRSHIP and PRREC were retained because, except in extreme cases, it does not seem likely that carriers would alter reliance on regular shippers and/or receivers due to claims problems.<sup>6</sup> The estimated parameters associated with the variables in Equation 2 have the same signs, and approximately the same magnitudes as the corresponding estimates for Equation 1, suggesting that any simultaneity problems are not severe.

#### *Attitudes Regarding Federal Intervention*

Drivers and receivers were asked if federal intervention into freight claims disputes between carriers and receivers would be desirable. All of the receivers opposed such a development, asserting that there were no problems with direct carrier-receiver negotiations. However, half of the drivers expressed support for the idea, while

Table 4

Logit Analysis of Probability of Having Had a Freight Claim in Past 5 Years

Variable <sup>1</sup>	---Equation 1---		---Equation 2---	
	Coefficient <sup>2</sup>	Change in Probability <sup>3</sup>	Coefficient <sup>2</sup>	Change in Probability <sup>3</sup>
INTERCEPT	-1.015** (.5113)		-.7793* (.4109)	
OWNOP	.2777 (.3176)	.068	.3404 (.3016)	0.84
PRIVATE	-.5148 (.4421)	-.126	-.5647 (.4276)	-.139
EXPER	.01208 (.01504)	.003	.01038 (.01461)	.003
FFVYR	.004194 (.003247)	.001	.003578 (.003019)	.001
PRSHP	-.004379 (.004180)	-.001	-.005494 (.003985)	-.001
PRREC	.008230** (.003997)	.002	.008189** (.003927)	.002
NPULP	.05752 (.2961)	.014		
NCOUNT	.3797 (.3795)	.093		
NTHERM	-.9015*** (.3627)	.219		
-2 Log Likelihood Rate	291.8**		308.35*	
Number of observations	228		234	
Percent correctly predicted by model <sup>4</sup>	65		61	

<sup>1</sup> See text for explanation of variables.

<sup>2</sup> Standard errors in parentheses:

- \* - significantly different from zero at .10 level
- \*\* - significantly different from zero at .05 level
- \*\*\* - significantly different from zero at .01 level

<sup>3</sup> Change in probability per unit change in the independent variable calculated at mean levels for the sample. This formula for this calculation is as follows:

$$P_i = \beta_i [e^z / (1 + e^z)^2]$$

where  $P_i$  = change in probability of having had a claim per unit change in the  $i^{th}$  independent variable

$z$  = value of the logit equation (column 1) at mean levels for all independent variables

$e \cong 2.71828$

<sup>4</sup> If estimated probability equalled or exceeded .5, assumed to predict that the driver had had a claim.



35 percent were opposed. Not surprisingly, owner-operators and for-hire fleet drivers were more likely to favor federal intervention than were drivers for private fleets (54%, 52%, and 33%, respectively).<sup>7</sup>

Differences were also noted based upon freight claims experience. Fifty-six percent of the drivers who have ever had a claim expressed support for federal involvement in settling freight claims, versus 45 percent of those who have never had a claim. This suggests that, unlike receivers, carriers are not satisfied with the current system of resolving claims. It should be noted that near-equal percentages of those ever and never having claims expressed outright opposition to federal involvement. Rather, 20 percent of those never having a claim were uncertain, versus only 10 percent of those who have ever had a claim.

Fifty-one percent of those expressing support for federal involvement also stated that they would be willing to pay a licensing fee for the service. Therefore, just over one-quarter (.51 x .50=.255) support intervention to the extent of being willing to pay a fee. The carrier, rather than the driver, would probably pay such fees; therefore, the responses of the owner-operators are of particular interest. Fifty-four percent of the owner-operators supporting federal intervention in concept, or nearly 30 percent of all owner-operators in the sample, expressed willingness to pay for the service.

### Summary and Conclusions

Perishables are particularly susceptible to losses as they move through the logistical system. However, virtually no research has been done to document the extent and reasons for losses. The study reported in this paper has focused on losses, as indicated by freight claims, for produce and ornamentals from the origin-region shipper to the first consuming-area receiver. The principal findings are:

1. Freight claims are concentrated among a small proportion of all drivers.
2. The most common cause for freight claims is load shifts and crushing. Dollar amounts per claim, however, tend to be modest.
3. The most costly claims, on average, result from faulty climate control. Consistent with this observation, the most important action that a carrier can take to lower freight claim

probabilities is to use a recording thermometer.

4. Receivers express satisfaction with direct receiver-carrier or receiver-shipper negotiations to settle freight claims. Drivers appear split, with half supporting a more active role for the federal government.

Clearly, losses in this segment of the logistical system are severe enough to merit special attention by carriers, shippers, and receivers. The concentration of freight claims among a small proportion of drivers suggests that shipper/receivers should review the claims history of prospective carriers. All parties should insist upon adequate stacking and bracing procedures to avoid losses due to load shifts and crushing. Most important, recording thermometers should be used for most, if not all, perishables requiring temperature control. These measures are not costly, particularly in view of the freight loss potentials and frequencies reported by both drivers and receivers. Finally, the sharp differences between driver and receiver attitudes regarding the need for federal intervention may reflect real or perceived differences in negotiating positions. Carrier groups are applying political pressure to extend PACA-type legislation to themselves.<sup>8</sup> It may behoove shippers and receivers to examine the implications to them of such legislation and, if the implications are unfavorable, to develop alternative negotiating procedures more acceptable to both parties.

### Endnotes

- [1] Interviews were conducted at all three stations on both days from 6:00 PM to 1:00 AM. This tends to be the high volume period for outbound produce and ornamentals at the stations.
- [2] An exception to this would be when the transportation division is treated as a separate profit center. Other divisions may actually pay the transportation division for its services and exact penalties (i.e., file claims) for unacceptable service.
- [3] In general, trailer refrigeration units are designed to maintain, but not appreciably lower, produce internal temperatures. Therefore, precooling by the shipper is necessary to prevent temperature-related damage during transit.

- [4] Litigation would more often be necessary, *ceteris paribus*, against carriers not having an established relationship with the receiver.
- [5] However, at the expense of bias due to missing variables.
- [6] Carriers may elect not to serve a shipper or receiver due to claims experiences. However, only if claims were a severe problem does it seem likely that a carrier would narrow the range of those that it serves, and then only if the carrier perceived a link between familiarity with shipper/receivers and claims probabilities.
- [7] This follows because to the extent that the carrier hauls its own produce (either as the shipper or the receiver), there is no gap in time not covered by PACA.
- [8] For example, the National Agricultural Transportation League has published numerous editorials advocating such legislation in its magazine, *NATL News*, and has had several meetings and communications with U.S. Congressmen and USDA officials.

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