

COST STANDARDS APPLICABLE TO INTERMODAL
MINIMUM RATE REGULATION

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I. Introduction to the Problem

The Supreme Court's decision in *American Lines v. Louisville and N.R. Co.*, 392 U.S. 571 (1968), hereinafter referred to as the "Ingot Molds" case, by its very lack of a satisfactory answer,¹ has brought into focus one of the most persistent problems in the Federal scheme of transportation regulation—that of determining how far, ultimately, the Interstate Commerce Commission can allow competitive ratemaking to influence the market's allocation of traffic among the regulated modes. The debate has been cast in terms of which of two levels of carrier costs—"variable costs" or "fully allocated costs,"²—is the appropriate base for a standard against which to measure the legality of carrier proposed rates. The problem ultimately goes back to basic ambiguity in the language of the National Transportation Policy³ and § 15 a (3) of the Interstate Commerce Act.⁴ Section 15 a (3), added by the Transportation Act of 1958,⁵ requires that:

. . . rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving due consideration to the objectives of the national transportation policy declared in this Act.

The relevant portion of the National Transportation Policy declares that it is the policy of Congress ". . . to provide for fair and impartial regulation of all modes of transportation subject to the provisions of this act, so administered as to recognize and preserve the inherent advantages of each . . ." Nowhere in the Act are "inherent advantages" or a procedure for ascertaining same defined.

It is, of course, the second clause of § 15 a (3) which gives rise to the

1. "It is difficult to escape the inference that the Court has . . . simply postponed decision of a difficult issue." Mr. Justice Harlan, in concurrence, at 392 U.S. 597, n.2.

2. The terms "variable" and "fully allocated," the meanings of which will be fully explored below, were adopted in preference to the older, more familiar usages of "out of pocket" and "fully distributed" by the I.C.C. Docket No. 34013, *Rules to Govern the Assembling and Presenting of Cost Evidence*, 337 I.C.C. 298, 305, finding No. 2, (July 30, 1970).

3. 49 U.S.C. preceding Section 1.

4. 49 U.S.C. Section 15a(3).

5. Pub. L. 85-625, 72 Stat. 568.

problem by incorporating into the § 15 a (2) criteria⁶ a due consideration for the preservation of "the inherent advantages" of each of the regulated modes. Were it not for the second clause, the I.C.C. would supposedly be barred in its inquiry from considering the effect of a proposed rate on the rates of any other carrier, including the question of whether the proposed rate would destroy the "inherent advantages" of other carriers.⁷ In this paper we will examine lower cost as an "inherent advantage" within the framework of the regulated intermodal competition. It should be emphasized that our concern is with the appropriate level of *cost* by which to measure inherent cost advantage. As the Commission has recognized,⁸ "costing" must be distinguished from "ratemaking," a process in which cost is just one factor, along with inherent service advantages and with the preservation of a system of transportation adequate for the nation's commerce, the Postal Service, and for the national defense.⁹

Precise economic definitions of "variable costs" and of "fully allocated costs" are not possible. These terms, developed in the practical business of costing, were for years used loosely and without an official definition. Variable cost ("out of pocket" cost) was defined by the District Court in the "*New Haven*" case¹⁰ as ". . . a rough approximation of the long-run marginal .. cost of carriage." It has generally been identified with the economic concepts of "marginal," "incremental," or "avoidable" cost. Generally these terms refer to the theoretical costs of one additional unit of production. If a company produces N units at a cost of X dollars, then the additional cost above X dollars which would be incurred in the production of N plus 1 is the "marginal cost" of that unit. Obviously, this economic concept cannot be applied to real world rate making. To do so, assuming that the rate charged for each unit equalled that unit's marginal cost—the theoretical point at which efficient resource utilization is maximized—would require that a separate rate be set for each pound added to a carload, and each carload added to the train, an unworkable situation. Variable cost involves an approximation of the marginal cost of rendering an additional *service* over the "intermediate-long run" (defined by the I.C.C. as 5-10 years).¹¹ Another way of putting the same proposi-

6. 49 U.S.C. Section 15a(2) establishes the criteria for the exercise of the I.C.C.'s minimum rate-making powers as regards railroads.

7. 49 U.S.C. Section 15(1), 316(e), 907(b), 1006(b).

8. Kaplin, Jair S., *Report and Order* of Jair S. Kaplin, Hearing Examiner, in Docket No. 34013, *Rules to Govern the Assembling and Presenting of Cost Evidence*, (1966), at sh. 73.

9. Other specific objectives of the National Transportation Policy.

10. *New York, New Haven and H.R. Co. v. United States*, 199 F. Supp. 635, 647 (D. Conn. 1961).

11. *Supra*, note 2, finding 3, at 309.

tion is that the variable cost of a service is the cost which the company would *avoid* over a 5-10 year period were it *not* to render the particular service.

“Fully allocated costs” (“fully distributed costs”), on the other hand, were defined in the “Ingot Molds” decision as “. . . out of pocket variable costs plus a revenue-ton and revenue-ton mile distribution of constant costs. . . that indicate the revenue necessary to a fair return to the traffic . . .”¹² It is the variable cost of the service plus a pro-rata of the company’s fixed costs. While “variable cost” by its terms, exclude costs which are “fixed” over the 5-10 year intermediate-long run because they cannot be attributed to any particular unit of production, the “fully allocated” cost concept assigns this unit a pro-rata share of such fixed costs. The concept recognizes that fixed costs of production must also be covered by total revenues if the company is to remain solvent. In the absence of any better way of assigning the contribution each unit of production must make towards fixed costs, this concept assumes that the contribution of every unit must be equal to the contribution of every other unit.

The generalization in which we shall indulge in this paper is that the railroads are always the proponent of the variable cost level and that motor carriers and barges invariably favor fully allocated cost as the only appropriate standard. The conflict is explained by inherent differences in the cost structures of the railroads on the one hand, and the barges and motor carriers on the other. Basically, the railroad industry is characterized by high fixed costs and chronic excess capacity (which means that additional traffic can be carried at a relatively small increment to total costs.) This is because railroads, unlike the other modes, have to provide themselves with rights-of-way, trackage, signals, sidings, turntables, etc., permanent structures which must be in place before the first carload of revenue generating goods can be carried.

In comparison, the fixed costs of the other modes are relatively low. Although motor carriers and barges pay the usual user taxes and tolls, they are, in effect, subsidized by the provision of public rights-of-way in the form of highways, improved natural waterways, and canals. These represent “public costs” to the extent that that proportion of the cost of providing and maintaining them attributable to the carriers exceeds carrier contributions in the form of user taxes and tolls. To that extent “. . . they distort the true economic picture with respect to both relative and

12. 392 U.S. 571, 575, n.3 (1968), quoting *New Automobiles in Interstate Commerce*, 259 I.C.C. 475, 513 (1945).

13. Kahn, Alfred E., *The Economics of Regulation*, Wiley and Sons, New York (1970), Vol. I., 161.

total use of national resources in the production of transportation.”¹⁴ None the less, and despite the vehement protests of the railroads,¹⁵ the I.C.C. has not, thus far, included these public costs in the computation of the fully allocated costs of either the motor carriers or the barges.¹⁶ The reasoning is that to the extent that the provision of highways and waterway improvements subsidize these modes of transport, that must be taken to have been the intent of Congress in authorizing construction and in assessing tolls and user taxes.^{17, 18}

A proposed rate which is below the level eventually accepted by the I.C.C. will be rejected as “destructive competition.”¹⁹ This is because any rate which returns less than the costs of rendering the service can only be rationalized as an attempt to destroy the competition. To make up for the loss suffered on the competitive service, the carrier must “discriminate” against shippers on other, non-competitive runs where demand is relatively inelastic. Once the competition is extinguished, rates must come up again.²⁰ It is thus axiomatic in any rate setting proceeding that rates can never be allowed to be set below the marginal cost of carrying the traffic. Our question is whether the reference to the National Transportation Policy in § 15 a (3) further requires that a rate also return its pro-rata share of fixed costs. What has been said above demonstrates that it makes a very real difference, as between the regulated modes of transport-

14. *Supra*, note 8 at shs. 89, 90.

15. American Association of Railroads, *Exceptions of the Railroads to the Report and Order Recommended by Hearing Examiner Jair S. Kaplan*, in Docket No. 34013 *Rules to Govern the Assembling and Presentation of Cost Evidence*, (March 1, 1967), 78-83.

16. *Supra*, note 11. See also: *Grain in Multiple-Car Shipments—River Crossings to So.*, Division 2, 318 I.C.C. 641, 682-684, and on reconsideration by the entire Commission, 321 I.C.C. 582-593 (1963).

17. *Supra*, note 14.

18. See generally, Dearing, C. L. and Owens, “National Transportation Policy,” *The Brookings Institute* (), 248-249.

19. *New Automobiles in Interstate Commerce*, 259 I.C.C. 475 (1945), modified, 263 I.C.C. 771 (1945); at 259 I.C.C. 534.

“Whether a rate is below a reasonable minimum depends on whether . . . the carrier would be better off from a net revenue standpoint with it than without it.”

as quoted in Fulda, *Competition in the Regulated Industries; Transportation*, Little Brown and Company, Boston (1961) at 346 n. 18.

20. 49 U.S.C. Section 4(2), relating to water-rail competition prohibits railroads which have reduced rates in competition with barges from thereafter raising rates without the permission of the I.C.C., which shall have first found that “such proposed increase rests upon changed conditions other than the elimination of water competition.” Fulda, *ibid*, quotes *Skinner and Eddy Corp. v. United States*, 249 U.S. 555, 567 (1919), “. . . was designed to prevent railroads from killing water competition by excessively low rates,” 340, n. 8.

tation, which of the two levels is adopted as the base below which rates may not fall.

II. Background

A. Judicial and Administrative Decisions Concerning the Applicable Cost Standard

The question as to the cost standard utilized to determine a low-cost carrier has had a long and inconclusive history. Assuming that the low-cost carrier has an "inherent advantage" which should be protected by the National Transportation Policy, it becomes crucial for the rate setter to define a standard for deciding which of two competing modes is "lowest" in cost. As has been pointed out, if "variable costs" are used, the railroads become the low-cost carrier. If "fully allocated costs" are used as the standard, the water and motor carriers are the low-cost carriers.

One of the first cases to consider this issue was *New Automobiles in Interstate Commerce*, 259 I.C.C. 475 (1945). In *New Automobiles* the railroads were attempting to lower their rates in order to compete with trucks. The Cost Accounting Section of the I.C.C. computed five "costs" for the railroads in carrying new automobiles. Two of these were "out-of-pocket" and "fully-distributed" costs. For the trucks the only cost standard employed was "fully-distributed." In the end the I.C.C. decided that a rate for the railroads was compensatory, above out-of-pocket costs, and that in this circumstance the rates on one mode should not be held up to protect the rate structure of a competing mode. The I.C.C. stated that "whether a rate is below a reasonable minimum depends on whether it yields a proper return; whether the carrier would be better off from a revenue standpoint with it than without it; whether it represents a competition that is unduly destructive to a reasonable rate structure and the carriers; and whether it conforms to the National Transportation Policy . . ."21

However, the I.C.C. did not follow *New Automobiles* consistently. For example, in *Petroleum Products from Los Angeles to Arizona and New Mexico*, 280 I.C.C. 509 (1951), Division 3 disallowed railroad rate reductions to meet competition of the motor carriers. The Division seems to have accepted the argument of protestant truck lines that they are specialized carriers and that unless they are allowed to recover more than their fully-distributed costs they will go out of business. The Division said, "In the situation presented where two modes of transportation are competing

21. *New Automobiles in Interstate Commerce*, 259 I.C.C. 475, 534 (1945), modified, 263 I.C.C. 771 (1945).

for the same traffic and both are necessary to meet the needs of shippers, rates of both modes must be reasonably compensatory and so related that they will not be unreasonable, unfair, or destructive, but will promote adequate, economical, and efficient service by each mode and preserve the inherent advantages of both."²² Two years later the Commission allowed similar rate reductions to meet potential pipeline competition.²³

In 1957, *Schaffer Transportation Company v. United States* was decided by the Supreme Court. In this case Schaffer, a trucking firm, wished to compete with the railroads for granite being shipped from Vermont. One of the arguments of the trucking firm was that it could provide lower rates. The Commission disregarded this evidence as not relevant. The Court overruled the Commission saying, "The ability of one mode of transportation to operate with a rate lower than competing types of transportation is precisely the sort of inherent advantage that the Congressional policy requires the Commission to recognize."²⁴ No cost comparisons were discussed, however.

Such decisions by the I.C.C. prompted at least one court to say that "the Commission had, in a line of cases through the early 1950's, often cancelled reduced rates, though they were fully compensatory. While the Commission has traditionally contended such cancellations were not ordered to protect other modes, the Congress felt otherwise . . ."²⁵ A year later the Transportation Act of 1958 was passed. It provides:

In a proceeding involving competition between carriers of different modes of transportation subject to this Act, the Commission, in determining whether a rate is lower than a reasonable minimum rate, shall consider the facts and circumstances attending the movement of the traffic by the carrier or carriers to which the rate is applicable. Rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving due consideration to the objectives of the national transportation policy declared in this Act.²⁶

Even after the passage of the Act, the Commission continued to deny

22. *Petroleum Products from Los Angeles to Arizona and New Mexico*, 280 I.C.C. 509, 516 (1951).

23. *Petroleum from Los Angeles and El Paso to Arizona and New Mexico*, 287 I.C.C. 731 (1953).

24. *Schaffer Transportation Co. v. United States*, 355 U.S. 83, 91; 78 S. Ct. 173, 2 L. Ed. 2d. 117 (1957).

25. *Missouri Pacific R. R. Co. v. United States*, 203 F. Supp. 629, 633 (E. D. Mo. 1961); see also Coyle, J. J. 36 I.C.C. Prac. J. 1954, 1956, (1969).

26. *Supra*, note 4.

certain railroad rate reductions in order to protect competing carriers.²⁷

The first case reaching the Supreme Court concerning an interpretation and application of Section 15a(3) of the Interstate Commerce Act was the *I.C.C. v. New York, N. H. and H. R. Co.*, 372 U.S. 744 (1963), referred to as the *New Haven* case. In *New Haven* the railroads had proposed reduced rates for trailer-on-flatcar service to meet the rates offered by coastal water carriers. These rates generally equalled or exceeded the railroads' out-of-pocket costs and in many instances the railroads' fully-distributed costs. The I.C.C. cancelled the rates on the grounds that the water carriers would be destroyed and that they were an integral part of the national transportation system and should be protected. The Court stated that the Commission had not determined which mode had an "inherent advantage" as to rates. The Commission had not held up railroad rates to protect the other mode's inherent advantage, but rather had felt the reduced rates must be disallowed because of the requirements of the National Transportation Policy.

The Court then discussed the legislative history behind the passage of Section 15a(3) and concluded that "there can be no doubt that the purpose of this provision was to permit the railroads to respond to competition by asserting whatever inherent advantages of cost and service they possessed."²⁸ The purpose of the Act was to do away with the paternalism of the I.C.C. in maintaining shares of the traffic for each mode under its jurisdiction.

The Court continued by saying that a rate was not destructive simply because it diverted traffic from another mode. The Court felt that these rates should be disallowed as not consistent with the National Transportation Policy only if they impaired an inherent advantage of the water carriers. Here the Court indicated that the water carriers may have just such an advantage as both their out-of-pocket and fully-distributed costs were less than that of the railroad. But the Court emphasized that the Commission had not determined which carrier had an inherent advantage as to rates. The Court said, "It may be, for example, that neither a comparison of 'out-of-pocket' nor a comparison of 'fully-distributed' costs . . . is the appropriate method of deciding which of two competing modes has the cost advantage on a given movement . . . These and other similar questions should be left for initial resolution to the Commission's informed judgment."²⁹ Thus the Court remanded the case to the Commission.

27. *Commodities-Pan-Atlantic S.S. Corp.*, 313 I.C.C. 23 (1960), revd., *New York, N.H. & H.R. Co. v. United States*, 199 F. Supp. 635 (D. Conn. 1969) remanded to I.C.C., *I.C.C. v. New York, N.H. & H.R. Co.*, 372 U.S. 744 (1963).

28. *I.C.C. v. New York, N.H. & H.R. Co.*, 372 U.S. 744, 757 (1963).

29. *Id.* at 760-1.

The I.C.C. has compared the cost standards to determine which mode has an inherent advantage in varying ways. If a rate reduction is proposed to meet unregulated competition, the Commission allows it as long as it is above out-of-pocket costs and therefore compensatory.³⁰ If both competing modes are regulated, the standard applied by the Commission is more complicated. The Brief of Respondent Railroads before the I.C.C. in the *Ingot Molds* case perhaps best sums up the rule of law then applicable in these situations as follows:

First, the Commission compares the fully-distributed costs of the two regulated modes to determine which enjoys the lower. See *Grain From Idaho, Oreg., & Wash. to Ports in Oreg. & Wash.*, 319 I.C.C. 534, 560 (1963). If, upon such comparison, the mode proposing the reduction has the lower cost, the rate is lawful regardless of whether it clears fully-distributed costs provided it covers the proponent carrier's incremental costs. See e.g., *Motor Vehicles From Kansas City to Ark., La., & Tex.*, 318 I.C.C. 301, 320 (1962). Where the comparison of the full costs indicates that the proponent of the rate reduction has the higher full costs, the reduction will, nevertheless, be lawful from a cost standpoint if the rate exceeds the higher cost carrier's own fully-distributed costs and does not force the lower cost agency to go below its own fully-distributed costs in order to remain competitive. *Agricultural Insecticides—Heyden, N.J. to Houston, Tex.*, 319 I.C.C. 493, 495 (1963). The Commission has also approved rates of the higher cost agency which, although not shown to be above its fully-distributed costs, exceed its own incremental costs and are higher than the lower cost agency's fully-distributed costs. *Cereal, Coffee, Tea, Drugs, Related Art.—N.J. & Pa. to Tex.*, 319 I.C.C. 424, 426 (1963). But if the higher cost agency's rate is below its own fully-distributed costs and also below the lower cost agency's fully-distributed costs, the likelihood is that it will be disapproved . . . *Grain From Idaho, Oreg. & Wash. to Ports in Oreg. & Wash.*, 319 I.C.C. 534, 561, 562 (1963).³¹

The I.C.C. generally agrees with this statement.³²

The *Ingot Molds* case was the next leading case to address the issue.

30. See *Grain in Multiple-Car Shipments—River Crossings to South*, 318 I.C.C. 641, 663, 684 (1963); 321 I.C.C. 582, 598, 600 (1963); *Wine, Pacific Coast*, 329 I.C.C. 167 (1966); *Portland Freight Traffic Association v. Northern Pacific Railway Co.*, 337 I.C.C. 827 (1970).

31. Brief for Respondent Railroads at 22, 23, *Ingot Molds, Pa. to Steelton, Ky.*, 326 I.C.C. 77 (1965).

32. Brief of the I.C.C. at 38, *American Lines v. L. & N. R. Co.*, 268 F. Supp. 71 (W. D. Ky. 1967).

The case was concerned with the movement of ingot molds from Neville Island and Pittsburgh, Pennsylvania, to Steelton, Kentucky. Almost all of the traffic had been moving by barge-truck service, and the railroads were proposing to lower their rates from \$11.86 to \$5.11 per ton, or the same rate as that charged by the barge-truck service. Division 2 of the I.C.C. found the fully-distributed cost to the railroads to be about \$7.59 per ton and the out-of-pocket costs to be \$4.69. The fully-distributed cost to the barge-truck service was \$5.19 and their out-of-pocket costs were estimated to be approximately the same.³³

Commissioner Freas, writing for Division 2 of the I.C.C., stated, "We adhere to the utilization of fully-distributed costs as the standard for determining the inherent advantage of low cost in the situation presented."³⁴ However, he went on to say that since protestants, the barge-truck service, had voluntarily set their rates below their fully-distributed costs, the Division would not assume that the railroads were impairing protestants' inherent cost advantage by meeting that rate. As the railroads' rate exceeded their out-of-pocket costs, it would contribute to the railroads' constant costs and there would be the benefit to the public from the competitive rate setting.

The case then went to the full Commission.³⁵ The I.C.C. reversed Division 2 and held the rates to be unjust and unreasonable. They stated that fully-distributed costs were to be used to determine which mode possesses an inherent advantage. Moreover, this advantage cannot be lost or impaired by the circumstance that the existing rate of the low cost carrier is below its fully-distributed costs. They felt that since the railroads had the lower out-of-pocket costs, they could drive the water carriers out of business. Finally, the Commission stated that any departure from using a fully-distributed cost standard should be undertaken in the broad rule-making proceeding of Docket 34013, Rules Governing the Assembling and Presenting of Cost Evidence.

Commissioner Freas registered a strong dissent to the Commission's opinion saying in part: "As I see it, the majority has come full circle to the pre-Section 15a(3) days before 1958, and is once again indulging in the arbitrary allocating of traffic among various modes. It has done so by equating, in effect, fully distributed costs with a profitable rate."³⁶

The railroads sued to enjoin and set aside the order of the Commission. The Three-Judge District Court found for the railroads and set aside the

33. *Ingot Molds, Pa. to Steelton, Ky.*, 323 I.C.C. 758 (1965).

34. *Id.* at 763.

35. *Ingot Molds, Pa. to Steelton, Ky.*, 326 I.C.C. 77 (1965).

36. *Id.* at 87.

order. They held first that there was no rational basis for the Commission to use fully-distributed costs and, therefore, the order was arbitrary and, second, that Congressional intent was not carried out by the Commission's order.³⁷ The Court said the Commission had asserted that merely because a carrier was able to get some return and by adding traffic maximize the contribution to its overhead does not necessarily mean the carrier is more efficient. The Court asked why this is so and said the Commission had not answered this question. The Court also contended that the Commission had not rationally explained the distinction between regulated and unregulated competitive situations which enables it to utilize different cost standards. As to Congressional intent, the Court felt that Section 15a(3) was a codification of *New Automobiles* and authorized exactly this sort of hard competition.

Both the District Court and the Commission relied on the *New Haven* case. The Commission argued that in *New Haven*, the Supreme Court had indicated a willingness to accept a finding of "inherent advantage" based on the lower fully-distributed costs. The District Court, however, relied on the language in *New Haven* specifically disavowing any holding as to the applicable cost standard.

The Supreme Court, Mr. Justice Marshall for the majority, reversed the District Court. Interpreting its prior decision in *New Haven*, the Court said the I.C.C. "could, after due consideration, decide that some other measure of comparative costs might be more satisfactory in situations involving intermodal competition than the one (fully-distributed costs) it had traditionally utilized. This is a far cry from saying that it *must*." (Italics Court's)³⁸ The Court noted that Congress had rejected language for the 1958 Act requiring the I.C.C. to consider only out-of-pocket costs.³⁹ Moreover, one of the examples before the Congressional Committee examining the proposals for the 1958 Act was identical to this case.⁴⁰ The Court felt that a reading of Section 15a(3) to require the Commission to compare out-of-pocket costs would render the terms "inherent advantage" meaningless.⁴¹ This is a clear indication that the Court would accept findings of inherent advantage based on comparisons of fully-distributed costs.

However, the Court then repeated its holding in *New Haven* to the effect that the initial determination of the question of which cost standard should be applied was for the Commission. The Court stated that the

37. *American Lines v. L. & N. R. Co.*, 268 F. Supp. 71, (W.D. Ky. 1967).

38. *American Lines v. L. & N.R. Co.*, 392 U.S. 571, 584 (1968).

39. *Id.* at 580.

40. *Id.* at 582.

41. *Id.* at 581.

Commission has not made such a determination as its decision in this case is temporary. The Court noted that "the I.C.C. has presently pending before it a broad-scale examination of the whole question of the cost standards to be used where comparisons of intermodal cost advantage are required."⁴² The majority felt the I.C.C. should be allowed to decide the question in that proceeding. Therefore, the Court affirmed the I.C.C.'s order.

Mr. Justice Harlan in his concurring opinion stated that he understood the Court's position to be that since the Commission has not decided the question expressly left open in *New Haven*, the Court need not decide it.⁴³ He felt this question should have been resolved here instead of requiring new litigation.

The rulemaking proceeding pending before the I.C.C. is entitled *Rules Governing the Assembling and Presenting of Cost Evidence*, Docket No. 34013. It will be discussed in a later section of this paper.

B. A Review of Legal and Economic Opinion as to the Applicable Cost Standard

All of the commentators on this question are in agreement on one thing. That is: the issue as to which cost standard should be applied has been one of the most widely discussed and written about issues by transportation lawyers and economists in recent years.

Perhaps the best place to start a review of the recent legal and economic opinions on the issue is with the exhibits introduced into the *Ingot Molds* case by ten railroad economists.⁴⁴ In the statement by William J. Baumol he asserts that, "It is important to realize that the discussion . . . does not represent the views of one or a few economists or even a narrow school of economic analysis; rather it can be stated without hesitation that it would receive the support of the vast majority of reputable members of the profession."⁴⁵ He then summarizes his conclusions concerning the applicable cost standard. First, "the type of cost datum which is most pertinent and validly employed in the setting of price floors (minimum rates) is incremental or marginal cost."⁴⁶ He states that concepts such as fully-distributed costs are artificial and arbitrary and lead to inefficient utilization of transportation facilities. Secondly, he states, "In determin-

42. *Id.* at 591.

43. *Id.* at 594.

44. *The Role of Cost in the Minimum Pricing of Railroad Services*. The Journal of Business of the University of Chicago, Vol. 35, No. 4 (1962).

45. Exhibit 37, p. 4, Statement of William J. Baumol, *Ingot Molds, Pa. to Steelton, Ky.*, 323 I.C.C. 758 (1965).

46. *Id.* at 4.

ing any price floors for the services of a particular carrier, only the incremental costs incurred directly or indirectly by *that* carrier in providing that particular service are always pertinent.”⁴⁷

In support of his conclusions Mr. Baumol proceeds to demonstrate how incremental cost pricing maximizes net revenue. The railroad will only know if a particular movement adds to its net revenue by comparing the incremental costs of that movement with its incremental revenue.⁴⁸ This service should be provided as long as the revenue from it covers its incremental costs and returns something toward overhead or fixed costs.

Then he states, “If any floor on rates, other than that provided by incremental cost is artificially imposed by regulatory decisions, both the public and the business firms involved must necessarily be harmed. The public must suffer because of the lost opportunities to obtain goods and services whose value exceeds the added costs incurred. The participating carriers must lose because they are forced to forego opportunities to supply services which could have provided a contribution to profit and overhead. . . .”⁴⁹

Mr. Baumol argues that fully-distributed costs are objectionable on two main grounds. First, they are always arbitrary. By definition, one is trying to allocate or distribute a cost which is “fixed” or not allocable. Secondly, a fully-distributed cost calculation is irrelevant to whether a service will be profitable or not.⁵⁰

The other railroad economists agreed with the statements of Mr. Baumol. Richard B. Heflebower pointed out that the railroads have excess capacity. Given this fact, he argues that pricing on an incremental costs basis spreads this “burden” over more traffic, and secondly, the increased use of these facilities enlarges the social output from this excess capacity.⁵¹ He feels that the “inherent advantage” is with the carrier having the lower incremental cost.⁵²

The I.C.C. in its brief before the District Court in the *Ingot Molds* case argues that economic opinion is not nearly so unanimous as Mr. Baumol states.⁵³ One of the economists they point to is Professor Joseph R. Rose. He has written two articles concerning this issue but in both he stated that “marginal costs” were the appropriate cost standard for pricing pur-

47. *Id.* at 5.

48. *Id.* at 9.

49. *Id.* at 10.

50. *Id.* at 16.

51. Exhibit 40, p. 6, Statement of Richard B. Heflebower, *Ingot Molds, Pa. to Steelton, Ky.*, 323 I.C.C. 758 (1965).

52. *Id.* at 9-10.

53. *Supra*, note 32 at 50.

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poses.⁵⁴ In his latest article Professor Rose opts for rates set by adding a uniform increment to marginal costs. He argues against rates which are discriminatory because of demand factors. But under this method the mode with the lower marginal cost would still set the rate floor.⁵⁵

F. K. Edwards, a former member of the I.C.C.'s Cost Finding Section, asserts that fully-distributed costs have no function in railroad ratemaking. He believes demand factors should set the rate.⁵⁶ Additionally in "The Ingot Molds Case and Competitive Ratemaking", J. J. Coyle emphasized that the I.C.C. allows "out-of-pocket" rate setting to meet unregulated competition.⁵⁷ He contends that there is no logical distinction between the unregulated and regulated competitive situations.

Some authors are even harsher in their criticism of the I.C.C.'s use of fully allocated costs to set minimum rates. David Boies, Jr., in his article "Experiment in Mercantilism: Minimum Rate Regulation by the Interstate Commerce Commission," says the I.C.C. uses its minimum rate-making power like a monopoly to keep transportation cartel prices up.⁵⁸ He argues that any rate floor misallocates resources and also that were railroads allowed to reduce their rates, they would stay low even if some other carriers were driven out of business. He says one of the primary reasons for regulating the motor carriers in the first place was ease of entry and their intermarket mobility.⁵⁹ This ease of entry would keep railroad rates low.

Mr. Boies then analyzes three arguments for use of fully allocated costs as a minimum rate floor. First, he presents the argument that a rate not recovering its fully allocated costs does not carry its share of the fixed costs, thereby causing some other traffic to carry a greater proportion of these fixed costs than it should. He meets this argument as do the railroad economists by noting that any recovery toward fixed costs is better than none. The absolute amount that other railroad shippers must contribute to covering fixed costs is less if some contribution is made by the added traffic.

54. Rose, J. R., *Regulation of Rates and Intermodal Transport Competition*, 33 I.C.C. Prac. J. 23 (1965); Rose, J. R., *Regulation of Intermodal Rate Competition in Transportation*, 69 Mich. L. R. 1011, 1026, May 1971.

55. Rose, J. R., *Regulation of Intermodal Rate Competition in Transportation*, 69 Mich. L. R. 1011, 1029, May 1971.

56. Edwards, F. K., *The Role of Transportation Costs and Market Demand in Railroad Ratemaking*, 37 I.C.C. Prac. J. 420 (1970).

57. Coyle, J. J., *The Ingot Molds Case and Competitive Ratemaking*, 36 I.C.C. Prac. J. 1654 (1969).

58. Boies, David Jr., *Experiment in Mercantilism: Minimum Rate Regulation by the Interstate Commerce Commission*, 68 Colum. L. R. 599, 639 (1968).

59. *Id.* at 652.

Secondly, he presents the argument that the railroads with their superior financial strength would drive other modes out of business and then wield monopoly power. He counters this argument with the "ease of entry" factor and competition from other railroads. One railroad would not be able to drive another out of business and this would provide competition even if over different routes to the same region.⁶¹

Finally, Mr. Boies presents the contention that making each portion of the traffic cover its fully allocated costs is a form of internal subsidization for the railroads. It allows them to service the unprofitable areas that they could not afford to serve if they only recover a small amount above their variable costs. He points out that in a situation like *Ingot Molds* the railroads themselves are asking for rate reductions which would hardly be likely if they felt they were going to lose revenue by doing so. Obviously, if pricing at marginal or incremental levels maximizes profits as the economists argue, that would help the railroads service unprofitable areas more than pricing at fully allocated levels.⁶²

On the other hand, Professor Hampton K. Snell feels that pricing on a variable cost basis ignores the fixed costs which must be taken into account by the ratemaker. He feels the I.C.C. can fairly approximate a range of fully allocated costs for a particular service and that it should.⁶³

The author of "Rate-Making Under Conditions of Regulated Intermodal Competition: The Status of Incremental Cost Pricing," 55 Va. L. R. 691 (1969), does not seem too critical of the I.C.C.'s comparison of fully allocated costs. His main point, however, is that a cost standard should not be determinative of an "inherent advantage." He argues that the issue is too narrowly drawn and that ratemaking should also take into account service advantages.⁶⁴ Other law review comments have been favorable to the District Court Decision in *Ingot Molds*, arguing for the out-of-pocket cost standard.⁶⁵

Finally, in any discussion of the prevailing opinion among legal and economic writers in this area, their predictions as to the outcome of this issue are important. At least two writers, Robert W. Harbeson and Joseph R. Rose, have felt the Court has shown a preference for a fully-

60. *Id.* at 648-650.

61. *Id.* at 651-654.

62. *Id.* at 655-660.

63. Snell, Hampton K., Professor in Bus. Adm., The University of Texas at Austin. From discussion during presentation of this paper in seminar, The University of Texas Law School, Nov. 11, 1971.

64. Comment, *Rate-Making Under Conditions of Regulated Intermodal Competition: The Status of Incremental Cost Pricing*, 55 Va. L. R. 691, 703 (1969).

65. Comment, 45 Texas L. R. 1429; Comment, 81 Harv. L. R. 905.

distributed cost standard.⁶⁶ Mr. Harbeson has said, "Barring a change in the statute the Court has thus in practical effect, if not technical form, made some version or modification of full cost the applicable general standard, subject to exceptions, in the regulation of intermodal competition."⁶⁷ It is felt that if the I.C.C. determines that fully allocated costs should be compared to determine the low cost mode, the Courts will accept its decision.

III. *As to the Present State of the Rule-Making Proceeding Before the I.C.C.*

In the "*Ingot Molds*" decision, Mr. Justice Marshall referred to the proceeding then being conducted by the I.C.C. to determine appropriate formulas and rules for the presentation of cost evidence in minimum rate hearings.⁶⁸ An unwillingness to prejudice the eventual outcome of that proceeding provided impetus for the decision to defer to the Commission and may explain the ambiguity between that decision and certain previous decisions, notably "*New Haven*", in which the Court displayed a readiness to overturn Commission decisions which had rejected proposed carrier rates.⁶⁹ The Court recognized that the initial choice between variable and fully distributed minimum cost levels properly lay with the Commission and that until the Commission should, by the proceeding then in progress, be able to make a decision in this most complicated and technical matter, it would be premature for the Court to interject its own choice.

Mr. Justice Marshall had reference to Docket No. 34013, *Rules to Govern the Assembling and Presentation of Cost Evidence*, initiated by the Commission on its own order on April 16, 1962.⁷⁰ The assumption was of course that No. 34013 would eventually result in a choice between the variable and fully allocated cost levels, an assumption which the Commission shared.⁷¹ On October 10, 1966, Hearing Examiner Jair S. Kaplan

66. Harbeson, Robert W., *The Supreme Court and Intermodal Rate Competition*, 36 I.C.C. Prac. J. 1487 (1969); Rose, Joseph R., *Regulation of Intermodal Rate Competition*, 36 I.C.C. Prac. J. 1487 (1969); Rose, Joseph R., *Regulation of Intermodal Rate Competition in Transportation*, 69 Mich. L. R. 1011 May (1971).

67. Harbeson, Robert W., *The Supreme Court and Intermodal Rate Competition*, 36 I.C.C. Prac. J. 1487 (1969).

68. *Supra*, note 38.

69. *Supra*, note 55 at 1032.

70. Statutory authority for the order and proceeding—49 U.S.C. Sections 12, 17, 204, 304, 404 and 5 U.S.C. Section 553.

71. *Coal from Southern Mines to Tampa and Sutton, Fla.*, 318 I.C.C. 371, 393 (1962); *Grain in Multiple-Car Shipments—River Crossings to So.*, 321 I.C.C. 582, 597 (1963); *Animal Feed—Kansas City, Mo., to Chicago*, 325 I.C.C. 147, 154, 156, 157 (1965); *Aluminum Extrusions from Miami to Chicago*, 325 I.C.C. 188, 193 (1966); *Drugs and*

entered his *Report and Order* in No. 34013. The Association of American Railroads ("AAR") strongly excepted on the threshold, arguing that it was ". . . evident that the recommended report would have the Commission depart from a proceeding addressed to the procedural handling of factual cost evidence, and enter upon a totally new undertaking concerned with rate-making criteria."⁷² The proceeding had been directed by the order of April 16, 1962, and amendments, to the development of formulas and rules pertaining to the introduction of cost evidence so that minimum rate proceedings might be regularized and a basis for the meaningful comparison of cost evidence achieved. With some justification, the A.A.R. contended that, contrary to the Administrative Procedure Act and requirements of a fair hearing the Examiner had changed horses in midstream in order to reach recommended finding 6 (which would use fully allocated costs to determine the "low cost" or "rate setting" carrier), and 7 (which would have protected the "inherent cost advantage" of the low cost carrier through the prescription of rate differentials equal to the difference between the respective fully allocated cost levels of the competing modes).⁷³ The initial decision of the full Commission on the *Report and Order* was to accept the A.A.R.'s contention, and to refer the question of the appropriate minimum cost level in intermodal rate competition for further consideration under Docket No. 34013 (Sub.-No. 1), *Cost Standards in Intermodal Rate Proceedings*.⁷⁴ This order was handed down on February 14, 1969.⁷⁵ As of October 27, 1971, three years after the "*Ingot Molds*" decision, and better than nine years since the proceeding was begun, research has failed to uncover any further report on the matter.

On July 30, 1970, the Commission served its findings on related recommendations in the *Report and Order*. Finding (1) "Approval and adoption of specific cost formulas, with a view toward giving prima facie validity to formula-based costs found not shown to be necessary or desirable," accepting the Hearing Examiner's recommended finding, dealt with a proposal to use specific formulas developed by the Commission's Cost Finding Section ("CFS"). Finding (1), essentially a procedural matter, is of only collateral interest to our discussion.

Findings (2) and (3) are of direct relevance to the matter at hand. These

Related Articles, New Jersey to Chicago, 326 I.C.C. 6, 16 (1965); *Grain—Idaho, Oreg., Wash., to Ports in Oreg., Wash.*, 326 I.C.C. 358, 362 (1966); *Seaboard Air Line R. Co. v. Southern Ry. Co.*, 329 I.C.C. 17, 27 (1966).

72. *Supra*, note 15 at 3.

73. *Id.*

74. *Supra*, note 2 at 300.

75. *Id.*

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findings, accepting the recommendations of the *Report and Order*, and concurred with by the A.A.R., involved a redefinition of the two cost levels so as to exclude elements which were not properly costs and the adoption of a "variability factor," or time frame, by which variable and fully allocated costs could be distinguished. The effect of these two findings was to introduce into the question some badly needed precision.

(2). The terms "out of pocket costs" and "fully distributed costs" as used in Commission proceedings, required to be changed to "variable costs" and "fully allocated costs" respectively, and the non cost elements of profit, income taxes, and, for railroads, the passenger and less-than-carload deficits, excluded therefrom.

The basis for this change was the ". . . distinction between the broad function of ratemaking and the more limited fact finding function of costing . . ."76 Excluded from variable costs and fully allocated costs alike were provisions for "pure economic profit" which previously accepted formulations of "out of pocket" and "fully distributed" costs had made. The provisions for profit are certainly appropriate in the ratemaking process but in fact have nothing to do with costs. The distinction must be made, however, between pure economic profit and a return on equity investment. The investment of equity capital has a cost in the same way that the investment of debt capital has a cost.⁷⁷ The interest charged on borrowed money is obviously the true cost of using someone else's capital. Likewise, the opportunities for investment which the investor must forego when he uses his own capital is a true cost of capital; a cost equal to the interest he could have realized had he chosen to "rent" his money to someone else. The determination of such cost is a question of fact; a question of an entirely different nature than the rate making problem of the size of the profit or reward a regulated industry should receive.⁷⁸ Also excluded from the computation of the levels of cost are the various State and Federal income taxes. Although they may appear as an expense, nonetheless they arise only after a net profit has been earned.

If income taxes, as such, were included in costs of operation, prosperous carriers with high net earnings would show relatively larger and improperly inflated costs, perhaps requiring increased freight rates, than carriers having none, or very small profits.⁷⁹

While income taxes, like profits, are very relevant in the rate setting

76. *Supra*, note 8 at sh. 84a.

77. *Id.*, at sh. 86.

78. *Id.*

79. *Id.* at sh. 87.

process, they are not properly cost items, and their inclusion as such has the practical effect of distorting cost comparisons.

Of course the losses incurred in passenger service are no longer the burden of the railroads, having been shifted by Amtrak to the Federal government. But the exclusion of losses resulting from passenger and less-than-carload services from cost computation retains validity not only as applied to less-than-carload deficits, but as a general costing principal. The railroads are required, in the public interest, to maintain certain services which, because of their unprofitability, they would otherwise discontinue. But the deficits incurred in rendering these unprofitable services should not influence the costs of other services upward in a manner that might effect the minimum compensatory level of rates that could be charged for those services. Losses and deficits are simply the opposite side of the coin from profits and gains. Both represent the difference between revenues and expenses—one being on the minus and the other on the plus side thereof.⁸⁰ It is, therefore, no more proper to include net operating deficits in the computation of costs than it is to include net operating revenues.

(3) The determination of a variability factor for particular services found to require the selection of an appropriate time period sufficiently long to reflect adequately those changes in operations resulting in expenses which can reasonably be expected to vary with the performance of the particular service or services rendered.

As we explained above, incremental cost is the increment or addition to total costs incurred in the last individual unit of production. We indicated why a strict application of incremental costs is inappropriate to transportation ratemaking except in the very limited case in which the one-shot movement of one train-load, truck-load, or barge-load of freight from X to Y is defined as the unit of production. Thus the term "out-of-pocket" cost came into use as a practical expedient to describe the minimum level of costs that must be returned by a particular on-going movement if that movement is to pay its own way. It is relatively easy to identify the incremental costs of producing one more T.V. set or even the movement of one more train-load of steel from Pittsburg to Atlanta, but to determine what portion of the total costs of a transportation company are particularly attributable to one of many on-going movements is an entirely different matter. Given significant excess capacity, as the railroads have, a particular movement can exploit underutilized facilities, representing fixed costs, which would be in place regardless of whether the

80. *Id.* at sh. 88.

movement was ever made. But these underutilized facilities, be they locomotive, cars, signals or even trackage, will, over sufficiently long periods of time, wear out and have to be replaced if the movement or movements that utilize them are to continue. Theoretically, all costs (with the possible exception of land for rights of way) are variable in the extreme long-run. Thus, if we are not to consider all costs as being 100% variable (the contention adopted by the motor carriers), we must settle on some time frame of shorter duration which will fairly and adequately reflect which costs are to be attributed to the particular movement and which are incurred in favor of the system as a whole. The precise determination of that point, involving as it does the most technical calculations (double regression techniques, etc.), and involving a large number of independent variables, is frankly beyond the scope of this paper. Nonetheless, the Examiner and the Commission agree that an appropriate time frame can be described under the particular circumstances of each case within the "intermediate long-run" of 5 to 10 years.

Findings (4) (5) and (6) of the Commission illustrate the present ambiguity on the rate floor question.

(4) The allocation of constant costs to particular services, for rate-making purposes, results in the assignment of an equitable portion of such expenses to the particular services, and no single method found universally applicable to all transportation services.

(5) No single method of apportioning joint or common costs found universally acceptable, and any method of apportionment utilized for ratemaking purposes required to be designed to reasonably reflect the specific circumstances attending the transportation performed. [Joint or common costs are those costs other than fixed costs incurred in the two or more movements but not specifically attributable to any particular movement.]

Recommendation 5 of the *Report and Order*, treating with both fixed and joint or common costs, was to the effect that such costs be allocated throughout the system (or among those movements incurring common costs) on the basis of cars and car miles, trucks and truck miles, and barges and barge miles.⁸¹ The CFS had previously allocated constant costs on a ton and ton-mile basis; a basis which, according to the Hearing Examiner, discriminated against "heavier loading" commodities. "Thus, for example, under a ton and ton-mile allocation a car load of lead is assigned comparatively more constant costs than a comparative car load

81. *Id.* at sh. 95.

of feathers, though each use exactly the same instrumentality.”⁸² The CFS countered that the Examiner’s “instrumentalities of transportation” allocation would be on a “cost-of-service” basis (contribution to fixed costs by the unit of production varies directly with the unit’s variable cost), a basis which the Examiner had previously rejected in another form because it would, by implicitly assuming that costs are 100% variable, discriminate against higher variable cost commodities.⁸³ Both the Hearing Examiner and the CFS agreed however that the allocation of constant costs to particular units should be made. The problem, as they saw it, was to evolve a “. . . reasonably equitable and just method”⁸⁴ of making such an allocation.

The A.A.R. rejected any basis for apportioning fixed costs as essentially arbitrary.⁸⁵ Though all parties agree that total revenue must cover total costs if the company is to remain solvent, the A.A.R. contends that each railroad should be able to set rates for the individual movement at a level which will maximize the revenue realized from that movement and thus the movement’s contribution to constant costs. The point of revenue maximization—the rate that will draw the maximum revenue from a given demand—may very well be between the variable cost of the movement and its fully allocated costs no matter how constant costs are allocated. In such a situation, the use of a fully allocated cost floor for proposed rates would mean that less traffic would be called out by the rate, and thus less revenue generated towards meeting constant costs. Therefore, to the railroads, any basis of allocating constant costs must be not merely arbitrary, but irrelevant and even destructive.

(6) In appropriate circumstances (a) “fully allocated costs” found representative of the full expense level assignable to particular services; (b) relevant “variable costs” found indicative of the minimum level of expenses which must normally be recovered by a carrier in providing a particular service; and (c) “incremental or marginal” costs authorized for utilization as indicative of a minimum expense level for rate making purposes in appropriate short run situations.

This ambiguous finding is the most authoritative statement we have on the Commission’s position. The A.A.R. would of course contest (a) on the ground that under no circumstances is a fully allocated cost level appropriate as a rate floor. But (a) represents no expansion of the previous Commission practice in rate-setting. In effect, the Commission will con-

82. *Id.* at sh. 96.

83. *Supra*, note 2 at 312.

84. *Supra*, note 8 at sh. 94.

85. *Supra*, note 15 at 29.

tinue to make a determination as to the appropriate floor on the facts of each particular case.⁸⁶ Though this is probably the most politic course for the Commission to pursue until some decision on No. 30413 (Sub.-No. 1) is reached, it is most unfortunate that the Commission has failed in its previous decisions to provide a clear indication of the basis on which it will make that determination in future cases.

IV. Could the Railroads Case be Supported on the Ground that Adoption of their Standard of Costing would not Destroy all Trucking and all Barges?

The question assumes that the destruction of trucking and barges would necessarily be a bad thing. In strict resource maximization terms, if the railroads, or any other mode, were the most efficient carrier of all the nation's traffic then the elimination of other, less efficient modes would be not only inevitable (unless the government intervened to protect them), but also desirable. The mode which could carry the nation's resources most efficiently should be allowed to take traffic away from less efficient modes. Otherwise shippers would have to pay more for transportation than should otherwise be necessary, the difference representing a subsidy to inefficiency.

There is, however, an inherent assumption about that most efficient mode which is not borne out when one looks at the nation's real transportation needs. What we have assumed is that either all the nation's traffic has the same service requirements, or else that the most efficient carrier is the most efficient way to meet all the various services' requirements which one finds in the nation's total traffic. In reality, of course, the service requirements of particular categories of traffic are as varied as those categories themselves. Congress, for instance, had the very peculiar service requirements of farm-to-market agricultural traffic in mind when it enacted the "agricultural exemption"⁸⁷ to the Motor Carriers Act of 1935.⁸⁸ The particular service requirements of agricultural traffic were so distinct that Congress felt compelled to carve out, in effect, a whole separate mode of transport—unregulated, interstate, for-hire trucking—to meet them.

Likewise each of the available modes of transportation has its inherent technological service advantages and disadvantages which are peculiar to it alone. Again, Congress had in mind the particular advantages of water carriage, (and the requirements of traffic in undifferentiated bulk com-

86. *Supra*, note 2 at 318.

87. 49 U.S.C. Section 303(b) (1952); 49 Stat 545 (1935).

88. 49 U.S.C. Sections 301-327 (1952), 54 Stat 929-952 (1940).

modities) when it enacted the "bulk commodities" exemption⁸⁹ to the general regulation of water carriers.⁹⁰ Barges were so well suited to the carriage of undifferentiated bulk that Congress foresaw very little competition being offered for this traffic by other modes.⁹¹ In this connection, notice also that an inherent service disadvantage of water carriage—slow speed—has comparatively little impact on their share of the traffic in undifferentiated bulk. These are the sort of commodities that require large inventories and thus large areas set aside for storage. Shippers actually depend on having large quantities of undifferentiated bulk tied up in transit at any one time.

The net result of this sort of traffic/mode differentiation by service requirements/advantages is that significant categories of the nation's total traffic are the exclusive preserve of one or another of the available modes of transport. Rate competition in these categories is irrelevant since there is no other mode with the capabilities to take the traffic away.

There is, of course, a great range of traffic for which the marginal service advantages of any one mode may be overcome in the shipper's mind by the lower rates offered by another. In this range are competitive situations involving modes offering relatively similar service capabilities, and situations in which the comparatively large service advantages of one mode are balanced by the comparatively large rate advantages of another. It is in this range that competitive ratemaking has significance in terms of the allocation of available traffic among the various modes. Service advantages of one or another of the competing modes lose that traffic allocation function, and are instead treated as a "given" around which rates are made.

In competitive ratemaking what the other modes basically fear is that a variable cost floor for rates will enable the railroads to shift much of the burden of the fixed and joint ("constant") costs of the system to other, non-competitive rail movements which, because they need not meet rate competition, are able to consistently return more than their pro-rata share of constant costs. Thus the roads could lower rates in competitive situations to the detriment of the traffic shares of the other modes and make up the difference elsewhere.

The cost structures of the motor and water carriers cannot match this ability to shift the burden of constant costs away from competitive movements. A significantly larger percentage of their total costs are directly

89. 49 U.S.C. Section 903 (b), (c), (d) (1952).

90. 49 U.S.C. Sections 901-923 (1952), 54 Stat. 929-952, (1940).

91. *Supra*, note 19, at 184; Professor Fulda concluded that Congress had anticipated correctly in the undifferentiated bulk commodities situation, but had not in regards to the agricultural commodities exemption.

attributable to the movement of particular traffic and thus, under a variable cost floor, would have to be reflected in the rate set for that movement. Further, motor carrier and barge firms are typically much smaller organizations than railroads and thus cannot match the railroad's backlog of non-competitive movements. If railroads are permitted to set rates generally at levels below fully allocated cost, the result will undoubtedly be a shift of some traffic away from other modes in competitive situations.

For a number of reasons, however, there seems to be no possibility that a variable cost floor for railroad rates will destroy the other modes. In the first place, each of the other modes (as distinguished from the individual firms making up each mode), has very significant categories of traffic in which it does not have to face inter-modal competition. The point to point capability of trucks for instance, gives them a nearly unbeatable advantage in the transport of general commodities over short (up to 200 miles) distances. It simply does not pay the shipper to have his goods hauled to the rail siding by truck, unloaded onto the boxcars, carried 200 miles, unloaded back into trucks, and hauled to the consignee. Whatever marginal savings he could realize on rail rates would certainly be less than the added costs of the extra handling and intermediate carriage.

A second reason (which is more in the nature of a constraint on the railroads to be satisfied with a rate which is somewhat higher than the level which would drive out the competition) is the fact that to set the rate at the lower level may mean that the railroad is giving up possible revenues which it may not later be able to make up. If the rate level at which revenue is maximized is at a level which would allow other modes to compete, then to force those other modes out would necessarily mean that the railroads had foregone possible revenue. The obvious thing to do would be to raise the rates after the competition had been eliminated in order to take advantage of the new seller's market. This, however, the railroads could not do. Motor carriers and barges have one great advantage in that they possess the inherent technological flexibility to easily reenter a market which they have previously been forced to abandon. There being no physical barriers to reentry, higher rates would naturally tend to call the trucks and barges back into competition for the traffic (subject, of course, to the I.C.C.'s approval).

Further, there is always the possibility that once rates have been lowered to a level that eliminates competition, the Commission, in the exercise of its maximum rate power, will refuse to let them rise again. Section 4(2), 49 U.S.C. § 4 (2), (1952), specifically forbids railroads which have reduced rates in competition with water carriers from thereafter increasing rates unless the Commission has first found that "such proposed

increase rests upon changed conditions other than the elimination of water competition.⁹²

A final restraint on railroad rates set below the fully allocated cost level are the limitations on the railroads' ability to shift the constant cost burden to other rates. In 1960, CFS studies indicated that fully 72% of all tons carried by the railroads were carried at below fully allocated cost.⁹³ The remaining 28% of the traffic (one must assume a great deal to believe that now, eleven years later, the figure for non-competitive movements is even this large) must surely have a finite capacity to carry the constant cost burden.

For these reasons, it is highly improbable that the nation's water and motor carriers would be driven out of existence by the adoption of a variable cost floor. At most, such a rate floor would mean a shift of some percentage of the general range of traffic for which these modes compete. This marginal shift of traffic must be compared to the long-run trends in the carriage of inter-city freight. In 1940, the railroads carried 63.24% of the inter-city ton/miles; in 1960 the figure was 44.73%. The preliminary figure for 1968 indicates the percentage has further shrunk to 41.63%. The figures for motor carriers for the same years were 9.53%, 21.46% and 21.46%. Revenues have increased for the railroads during the 1940-1968 period by a factor of 2.5. Revenues of the motor carriers, in comparison, have increased by a factor of 13.7. Water carriers, though their share of the total intercity freight traffic has dropped from 18.13% to 15.55%, have increased revenues by a factor of 4.94. The shifts in traffic to the railroads which would follow the adoption of a variable cost floor certainly would not approach a level that would threaten the existence of either of the other modes.

V. Should Criteria be Established as to how High Above Out-of-Pocket [Variable Costs] the Railroads Should be Required to go in Competitive Rate-Making?

There are three basic rationales for establishing a minimum rate floor above the variable costs of the service:

- A. That the rate for each service should be set at a level high

92. *Id.*

93. Figures developed by C.F.S. and quoted in Hershey, J.W. *The Rest of the Story on Cost in the Minimum Pricing of Railroad Services*, Vol. 36, No. 3., *The Journal of Business of the University of Chicago*, 339, (July, 1963).

94. U. S. Department of Commerce, *Statistical Abstract of the United States*, 534, 535 (1970). The revenue figures on which the calculation of the factors was based are apparently not in constant dollars and thus reflect the general inflationary trend of the last 30 years.

enough to insure that service's fair contribution towards the constant costs incurred in behalf of the entire system; this in order that there be no discrimination among traffic (some shippers, in effect, having to subsidize the traffic of other shippers).

(b). That 49 U.S.C. 15 a (3) requires that the rate for each service be set at a level high enough to protect the market share of a competing mode having an inherent *fully allocated* cost advantage.

C. That 49 U.S.C. 15 a (3) requires that the rate for each service should be set at a level high enough to preserve the viability of competing modes in the interest of national defense.

A. The first argument proceeds thus: Total revenues must cover total costs, including fixed and joint costs, if the railroad is to remain solvent. The appropriate question is how the burden of fixed and joint costs is going to be apportioned among the various services being rendered by the road. If the rates charged for some services are set at levels which do not return those services' pro-rata share of these constant costs then, necessarily, the rates charged for other services must be set at a level above fully allocated costs in order to make up the difference. Thus, in effect, shippers being charged rates above fully allocated costs not only provide all the road's profit, but must also subsidize the traffic of other shippers moved at rates less than fully allocated costs.

While this rate discrimination among shippers is bad enough, the railroads' dependence on such discrimination is inherently destructive.⁹⁵ The ability of the railroads to set a rate above fully allocated cost is a function of the demand or, in other words, the "value of [the railroad's] service"⁹⁶ to the shipper. The condition of demand which refers to its responsiveness to changes in price is known as demand "elasticity". A demand curve for a particular service which would allow the railroad rendering the service to set rates at a level significantly above the costs incurred without significantly effecting the quantum of traffic called out by the rate is said to be relatively "inelastic". Elasticity is a function of the shipper's need for the service. If the shipper needs to move his freight, and has no other viable mode of transportation available to him, he can do relatively little to effect the rate charged. His demand for the service is inelastic with the result that the railroad can charge him significantly more than its fully allocated costs to carry his goods. It should be obvious that the key to demand elasticity is the availability of viable alternative modes of transportation.

There was a period in our history when the railroads faced little or no

95. *Supra*, note 92 at 338.

96. Rate-making on a demand basis is referred to throughout the literature as "value-of-service."

viable competition on the great majority of their services. It was the exploitation of this monopoly position, of inelastic demand, that led to the original enactment of maximum rate regulation, to be enforced by the Interstate Commerce Commission, in 1887. But technology has radically changed the transportation picture in the last eighty-six years. The ready availability of alternative modes which did not even exist sixty years ago has meant steadily increasing competition for the nation's traffic and a corresponding decrease in the railroads' ability to exploit demand. Between 1940 and 1968 for example, the railroads' share of the intercity freight traffic in ton miles dropped from 63.24% to 41.63%. During the same period, the motor carriers' share has increased from 9.53% to 21.46%.⁹⁷ Not only regulated motor carriers, but water carriers, pipelines, air freight, and private carriage now give the shipper a range of potential modes from which to choose.

The effect of this aggressive new competition on the railroads' ability to charge rates significantly greater than fully distributed costs is demonstrated by the fact that in 1960 only 28% of all freight carried by the railroads, measured in tons, returned at least the fully allocated costs of the movement.⁹⁸ In other words, in 1960, 28% of the traffic subsidized the other 72% which was moved at less than fully allocated costs. How much further this shift of the burden can continue is open to question but it cannot continue indefinitely.

This argument against a variable cost floor, though persuasive on its face, is successfully rebutted when one considers the rationale for rates set at some level below fully allocated costs. Precisely because of the impact of the new alternative modes on transportation demand, it may very well be that only at some rate below fully allocated costs can net revenue, and thus contribution towards constant costs, be maximized. The elasticity of the demand for the service would be such that a higher rate would call out less traffic and would be actually dysfunctional in terms of covering constant costs. The burden on those movements for which rates can be set above fully allocated costs would be greater, not less. Only demand can dictate that level above variable costs which will be the most efficient in terms of covering constant costs. The assignment of a prorata contribution to constant cost above variable cost ignores the realities of demand and the managerial discretion necessary to rational rate-making.

This still leaves the inescapable fact that some shippers will have to bear a relatively greater burden of the constant costs of the system than will others. But what has been said above should indicate that such is the result

97. *Supra*, note 93.

98. *Supra*, note 92.

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of the varying elasticities of demand for particular services and not because the railroads have for some reason rigged rates that way. Such shippers are actually *better* off because rates are set without regard to fully allocated costs but solely with a view toward maximization of the revenue that can be generated toward constant costs.

B. The second rationale is based on the proposition that “inherent advantage” as applied to costs must mean “inherent fully allocated cost advantage.” The argument is that only fully allocated costs can accurately measure the total resources expended in the rendering of a particular service. The mode which utilizes the fewer total resources—which has the lower fully allocated costs—in the rendering of a particular service has the inherent cost advantage. The Commission is compelled by § 15 a (3) to a due regard for the objectives of the National Transportation Policy, among which is the “recognition and preservation of the inherent advantages” of each mode. Thus, in setting rates for a particular competitive service, the Commission is compelled to use the differential between the fully allocated costs of the competing modes as the floor for rates charged by the mode having the higher fully allocated costs. Only in that way, it is argued, can the “inherent advantages” of having the lower total cost be protected.⁹⁹

The counter argument that Congress did not intend the use of fully allocated costs for determining rate floor is thus:

§ 15 a (3) provides that . . .

In a proceeding involving competition between carriers of different modes of transportation subject to this Act, the Commission, in determining whether a rate is lower than a reasonable minimum rate, shall consider the facts and circumstances attending the movement of the traffic by the carrier to which the rate is applicable. Rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving due consideration to the objectives of the national transportation policy declared in this Act.

Were it not for the second clause of the second sentence, the obvious reading of § 15 a (3) would be that the rates for any particular mode are to be set without reference to their effect on the traffic carried by any other mode. This would imply the use of a variable cost minimum rate floor because a rate can only be non-compensatory, and therefore below “a reasonable minimum,” if it fails to return at least the costs incurred by that mode in rendering the service. The legislative history of § 15 a (3)¹⁰⁰

99. *Supra*, note 8 at 111-115.

100. *Hearings on the Problems of the Railroads before Subcom. of S. on Interstate and Foreign Commerce*, 85th Cong., 2d Sess. (1958).

clearly indicates the prevailing mood of the Congress in making the 1958 amendment. The Senate Report on § 15 a (3)¹⁰¹ quotes the Senate Subcommittee Report as follows:

The subcommittee wishes to affirm the interpretation of the Commission given in the Automobiles case [*New Automobiles in Interstate Commerce*] epitomized in the words quoted above. The subcommittee therefore believes it necessary to amend the act only so as, in effect, to admonish the Commission to be consistent in following the policy enunciated in the Automobile case thus assuring reasonable freedom in the making of competitive rates.

The source of the second clause in the second sentence is easy to find,¹⁰² but its precise meaning is cloaked in ambiguity. It was obviously adopted as a compromise to barge and motor carriers who were concerned whether the Commission, under § 15 a (3), should ever have the power to find unlawful reduced rates which would be above the proponent's variable costs, but below its fully allocated. "Giving due consideration to the objectives of the national transportation policy declared in this Act," refers to the provision in the National Transportation Policy for;

. . . fair and impartial regulation of all modes of transportation subject to the provisions of this Act, so administered as to recognize and preserve the inherent advantages of each . . . to promote . . . and foster sound economic conditions in transportation and among the several carriers; to encourage the establishment and maintenance of reasonable charges for transportation services, without unfair or destructive competitive practices . . .

Nowhere in the National Transportation Policy or anywhere else in the Interstate Commerce Act is a definition of how inherent advantages should be "recognized and preserved." The first sentence and first clause of the second sentence of § 15 a (3) can only be explained, and are explained by the reference to *New Automobiles* above, as incorporating into the Act, the Congress' approval of variable costs as the appropriate floor for competitive rates. That clear indication of legislative intent should not be rendered nugatory by a reading of the second clause which would require that rates be set above the fully allocated level.

Neither argument has prevailed thus far before either the Commission or the courts. The picture of the Congressional intent which emerges before those tribunals from the language and legislative history of § 15 a

101. S. Rep. No. 1647, *Transportation Act of 1958*, 85th Cong., 2d Sess., 2, 3 (1958).

102. *Supra*, note 99.

(3) is of a "something for everyone" sort of legislative compromise. Unable to find a middle ground on which the contradictory positions of constituent transportation modes could be reconciled, Congress simply drafted those positions into this amazing section, contradictions and all.

C. The argument that rates should be set at a level high enough to preserve the viability of competing modes for purposes of national defense proceeds from the prescription, in the last section of the National Transportation Policy, that the Commission should seek to preserve a system of national transportation sufficient for the national defense. "Congress unequivocally reserved to the Commission power to regulate the reasonableness of interstate rates in the light of the needs of national defense"¹⁰³ We cannot, therefore, assume that the reference to national defense is mere windowdressing, without practical significance.

On the other hand, recognition of this broad consideration should not be applied in a manner that would nullify the more particularized mandates of § 15 a (3).¹⁰⁴ In the *New Haven* case the Court recognized the call a due consideration for national defense has on the rate-setter, but correctly decided that this broad consideration should be the ruling one only in those most exceptional circumstances in which the Commission can show, in fact, a relationship between a particular rate and the capacity of the nation's transport system to adequately provide for the national defense.¹⁰⁵

VI. The National Transportation Policy should be interpreted as allowing the railroads to take traffic away from the other modes if they can do it by equal or cheaper rates while still making a reasonable profit.

In the preceding section of this paper we have discussed why it can be detrimental to a mode with lower variable costs to hold its rates up to protect another mode's inherent advantage based on lower fully allocated costs. The railroads and any other carrier should be allowed to price their services on the basis of their variable costs. On the facts of the *Ingot Molds* case this would allow the railroads to take traffic away from the barge-truck service by equal rates while still making a reasonable profit.¹⁰⁶ That is, of course, only if the barge-truck rates remained the same. In this section we shall attempt to point out some of the policy reasons for the above interpretation of the National Transportation Policy.

103. *Hearings before S. Com. on Interstate and Foreign Commerce, on S. 3378*, 85th Cong., 2d Sess. 18, 81 (1958); *Hearings on Railroad Problems before Subcom. on H. R. Com. on Interstate and Foreign Commerce*, 85th Cong., 2d Sess. 152, 322 (1958).

104. *United States v. Capital Transit Co.*, 325 U. S. 357, 362 ().

105. *Supra*, note 8 at sh. 69.

106. *Supra*, note 35 at 80.

As the economists have argued, as long as the revenue generated by a particular service exceeds the variable costs of providing that service, the service is profitable. It will return some amount toward the fixed costs of the operation. The I.C.C. would say this service is compensatory. Further, it is contended that ratemaking according to a variable cost standard will maximize the revenue obtainable from a particular service. Maximizing such return reduces the amount of fixed costs which must be recovered from other traffic. Of course, the operation as a whole must recover its entire costs to remain profitable and prevent a deterioration of its plant. However, the best way to do this is to maximize its return on each part of its traffic. Thus, as in the *Ingot Molds* situation allowing the railroads to carry this compensatory traffic would maximize their return on this particular traffic and so help recover their fixed costs.

The I.C.C. accepts the argument that the reduction of rates in *Ingot Molds* is in the railroads' self-interest. However, they assert that the National Transportation Policy is not to be interpreted as allowing whatever is in the railroads' self-interest.¹⁰⁷ It is argued that although the railroads would reduce the amount of their constant or fixed costs which must be recovered from other traffic, the amount of fixed costs that the barges must recover from other traffic for their operation to remain profitable would increase. As the barges carry less traffic they would have more difficulty in spreading their fixed costs to other traffic. In fact, their very existence may be threatened.¹⁰⁸ This, the Commission says, is not the purpose of the National Transportation Policy. However, as we have said, the water and motor carriers have a very high percentage of variability of costs. They would not have much of a burden of fixed costs to shift to other traffic. It is only their existence in the carriage of this particular traffic that is threatened.

The National Transportation Policy, though, does not require the preservation of all modes of transportation. It does call for the protection of the inherent advantages of each mode, and therefore, the I.C.C. argues that it is protecting an inherent advantage possessed by the barge-truck service. Lower cost is an inherent advantage and the water carriers have the lower fully allocated costs.

This, we feel, is an incorrect interpretation of the National Transportation Policy. More precisely, it is an incorrect interpretation of the words "inherent advantage" for at least two reasons.

First, any interpretation of an inherent advantage based solely on a cost standard fails to take into account possible service advantages. Although

107. *Supra*, note 32 at 25.

108. *Supra*, note 35 at 82.

the I.C.C. in *Ingot Molds* held that neither mode possessed a service advantage, it was agreed that at equal rates, the railroads would carry all of the traffic.¹⁰⁹ This indicates an advantage which should be considered in any ratemaking proceeding.

Secondly, from an economic standpoint, if costs are to be compared, the inherent advantage should lie with the carrier able to move the particular traffic at the least cost to society. Since constant costs remain whether a particular service is rendered or not, the better measure of the cost to society is the variable cost of rendering that service. The mode with the lowest variable costs consumes the least of society's resources by rendering a particular service. The variable costs approximate the additional resources used to provide the service. Moreover, since the railroads are characterized by an excess capacity, allowing the railroads to carry this traffic best utilizes these facilities.

The advantage of the railroad here is in the fact that it is such a general commodity carrier. By pricing above variable costs it can recover its fixed costs from a large variety of traffic. The water carriers are more dependent on certain types of traffic to recover all of their costs. The I.C.C. contends that their existence as a competitor for this traffic would be threatened by the lower rates, but from society's viewpoint, maintaining two modes because one has lower fully allocated costs is not economical. The mode with the lower variable costs could perform this service for less and get a return to its fixed costs. If either mode cannot recover its full costs, it would go out of business as can happen in any competitive situation. Holding the railroads' rates up so that the water carriers can recover their fully allocated costs means society pays for the fixed costs of both modes on this segment of traffic. Society should not be supporting two modes where one could do the services for less. As pointed out before, where one mode possesses a distinct service advantage as the water carriers with some bulk commodities, it would continue to carry this commodity at higher rates covering its fully allocated costs. But where it does not possess an advantage the commodity would be carried by the mode with the lowest variable cost.

However, there are other policy considerations concerning the loss of one of the two competitors on any segment of traffic. Would the railroads then have monopoly power and raise prices? First, the I.C.C. has specific power under Section 4(2) of the Interstate Commerce Act to prevent the raising of prices by a railroad unless conditions have been changed by factors other than the end of competition by the water carrier.¹¹⁰ Second,

109. *Id.*, at 80.

110. *Supra*, note 20.

if the railroads were to raise prices, the barges could reenter the market. Both barges and motor carriers have relatively low entry costs and are highly mobile. They could readily reenter a market if the railroads raised prices. Obviously, in this situation the I.C.C. would have to allow certification to reenter the particular market quickly.

Finally, an interpretation of the National Transportation Policy to allow the railroads to take traffic while still making a reasonable profit should not and would not be applied in all cases. If, for example, national defense needs required the maintenance of a strong coastal barge service, the I.C.C. could keep the railroad rates up to maintain the coastal barges. However, as the Court indicated in *New Haven*, the I.C.C. would be required to articulate its reasons for doing so.

VII. Should Section 15a(3) Be Clarified by Amendment?

As should be apparent from reading the preceding chapters of this paper, Section 15a(3) of the Interstate Commerce Act is not so clear as to preclude differences of opinion concerning its meaning. The last sentence of the section reads: "Rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving due consideration to the objectives of the national transportation policy declared in this Act."¹¹¹ The controversy has raged over the interpretations of the last phrase of this sentence. We have already noted that the Commission has consistently used this phrase to protect one mode's "inherent advantage". This inherent advantage has been lower cost based on a comparison of fully allocated costs. Moreover, we have stated that the Supreme Court has indicated a willingness to accept such an interpretation by the Commission.¹¹² Therefore, the question is, "Can Section 15a(3) be clarified by amendment to bring about a comparison of variable costs to determine an inherent advantage?" Or perhaps better still, "Can Section 15a(3) be clarified to allow minimum rate-setting without inter-modal cost comparisons at all?"

First, it should be remembered that in 1958 when this section was passed, the railroads had proposed an alternative amendment. This amendment, known as the Three Shall-Nots, read:

In determining whether a rate, fare, or charge, or classification, regulation, or practice to be applied in connection therewith, results in a charge which is less than a reasonable minimum charge, as used in this Act, the Commission shall not consider the effect of such charge on the traffic of any other mode of transportation; or the

111. *Supra*, note 4.

112. *Supra*, note 4¹.

relation of such charge to the charge of any other mode of transportation; or whether such charge is lower than necessary to meet the competition of any other mode of transportation: *Provided, however*, That the provisions of this paragraph shall not be construed to prohibit any carrier subject to this Act from protesting or complaining in the event that a rate, fare, or charge is filed or made effective which it believes to be less than a reasonable minimum charge.¹¹³

This amendment was vigorously opposed by the Commission. The present compromise section was adopted to prevent umbrella rate-making and protection of fair shares of the market. But, as noted by the Supreme Court in *Ingot Molds*, one of the specific instances Congress mentioned as an inherent advantage was protection of the mode with the lower fully allocated costs.¹¹⁴

At this time an amendment of Section 15a(3) to read as the Three Shall-Nots would still be open to criticism. Although it would seem that destructive competitive pricing, under variable cost, could be prevented as unreasonable with reference to the proposing mode's costs only, holding a rate up for some of the other objectives of the National Transportation Policy would seem to be precluded by such a change. Since the Commission could not consider the effect of this lower rate on a competitive mode, it could not find that the rate might threaten the existence of another mode and therefore be against the interests of national defense. Furthermore, the advantage of an administrative agency is its flexibility. The Three Shall-Nots would bind the Commission and prevent them from considering "the effect of such charge on the traffic of any other mode of transportation" for any reason. The wording of the present Act allowing the Commission to consider the overall aims of the National Transportation Policy seems more desirable.

However, the possibility of clarifying the objectives of the National Transportation Policy should be considered. An additional sentence defining what Congress meant by the term "inherent advantage" would solve the problem. However, any attempt to define service advantages possessed by the modes of transportation in carrying certain commodities would be impractical. An inherent cost advantage defined as the mode with the lower variable costs would direct the Commission to compare the variable cost of two modes. This would resolve the issue as presented. Also any conflict between two objectives of the National Transportation Policy could still be solved with flexibility. Thus, if the mode with the higher

113. H. R. 6141, 84th Cong., 2d Sess. (1957).

114. *Supra*, note 40.

variable costs needed protection as its existence was in the interest of national defense, the I.C.C. could so hold. Protecting the lower cost mode's inherent advantage would be overridden by the needs of national defense.

We submit, however, that any such amendment specifically defining an inherent cost advantage should not be put forth until the I.C.C. and the courts have definitely decided that the inherent advantage will be with the mode having the lower fully allocated costs. That is, until Docket 34013 (sub-1) has been finally decided, the present broadly stated objectives of the National Transportation Policy should be left as they are.