The U.S. Owner-Operator Trucker: A Transportation Policy Based on Personal Bankruptcy

by

D. DARYL WYCKOFF

Harvard University, Massachusetts *

A large, highly productive, and vital segment of the U.S. intercity freight transportation capacity is subject to violent and, at times, disruptive convulsions as a buffer to absorbing shifts in transportation demand. I am referring to that group of single-truck fleet, independent operators known in the United States as "owner-operators." It has been estimated that some 100,000 such persons own and operate their own trucks without Interstate Commerce Commission (ICC) authority and provide approximately 25 to 40 percent of the intercity truck transportation in the United States. Until recently this segment of the U.S. transportation industry received little attention. Certainly there was no concern for the welfare of this group of independent small businesses that were ignored by the government and the larger competitors.

Two events have brought these carriers greater attention. First, during the fuel shortages of 1973 and 1974 these operators found themselves to be without fuel allocations. This led to a national shutdown of the owner-operators with serious reprocusions. Second, during the economic down turns of the U.S. economy in recent months a large number of the owneroperators went bankrupt, and there is little rush to replenish the ranks als the economy has begun to pick up.

These unregulated carriers are the elastic that permits expansion and contraction of the U.S. capacity. The behavior of these owner-operators hold many lessons for governments contemplating regulatory policy for transportation.

U.S. TRUCKING INDUSTRY REGULATORY STRUCTURE

To understand the role of the owner-operator in the U.S. trucking industry it is necessary to understand his position within the U.S. regulatory framework. Exhibit 1 provides a general structure for the U.S. industry. The private carriers are not regulated by the ICC. The for-hire carriers are divided into those who operate entirely within one state and those who transport goods across state lines. Each state exercises its unique forms of regulation on the intrastate carriers. The interstate carriers are regulated by the ICC unless exempt commodities are carried (such as fish and unprocessed agricultural products).

Carriers under ICC jurisdiction must comply with restrictions on certification, routes or areas served, commodities handled, rates charged, finance, mergers, and acquisitions. Unlike some other national transportation regulators, the ICC does not regulate the number of trucks a carrier may operate. So, by regulating entry and exit the number of competitors is controlled but the capacity is not.

Common carriers must secure "certificates of public convenience and necessity," and they must make certain services available to all shippers without discrimination. Contract carriers are required to obtain a "permit" to provide prescribed types of contract services to a small number of shippers (usually no more than 10). It is generally considered difficult for new common carriers to enter and for existing firms to extend their authorities without purchasing the existing rights of other companies. Even such a transfer of rights requires the permission of the ICC.

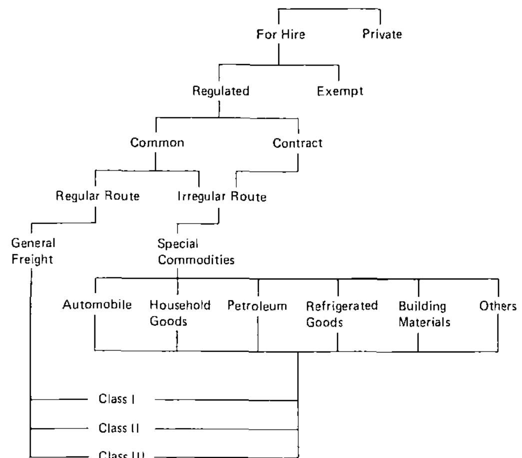

Exhibit 1 - The structure of the motor carrier industry

Owner-operators usually do not have the resources to secure an operating authority from the ICC nor purchase existing operating rights from other carriers. Because of this, the owner-operator has three options available, all of which are exercised: transport exempt commodities (directly or through a broker), act as a subcontractor (usually called a lessee) to a regulated carrier, or transport regulated goods illegally. ICC regulations permit an owner-operator to "lease" himself and his equipment to a regulated carrier on a "permanent" (30-day notice to cancel) lease. He may also "trip lease" to return to his base of operations, but he is prohibited to originate a trip on this basis. It is easy to see how such a provision might invite abuse. The 3-day permanent leases are not particularly successful in creating long-term relationships between owner-operators and the regulated carriers. Since

* *This paper is based on the research of D. Daryl Wyckoff of Harvard University and David H. Maister of the University of British Columbia.*

the regulated carrier is not usually required to provide an owner-operator with any specified amount of work, the owner-operators often drift between the regulated, and exempt sectors. In fact, such situations are often well understood and expected by the regulated carriers when an owner-operator is contracted for.

The arrangement between the regulated carrier and the owner-operator usually calls for the former to pay the latter a fixed percentage of the revenue from a load carried. If the owner-operator provides the truck and trailer, this amounts to approximately 75 percent. In some respects it might be argued that the 25 percent retained by the regulated carrier who holds the certificate is charging the owner-operator a toll for the privilege to operate under ICC regulation. However, the regulated carrier may be providing the owner-operator with a variety of services including arranging highway permits, licenses, health and welfare benefits, and, not the least, selling. Since rates for exempt commodities are usually substantially below the rates for regulated commodities, there is substantial temptation for an owner-operator to bypass the regulated carrier to deal illegally with the shipper. It is difficult to estimate precisely the volume of regulated traffic which moves illegally each year. My own field interviews indicate that roughly 10 percent of the traffic of the owner-operators sampled was in this category. It is so common that the regulators tend not to even bother to investigate but the most blatant violators.

THE OWNER-OPERATOR'S ROLE IN THE INDUSTRY

The main operating characteristic of the owner-operator is that he is basically a truckload (TL) carrier. This is a very important feature to recognize as it explains a great deal about his role in the trucking industry. A truckload operation requires no investment in terminals (or depots); no employees for loading, sorting, and unloading; no consolidation (one shipper per truckload); and relatively little administrative control. The truckload operation is essentially very simple: loading at the shipper's dock (bank), driving to the consignee, and unloading. This simplicity, lower investment, and freedom from fixed base and route operation implied in a consolidation operation, are obviously very attractive, if not essential, to the owner operator.

General commodities carriers are most frequently identified as consolidators and carriers of less than truckload (LTL).[1] But, as seen in Exhibits 2 and 3 there have been a number of subcontract operators providing services to these carriers. In general these general commodities carriers do not use owner-operators for LTL movements. In some respects this is because of the method of pay to owner-operators (it would be difficult to determine an equitable pay system for LTL shipments which are rated to include consolidation and handling expenses appropriate to the size of the shipment). Also, most of the labor contracts do not provide for the use of owner-operators in this operation. Here is the first hint of the systematic discrimination of these drivers by the labor unions and truckline managers. Finally, most managers are unwilling to "trust" their highly-valued LTL freight to owner-operators. There is no question that this is discrimination. In practice, many general commodities carriers see the use of owner-operators as a means for rapid expansion to take incremental, marginal business at little cost and nominal risk. A number of general commodities carriers have established separate "special commodities" divisions which utilize owner-operators. Here the term special commodities does not refer so much to unique handling characteristics as much as a list of commodities agreed to by management and the Teamsters as being of such a low rate that the carrier would not handle them with the conventional union payscale. In exchange for this Teamster agreement, the carrier must limit this operation to the commodities and contribute monthly to the Teamsters' health and welfare fund for each driver. This comes from the 25 percent, described earlier, retained by the company. Few of the owner-operators ever receive benefits from this fund. Most owner-operators greatly resent but accept this practice with resignation.

Exhibit 2 - Number of power units rented with driver by class I and II regulated motor carriers, 1957-1973

	General commodity carriers	Special commodity carriers	Local carriers	Total
1957	5,575	15,516	284	21,375
1959	6,815	22,392	285	29,492
1961	4,884	23,566	229	28,679
1963	7,656	24,832	560	33,048
1965	9,433	29,033	211	38,677
1966	7,395	32,666	351	40,412
1967	7,777	34,380	261	42,418
1968	7,436	38,695	407	46,538
1969	8,139	39,804	284	48,227
1970	8,153	40,796	191	49,140
1971	8,481	44,095	214	52,790
1972	8,959	49,096	191	58,246
1973	9,169	50,150	186	59,505

Source: TRINCS Blue Book of the Trucking Industry, various years.

Exhibit 3 - Percentage of total power units rented with drivers, by all class I carriers of general commodities, 1957-1973

Year	% power units rented with driver
1957	7.57
1959	8.81
1961	6.33
1963	9.70
1965	10.64
1966	8.27
1967	8.62
1968	8.59
1969	8.51
1970	8.43
1971	8.71
1972	9.16
1973	9.00

Source: TRINCS Blue Book of the Trucking Industry, various years.

Exhibit 4 - Number of power units rented with drivers by class I and II special commodity carriers, by commodity group 1973

	Power units rented with drivers	Miles rented with drivers (000)	% all miles
1. Household Goods (intercity)	17,178	657,238	84
2. Petroleum Products	4,241	317,385	23
3. Refrigerated Products	4,239	522,213	54
4. Agricultural Products	969	89,369	30
5. Motor Vehicles	603	42,591	5
6. Building Materials	2,170	156,945	31
7. Other Special Commodities	21,200	1,561,882	39

Source: TRINCS Blue Book of the Trucking Industry, 1974.

The larger use owner-operators by ICC regulated carriers is by the special commodities carriers, as of the types listed in Exhibit 4. The greatest use of owner-operators is in the household goods (removals) industry. Most household goods carriers are, in fact, an alliance of agents that provide pickup, delivery, local movement, and goods storage within a restricted area. The organization provides services to the member agents to or from points outside their areas. These agents may move customers to any area of the United States. Since the owner-operator will travel almost anywhere for a load, they are well suited for the seasonal and directional imbalances of such traffic. So, owner-operators are added or eliminated from the rolls of the household goods carriers as the traffic demands.

The agricultural and refrigerated products (including perishable products such as fresh fruits and vegetables, fish, meat, and frozen goods) are typically seasonal and move over changing routes depending on availability of produce and market demands during the year. The actual number of owner-operators employed in such service depends on the crop volume, availability of railroad capacity, and aggressiveness of railroad pricing. Again, the owner-operator's participation is primarily controlled by forces and institutions outside of his control.

The building materials category, which includes dump trucking (tipping) is a very cyclical and seasonal business responding to a demand derived from the generally unstable construction industry. The demand for owner-operators by the trucking companies is intense over relatively short periods of time, but the time between demands may be quite long.

Similar patterns are seen in the owner-operator's participation in the other commodities listed in Exhibit 4. From this description it is relatively easy to deduce the plight of the owner-operator roaming from one market or operation to another following seasons and promises of work. The owner-operator is the capacity employed by unexpected demands or temporary displacements, but he is also the first to be eliminated when peak demands contract to base levels. The only hope of these itinerant subcontractors is that the downturn in one market will be offset by an upturn in another market. Unfortunately this is not always true.

Exhibit 5 - Estimated owner-operator expenses, 1974

	Low Estimate	Average	High Estimate
(A) Fixed Annual Expenses			
Tractor Depreciation	$ 2,813	$ 3,375	$ 3,938
Trailer Depreciation	429	536	643
Finance Charges	1,575	2,109	2,640
Insurance	1,700	1,850	2,000
Licenses and Permits	900	1,350	1,800
(B) Variable (Per Mile) Expenses			
Maintenance and Tires	$ 050	$ .065	$ .080
Fuel and fuel taxes	.078	.106	.143
(C) Required Driver Payment	$15,100	$19,125	$23,150
(D) Overhead*			
(1) Lease Basis	25 %	33 %	43 %
(2) Brokers	5.3%	11.1%	17.6%

* Overhead calculated as a percentage of all other expenses, including driver's payment.

Source: Field Interviews

OWNER-OPERATOR ECONOMICS

Since there are no reliable published data on owner-operator costs, estimates based on extensive interviews were made. These estimates are shown in Exhibit 5. [2]

The item "required driver's return" in section (c) of Exhibit 5 is the net cash flow that was considered necessary to keep the driver willing to stay in the business. The figures given (which include on-the-road living expenses) are actually slightly less than the wage a Teamster driver would receive under the union contract. Interviews and other investigations indicated that owner-operators were willing to accept this lower income as a price of his independence. This point will be discussed further later in this paper.

The item identified as "overhead" in section (d) of Exhibit 5 reflects that part of the revenue paid to an ICC regulated carrier or to a load broker. The 20 to 30 percent of revenue paid converts to 25 to 43 percent of all other expenses.

To compare these expense figures with those of other modes of transport it is necessary to convert these figures to a cost per ton-mile. Interviews with owner-operators

indicate that they often drive 100,000 revenue miles per year. Some were able to achieve productivity as high as 150,000 miles per year. This contrasts with an average of 65,000 miles per power unit per year recorded by the regulated carrier fleets. Assuming an average payload of 40,000 pounds, the typical owner-operator has the potential of producing 2 million ton-miles per year.

Combining these figures with the data in Exhibit 5, it is possible to estimate the earnings of an owner-operator as shown in Exhibit 6. If an owner-operator were fully employed at a rate of 3 cents per ton mile, his earnings might range from $9,000 tot $45,000 per year. The problem is whether the owner-operator can expect to be fully employed.

Exhibit 6 - Earnings potential of an owner-operator

Miles Travelled per year	Level of Expenses	Amount Charged Shippers (in cents per ton-mile) 2.0	2.5	3.0	3.5
		I Owner operator working on a subcontract to a regulated carrier (lease basis)			
			Approximate Annual Earnings		
100,00	High	($5,000)	$2,000	$9,000	$16,000
150,000		($2,000)	8,000	18,000	28,000
100,000	Low	12,000	20,000	28,000	36,000
150,000		21,000	33,000	45,000	57,000
		II Owner operator hauling exempt commodities and utilizing a broker			
			Approximate annual Earnings		
100,000	High	$1,000	$9,000	$17,000	$25,000
150,000		7,000	19,000	31,000	43,000
100,000	Low	18,000	27,000	36,000	45,000
150,000		31,000	45,000	59,000	73,000

Source: Calculations based on Exhibit 5.

OWNER-OPERATOR'S BEHAVIOR

Exhibits 5 and 6 explain part of the owner-operator behavior. If a nominal salary to himself is viewed as part of the fixed cost, he has an annual fixed cost of $28,345 against a variable cost of $0.171/mile. Roughly $0.106 of this variable cost is a direct out-of-pocket cost in the very short term.

The owner-operator is at the extreme end of a series of derived demands and peak sharing decisions to expand or contract capacity. The owner-operator is viewed by the shipper of exempt commodities and the ICC regulated carrier as a variable cost. In fact, the owner-operator as a transportation enterprise is a relatively high fixed cost operator who has often speculated his entire personal savings on the down payment for the purchase of a truck and trailer.

Owner-operators as a group appear to be relatively unsophisticated managers. Being cash oriented, they tend to maximize cash flow. When demand is low they will cut their charges too close to out-of-pocket costs. When demand is high, the regulated carriers will hold the owner-operators to 75 percent of the rates on the low rated "special commodities." Being unsophisticated, most owner-operators fail to reserve funds for emergencies, periodic maintenance, and salary and bank payments during periods of low demand.

A second part of the owner-operator behavior that must be understood is the importance of independence, or the perception of independence. As mentioned earlier, most owner-operators will receive an annual income that is lower than they would receive for equivalent work if they were driving as an employee for a trucking company with a Teamster union contract. This economic inequity is further exacerbated when it is observed that the calculation in Exhibit 5 does not include any opportunity cost on the owner-operator's investment in the down payment in equipment and working capital. At a nominal 5 percent risk free investment alternative (in federally insured savings banks in the U.S.) it is reasonable that the owner-operator might except a premium of approximately $750 per year over what his Teamster equivalent would earn.

Is the owner-operator simply economically irrational or ill-informed? The answer appears to be complex. First, many of the owner-operators are ill informed when they enter the market. Obviously most owner-operators enter when business is vigorous, and they are rudely surprised to find that they are suddenly considered redundant by the shippers or carriers they served faithfully. Second, some owner-operators are confused by cash flow and net earnings after fully allocated expenses and reserves. Putting these points together with a substantial optimistic but naive view of the situation, most owner-operators enter with expectations of great financial success.

Why do owner-operators stay in the business if the economics are so unattractive? In fact, many do exit through sale of equipment, or bankruptcy or repossession of equipment. Analysis of the records of several financers of owner-operator equipment indicated an average of 15 percent repossession rate (primarily during the first 6 months and months 13 to 24 of the period of the loan). During periods of reduced demand investigations indicated repossession rates of up to 50 percent. Under most circumstances the owner-operator loses most of his equity in the unit in a repossession, which indicates a distressed exit. The reasons for continuing are often as complex. First, many are trapped. If they are unable to find a buyer for the equipment they may lose a substantial portion of their life savings. Second, the optimism that led them to the business originally may sustain their hopes for eventual success. Third, some owner-operators see their driving activities as second incomes after primary occupations (such as farming) that do not require their full time throughout the year.

The major feature that holds owner-operators in the business, based on several hundred field interviews, is independence. Many of the owner-operators demonstrated an antipathy to rules and regulations, sensitivity to bureaucracy, and resentment of routine and authority

that were well beyond the natural rebellion experienced among workers in other situations.

It is ironic that an individual would remain an owner-operator on this basis, given the economic penalty he pays for this privilege. The independence he values as an owner-operator is more a matter of his perception than a reality. In most cases he has simply exchanged the authority of a dispatcher for the monthly demands of a bank or finance company. While the owner-operator is generally not directly economically regulated by the ICC, he is required to conform to a number of safety regulations of the U.S. Department of Transportation. First, he is restricted in the number of hours he may drive, which seriously hampers his productivity on which his profitability depends. Second, he is restricted on size and weight. These restrictions not only appear to be arbitrarily limiting his productivity, but they are often quite irritably inconsistent between various states. Third, the owner-operator working for another company may be subject to the rules of that company. Finally, the income received for a load may depend on market forces or ICC rates that are outside of the hands, and possibly comprehension, of the owner-operator. This hardly describes the desired environment of a "free spirit" who is willing to make an economic tradeoff for independence.

Most of the features of the behavior described above were demonstrated by the owner-operators in the national shut down in 1973 and 1974. As a result of the fuel crisis in the United States prices for diesel fuel rose from $.31 per gallon in May of 1973 to as high as $.55 in December. The owner-operators, dependent on productivity for their livelihood found they were spending significant portions of their time waiting in lines at fuel stops. The federal government made arrangements to allocate fuel to users based on a pro-rata portion of their proven consumption the previous year. Owner-operators were left out of this allocation. The larger carriers, for whom many owner-operators worked, simply cut these subcontractors from their fleets to conserve fuel for company-owned trucks. On December 3, 1973 three drivers blockaded Interstate Highway 84 at the New York-Connecticut line. On the same day spontaneous blockades were established on Interstate Highway 80 in Pennsylvania. These blockades spread to highways in Ohio. The owner-operators, usually very independent of each other were willing to act in unity because the lack of fuel meant that there was no opportunity cost for not operating. Also, a little known communications revolution was well under way as the result of a major technological innovation that had largely been unobserved by the outside world. The citizen's band (CB) radio had been installed in their trucks by most owner-operators. These limited-range, two-way radios provided the communication system for organizing the shutdown as well as means of frustrating the efforts of law-enforcement officers to open blockades. The shutdown led to a major adjustment in ICC rates to permit recovery of the additional costs of fuel being experienced by the owner-operators. More importantly, it forced the government to release fuel to owner-operators. The owner-operators also learned the value of organized action. But, once the specific shortterm objectives of this effort were achieved, the independence of the owner-operators ruled again. None of the owner-operator organizations created during that crisis have been sustained. As the American economy turned down, the owner-operators were cast off by the regulated carriers to preserve traffic for their own trucks and employees.

FOOTNOTES

1. Less than truckload is generally defined as shipments under 10,000 pounds. While this is not a physical truckload in modern equipment, it is the weight break used historically for setting rates by the ICC.

2. A more complete explanation of the methodology used to develop these estimates is included in: D. Daryl Wyckoff and David H. Maister, **The Owner-Operator: Independent Trucker** (Lexington, Mass.: Lexington Books, D.C. Heath and Company, 1975).