

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

# PROCEEDINGS — Seventeenth Annual Meeting

Theme:

"Beyond The Bicentennial: The Transportation Challenge"

> October 28-29-30, 1976 Sheraton-Boston Hotel Boston, Massachusetts



Volume XVII ● Number 1

1976



TRANSPORTATION RESEARCH FORUM



# Generated at University of Minnesota on 2021-10-14 19:48 Creative Commons Attribution-NonCommercial-NoDerivatives

### Money-Back Rates: A Case Study in Regulatory Myopia

bu Harvey A. Levine\*. Thomas M. O'Connor\*, and Charles E. Shaw\*

THE INTERSTATE Commerce Commission (ICC) traditionally has been criticized for its lack of creativity in its enforcement of regulatory policy; but. in more recent years, with the advocacy of regulatory reform by the U.S. Department of Transportation (DOT), the criticism has intensified. In response the Commission has, on a number of occasions in the past several years, promised a more liberal policy which included the stimulation of carrier rate and service innovation. Yet, in a recent and rather obscure decision, the Commission denied one of the country's largest motor carriers the authority to offer a service similar to that offered by airlines, buses, the Postal Service and non-transportation many companies.1 Money-back guaranteed service (MBG), as proposed by the Pacific Intermountain Express Company (PIE), was to supplement normal service by pledging on-time delivery and a full refund in case of default in exchange for a ten-percent rate premium (\$25 minimum charge).

This paper analyzes MBG from both a marketing and an economic perspective by examining other services similar to MBG; speculating on the potential impact of MBG on shippers/consignees and other carriers; and critically evaluating regulatory policy relative to the denial of MBG. Thus, MBG is viewed not as an end in itself, but as an example which illuminates a deficiency of transportation regulatory policy.

### OTHER SERVICES SIMILAR TO MBG

Although MBG would be a new service for motor carriers, it is a widely accepted practice in the regulated transportation industry, specifically, and in other industries in general.

In transportation, airlines offer the most comprehensive money-back service, while somewhat similar provisions are offered by air freight forwarders,

Dr. Harvey A. Levine Messrs. Thomas M. O'Connor and Charles E. Shaw of R. L. Banks & Associates, Inc. This paper is an outgrowth of research conducted by the firm for the U.S. Department of Transportation, but solely reflects the views of the authors.

bus lines and the U.S. Postal Service. First-flight-out service is offered by virtually all air carriers, which expedites the processing and transportation of air freight parcels. The provisions of this service, offered by several of the major airlines, are shown in Table 1. It will be noted that many of the carriers offer a refund of 50 percent of the charges for default, and Air California offers 100 percent refund.

There are several varieties of expedited and special services offered by air freight forwarders. Some of the forwarders offer a refund of 50 percent of the total charges for non-performance, while others refund the premium charges.

Since December 1970. Greyhound Lines has offered an expedited package express service whereby shipments are guaranteed to move on the next bus out. "Next-bus-out" is defined to exclude those buses leaving less than 30 minutes after Greyhound accepts the package at the terminal. This service is available to selected destinations and is keyed to package weight, movement, distance of regularly-scheduled "next-bus-out" (NBO) and frequency service to the points. The cities currently served from Washington, D.C., and representative rates for both regular and NBO package express, are shown in Table 2. Grevhound charges a premium fee equal to 100 percent of the regular rate for NBO express and refunds the entire premium for failure to perform.

There is a parallel here to certain aspects of the PIE proposal. The Commission has not taken issue with the contention that, in the case of bus packexpress, age attaining incremental gains can result in substantial increases. Rather, the ICC has confined its opposition to the issue of refunds in excess of the premium charge. Although the rate and cost increases involved in the proposed PIE expedited service are considerably below this level, the underlying principle is the same. Improving the existing PIE transportation standards would entail additional expenditures.

The U.S. Postal Service offers Express Mail Service, an expedited delivery system, to 405 cities. The number of cities may vary according to the availability of airline service. The Postal Service

### TRANSPORTATION RESEARCH FORUM

### AIRLINES' FIRST-FLIGHT-OUT SMALL PACKAGE SERVICE

Airling	Maximum Height (Pounds)	Paxima Value	Raximum Dimensions (Inches)	Bestrictions	Rate	Pickup & Delivery Service	Refund Provision
Air California	10	\$ 50	66" total; no single side to exceed 36"	Live animals and Bazardous materials	\$10	On Request	Total
American Airlines	50	\$500 (Except \$250 to Caribbean)	90° total; me single side to exceed 48°	Food products, live animals, dutiable items to Caribbean	\$24-60	Yes.	SOE
Braniff International	\$0	\$500	30. I 30. I 30.	Live animals, fruit, vegetables, meat, flowers, restricted articles	\$25 (Newall, \$40)	Ro	\$10
Continental Airlines	\$0	\$500	90" total	Live animals and restricted articles	\$25-50	By special arrangement	Sos
Delta Air Lines	\$0	\$500	90" total	Restricted articles accepted at freight facility only	\$15-45	No, but will assist	\$5 to \$22.50 depending on initial charge
Eastern Airlines.	50	\$500	90° total	Live animals, radio- active materials not suitable for air	\$25-35	Yes, via Air Couriers Inter- national	SOL
Trans world Airlines	50	\$500	90" total	Items listed in restricted tariff	\$25-40	Ro	SOL
United Air Lines	50	-\$500	90" tetal	Live animals and restricted articles	\$15-60	No	SOE

Note: Several additional air carriers offer similar type service.

Source: Carco Airlift, May 1975.

TABLE 1

### **GREYHOUND PACKAGE EXPRESS RATES**

	Charge Including							
"Next Bus Out"	Regular	Charge	"Next Bus			le Premium		
Destinations from	0-10	90-100	0-10	90-100	0-10	90-100		
Washington, D.C.	<u>Pounds</u>	<u>Pounds</u>	Pounds	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>		
Atlanta Georgia	\$5.05	\$16.10	\$10.10	\$32.20	\$5.05	\$16.10		
Baltimore Md.	2.45	4.80	4.90	9.60	2.45	4.80		
Hagerstown, Md.	2.75	6.85	5.50	13.70	2.75	6.85		
New York, N.Y. Norfolk, Va. Roanoke, Va.	3.85	8.80	7.70	17.60	3.85	8.80		
Philadelphia, Pa.	3.30	7.90	6.60	15.80	3.30	7.90		
Pittsburgh, Pa.	3.95	9.20	7.90	18.40	3.95	9.20		
Richmond, Va.	3.30	7.90	6.60	15.80	3.30	7.90		

Note: In all cases, both Premium and Refundable Premium equal 100 percent of the Regular Charge. Source: National Bus Traffic Association, Chicago, Illinois, Rates Effective May 30, 1975; Greyhound Lines, Inc., Eastern Division, Washington, D.C., Rates Effective May 30, 1975.

TABLE 2



## U.S. POSTAL SERVICE EXPRESS MAIL SERVICE MONEY-BACK GUARANTEE PROGRAM FOR SMALL PACKAGES OF 40 POUNDS AND UNDER

Percent Express Small Charges over Air Parcel Post Charges on 40-Pound Package Handled from Air Port to Addresseeb

Chicago to:	Cleveland	Philadelphia	Salt Lake City	San Francisco
Express Mail	\$20.00	<b>\$</b> 20.00	\$22.00	\$27.00
Air Parcel Post	17.03	18.67	21.06	25.90
Percent Express				
Mail Charge Over				
Air Parcel Post	17.4%	7.1%	4.4%	4.2%

### **Refund Provision**

100 percent of Express Mail Charge refunded if delivery is not made within 24 hours after acceptance by U.S. Postal Service.

Source: U.S. Postal Service Notice 62, October, 1974; Notice 48, August, 1974; Notice 59, March, 1974.

### TABLE 3

guaranteeing next-day delivery backed the guarantee with a full refund. The charge for this service ranges from \$1.50 to \$27.00, depending upon weight, distance, and pickup and delivery. It is required that the parcel be received at the originating airport by 5:00 p.m. Table 3 depicts the premium involved on a 40-pound shipment commanding the maximum rates. The premium in this illustration varies from 17.4 to 4.2 percent, depending upon the distance.

Service contracts are one of the principal areas in which non-transportation firms provide ancillary services for a fee. A broad range of service contracts are offered by major merchandisers such as Sears Roebuck, J. C. Penney and Montgomery Ward. These contracts cover all the major home appliances such as freezers, televisions and air conditioning units; consumer electronic products such as stereos and tape recorders; electronic instruments such as organs and guitars; and motorized equipment such as lawnmowers and roto-tillers.

The automotive industry is replete with examples of service contracts and purchase guarantees. American Motors offers an optional program known as the "Double Buyer Protection Plan." This program extends the standard warranty for a second year. The coverage is exactly the same as that provided to new car buyers during the initial year of ownership. Essentially, everything but the tires is covered. This extra service, however, entails cost to the company; therefore, there are several requirements the owner must meet to qualify for the double buyer protection plan. Periodic maintenance checkups must be completed and the service contract fee must be paid. The second-year

protection fee for 1975 autos cost \$99.00; for 1976 autos, the fee will rise to \$148.00. This increase reflects both price trends and actuarial adjustments keyed to repair incidence.

A repair program is essentially an endorsement of the product's quality; a guarantee by the manufacturer that the product will perform satisfactorily. Failure to meet production standards results in cost impacts on the repair programs—the customer, in effect, receives repair service free if the product is anomalously deficient.

Each of these services and provisions deals with performance incentives. Similar incentives were incorporated in the PIE "Money-Back Guaranteed" proposal. Efficiency is the objective; explicit cost consequences are the stimuli prompting attainment of that objective.

### II. POTENTIAL IMPACT OF MBG

MBG offers potential service benefits to users and additional revenue oppor-tunities for carriers. On the positive side, shipper benefits would have been derived in the form of published delivery schedules (currently not offered by motor carriers and not required by ICC mandate), establishment of customerservice standards, improvement in the probability of on-time delivery, availability of alternative types of service tailored to shipper needs, establishment of standards for determining "reasonable dispatch," and the insurance of payment for late delivery. Furthermore, MBG could have been the impetus for other new services to meet customer needs, and could have resulted in improved service from competing modes of transportation. Innovation breeds innovation. Regulated carriers-already faced with a disincentive to innovate

a Up to 50 pounds accepted with sales agreement covering regularly scheduled service. b Other service options also available.

(i.e., regulated profit ceilings)—should be encouraged by public policy to develop new marketing techniques. On the negative side, MBG would appear to have provided a method for carriers to discriminate in favor of certain shippers, but the alternative and experimental nature of the service, as well as tight ICC controls, could have alleviated this concern.

Discussed below are the favorable aspects of MBG as well as alleged negative effects. The above terminology ("favorable" and "alleged negative") were derived after the impact analysis, which concluded that MBG could have been beneficial to shippers and carriers, while offering little, if anything, in the way of potential negative results.

### Lack of Published Delivery Schedules

Currently, regulated motor carriers do not publish delivery schedules in a form other than guidelines for salesmen's use. The lack of published schedules is probably due, in large part, to a lack of available technology with which to insure expected deliveries. Consider the difficulties the Commission has traditionally encountered in defining reasonable service. Section 204(1) of Part II of the Interstate Commerce Act states, in part, that: "It shall be the duty of the Commission to regulate common carriers by motor vehicles as provided in this part, and to that end the Commission may establish reasonable requirements with respect to continuous and adequate service. . ."

"Adequate service" is difficult, if not impossible, to define in a broad sense. Service that satisfies the needs of one shipper may not satisfy the needs of another. This would be evident in comparing the service requirements of a shipper of a low-value commodity, in a market with little or no competition, with the service requirements of a shipper of a high-value commodity in a highly competitive market. Additionally, service requirements vary from one shipment to another for a particular shipper. In many instances, a consignee will need a shipment delivered by a certain date in order to keep a plant in operation, a customer pleased, etc., and will place an order with a shipper only if delivery can be assured by the required date. If such shipment is not delivered by the required date, the consignee may suffer considerable financial loss in both the short and long run (e.g., lost sales).

### Commitment to Customer-Service Standards

This tariff-published commitment would have been made due to PIE's de-

velopment of a computerized, shipment-information system. As the freight bill was being typed, the information in a shipment was captured by the computer, after which inquiry could be made to the computer to determine the location of the shipment. PIE anticipated that, if MBG service were inaugurated, the number of MBG shipments would be sufficient to justify programming the computer to automatically monitor the movement of MBG shipments and produce an exception report on shipments not moving in accordance with established schedules. This could be done by programming the following factors into the computer:

1. The scheduled time between the origins and destinations that MBG ser-

vice is offered;

2. Route structure of the various traffic lanes over which MBG service is offered, including each relay and transfer point, in order that the computer will report any shipment that is dispatched in the wrong direction;

- 3. Scheduled running time between transfer and/or relay points on the route, which is based on an average speed of 40-miles per hour;
- 4. Maximum time allowed at each transfer and relay point. This will vary from one point to another, and will be determined for each particular point; and
- 5. Saturdays, Sundays and holidays to be excepted by the computer in determining whether a shipment is moving on schedule.

Each time an MBG shipment was monitored, the computer would determine if the shipment was moving on schedule by comparing the time remaining in the schedule with the time allowed for the shipment to arrive at the destination terminal by midnight preceding the scheduled delivery date. In many cases, such real-time information on MBG shipments would give PIE the opportunity to take corrective action in order to get a delayed shipment delivered on schedule.

The newly-developed system of obtaining current information on a motor carrier operation, made possible through modern computer technology, would provide the capability to predict and control service performance to such a degree as to make MBG a feasible alternate service to offer to the shipping public.

Incentive to Improve On-Time Delivery
Reliability in transportation can be
guaranteed but not assured; thus shippers incur some risk in depending on
transport carriers for promised delivery
times. MBG could have lessened that

at University of Minnesota on 2021-10-14 19:48 Commons Attribution-NonCommercial-NoDerivatives

risk and allocated the remaining risk between shipper and carrier. As with insurance policies, the cost for transferring risk (to the carrier) is initially borne by the potential recipient of damages resulting from default (the ship-per). Where default occurs, the carrier pays the cost of damages. In the long run, because MBG shipments would be delivered both on time and, in some cases, late, shipper and carrier would share the costs associated with increased reliability of service.

It is the market (the aggregate of individual shippers) which would determine the value of MBG service-in essence, the cost of less dependable service—through participation in a market test. Shippers valuing transportation re--through participation in a market liability, to the extent that the cost of MBG premiums fell below the cost to the shipper of late deliveries, would have used MBG service, depending on customers, types of products, geographic area, etc.

The compensation paid to shippers for delivery defaults would have served as an inducement to PIE to maximize its level of delivery reliability. Projections of PIE's costs and revenue indicated that MBG service would have been unprofitable if the company defaulted on nine percent or more shipments. Both the carrier and shipper have vested interests in on-time delivery. MBG service could have provided the impetus for premium service standards where desired.

### Alternative Service

Essentially, MBG was a level of service above the norm offered for a surcharge. There are a number of premium service, premium-price services rently available in the transportation industry. Among these-in the land transportation arena-are diversion, reconsignment, stopping in transit, C.O.D., and specially-assigned equipment. Each of these services is regularly incorporated in published tariffs. The charter ship trade provides an additional analto MBG service, where monetary refunds might accrue to either the shipper or vessel owner, depending upon whether delivery is delayed or provided with dispatch. Payment is provided on a per diem basis, and recent per diem levels have ranged from \$2,000 to \$5,000, depending on the cargo and port involved.2

### "Reasonable Dispatch" Standards

The definition and ensuing controversy surrounding the subject of reasonable dispatch has long been a drain on ICC, shipper and carrier resources. On March 18, 1972, the ICC instituted

Ex Parte No. 284, Investigation into the Need for Defining Reasonable Dispatch. Mainly addressed to perishable commodities, this proceeding resulted from the ICC commitment evolving from Ex Parte, No. 263, Rules, Regulations and Practices of Regulated Carriers with Respect to the Processing of Loss and Damage Claims, to define "reasonable dispatch." Despite its original intentions, the Commission has, at this time, not defined reasonable dispatch. The possible reasons for this are many. For one thing, for a regulatory agency to superimpose an overall standard of delivery efficiency on a myriad of markets with varying operating conditions would result only in exacerbation of shipper and carrier disenchantment. The Commission itself recognizes the complexity of defining reasonable dispatch in referring, in Ex Parte No. 284, to the economic and social changes affecting reasonable dispatch. Recognized vari-ables include "technological improvements and innovations or broad scale economic changes not directly related to transportation," . . "changes in managerial attitudes of shippers and carriers, modifications in marketing conditions and methods, and many other factors of an even less tangible nature.

Any MBG delivery defaulted by the carrier obviously would fail the test of reasonable dispatch for that shipment. Also the MBG premium service standards could have acted as a guide in establishing expected delivery times for non-MBG shipments. Thus, reasonable dispatch for non-MBG shipments could fall somewhere between MBG-promised times (on the high side) and one or two days later, depending upon the mar-kets (on the low side). In fact, MBG standards could have become normal service goals for carriers not offering MBG service.

### Potential Negative Impact

The proposed MBG service portended no apparent adverse impact to shippers or other motor carriers. In an industry characterized by joint decisions, the PIE proposal was an independent action in the spirit encouraged by the Nation's lawmakers in providing antitrust immunity (Reed-Bulwinkle Act of 1948) for transportation tariff bureaus. Several factors shape the absence of negative impact from MBG. First, MBG was offered as an experimental service in a limited number of markets characterized by relatively substantial competition. Second, PIE proposed to maintain its current delivery standards for non-MBG service. Third, MBG service would have been available to shippers on an equal basis—first in the test markets and, at a later date, in other markets. Fourth, discrimination would not have existed where two similar shipbetween similar points were charged different rates (i.e., one was charged the premium MBG rate and the other the normal rate) because the MBG shipment would have received different service—that is, constant monitoring, a higher probability of on-time delivery. and an accompanying insurance policy promising remuneration in case of de-livery fault. Fifth, shippers would have had a choice as to which type of service they desired. And finally, MBG would have been an experimental test service subject to the demands of shippers as well as the control of the ICC. In regard to this latter point, PIE would have provided the Commission with detailed data for purposes of close scrutiny and regulatory control.

Expediting a delayed MBG shipment would not have discriminated against shipments in normal service. Shipments are normally handled at PIE's terminals on a "first-in, first-out" basis in order to maintain a smooth flow of traffic and reasonable operating efficiency, and this general practice would have continued after implementing MBG service. Since PIE's monitoring system would have reported only delayed MBG shipments, expediting such shipments would have only placed them back in their original position in the schedule in relation to other shipments.

MBG service would not have replaced any service currently offered by PIE or any other carrier in the proposed market, and shippers would have had no obligation to use MBG service. Even if all carriers were to offer MBG service, nonpremium rates and schedules would not be disrupted because they would continue to be the major focus of shippers.

A market test of MBG service would have allowed shippers to demonstrate the need for such service, and would have allowed the carrier to minimize risks associated with producing and marketing a new service. MBG service may or may not have fulfilled shipper needs and desires. Only the shippers could decide the basic issue. A market test is a commonly-used rationale and economical method for identifying consumer needs.

PIE would have kept such records and compiled such periodic reports as were necessary to evaluate the market test of MBG service, and would have kept any additional records and compiled such reports as the ICC deemed necessary for regulatory purposes.

### III. REGULATORY MYOPIA

In rejecting MBG, the Commission stated in I&S Docket No. M-28454 that "the first test of a novel proposal must be its lawfulness under applicable statutes." It then cited previous decisions in cases allegedly having analogous issues—most notably the Rent-A-Train case,3 where the Commission rejected the rates proposed because it construed the proposed expedited service to be the same as normal service. The Commission went on to find that MBG is unlawful in "that it provides for unauthorized and illegal rebates, including free transportation," and cites several cases where such transportation was declared to be in violation of the Interstate Commerce and Elkins Acts.

From a somewhat semantical and narrow viewpoint, one could take the position that MBG would not include "unauthorized and illegal rebates" if the Commission authorized money-back guarantees and called such payments discounts. Furthermore, MBG would not be "free" if preventive damages were considered (i.e., the cost of late deliveries to shippers could be substantial, as indicated by a willingness to pay a premium rate for higher on-time probability) and, in fact, if PIE offered, say, a 95 percent return rather than a 100 percent refund.

Irrespective of definitional technicalities which a regulatory agency may use to its advantage as a decision-making crutch, the MBG decision appears to exemplify a regulatory attitude which may have gone beyond the fringe of the original intent of transportation legislation. In essence, if the viewpoint is upheld that the mere existence of service differentiation in itself is discrimination under the Interstate Commerce Act, then virtually few, if any, economic benefits would accrue to our nation's shippers from a regulated overland transportation system.

The tendency for and charges of over-regulation have been openly discussed in recent years. Professor McKie calls over-regulation the "tar baby effect"—i.e., a situation where the regulation of any factor leads to additional regulation of other factors until a point of "indefinite extension of control" is reached. While entry and rate regulation have dominated motor carrier control since 1935, the disapproval of an alternative service by one carrier in markets characterized by competition on the grounds of discrimination may not only reflect the so-called "tar baby effect," but may also be another step in disassociating sound marketing principles from regulated transport service.

In essence, the so-called marketing concept (i.e., business exists to serve particular needs and wants of customers) is inconsistent with the wording of national transportation policy when "destructive competitive practices," "un-just discriminations" and "undue preferences" are so narrowly interpreted as to exclude a variety of customer service levels. What is paramount about MBG is that it is only an alternative service by one carrier, and that shippers could establish its worth and validity through the market process. Sound economic policies, as well as astute marketing practices, foster certain discrimination (e.g., department store sales, price negotiation in automobile purchasing), and the

interpretation of national transportation policy, as carried out by our regu-latory agencies, should be flexible enough to include alternative-service programs such as MBG.

### **FOOTNOTES**

- 1 Division 2 of the Interstate Commerce Commission found, by a Report and Order served October 7, 1975, in Investigation and Suspension Docket No. M-28454, that MBG rates violated both the Interstate Commerce Act and the Elkins Act.
- 2 Lykes Brothers Steamship Corporation, Washington, D.C.
- 3 Grain by Rent-A-Train, IFA Territory to Gulf Ports, 339 ICC 579, 1971.

  4 James W. McKie, "Regulation and the Free Market: The Problem of Boundaries," The Bell Journal of Economics and Management Science, Spring 1970, p. 9.