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AMONG RAILROADS: WHY COMPETITIVE ACCESS
SHOULD NOT BE AN ANTITRUST CONCERN

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**An Analysis of Vertical Relationships Among Railroads:
Why Competitive Access Should Not Be An Antitrust Concern**

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Federal Trade Commission
October 1989

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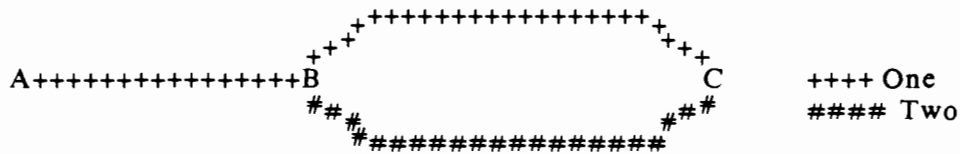
ABSTRACT

Competitive access has been an important antitrust issue for the ICC since the Staggers Act of 1980 largely deregulated the railroad industry. This paper looks at the reasons why competitive access should and should not be an antitrust issue. Given the economics of vertical relationships and contracting, it would appear that in the vast majority of cases, if it is efficient for competitive access to be granted, it will be without government action. If competitive access is to remain an antitrust question, then several conditions should be met before intervention occurs.

I. Introduction

The Staggers Act of 1980 largely deregulated railroads in the United States. For the most part, railroads can now set their own rate and service levels without interference from the government. There still remains debate, however, on what the proper role of the Interstate Commerce Commission (ICC) should be in intervening in the railroad market.

Under the Staggers Act, the ICC can set rates in cases of what is known as "competitive access." Consider the following scenario: A factory at point A producing a product that cannot be shipped by barge or truck wishes to deliver the product to a customer at C. Unfortunately for the factory's owners, only Railroad One serves the route from A to B to C, as shown below.



Railroad Two, which serves the route from B to C, is willing to arrange a "joint" route. Under such an arrangement, One's trains take the cargo from A to B, and then the shipment's freight cars are switched onto Two's trains for the journey to C. Alternatively, Two is willing to send its trains on One's track to serve the factory's needs. Railroad One, however, either refuses to agree to such an arrangement with Two, or sets a sufficiently high price for the use of its AB tracks so that Two cannot offer a competitive price for serving AC.

The ICC has the authority to set a rate for a joint shipment on One between A and B and then on Two between B and C and has often faced

this question in the post-Staggers environment.¹ These types of "gateway" provisions date well before Staggers and are known as "DT&I" conditions.² Several authors, such as Tye (1986a,b, 1987a,b, 1988, and 1989), Grimm and Harris (1983, 1988), McFarland (1985), Tirole (1988) and Kellman (1989) discuss the need for such conditions to prevent Railroad One from "foreclosing" its rival and extending One's monopoly.

This paper reviews the economics of competitive access from the viewpoint of antitrust. The goal of antitrust is either to maximize net welfare to society (Bork, 1966) or consumer welfare (Lande, 1982). Both criteria are examined in relation to railroad competitive access.

Section II explains five reasons why the ICC should not grant competitive access. First, the economics of vertical integration imply that inefficient foreclosure is unlikely to occur. Second, due to the nature of railroad services, it may be that One's monopoly power over AB traffic does not generate any significant welfare loss to consumers or society. Such monopoly power may serve to redistribute wealth (economic rents) from shippers to railroads, but the distribution of wealth is a general political and regulatory question, and not an antitrust matter. Third, contrary to what other literature in this area indicates, the presence of sunk costs in the

¹ See, for instance, *Interchange Provisions at Jacksonville Fl., SCL and SRS* 365 I.C.C. 905 (1982), *Brae Corp. v. U.S.* 740 F.2nd 1023 (1984), *Midtec Paper Corporation et. al. v. Chicago, Northwestern Transportation Co.* 1 I.C.C. 2nd 362 (1985), 3 I.C.C. 2nd 171 (1986). Congressional unhappiness with the ICC's refusal to grant competitive access conditions in sufficient numbers appears to have been an important reason why the Bush Administration chose not to reappoint ICC Chairman Heather Gradison. See Harry F. Rosenthal, "ICC Chairwoman to Resign as Tough Senate Fight Looms," Washington Post, May 26, 1989 at D-11.

² The ICC codified its competitive access conditions in *Detroit, Toledo & Ironton Railroad Company Control*, 275 I.C.C. 455 (1950). See also *Detroit, Toledo & Ironton Railroad Company Control v. U.S.*, 725 F.2nd 47 (1984).

railroad industry does not generate a market failure requiring antitrust remedy. Fourth, since the government may intervene, substantial resources may be wasted trying to influence the government's decision. Fifth, as the proponents of the Staggers Act knew, railroads require this type of market power to cover their fixed costs and remain in operation.

Section III discusses two possible reasons for granting access. First, a railroad may be trying to avoid another form of regulation ("market dominance" ratemaking). Second, a railroad may be trying to extend its AB monopoly onto the BC line. While these situations may be possible, analysis of the relevant situations indicate that they do not appear likely.

Given the substantial reasons why intervention should not occur, this paper argues against the granting of competitive access. If competitive access is to be granted, then the ICC should set extremely stringent guidelines for making such interventions.

II. Reasons For a Regulator to Deny Competitive Access

A. The Existence of Only One Monopoly Profit

Consider a firm with a monopoly at an upstream level of production, and its incentives for integrating with a downstream firm. In this case, the monopoly firm is Railroad One, with its total control over AB traffic. Its input (AB service) is necessary for AC service. The incentive for One to favor its own traffic on BC will depend on whether AB service is a "fixed" input in the production of AC service. By fixed it is meant that the proportion of AB service used in each unit of AC output cannot be altered in response to a change in the price of AB service. If the production process is characterized by fixed proportions in this way, then the price of

ABC output cannot rise as a result of a profit-maximizing monopolist Railroad One foreclosing Two from joint (AB plus BC) traffic.³

The economic theory behind fixed proportions cases is clear. There is no substituting away from AB traffic for the captive factory at A. Thus, Railroad One, by its position as a monopolist on the AB route, is in a position to capture the one and only monopoly profit from that route. It therefore has no incentive to favor its own traffic on route BC as opposed to Railroad Two's traffic.

Let us say that One only had route AB and decided to integrate "forward" into BC service. Assuming that there is no cost to switching shipments between railroads and that the BC route is perfectly competitive, if One's cost of operating a BC route is the same as Two's, then its total cost of production (cost of AB shipments plus cost of BC shipments) is unaffected by the integration. Thus, the AB price that maximizes One's profits is likewise unaffected by forward integration. In this case, the internal transfer price (the implicit price the AB part of One charges to the BC part) is identical to the price charged to independent railroads such as Two, and no additional profits are obtained through integration. (This conclusion assumes that competition on the BC route lowers the BC price to the long-run marginal cost of a shipment.)

This is the competitive access version of the basic conclusion in economic theory that, given fixed proportions, all the monopoly profits can be achieved by having a monopoly at one stage and that the price of the

³ An extensive discussion of the economics of vertical relations can be found in Fisher and Sciacca (1984) and Chapter 4, "Vertical Control," in Tirole (1988). The original research from which these discussions derive include Waterson (1982), Mallela and Nahata (1980), and Warren-Boulton (1974).

final output is unaffected by vertical integration. Competitive access would seem to be the classic case of fixed proportions. The only way that one unit of AC service can take place is through "consuming" one unit of AB service. The factory cannot consume, say, three-quarters unit of AB service and expect to get its product to B and hooked up with Railroad Two for shipment to C.

There are, however, some complications to this analysis. First, if Railroad One is regulated on the AB route and is thus prevented from charging the monopoly price, it will have an incentive to transfer the monopoly profit to an unregulated entity at the BC stage. Under these circumstances, Railroad One may refuse to sell AB service to Railroad Two so that it can "hide" its monopoly returns for AB service in the price it charges for BC service to ABC customers. In this case, denial of access could lead to higher prices. This possibility will be examined in Section III-A.

In contrast, if One is unregulated, but the downstream market BC is not competitive (i.e., the price charged exceeds marginal cost), the upstream monopolist One can reduce the price charged to the factory and increase its own profitability by vertically integrating. The problem One is trying to avoid here, as Spengler (1950) pointed out, is that without integration two firms are acting to reduce output. This "double marginalization" (or "layered monopoly") serves to decrease output below (and price above) that which one monopolist would generate.⁴ In this case, vertical integration reduces the monopolist's cost of producing AC. As with any monopolist, lower cost will

⁴ As the saying goes, "What is worse than one monopolist? A series of monopolists."

translate into lower output price (albeit not on a dollar-for-dollar basis). For the time being this point will be abstracted from, but it will become important in Section III-B.

The classic competitive access case is *Terminal Railroad Association of St. Louis*.⁵ In *Terminal Railroad* a group of railroads controlled all rail access to St. Louis from the east side of the Mississippi River. The Supreme Court ordered the Association to grant access to other, non-owner members. A similar rationale was used in the *Chicago Junction Case*,⁶ the first ICC competitive access case. Grimm and Harris (1983) cite these examples as the linear ancestors for all competitive access cases.

In fact, as recent research (Reiffen and Kleit, 1989) has shown, the Supreme Court order in *Terminal Railroad* was superfluous. The Terminal Association already granted equal access to members and non-members. A similar arrangement existed in *Chicago Junction*.⁷ This is exactly what the theory of vertical relationships predicts. Thus, the proper lesson to be drawn from *Terminal Railroad* and *Chicago Junction* is that Railroad One will sell its services on AB to Railroad Two at the same price it "sells" those services to itself. Thus, if Railroad Two is unable to obtain access to AB at a remunerative price, it is likely because Railroad One is the more efficient shipper for those products to destination C. Railroad One may be more efficient because it has the shorter track line, or because the costs of shifting the shipment's freight cars from One to Two is greater than the

⁵ 224 U.S. 383.

⁶ *Chicago Junction Case* 71 I.C.C. 631 (1922).

⁷ See Dissent of Commissioner Meyer, 71 I.C.C. 643.

lower track costs of Railroad Two.⁸ Whatever the reason, there is no general need for policy intervention to generate the proper vertical relationship among One and Two.

B. Lack of Significant Welfare Effects.

Railroads offer services, not goods. Services cannot be transferred from one buyer to another. Thus, railroads may have the ability to price discriminate.⁹ Indeed, if the factory is the only buyer of services on AB, the relevant situation is a bilateral monopoly. (See Warren-Boulton, 1978 at 52 and Blair, Kaserman, and Romano, 1989.) In this case, the factory and Railroad One can negotiate on both price and quantity. Thus, the factory and the railroad can agree to charge a high price for initial shipments and marginal costs for the final shipments. Under these conditions it is possible that the railroad can collect its monopoly profit and the bargaining process generates outcomes which maximizes both consumer and social welfare

Let us say that the factory produces widgets. If there are other producers of widgets who are not on the AB line and the widget market is competitive, the railroad cannot increase its profits by restricting the level of the factory's widget output. Were the widget output of the factory at A to be reduced by high (marginal) rail rates, the other widget manufacturers

⁸ Shifting cargo from one railroad to another at an interchange may be quite costly, as it involves labor and administrative costs that can be avoided by keeping the traffic on one railroad. See Levin and Weinberg (1979).

⁹ Scherer (1980 at 315) lists three conditions necessary for price discrimination. First, the producing firm must have market power. Second, the producer must be able to distinguish among customers. Third, the producer must be able to prevent resale of its product (service). These three conditions appear to be true in the case of railroad competitive access.

would react by increasing their own output. Thus, the railroad faces "product competition" and cannot gain profits by reducing the output of the factory below the competitive level and raising the price of widgets. The railroad therefore increases its profits by capturing the inframarginal rents of its shippers without harming the final consumers of the good in question.

This result requires the railroad to have a good deal of information about its customers. In most markets this might be a significant burden. In the markets described here, however, it appears more likely. If the railroad has only one or a few customers (such as the factory postulated above) it is in a position to learn a great deal about the demands of its customers for rail services, especially as it gains experience with those customers. While obtaining the necessary information for textbook optimality seems unlikely, it could be expected that the railroad might be able to come fairly close to that mark with the information available to it.

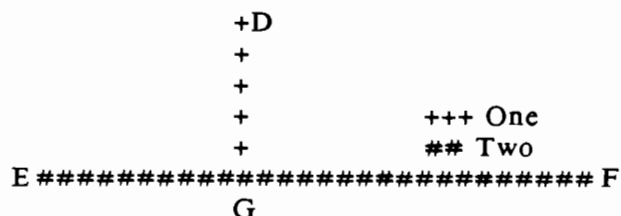
Assume now that the railroad does not face product competition. Also assume that there is only one other firm manufacturing widgets and it is also on the AB line. Since Railroad One does not face product competition, it can set the price of shipping widgets so that the amount of widgets shipped is equal to the monopoly level. One thus captures the available monopoly profits on widgets, widget output is reduced, and net welfare to consumers and society falls. (In this case, the railroad is also in a position to capture inframarginal rents, as discussed above.)

Given sufficient product competition, consumer welfare and net welfare may not be reduced in any significant manner by One's monopoly power over the factory's shipments. The factory and Railroad One can be expected to generate close to the maximum amount of surplus (or rents) from their

relationship. It is, however, by no means clear who will capture the majority of the rent. (Of course, the railroad cannot capture more rent from the factory than the railroad actually generates from its existence.) Although this question is important to the factory and the railroad, it does not appear to be an antitrust issue. While there appears to be a debate as to whether the goals of antitrust are to maximize consumer welfare or net welfare, merely shifting rents from one firm to another does not appear to be relevant to antitrust policy.¹⁰

C. The "Problem" of Sunk Costs

Consider a railroad configuration like that the one drawn below.



Railroad One requires access to Railroad Two in order to ship products from D through G to E or F. Let us say that One must sink costs, S, to start the railroad line. One then incurs marginal costs, M, when shipping a particular cargo from D to G and switching the cargo onto the tracks of Railroad Two at G. Let us also assume that DG stand-alone traffic is

¹⁰ Lande (1982) is somewhat unclear on this point. In his summary of the goals of the Sherman Act (at 105) Lande states that one of its purposes is to encourage producers to receive competitively priced goods. The support for that statement (footnote 123 at 95-96), however, indicates that higher producers prices are an evil because they lead to higher consumer prices. Lande's thesis is that the major purpose of the Sherman Act is to prevent wealth transfers from consumers to producers. Lande does not directly address the question here, which is a case of rents being transferred from one producer to another without higher consumer prices.

insufficient to cover the sunk costs S of Railroad One. Without a previous agreement, once One has set up its line from D to G , Two may simply offer (consistent with Klein, Crawford, Alchian, 1978, hereafter cited as KCA) to reimburse One M dollars for every cargo shipment that One delivers to its tracks at G . Thus, One would have no method by which it can recapture the part of its sunk costs S that cannot be recouped from DG traffic. Given this, One may not sink the necessary costs, and the efficient shipments from D to E and F may not occur. Tye (in several places, such as 1989 at 166-167 and 1988 at 322-324) concludes from this situation that the KCA analysis involves the creation of monopoly power and a general market failure of vertical relationships requiring antitrust intervention.

Tye's conclusion appears to be based on misinterpreting KCA in two important ways. First, as KCA point out (at 299), the problem is not one of monopoly, but the extraction of relationship specific (quasi-)rents.¹¹ The relevant parties have the necessary incentives, given sufficient information and institutional arrangements, to insure that the efficient amount of output occurs. Agreement may not always be reached, but this is simply a general (and most likely minor) flaw of capitalism and not a question of monopoly and antitrust.¹²

¹¹ For instance, a person who has worked in a government agency for several years may have learned a sufficient amount about the bureaucratic process at that agency so that working at that agency may represent his highest valued use. His employers, aware of the agency specific nature of that person's experience, may attempt to compensate him at slightly above his highest "outside" value and capture most of the quasi-rent that he has created. This problem does not imply the use of monopoly power. One person is not a relevant labor market, and one government agency is unlikely to be a relevant employer market.

¹² Conceptually, as Coase (1988 at 6-7) notes, the question comes down to whether the transactions costs of such an arrangement through private contracting are greater or less than the gains from such an arrangement.

Second, as KCA (at 302-307) discuss, contracting can be expected in general to solve the appropriability problem. Railroad One, before it sinks its costs, contracts with Two for a freight rate. In this way, it can protect its sunk costs from expropriation.¹³ This procedure appears to be common. For instance, in a section entitled "Important Things That Should be Included in The Purchase Agreement," an ICC booklet (1988 at 16) on how to go about buying a small short-line railroad "One" from a mainline "Two" states,

Rate divisions - in most cases the selling railroad will be the exclusive connecting carrier; it is imperative that the small railroad obtain contractual assurance of stable joint rates for an agreed period of time. The small railroad should aim for rates (whether joint or local) that are compensatory to both itself and the selling carrier but not so high as to inhibit shipper's service

(Also see the discussion in Federal Railroad Administration, 1989, at 63 and 78-79.) This is exactly what the KCA analysis predicts will happen.

While it is possible that the problem of bilateral monopoly may prevent an agreement, Coase (at 159-163) notes that this is not usually a major problem in a market economy.

From a public policy point of view, the pertinent question is whether government regulation can lower the transactions costs of reaching and enforcing an agreement. Coase (at 24-28) presents several reasons why government intervention is unlikely to reduce transactions costs. In any event, this a question of whether some type of direct regulation, rather than antitrust policy, is called for. (For a discussion of why issues like this are not pertinent to antitrust, see Demsetz, 1977.)

¹³ In the case of employment at a government agency, the government contracts with employees to include them in a salary structure that rewards employees partly on the basis of merit and largely on seniority. (Seniority may also be viewed as a proxy for merit.) KCA (at 298 and 306-7) point out that there can be problems enforcing such contracts, if they are sufficiently complicated, as the parties may have incentives for post-contractual opportunism. This problem does not appear to apply to agreements on freight shipments, which seem to be fairly easy to specify.

Tye's argument seems based in large part on the transition from regulation to deregulation.¹⁴ Prior to Staggers, it is possible that Railroad Ones sunk their costs S under the assumption of regulatory rates and after deregulation part of those sunk costs were expropriated by Railroad Twos. But transitions, by definition, are of finite length. It has been nine years since the Staggers Act was enacted. While the transition to deregulation may not be over, it must be a good way towards completion. Moreover, even if rents are now being expropriated from producers who made investments prior to Staggers, that is again a question of equity, not of economic efficiency or consumer welfare.¹⁵ As discussed above, the parties have important incentives to reach the efficient outcome.

In the long run, the availability of such contracts has important implications for the allocations of rents between the company owning the factory at A and Railroad One. Before that company sinks any costs of a factory at A, it too can negotiate for a price for rail shipments. Of course, if the sunk costs involved in such a factory (for instance, a coal mine) depreciate slower than the sunk costs of a railroad, the transition to deregulation may take longer in this area.

¹⁴ See Tye (1987a and b, including the titles of the articles, and 1989 at 146).

¹⁵ In a dynamic sense, allowing expropriation to take place after deregulation limits the effectiveness of any future regulation. The reason is that should any future regulation lower rates, firms will be reluctant to invest sunk costs in response to low rates that might be threatened by another round of deregulation. Thus, if one foresees the repeal of the Staggers Act followed by a period of lower rates with regulatory uncertainty, and given that such precedents have future meaning, one would want to prevent the expropriation of rents in a transition to deregulation in order to prevent the establishment of such a precedent.

By themselves, sunk costs do not generate a market failure. As the KCA analysis shows, unless transactions and enforcement costs are quite large, the market generates a solution to the expropriation problem by means of contracting.¹⁶ Given that this type of contract appears common in the industry, transactions costs do not seem to be a major policy problem. No monopoly power problem occurs that requires antitrust intervention.

D. Rent-Seeking

If competitive access is a policy issue, by its nature the process of making policy decisions will consume economic resources. These resources are by no means limited to the ICC's administrative costs. As Tullock (1967), Krueger (1974) and Posner (1975) have pointed out, when government allocates resources to private parties, those parties invest in obtaining those resources. Such investments take the form of "lobbying" the government to present the merits of one's case. The expenditure of such resources, while generating a return for the private parties involved, represents a waste of resources to society. Theoretically, the resources depleted in such "rent-seeking" will be approximately equal to the amount of rent being allocated by the government. (For a more complete description, see the articles in Rowley, Tullock, and Tollison, 1988.)

Competitive access seems to be a classic example of rent allocation. One has a monopoly that it will fight to protect, while the factory and Railroad Two will invest heavily in ICC proceedings to lower the rates they are charged. As Pittman (1988 at 19) puts it, "... an ICC hearing room full

¹⁶ If the costs of contracting reach too high a level, the KCA analysis implies that vertical integration will replace contracting.

of blue suits billing \$200 an hour is itself a signal that there are rents available somewhere."

The thrust of the rent-seeking literature is that the government should limit the amount of resources it allocates to reduce the significant deadweight losses to society that can occur through investments in "lobbying." Thus, unless there is a strong presumption that competitive access proceedings actually have some positive effect, this literature indicates that it would be proper to eliminate competitive access from the policy arena.

E. Revenue Adequacy

A major premise of the Staggers Act was that, given the nature of the railroad industry, some prices above marginal costs were necessary to generate the profits necessary for industry stability.¹⁷ Railroad firms must pay high fixed costs for setting up a rail network, and they also appear to have constant marginal costs. Thus, if each route is competitive (which may be true on the BC route described above), railroads will charge prices equal to their marginal costs. As discussed in Part C, they will therefore be unable to cover their fixed costs and thus unable to attract new capital needed for future operations. (For a further description of this problem see Hovenkamp, 1988 at 1049-1054 and Ekelund and Shieh, 1989, Forthcoming.) They will therefore need economic profits on the less than competitive routes (like the AB line described above) to remain financially solvent. This

¹⁷ Another important aim of the Staggers Act was to lower marginal costs by lifting regulatory impediments. Thus, while Staggers has allowed prices to rise above marginal costs, the prices paid by shippers appear to have fallen during deregulation. See Barnekov and Kleit (1988, Forthcoming).

was one of the important economic factors behind the railroad financial crisis that lead to the Staggers Act (House of Representatives, 1980).

Railroads have increased their profits and financial stability since Staggers. (See, for example, Barnekov and Kleit, 1988, Forthcoming; and McFarland, 1987). Despite this, railroads do not yet appear to be "revenue adequate" (the last full evaluation of this question seems to be General Accounting Office, 1986). In other words, they have apparently still not reached the level of financial returns necessary to prevent another regulatory crisis in the industry. If the ICC were to impose competitive access conditions, it would serve to redistribute rents from railroads and give them to other industries. Even if railroads are able to capture supra-competitive profits, however, they still have important incentives to keep "captive" factories in business to maximize the amount of rents that it can gain for itself. This type of monopoly power could result in something like the Ramsey "second best" solution that economic theory recommends for the problem of covering fixed costs in natural monopoly industries like public utilities. (See Baumol and Bradford, 1970.)

III. Reasons to Grant Competitive Access

A. Evasion of rate regulation.

Competitive access is not the only method by which the ICC can intervene in railroad pricing. In theory, the ICC can declare a region "market dominant" and grant rate relief to shippers in a particular area. Should this intervention be likely, Railroad One may wish to deny access to Two, even if Two is more efficient on the BC line.

The ICC may only declare market dominance if a railroad is charging more than 180 percent of its variable costs on a set of routes. Let us say that the (unconstrained) monopoly rate on AB is 260 percent of variable costs and the competitive rate on BC is 90 percent of One's variable costs for BC shipments, i.e., Two has 10 percent lower costs on BC than One. Also assume that the costs to One of an AB shipment are equal to the costs of a BC shipment. If One grants access to Two, and thus only ships on segment AB, the ICC may observe One's "market dominance" over AB, and thus could impose regulation. If, however, One denies access to Two and charges the competitive rate on BC, its total price for AC will only be 175 percent of variable costs. (It would still charge any AB customers 180 percent of variable costs for shipments terminated at B.) By denying access to Two, One would obtain larger profits than what it would gain if the ICC restricted its AB price to 180 percent of variable costs on AB.

This type of regulatory rate evasion is a standard extension of Averch and Johnson (1962) and is the rationale for requiring competitive access in the telecommunications and natural gas industries. Tye (in several places) and McFarland (1986) view rate evasion as a reason for railroad competitive access regulation, and it is discussed in a more general sense by Brennan (1986). This theory helps to explain the distortions Grimm and Harris (1988) found using rail data from 1976 (prior to deregulation).

In theory, this argument is correct. But in reality it is likely to apply only rarely in the post-Staggers environment. The ICC can either intervene by granting competitive access or by declaring "market dominance." Several factors must be present for rate relief to occur because of "market dominance." First, a railroad must be charging more than 180 percent of

variable costs. Second, truck and barge shipments must be non-competitive. Third, a railroad must not face "product competition" from similar goods shipped by other railroads. Finally, the railroad must be "revenue adequate", as discussed above.¹⁸ This combination, plus the length of ICC proceedings (*McCarty Farms* dated from the late 1970s) make market dominance cases fairly rare.

Politically, it seems unlikely that a railroad would choose to face a competitive access proceeding rather than a market dominance proceeding by denying another railroad competitive access. In a competitive access case competitive railroads and shippers are against the denying railroad, while in a dominance case competitors are likely to be satisfied. Thus, the odds against a railroad in an access case may be higher than in a market dominance case. Therefore, if a railroad chooses to deny access, it does so in spite of the regulatory incentives, not because of them.

There may, in fact, be occasions where a railroad denies competitive access to avoid rate regulation. This reason, however, does not seem to have entered into the major decisions rendered by the ICC or the courts on this issue.

B. Eliminating Competition "Downstream"

Several authors (Grimm and Harris, 1983, 1988; McFarland, 1986; Tye, 1986a and b, 1987a and b) have asserted that denying competitive access can preclude Railroad Two from serving BC as well as AB. They therefore conclude that One is able to "leverage" its AB monopoly into the BC route.

¹⁸ See *McCarty Farms, et. al. v. Burlington Northern Inc.*, 3 I.C.C. 2nd 822 (May 22, 1987).

The argument is as follows: If it had access to AB, Railroad Two would earn a positive rent (obtaining revenues above marginal cost) on both its existing BC traffic and the BC traffic that it would obtain if it received access to AB. Thus, if denied access to AB traffic, Two's rents would decrease. Two might then be forced to withdraw from the BC market, if it required rents generated from this connecting traffic to cover its operating costs. Since railroad markets have extremely high barriers to entry, once Two has been "predated" from the market, One could charge monopoly prices on BC traffic. In a less dramatic form, this argument has Two reducing traffic on BC as a result of being denied competitive access. Less service may mean lower product quality, reducing Two's ability to compete on BC.

Even facially, this argument has several problems. First, it envisages competition on BC with price greater than marginal costs (otherwise no rents will be available to Two). It is by no means clear this is the equilibrium in all railroad markets.¹⁹ If indeed the BC price is above marginal cost, then One has a clear incentive to deny access and ship on its own BC tracks and avoid the "double marginalization" distortion discussed above. In such circumstances, the factory's output and society's welfare are increased if Two is denied access.²⁰

Further, this line of analysis would force the government to address to question of how to allocate these rents. According to the theory, granting

¹⁹ While MacDonald's (1989) empirical results indicate this may be true in general, they do not imply that it is true in particular cases.

²⁰ This analysis assumes that the state of tacit collusion among the railroads on BC is not such that they agree to discriminate perfectly in price among those firms who have a relatively lower value of BC service. If this were the case, collusion would generate the competitive quantity outcome, similar to what was discussed in Section II-B. Such a complicated type of tacit collusion seems unlikely.

Two access raises Two's rents and service quality. Therefore, it is likely to lower One's rents and service quality.²¹ Any proceeding that attempts to sort out the difficult question of who "deserves" these resources is highly likely to be subject to wasteful rent-seeking behavior.

The predation argument is subject to Bork's (1976) critique. If an industry has high barriers to entry, a firm will be very reluctant to leave it. In the face of a predatory strategy, a firm will simply reduce output or shut down its operations and wait out the strategy. In other words, barriers to entry are barriers to exit, and thus Two would be extremely reluctant to exit from its property rights on the BC line.

There is a more important objection to this leveraging theory. Two will compete with One, not only on BC, but a variety of other routes that run through BC. (See discussion in Roberts, 1987 at 91.) Thus, if the second railroad is denied AC traffic, it can generally take traffic from the first railroad on routes running through BC. Such traffic should be available on numerous parts of its rail network. Further, as McFarland (1986) has pointed out, if the second railroad cannot be viable without interlining AC traffic, then perhaps it should not exist. The costs of that railroad continuing to operate may be greater than its benefit to society.

In many circumstances, it may be difficult to determine whether the second railroad is merely "rent-seeking" or has a legitimate complaint. If

²¹ This idea has appeared in at least one competitive access decision. Writing for the appeals court in *Chesapeake and Ohio Railway Company et. al. v United States* 704 F.2d 373 (1983), Judge Richard Posner noted that the plaintiffs' claims of predation were unlikely given that they were in much better financial condition than the carrier on which they were requesting competitive access from (Conrail). As Tye (1987b at 417) notes, the court remanded the ICC decision not to grant gateway conditions. It did so, however, on technical grounds and not on the merits of the case.

denial of access would actually result in One adding a BC monopoly to its AB monopoly, however, then shippers on the BC route would likely complain to the regulatory authorities in competitive access proceedings. Currently, while AB shippers (the factory) often complain in ICC and judicial proceedings, there does not seem to be any evidence that shippers on the BC line complain. Discussing economic events with affected customers is a standard procedure in antitrust investigations. (See Langenfeld and Stockum, 1989.) BC customers should be able to provide insight into whether competitive access proceeding tend to be merely a method of rent-seeking among railroads or if there is some genuine potential for leveraging a monopoly.

Even if access denial did extend an AB monopoly, the welfare effects may be minimal. Since roads have the ability to price discriminate, output may not drop. Only if it does not face "product competition" will the railroad have an incentive to reduce output, reducing consumer and societal welfare.

This analysis indicates that leveraging is possible, but high unlikely. Indeed, without a rigorous mathematical model, it is difficult to tell exactly if and when this behavior will take place. Competitive access proceedings, however, do not appear to have inquired whether railroads have actually been leveraging their monopoly positions.

IV. Conclusion

Competitive access should not be an antitrust policy issue. In the vast majority of circumstances railroads can be expected to grant access if it is efficient to do so. The case of *Terminal Railroad Association of St. Louis*,

though cited as a precedent for the need for competitive access, is actually a good example of why intervention is not necessary. In general, absent significant transactions costs, an unregulated market will generate the economically efficient outcome, with contracts to solve any "problems" of sunk costs.

Competitive access proceedings are an open invitation to wasteful rent-seeking. Successful petitions may serve to take rents away from carriers who require them to remain viable. Moreover, allowing a railroad to have monopoly power may not significantly reduce social welfare, because railroads are free to price discriminate. While this type of price discrimination reallocates rents between shippers and railroads (at least in the short and medium run), this does not appear to be an antitrust concern. Rather, it is a political and regulatory question relating to the distribution of wealth in society.

If competitive access is to be a antitrust issue, then the ICC and the courts should ask several questions before deciding to intervene. Is the railroad attempting to avoid rate regulation? Is some ongoing market dominance procedure affecting the carrier's incentives? Is this railroad really attempting to leverage some market power? Are consumers on the BC route complaining, or is the railroad's competitor merely trying to capture rents through a government process? Would granting competitive access have any significant welfare impact on society, or would it merely transfer rents from one firm to another? Does the railroad face product competition that eliminates its incentives to reduce output? Do the regulatory proceedings encourage wasteful rent seeking? Unfortunately, the ICC and the courts typically do not ask these questions.

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