

Articles

**Injecting Competition in the Railroad
Industry Through Access**

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I. INTRODUCTION

With the recent consolidation of several large track networks, the railroad industry has become highly concentrated.¹ In spite of the increased profitability of the industry, the number of major networks has dwindled because the immense costs of creating new networks prohibits entry into the market.² While the industry often competes with other modes of transportation to move freight, shippers who are relatively dependent on railroad transportation now have few competitive alternatives and face poorer service.³ Competitive access provides a remedy to constrain anticompetitive abuses in the industry and offers shippers more efficient transportation options. While various proposals exist, the core principle of competitive access is that potential entrants are permitted to use "facilities owned by one railroad for services provided by or in conjunction with another railroad."⁴

This Article explores the use of different regulatory regimes to encourage competition in the railroad industry. Section II of this Article explores railroad control of bottlenecks - portions of the network where only one railroad can provide service. This section relies on the economic theories concerning bottleneck control as well as anecdotal evidence of the impact of recent consolidations. Section III analyzes the current regulatory tools for encouraging competition: limited competitive access and rate regulation. This section also examines the administrative cases applying the competitive access and rate regulation provisions. Section IV surveys other approaches to enhance competition and discusses the bur-

1. These consolidations also allowed the newly merged firms to pare down parallel networks. As a result of such line sales, a growing number of independent carriers operate smaller, light density and labor intensive lines. Such lines provide the benefits of localized service at lower cost than many major railroad networks could provide. See Stephen R. Klein, *Railroads' Second Golden Era May Be Dawning*, STANDARD & POORS INDUSTRY SURVEYS, Nov. 4, 1993, at R15. Many of these short or regional lines, however, have a limited role in competing against the larger networks that spawned them.

2. Currently, only one regional railroad has proposed an expansion which would "become the country's first major new railroad in more than a half-century." However, this new railroad would hardly be a national competitor, as it will only offer competition in the delivery of coal from the Powder River Basin in Wyoming to various electric utilities in the Midwest. See Anna Wilde Mathews, *Regional Railroad Plans Big Expansion*, WALL ST. J., June 9, 1997, at A2; Steve Glishinski, *DM&E Takes First Step Toward Powder River*, 58 TRAINS 6, June 1, 1998, at 26-27. The Surface Transportation Board has given preliminary approval of the expansion - pending an environmental impact study. See Dakota, Minnesota & Eastern R.R. Corp. Constr. Powder River Basin, Fin. Docket No. 33407, 1998 WL 869567 (Surface Transp. Bd. Dec. 10, 1998).

3. See Jack J. Burke, *Seeking UP Cure*, TRAFFIC WORLD, Oct. 27, 1997, at 34; David Barnes, *Horror Stories*, TRAFFIC WORLD, Dec. 15, 1997, at 13; Luther S. Miller, *Why Shippers Are Angry*, 198 RAILWAY AGE 2, Feb. 1997, at 41.

4. See Charles N. Marshall & Cheryl A. Cook, *Issues of Cost Recovery in the Debate Over Competitive Access*, 15 TRANSP. L.J. 9, 9 n.1 (1986).

dens these approaches bring. Section V provides a brief summary and concluding remarks.

II. PROBLEMS AT THE BOTTLENECK: RAILROAD ANTICOMPETITIVE BEHAVIOR

The railroad industry has undergone a steady process of consolidation that may soon result in two competing transcontinental systems.⁵ The remaining major networks overlap, with at least two firms competing on each significant transportation corridor. However, these overlapping networks are not parallel on a regional level. While two networks may provide service between Los Angeles and Chicago, only one may provide a shipper with service to or from an intermediate point. As a result, many shippers have only one option for railroad service for a portion of the freight movement.

This concentration in itself, however, may not trigger abuse of market power. Other modes of transportation, such as trucking, pipelines and barges, provide competing services that some shippers may employ. These substitutes may place a ceiling on the price that a railroad firm exploiting its market power may charge. For many commodities, transportation costs may directly affect the supply of those goods.⁶ When transportation costs rise sufficiently in a regional market, product substitution and product source substitution may occur.⁷ For example, if Iowa corn farmers face higher transportation costs to move corn to a particular location, consumers, such as food processors, may use corn - or another substitutable grain - from another region to avoid paying the higher transportation cost for Iowa corn. In short, three options combat higher railroad transportation costs: (1) shippers may switch the mode of

5. Robert Krebs, President and CEO of Burlington Northern Santa Fe believes that transcontinental railroads are inevitable in the current business climate. See Gus Welty, *Redrawing the Railroad Map*, RAILWAY AGE, Dec. 1, 1995, at 36, 37.

Furthermore, federal policy has favored railroad mergers for quite some time. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 (Surface Transp. Bd. Dec. 27, 1996). During the period 1956 to 1971, regulatory authorities approved ten of fourteen merger applications. See THEODORE E. KEELER, RAILROADS, FREIGHT & PUBLIC POLICY 36 (1983). Since 1980, regulatory agencies have approved twelve of thirteen merger applications. See Salvatore Massa, *Are All Railroad Mergers in the Public Interest? An Analysis of the Union Pacific Merger with Southern Pacific*, 24 TRANSP. L.J. 413, 431 n.96 (1997) (listing ten of eleven); CSX Corp., Inc., *Norfolk-Southern Corp. - Control and Operating Leases/Agreements - Conrail Inc.*, 1998 WL 456510 (I.C.C.) (Surface Transp. Bd. July 23, 1998) (approving the eleventh merger); Rip Watson, *Deal creates First Large Cross-Border rail System*, J. COM., Mar. 26, 1999, at A1 (announcing approval of twelfth merger).

6. This would be especially true for products where the transportation service constitutes a substantial portion of the cost of the good.

7. See John Schmitz & Stephen W. Fuller, *Effect of Contract Disclosure on Railroad Grain Rates*, 31 LOGISTICS & TRANSP. REV. 97, 103 (1995).

transportation; (2) consumers of the good may substitute the commodity with another good; and (3) consumers may obtain the commodity from another location where transportation costs are lower.⁸

For some products in certain locations, railroad transportation may provide the only viable or most cost effective means of shipping a commodity.⁹ Anticompetitive behavior is possible under these circumstances when a railroad has exclusive control of either a destination or origin point in a movement. In this case, the price ceiling of other transportation substitutes may be very high, allowing a railroad to exploit its market power *unless* consumers can offset this market power with product substitution or product source substitution. When consumers are unable to offset this power, such a railroad becomes a bottleneck for the movement and may leverage its bottleneck onto other competitive portions of the movement.¹⁰ Bottleneck control has a profound competitive impact on shippers because substantial barriers to entry exist which dissuade a new entrant from building a competing line to the shipper.¹¹

Illustration 1 exemplifies a typical bottleneck situation where one carrier provides service between two points and the other carrier must

8. See Wesley A. Wilson, *Legislated Market Dominance in Railroads*, in RESEARCH IN TRANSPORTATION ECONOMICS, 49, 54, 62 (B. Starr McMullen, ed. 1994).

9. For example, landlocked Montana grain farmers may rely only on railroad transportation to ship their crops to ports in the Pacific Northwest. See *infra* notes 120-22 and accompanying text. Electric utilities receiving coal shipments represent another example. *Who Wins in a Competitive Power Market: Gas? Coal? Or Rail & Mining Interests?*, PUBLIC UTIL. FORTNIGHTLY, Apr. 1, 1997, at 42.

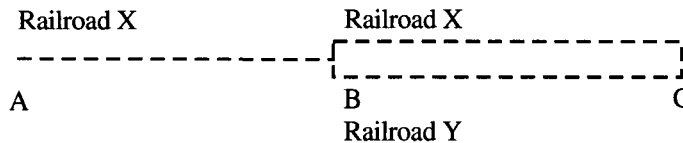
10. The economic literature has discussed this situation. See, e.g., William B. Tye, *The Price of Inputs Sold to Competitors: A Response*, 11 YALE J. ON REG. 203, 211-24 (1994); Curtis M. Grimm & Robert G. Harris, *A Qualitative Choice Analysis of Rail Routings*, 24 LOGISTICS & TRANSP. REV. 49 (1988); Henry McFarland, *The Economics of Vertical Restraints and Relationships Between Connecting Railroads*, 23 LOGISTICS & TRANSP. REV. 207 (1987).

The regulatory body governing railroad mergers has also discussed and accepted this scenario. See *Burlington N., Inc. - Control - Santa Fe Pac. Corp.*, No. 32549 at 76 (I.C.C. Aug. 16, 1995) [hereinafter *BN-SF*], *aff'd sub. nom.*, 109 F.3d 782 (D.C. Cir. 1997) ("it is a perfectly rational strategy for a destination bottleneck carrier to name, and stick to, a revenue division [among interconnecting railroads] that will allow it to extract substantially all of the economic profits that are available from a particular movement, letting connecting carriers set their divisions in response."); *Union Pac. R.R. Co. & Missouri Pac. R.R. Co. - Control - Chicago & N. W. Transp. Co.* 366 I.C.C. 462, 538 (1982) ("a carrier with a destination monopoly will likely push the through rate as high as possible and keep the monopoly profits to itself . . . and the destination carrier will establish favorable through service with the origin carrier willing to take the lowest division of the through rate for its segment of the movement.").

11. "A barrier to entry is any factor that permits firms already in the market to earn returns above the competitive level while deterring outsiders from entering." See PHILLIP E. AREEDA & HERBERT HOVENKAMP, 2A Antitrust Law ¶ 420, at 55-56 (1996). Areeda and Hovenkamp note that a large initial investment could act as a barrier to entry. See *id.* at ¶ 421b at 64. Barriers to entry are high in the railroad industry because of the significant costs associated with building a track network. No major entrant to the market has joined the railroad industry in over fifty years. See *supra* note 2.

exchange traffic with its competitor at an intermediate point to provide service between the same two points;¹²

ILLUSTRATION 1



In this illustration, Railroad X can provide single-line service between points A and C for a shipment of freight. In contrast, Railroad Y must interchange with Railroad X at an intermediate point to provide service between A and C. Railroad X may even set the location of the interchange to extend the length of the bottleneck portion of the route or it may choose not to deal with Railroad Y altogether. When denied access entirely, Railroad Y becomes subject to “vertical foreclosure.”¹³ If the costs of interchanging and using Railroad Y’s service were undesirable, Railroad X’s bottleneck power would be irrelevant in terms of selecting the more efficient routing because a shipper would always choose Railroad X’s service over the competitive portion of the movement.¹⁴

However, if a superior network or another factor enabled Railroad Y to provide better service through that segment despite the costs of interchanging, then bottleneck control distorts the competitive options of a shipper.¹⁵ Railroad X could control the movement by subsidizing its less efficient segment through the monopoly segment. Table 1 provides a hypothetical example of the potential effects of this distortion:

12. The agency governing railroad mergers used a similar chart to illustrate this theory in *Union Pacific Corp. & Miss. Pac. R.R. Co. - Control - Chicago and N. W. Transp. Corp.*, 1995 WL 141757 (I.C.C. Feb. 21, 1995). The agency discussed the foreclosure of non-bottleneck carriers from providing interline service on bottleneck routes.

13. See William B. Tye, *Pricing Market Access for Regulated Firms*, 29 *LOGISTICS & TRANSP. REV.* 39, 41 (1993); Curtis M. Grimm, et al., *Foreclosure of Railroad Markets: A Test of Chicago Leverage Theory*, 35 *J.L. & ECON.* 295, 298 (1992).

14. Under this scenario, the “efficient” routing would be selected. However, this does not escape the question of the bottleneck carrier’s leverage with respect to price. Recognizing the bottleneck carrier’s route as the most efficient, and one that the shipper would always prefer, grants the bottleneck provider an effective monopoly over the entire movement. See AREEDA & HOVENKAMP, *supra* note 11, ¶ 764b1, at 74 (discussion in context of intrabrand competition).

15. See Grimm & Harris, *supra* note 10, at 50-51.

TABLE 1
COST OF SHIPPER SERVICE OPTIONS

	Monopoly Segment A to B	Competitive Segment B to C	Total Cost A to C
Railroad X Only:	15	11	26
Railroads X and Y:	18	9	27

If a shipper uses Railroad Y's service for the competitive portion of the movement (B to C), Railroad X will raise its rate for the bottleneck portion of the movement (A to B). Some of this price increase could be attributable to the cost of interchanging at an intermediate point with Railroad Y because interchange could require additional facilities and labor.¹⁶ If market restraints exist on the pricing leverage of railroads, through limitations on information or industry custom,¹⁷ Railroad X may use its bottleneck control not to extract profits from Railroad Y's lower cost network, but it could attempt to use its position to capture the competitive portion of the movement entirely and foreclose Railroad Y from competing for this movement.¹⁸

The three-unit increase in Railroad X's price over its bottleneck segment could represent only a one-unit increase in cost attributable to interchange, with the remainder representing market leverage. In this case, stripping Railroad X of this bottleneck leverage would reveal that interchange with Railroad Y is the more efficient option. The dual carrier service would be 25 - 16 on the bottleneck portion and 9 on the competitive portion - instead of the 26 that Railroad X offers for single-line service.

Manipulation of bottleneck pricing in order to control freight movements over competitive segments of the network has pernicious effects on two levels. First, the bottleneck carrier distorts the incentives of shippers,

16. See, e.g., Verified Statement, William J. Baumol & Robert D. Willig, App. B at 5, Central Power & Light Co. v. Southern Pac. Transp. Co., No. 41242 (Surface Transp. Bd. Dec. 27, 1996) (arguing that the bottleneck carrier must have the incentive to "invest . . . to lower the costs of the interchange").

17. See Grimm, et al., *supra* note 13, at 299-300. The authors suggest that certain market constraints prevent bottleneck carriers from directly using pricing leverage. They argue that standard revenue division rules common in the industry govern such arrangements. Alternatively, they suggest that a bottleneck carrier may prefer to foreclose an interlining railroad over the competitive portion of the movement in order to maintain exclusivity with a customer who otherwise could use "the threat of shipping via the interline route to gain leverage in negotiations." See *id.* at 300.

18. See Tye, *supra* note 10, at 215. As Tye has noted, railroad regulators have intervened in some merger proceedings to prevent this type of foreclosure by either creating conditions on the adversely affected firm or granting trackage rights to that firm, allowing it to operate over the bottleneck segment. Examples of such cases are noted in *infra* note 62.

causing them to use a more inefficient network that provides poorer service or that simply has a higher cost structure.¹⁹ Like a classic tying arrangement, the bottleneck carrier uses its bottleneck service to divert traffic onto its own network for the competitive portion of the movement.²⁰ Second, the shipper ultimately pays more for the service or receives lower service quality.²¹ Since the bottleneck carrier is able to raise the rate charged over the bottleneck segment, the shipper pays more than the efficient price by keeping traffic on the bottleneck network.

The Chicago leverage theory challenges this viewpoint, contending that a bottleneck carrier would have the incentive to route the traffic on the less costly network in order to obtain a higher return on its investment.²² According to this theory, vertical integration of firms is almost always harmless and often efficiency enhancing.²³ Using the figures from Table 1, Railroad X would rather pay Railroad Y to accrue the gains of using its bottleneck power without being hampered by a lower return on the less efficient portion of its network. Railroad X could effectively charge 17 for the bottleneck portion of the movement, making the shipper indifferent as to which routing to use. Railroad X's behavior illustrates an example of a price squeeze on Railroad Y because Railroad X appropriates a portion of its profits.²⁴

Some economists have opined that the bottleneck carrier will then have an incentive to insure that the interchange carrier receives a return to sustain its operations over the line in order to perpetuate its monopoly profits:

A bottleneck railroad whose end-to-end price for rail service is effectively constrained by market forces or by regulation has every reason to encourage use of the facilities of a more efficient connecting carrier and to make certain that rates earned by that carrier are sufficient to permit it to survive and prosper in the long run. Assume for example, that segment A is the bottleneck and segment B can be served both by the owner of the bottleneck and

19. See Grimm et al., *supra* note 13, at 298.

20. See McFarland, *supra* note 10, at 208. For a non-railroad antitrust analog see *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 463-64 (1992).

21. See Tye, *supra* note 13, at 54-55. Tye notes that transportation costs to shippers *may* be increased if there is an absence of intermodal competition, product or product source substitution, or regulatory intervention. See *id.* at 55.

22. See Grimm et al., *supra* note 13, at 298-99; Tye, *supra* note 13, at 42.

23. The Interstate Commerce Commission, the agency responsible for railroad merger oversight until recently, adopted this theory to permit many so-called end-to-end mergers which joined non-parallel track networks. See, e.g., *Union Pac. R.R. Co. - Control - Missouri-Kan.-Tex. R.R. Co.*, 4 I.C.C.2d 409, 436 (1988) ("parallel mergers generally present more serious competitive problems than end-to-end ones").

24. Tye has defined a price squeeze as "a situation where a firm manipulates the input and output prices faced by a competitor to prevent that firm from competing effectively." See Tye, *supra* note 10, at 212 n.24.

one or more other railroads. If the market allows end-to-end rates of \$100 and the long-run incremental cost to the bottleneck railroad of transportation along the non-bottleneck segment B is \$40, then if the connecting carrier can carry it for \$30 and offers service at a price of \$39, the bottleneck carrier's profit will be increased by \$1 Since a \$1 . . . gain in profits is always better than zero, the bottleneck carrier always gains by perpetual continuation of service by the connecting carrier.²⁵

Table 2 illustrates this concept by showing the profits Railroad X could accrue and the cost to the shipper under either scenario, assuming that Railroad X's cost to operate the bottleneck segment is 12 and the competitive segment is 10.

TABLE 2
CHICAGO LEVERAGE THEORY APPLIED TO BOTTLENECKS

What the Shipper Pays:

	Monopoly Segment	Competitive Segment	Total Cost
X only	15	11	26
X and Y	17	9	26

How Railroad X Profits from the Two Options:

	Monopoly Segment	Competitive Segment	Total Profit
X only	3	1	4
X and Y	5	0	5

Some critics of the Chicago leverage theory have questioned the validity of its assumptions.²⁶ For example, the theory assumes that a railroad is able to extract a price squeeze on its interlining rival, but certain industry customs - such as standard division rules that set mileage as a proxy for cost - may preclude²⁷ or distort the use of a price squeeze.²⁸ If rate divisions are set according to the distance freight travels, in many cases the bottleneck carrier will prefer to provide single-line service, even if it is less efficient.²⁹ And, in order to exercise even a partially successful price squeeze, the bottleneck railroad would have to possess some knowledge of an interlining rival's cost structure to enhance returns.

Indeed, a bottleneck railroad may *prefer* to foreclose an interlining

25. See Baumol & Willig, *supra* note 16, App. B, at 3-4.

26. See Grimm, et al., *supra* note 13, at 305-08; Tye, *supra* note 13, at 54-56.

27. See Grimm, et al., *supra* note 13, at 299-300.

28. See Grimm & Harris, *supra* note 10, at 52-53.

29. See *id.*

competitor to prevent it from gaining knowledge about a customer. While the bottleneck railroad may earn the same or greater short-run profits by interlining in that particular market, the customer may need service in other markets where the bottleneck and the rival compete more directly.³⁰ By withholding information from the interlining railroad, the bottleneck carrier may attempt to keep an exclusive relationship with the customer to prevent future competitive threats or customer leverage in other markets. Similarly, other strategic reasons, such as the desire to weaken the interlining competitor to gain additional market power in other markets, may also act as an incentive for foreclosure.

In addition, foreclosure may take subtler forms, in order to fly below the regulatory radar screen. Vertical foreclosure scenarios in the railroad industry commonly occur when the bottleneck carrier “threatens” the shipper with reduced service quality or reliability for interlined shipments.³¹ Other situations are more obvious. For example, prior to a merger, Southern Pacific and Wisconsin Central provided interlined competition against Union Pacific for the movement of taconite pellets from mines in Minnesota to a steel manufacturer in Utah.³² Because the railroads provided an innovative service by backhauling coal to the Midwest, they were able to compete effectively with the single-line service of Union Pacific. After Southern Pacific merged with Union Pacific, this service was eliminated and the Union Pacific now provides single-line service.³³ In another recent, and perhaps extreme example of such behavior, Union Pacific sought to divert its traffic onto ships to relieve network congestion rather than give the freight to a rival railroad.³⁴

Regardless of the validity of the Chicago leverage theory, captive shippers pay more for railroad transportation or receive poorer service because the bottleneck provider will use its position to maintain higher rates over the bottleneck portion of the movement like a monopolist. Clearly, a railroad that provides the exclusive rail service at both the origin and destination for a captive shipper could use its monopoly position to exploit the market price of the movement.³⁵ Similarly, bottleneck lev-

30. Grimm, et al., *supra* note 13, at 300.

31. Grimm & Harris, *supra* note 10, at 53.

32. Mark W. Hemphill, *Taconite West, Coal East: How Wisconsin Central and Southern Pacific Snares the Big Geneva Ore Haul*, 55 *TRAINS* 3, Mar. 1, 1995, at 36-47.

33. See *Scanner*, 58 *TRAINS* 8, Aug. 1998, at 21. (“Wisconsin Central has come to terms with UP on moving Geneva . . . iron-ore trains . . . to an all UP routing from northern Minnesota, which took place in 1997, over a year before the contract expires.”).

34. See Daniel Machalaba, *Union Pacific Plans to Haul Cargo by Sea*, *WALL ST. J.*, Sept. 29, 1997, at A3.

35. In the proposed merger of Santa Fe and Southern Pacific, the number of carriers for shipping many commodities would have been reduced to only the new merged entity. Analyzing other economic estimates, Pittman observed that the proposed merger would have increased

erage creates a wealth transfer from captive shippers to railroad firms³⁶ and from interlining railroads to bottleneck railroads.³⁷ In addition to these wealth transfers, this leverage creates a dead-weight loss to society through inefficiency.³⁸ Furthermore, bottleneck control does not represent the only potential scenario for anticompetitive behavior.³⁹ And, of course, other concerns exist regarding the wisdom of a policy that has embraced nearly all railroad consolidations.⁴⁰

Price and cost trends on freight movements provide an indicia of

freight rates from between 15 to 30 percent in selected commodities. See Russell W. Pittman, *Railroads and Competition: The Santa Fe/Southern Pacific Merger Proposal*, 39 J. INDUS. ECON. 25, 32-39 (1990).

36. See Grimm et al., *supra* note 13, at 299; Tye, *supra* note 13, at 54.

37. See Tye, *supra* note 13, at 52-54.

38. See, e.g., Pittman, *supra* note 35, at 34-35; Timothy J. Brennan, *Why Regulated Firms Should Be Kept Out of Unregulated Markets: Understanding the Divestiture in United States v. AT&T*, 32 ANTITRUST BULL. 741, 747 (1987) ("monopoly is generally thought to lead to inefficient undersupply of goods").

39. In a classic antitrust law analysis, the competitive problems posed by industry concentration are two-fold. First, as indicated, firms may take unilateral action. Second, fewer competing firms create greater opportunities for collusion. Such behavior was a very common antitrust concern at the turn of the century. See *United States v. Joint Traffic Ass'n*, 171 U.S. 505 (1898); *United States v. Trans-Missouri Freight Ass'n*, 166 U.S. 290 (1897).

The United States Department of Justice has recognized competitive harm from both unilateral and collusive conduct. See UNITED STATES DEPARTMENT OF JUSTICE & FEDERAL TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES 18-25 (1992, rev. Apr. 8, 1997). With respect to unilateral conduct, "[a] merger may diminish competition . . . because merging firms may find it profitable to alter their behavior unilaterally following the acquisition by elevating price and suppressing output." See *id.* at 22.

40. Several other considerations may mitigate against pursuing such a policy. First, a poorly crafted consolidation may lead to a weakening of the newly created firm. See JOSEPH R. DAUGHEN & PETER BINZEN, *THE WRECK OF THE PENN CENTRAL* (1971). See also Brian O'Reilly, *The Wreck of the Union Pacific*, *FORTUNE*, Mar. 30, 1998, at 94. And, because of the reliance of other carriers on interlining shipments with each other, the woes of a newly merged railroad may spread to other railroads in the form of delays, inadequate interlining and diminution of traffic. See, e.g., Daniel Machalaba, *Delays and Snafus Grip Nation's Rail Freight*, *WALL ST. J.*, May 29, 1998, at B1.

Second, the newly consolidated firms may grow too large to efficiently manage operations and provide adequate service to shippers. Ronald Coase, for example, has suggested that firm size is constrained by the cost of organizing a firm. Once the organization costs approach the cost of carrying out the transactions in the market, the efficiencies of the firm are lost. See RONALD H. COASE, *THE FIRM, THE MARKET, AND THE LAW* 7, 44-45 (1988). See also GEORGE STIGLER, *THE ORGANIZATION OF INDUSTRY* 67-70 (1968).

Third, the significant rationalization of railroad track in the nation has cut off communities to freight or potential passenger service, and the lack of "redundant" networks in regions imposes a risk on the free flow of commodities when one railroad's network breaks down and no other firm can provide service on another competitive line. Since 1980, the Class I railroads have abandoned or sold nearly 20 percent of preexisting trackage. See Wesley A. Wilson, *Cost Savings and Productivity in the Railroad Industry*, 11 J. REG. ECON. 21, 23 (1997).

Fourth, notable safety problems may arise as a result of mergers. The Union Pacific safety record provides an example of a safety breakdown during the early implementation of a merger. See Daniel Machalaba, *Union Pacific Is Criticized for Safety Breakdown*, *WALL ST. J.*, Sept. 10,

whether some form of market abuse has occurred in the railroad industry. While declines in price may indicate vigorous competition, this information, standing alone, can be misleading. Decreases in cost resulting from new technology or automation may outstrip falling prices, allowing firms to reap greater returns. A firm that is able to control price declines over time may be exercising market power like a firm that increases prices in spite of a stable cost structure. Since the implementation of railroad deregulation, the railroad industry has gone through a period of substantial price reductions in freight movements. From 1982 to 1996, rail rates have declined by 26 percent after adjusting for inflation.⁴¹ At the same time, the industry has dramatically reduced its cost structure.⁴²

Comparing the two trends, one trade magazine observed that, for coal shippers, “trends in rail rates have generally not tracked declines in the railroads’ costs of providing service.”⁴³ This conclusion is further bolstered by the evidence that during the period immediately following deregulation, transportation prices for some commodities initially rose, probably because the short term cost savings from deregulation were still generally modest.⁴⁴ Moreover, shippers claim that the savings from deregulation are not shared, with captive shippers paying 20 to 30 percent higher rates than shippers who can choose between railroad carriers or even another form of transportation, such as barges.⁴⁵ In addition to these price effects, shippers have fewer railroad routing alternatives. As one commentator has observed, “[f]ewer and larger railroads resulting from consolidation resulted in fewer interlined shipments.”⁴⁶

1997, at A3 (the Federal Railroad Administration criticized the Union Pacific for a “fundamental breakdown” in rail safety, hinting that safety should be a consideration in merger approvals).

41. See Klein, *supra* note 1, at 1.

42. See *id.* at 1-2, 3. See also Wilson, *supra* note 40, at 39. Wilson’s study has estimated that cost savings in the industry fell in the range of 41 to 44 percent over the period 1981-1989.

43. See *Coal’s History of Dependence on Transportation*, *supra* note 9, at 42.

44. See Wesley A. Wilson, *Market-Specific Effects of Rail Deregulation*, 42 J. INDUS. ECON. 1, 20 (1994). This Wilson article reflects a study in rail rates for thirty-four commodity classifications for the period 1972-88. Wilson concludes that while commodity prices initially rose under deregulation, by 1988, “deregulation produced lower prices in most commodity classifications and did not increase prices in other classifications, suggesting that advances on productivity have dominated any adverse market power effects.” See *id.* See also Ronald R. Braeutigam, *Consequences of Regulatory Reform in the American Railroad Industry*, 59 SOUTHERN ECON. J. 468, 473-74 (1993).

45. See Bruce Ingersoll, *Deregulation Aids Rails Too Much, Shippers Say*, WALL ST. J., Apr. 2, 1998, at A2 (comparing rates of West Virginia steel mills and coal mines that rely on one railroad for service and rates for the same class of shippers who have either more than one railroad option or a competing barge line to move freight).

46. See Wilson, *supra* note 40, at 23. Wilson’s study, however, suggests that overall, the ICC and STB’s policies supporting deregulation and permissive attitude toward mergers has improved consumer welfare. See *id.* at 39. Other economists have suggested, however, that most improvements in the industry are attributable to policies promoting deregulation, and not merg-

Service and reliability of freight movements, which represent indicators of the competitiveness of the market, have also declined.⁴⁷ In the wake of recent mergers, the number of captive shippers who are building their own redundant railroad tracks to link up with competitors is growing.⁴⁸ One study indicates that transit times for “general” freight have increased 25 to 30 percent in the past three decades with on-time performance of 60 percent, a far cry from the 95 percent timeliness the trucking industry offers.⁴⁹ In one very recent merger proposal, the acquiring railroads have proposed to “slash” New York City to Chicago transit times for high priority freight to 26 hours, two hours slower than similar service offered 30 years ago.⁵⁰ One railroad executive has likened the industry as “about where the automobile industry was 15 years ago.”⁵¹

After the Union Pacific - Southern Pacific (UP-SP) merger, which promised improved service and cost savings, shippers have complained extensively about substantial service problems.⁵² In addition to sug-

ers. See Christopher A. Velturo, et al., *Deregulation, Mergers, and Cost Savings in Class I Railroads, 1974-1986*, 1 J. ECON. & MANAGEMENT STRATEGY 339, 367-68 (1992).

The importance of antitrust enforcement in deregulated markets to preserve competition has also been noted in both the railroad and airline industries. See Verified Statement, Alfred E. Kahn, Review of Rail Access and Competition Issues, Ex Parte No. 575 (Surface Transp. Bd. Mar. 28, 1998) (visited June 15, 1998) <www.stb.dot.gov/filings/all.nsf>; E. Han Kim & Vijay Singal, *Mergers and Market Power: Evidence in the Airline Industry*, 83 AMERICAN ECON. REV. 549, 550 (1993).

47. Regulators have traditionally claimed that mergers will improve service through single-line routing, opening new routing combinations, faster transit times, or other improved marketing of services that benefit shippers. See, e.g., *UP-CNW*, *supra* note 12, at 66; *BN-SF*, *supra* note 10, at 59-62, 65; Union Pac. Corp.—Control—Southern Pac. Rail Corp., Fin. Docket No. 32760, 1996 WL 467636, at *96 (Surface Transp. Bd. Aug. 6, 1996) [hereinafter *UP-SP*]; Rio Grande Indus., Inc.—Control—Southern Pac. Transp. Co., 4 I.C.C.2d 834, 895 (1988).

48. See Daniel Machalaba, *Opening Lines: Tired of Costs, Delays of Railroads, Firms Lay Their Own Tracks*, WALL ST. J., Feb. 6, 1998, at A1. One financial analyst has stated: “Unquestionably, the construction of a track spur by a shipper points to a state of extreme displeasure with a carrier’s rate/service package. Railroads that lose business in this way should undertake some deep soul-searching to determine how they lost touch with the customer.” See Klein, *supra* note 1, at R17.

49. See Daniel Machalaba, *A Long Haul: America’s Railroads Struggle to Recapture Their Former Glory*, WALL ST. J., Dec. 5, 1997, at A1.

50. See Bill Stephens, *Will Eastern Intermodal Match the Hype?*, TRAINS, Mar. 1998, at 24. Stephens discusses the Norfolk Southern and CSX joint acquisition of Conrail. Conrail’s intermodal schedule averaged thirty to thirty-two hours for this routing. The author asserts that transit times will improve partly because Conrail will be divided in two, and the railroads will have “two fast, high density . . . routes.” See *id.* at 25. Apparently, when Conrail owned these two parallel routes itself, it failed to have the proper incentives to develop such transit speeds. See *id.*

51. See Machalaba, *supra* note 49, at A1 (quoting Edward Burkhardt, chairman of Wisconsin Central Transportation Corp.).

52. See John Gallagher, *Are You Being Served?*, TRAFFIC WORLD, Oct. 19, 1998, at 14; John Gallagher, *SP Ghost Still Haunts UP*, TRAFFIC WORLD, Sept. 14, 1998, at 25; Burke, *supra* note 3, at 11; Barnes, *supra* note 3, at 13; Miller, *supra* note 3, at 41; *Coal Shippers: A Cautionary*

gesting that it would ship freight *via* the Panama Canal, UP-SP has also discussed barring new shipments on its lines.⁵³ These problems, at the very least, demonstrate some shippers' dependence on railroads and their inability to switch to other carriers when service problems arise. According to a study by Bernard Weinstein and Terry Clower for the Texas Railroad Commission, the UP-SP service disruptions have cost the national economy in excess of \$2 billion as of February 1998.⁵⁴ And, significantly, many affected shippers have avoided confronting UP-SP about these problems "for fear the railroad will punish them with higher rates in the future."⁵⁵ The service problems related to the UP-SP merger are not unique, as Union Pacific experienced similar difficulties during its 1995 acquisition of the Chicago & Northwestern, as did the parties in the recent Burlington Northern - Santa Fe merger.⁵⁶

III. CURRENT STB POLICIES TOWARD COMPETITIVE ACCESS

In most industries, antitrust laws would attempt to prevent the development or entrenchment of market power, and possible subsequent abuse⁵⁷ through the preclusion or substantial modification of mergers.⁵⁸ Significantly, railroad consolidations are not subject to the antitrust laws, but instead are reviewed by the Surface Transportation Board (STB) under a "public interest" standard of review.⁵⁹ Empirically, the STB and its predecessor, the Interstate Commerce Commission (ICC),⁶⁰ have pur-

Tale, RAILWAY AGE, Apr. 1997, at 59; Machalaba, *supra* note 49, at A1. Shippers are also lobbying Congress over their claims of anticompetitive behavior. See *infra* notes 145-52 and accompanying text.

53. See Daniel Machalaba, *Union Pacific May Bar New Shipments If Problems Aren't Solved in 30 Days*, WALL ST. J., Mar. 12, 1998, at A2; see also *supra* note 34 and accompanying text.

54. See Bernard L. Weinstein & Terry L. Clower, *The Impacts of the Union Pacific Service Disruptions on the Texas and National Economies: An Unfinished Story* (last modified Feb. 9, 1998) <www.rrc.state.tx.us/divisions/rail/UPFINAL3.html>.

55. See O'Reilly, *supra* note 40, at 102.

56. See *For Union Pacific "Unprecedented" Problems with Service*, RAILWAY AGE, Dec. 1995, at 20; Daniel Machalaba, *Union Pacific Struggles to Clear Up Delayed Shipments*, WALL ST. J., Nov. 30, 1995, at B4; Daniel Machalaba, *Burlington Northern Struggles to Get Merger on Track*, WALL ST. J., Apr. 22, 1997, at B4.

57. See MILTON HANDLER, ET AL., TRADE REGULATION 143-50 (1990).

58. Federal courts have the power to "prevent and restrain" antitrust violations. See 15 U.S.C. §§ 4, 25.

59. The "public interest" standard is congressionally mandated. 49 U.S.C. § 11324(b). Five factors guide whether this standard is satisfied in a merger application. The factors are: (1) the merger's impact on the adequacy of public transportation; (2) the effect of including or excluding other railroads in the region from the transaction; (3) the fixed charges resulting from the transaction; (4) the interests of railroad employees; and (5) the adverse effect on railroad competition. See *id.*

60. The Surface Transportation Board became the agency successor to the now defunct Interstate Commerce Commission, which was abolished effective January 1, 1996. See 49 U.S.C.S.

sued a policy that favored consolidations.⁶¹ To remedy anticompetitive behavior, the ICC originally regulated freight pricing and other aspects of operations. However, reforms to deregulate the industry encouraged railroad firms to have independence in pricing and other service decisions. Two crucial elements of this independence which affect bottleneck shippers are the ability of a bottleneck carrier to set the interchange point and the ability to bid on a freight movement through either single-line service or in conjunction with another carrier.

At present, the STB has pursued a policy of granting mergers - even when they create bottlenecks - but imposing limited conditions on railroads as well as allowing shippers to petition for relief.⁶² The first two parts of this section discuss the tools the STB uses to regulate market abuse in bottleneck or monopoly situations. The third part of this section analyzes two recent STB cases that address competitive abuse in the railroad industry.

A. CONTROLS ON THE INTERCHANGE POINT

Prior to deregulation, a shipper was entitled to select any particular routing it wished without regard to the economic costs imposed on the railroads to maintain interchange facilities and service. This "open routing" system was characterized as one that required railroads to maintain interchanges "on practically all combinations of railroad tracks between two points."⁶³ The Staggers Act of 1980⁶⁴ and the Railroad Revitalization and Regulatory Reform Act of 1976⁶⁵ eliminated this absolute shipper right and ultimately replaced it with a limited right to petition the STB.⁶⁶

The ICC permitted shippers to petition the agency for three basic

§ 702 (Lawyer's Coop. 1997); ICC Termination Act, P.L. 104-88, Title I, § 101, 109 Stat. 804 (1995).

61. See *supra* note 5.

62. See, e.g., Union Pac. R.R. Co.—Control—Missouri Pac. R.R. Co., 366 I.C.C. 462, 566-72 (1982); Burlington Northern, Inc.—Control—Santa Fe Pacific Corp., Fin. Docket No. 32549 at 76 (I.C.C. Aug. 16, 1995) [hereinafter *BN-SF*], *aff'd sub. nom.*, 109 F.3d 782 (D.C. Cir. 1997); Union Pac. Corp.—Control—Southern Pac. Rail Corp., Fin. Docket No. 32760, 1996 WL 467636, at *87, *91. This form of remedy for potential anticompetitive effects from mergers has been in vogue since the early 1980s. See Paul S. Dempsey, *Antitrust Law and Policy in Transportation: Monopoly Is the Name of the Game*, 21 GEORGIA L. REV. 505, 560 (1987).

63. See *Baltimore Gas & Elec. Co. v. United States*, 817 F.2d 108, 110 (D.C. Cir. 1987).

64. See Pub. L. No. 96-448, 94 Stat. 1895 (1980).

65. See Pub. L. No. 94-210, 90 Stat. 31 (1976).

66. See 49 U.S.C. § 10705(a). This provision grants the STB the power to establish new routings for freight movements "when it considers it desirable in the public interest." See *id.* at § 10705(a)(1). The statute provides two possible scenarios for STB intervention: (1) the competition policies of the Staggers Act are defeated or other anticompetitive behavior has occurred; or (2) other statutory criteria in 49 U.S.C. §§ 10705 or 11103 are satisfied.

types of network access remedies that affect the routing of their freight.⁶⁷ First, the agency could prescribe a “through route” between two or more railroads.⁶⁸ The through route remedy establishes the interchange points at which the railroads switch traffic on their respective networks. To further allow access for shippers, the through route remedy can be supplemented with the prescription of a joint rate covering the movement as well as establishing the division of the rate.⁶⁹

Second, the agency has authority to permit a competing railroad to operate over the terminal portion of the network to provide service to the shipper.⁷⁰ The agency is empowered to require the railroad firm owning the network to provide access “including main-line tracks for a reasonable distance outside of a terminal [to] another rail carrier.”⁷¹ The STB has characterized this remedy as “full access, for a fee, permitting the non-bottleneck carrier to provide service over the lines of the bottleneck carrier and thereby complete its own single-line service.”⁷² Like the through route remedy, the STB is empowered to establish the fee the tenant railroad pays to the owner of the bottleneck as well as the price that it charges the shipper.⁷³

The agency could exercise a third alternative - “reciprocal switching.”⁷⁴ Under this arrangement, a bottleneck carrier, for a fee, transports the cars of the non-bottleneck carrier over its lines to [the] destination, thereby permitting the non-bottleneck carrier to establish single-line rates for customers to which it does not have direct access. Thus, the non-bottleneck carrier can independently set a single-line rate for the movement because the switching fee of the bottleneck portion is established. When disputes occur with respect to the cost of the switching portion of the move, the STB is empowered to prescribe the terms of such agreements.⁷⁵

The statutes allow broad discretion in applying these remedies be-

67. See *Midtec Paper Corp. v. Chicago & N.W. Transp. Co.*, 3 I.C.C. 2d 171, 181 (1986), *aff'd sub nom. Midtec Paper Corp. v. United States*, 857 F.2d 1487 (D.C. Cir. 1988). An excellent summary of the three options is presented in G. Kent Woodman & Jane S. Starke, *The Competitive Access Debate: A 'Backdoor' Approach To Rate Regulation*, 16 *TRANSP. L.J.* 263, 271-73 (1988).

68. See 49 U.S.C. § 10705(a)(1).

69. See *id.*

70. Section 223 of the Staggers Act, Pub. L. No. 96-448, 94 Stat. 1895 (1980), explicitly authorized this sort of operation. This section is now codified as 49 U.S.C. § 11102(a).

71. See 49 U.S.C. § 11102(a).

72. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 at 7 n.13 (Surface Transp. Bd. Dec. 27, 1996).

73. See 49 U.S.C. § 11102(a).

74. See *id.* § 11102(c)(1).

75. See 49 U.S.C. § 11102(c)(1).

cause the STB may impose them when it is in “the public interest.”⁷⁶ While these remedies suggest significant regulatory discretion, the STB has interpreted the “public interest” standard more narrowly, deciding that the goal of allowing railroads to “rationalize their route structures making maximum use of efficient routings and eliminating others” was of greater importance.⁷⁷ According to the STB, the access remedies were crafted to provide relief when a bottleneck carrier with market power provides inadequate service or forecloses more efficient service from a competing firm.⁷⁸ Thus, a railroad firm’s refusal to voluntarily establish a through route is insufficient to establish a case for an access remedy.⁷⁹

The STB has recognized that a bottleneck carrier can maintain control of the bottleneck portion of the movement “unless it can be shown that the alternative routes sought are more efficient, or that the carrier[] ha[s] exploited [its] market power by providing inadequate service.”⁸⁰ Under STB regulations, the agency considers “all relevant factors” in

76. Each remedy has a similar “public interest” standard of application. The STB is permitted to impose through routes when “it considers it desirable in the public interest.” See 49 U.S.C. § 10705(a)(1). It is permitted to impose actual direct access to the non-bottleneck carrier when it is “practicable and in the public interest without substantially impairing the ability of the rail carrier owning the facilities or entitled to use the facilities to handle its own business.” See 49 U.S.C. § 11102(a). Similarly, the STB may impose reciprocal switching arrangements when “practicable and in the public interest.” See *id.* at § 11102(c)(1).

77. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 at 6 (quoting Interchange Provisions at Jacksonville, Fla., 365 I.C.C. 905, 916 (1982)). However, in merger proceedings, the STB uses a more liberal “public interest” standard in granting competitive access relief to petitioning shippers. See *UP-SP*, *supra* note 47, at *140-*41.

78. In *Central Power & Light Co.*, the STB repeatedly indicated the importance of this market abuse or inadequate service requirement in order to obtain relief. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242, at 6-7 (Surface Transp. Bd. Dec. 27, 1996) (a shipper must demonstrate that the bottleneck carrier “has used its market power to extract unreasonable terms on through movements, or, because of its monopoly position, has shown a disregard for the shipper’s needs by rendering inadequate service” (quoting Midtec Paper Corp., 3 I.C.C.2d at 181)).

In a fairly new development related to the UP-SP service crisis, the STB has also approved the use of these remedies “to provide temporary relief from serious, localized railroad service problems more quickly and effectively.” See *Expedited Relief for Service Inadequacies*, Ex Parte No. 628, 1998 WL 887188, at *2 (Surface Transp. Bd. Dec. 21, 1998). The agency’s decision to grant such relief is not premised on competitive considerations, but instead is based on a determination that “over an identified period of time, there has been a substantial, measurable deterioration or other demonstrated inadequacy in rail service provided by the incumbent carrier.” See 49 C.F.R. §§ 1146.1(a) & 1147.1(a). Relief is available only when a shipper is able to obtain a commitment from another railroad to provide service and, once the incumbent can demonstrate that it can provide adequate service again, the relief ends. See 49 C.F.R. §§ 1146.1(b)(1)(C) & (d)(1), 1147.1(b)(1)(C) & (c)(1). The effectiveness of these remedies to ameliorate the impact of a service breakdown remains untested.

79. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 at 7 (Surface Transp. Bd. Dec. 27, 1996).

80. See *id.*

making such determinations.⁸¹ The STB claims that it is “attentive to the ‘classical categories of competitive abuse’ that could produce such a result, including foreclosure, refusal to deal, or other ‘recognizable forms of monopolization or predation.’”⁸² In crafting a remedy, the STB also considers operational and service criteria, such as the comparative efficiency of routings.⁸³ These factors further temper the application of competitive access remedies, even in light of clearly anticompetitive behavior by a bottleneck carrier.

Each remedy option provides a distinct level of intrusiveness on the bottleneck carrier’s operations. This variation can be seen as a progression, from the through route remedy where the bottleneck carrier must accept another carrier’s freight at a specified interchange point, to terminal trackage rights where the non-bottleneck carrier directly operates over the bottleneck carrier’s network. The STB approach to considering all factors results in the assessment of the least intrusive remedy against a bottleneck carrier.⁸⁴ Therefore the STB is more likely to prescribe a through route, rather than reciprocal switching or terminal trackage rights.

B. PRICE CEILINGS

Price controls regulating maximum freight rates are closely tied to the three access remedies described above. During the 1970s, the ICC regulated freight pricing heavily, employing a policy of “rate equalization.” Under rate equalization, the cost of shipping freight between two given points are the same on each competing network, regardless of the actual efficiency of each routing.⁸⁵ In combination with the open routing practices described above,⁸⁶ the ICC sought to “preserve the widest possible network of through routes in order to protect disadvantageously located shippers, and apparently viewed price competition on routes between the same two points as a form of improper ‘discrimination.’”⁸⁷

81. See 49 C.F.R. 1144.5(a)(1).

82. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 at 9 (Surface Transp. Bd. Dec. 27, 1996). (quoting *Midtec Paper Corp.*, 3 I.C.C.2d at 173-74).

83. See *id.*

84. See *Vista Chem. Co. v. Atchison T. & S.F. Ry.*, 5 I.C.C.2d 331 (1989) (reciprocal switching); *Shenango, Inc. v. Pittsburgh, C. & Y. Ry.*, 5 I.C.C.2d 995 (1989), *aff’d sub. nom.*, *Shenango, Inc. v. I.C.C.*, 904 F.2d 696 (3d Cir. 1990) (terminal trackage rights). When rejecting an argument that Congress intended reciprocal switching to be prescribed more frequently, the *Midtec* court said, “If Congress intended any disparity in [the Board’s] discretion to deny these remedies, . . . it would almost certainly have been making reciprocal switching less rather than more available [than through routes].” See *Midtec*, 857 F.2d at 1501.

85. See *Baltimore Gas & Elec. Co. v. United States*, 817 F.2d 108, 110 (D. C. Cir. 1987).

86. See *supra* note 63 and accompanying text.

87. See *Baltimore Gas*, 817 F.2d at 110-11.

This policy of rate equalization was abandoned after the reforms. Instead, "rate reasonableness" review was established which relied on the actual costs of the network. A shipper may petition the STB with respect to the rate reasonableness of a particular freight movement.⁸⁸ Congress has fixed a universal benchmark for rate reasonableness claims.⁸⁹ A railroad firm must show that the rate it charges "results in a revenue-variable cost percentage for such transportation that is less than 180 percent."⁹⁰ The ICC interpreted this benchmark as a guideline that did not necessarily trigger a finding that a rate is unreasonable.⁹¹

Subsequent adjudication has led the STB to determine whether rates are unreasonable by using constrained market pricing theory.⁹² Constrained market pricing theory examines the extent to which a firm may leverage prices on captive customers. The STB has recognized three possible approaches to apply constrained market pricing theory.⁹³ In one approach, the stand-alone cost method, the shipper develops a hypothetical railroad and "calculate[s] the revenue requirements . . . to provide the rail service needed . . . free from costs associated with inefficiencies and free from cross-subsidies of other traffic."⁹⁴ Using the data from this method, the STB then compares actual freight rates to determine whether they are excessive. Constrained market pricing theory may yield results that can justify a railroad's charges, even if they are substantially above the congressional benchmark.⁹⁵

Before examining the reasonableness of the rate, the STB must determine whether the railroad is "market dominant."⁹⁶ Under the relevant statute, market dominance is defined as "an absence of effective competition from other rail carriers or modes of transportation."⁹⁷ Until very recently, the STB had considered four factors that established mar-

88. See 49 U.S.C. § 10701(a).

89. See 49 U.S.C. § 10707(d)(1)(A).

90. See *id.* Congress has also defined the components of "variable cost" in this calculation. This benchmark has remained relatively unchanged even though it was expected to be reduced as the health of the railroad industry improved. See KEELER, *supra* note 5, at 100.

91. See *McCarty Farms v. Burlington N., Inc.*, 4 I.C.C.2d 262 (1988), *rev'd sub. nom.*, 985 F.2d 589 (D.C. Cir. 1993).

92. See *McCarty Farms v. Burlington N., Inc.*, Fin. Docket No. 37809 1997 WL 472908 at *3 (Surface Transp. Bd. Aug. 14, 1997, *aff'd sub. nom.*, 158 F.3d 1294 (D.C. Cir. 1998) [hereinafter *McCarty Farms II*].

93. The ICC recognized the following three approaches: (1) revenue adequacy; (2) management efficiency or pricing efficiency; and (3) stand-alone cost. See *Coal Rate Guidelines*, 1 I.C.C.2d 520, 537, 547 (1985), *aff'd sub. nom.*, 812 F.2d 1444 (3d Cir. 1987).

94. *McCarty Farms II*, at *3.

95. See, e.g., *id.*

96. See 49 U.S.C. § 10707(b). A showing that a rate exceeds a particular level does not necessarily establish market dominance. See *id.* at § 10707(d)(2).

97. See *id.* at § 10707(a).

ket dominance: (1) lack of intramodal competition; (2) lack of intermodal competition; (3) lack of geographic competition; and (4) lack of product competition.⁹⁸ Geographic and product competition are analogous to the source competition and product substitution concepts discussed in Section II.⁹⁹

However, in late 1998, the STB has modified its position, considering only two factors: lack of intramodal and intermodal competition.¹⁰⁰ Railroad firms are currently challenging the modified rules, petitioning to reopen the matter and threatening to appeal to the federal courts if the agency's position remains adverse.¹⁰¹ Regardless of which factors the STB will ultimately consider, market dominance is an affirmative defense, and it is incumbent on the responding railroad to present convincing evidence on any one of the four factors in order to avoid rate reasonableness review.¹⁰²

The STB's authority to review freight rates is limited to rates that the parties have not set by contracts.¹⁰³ When a shipment is moved under a combination of a contractual agreement and a rate set by the STB, rate review extends only to the non-contractual portion of the movement.¹⁰⁴ Outside of the limited exception for a combination of contract and non-contract movement of freight, a shipper can request review of only the entire rate charged.¹⁰⁵ The STB has emphasized this point, quoting from

98. See Market Dominance Determinations, 365 I.C.C. 118, 131 (1981).

99. See *id.* at 128. The I.C.C., in defining these two concepts, has stated:

Geographic competition is a restraint on rail pricing stemming from a shipper's or receiver's ability to get the product to which the rate applies from another source, or ship it to another destination. Because the shippers and receivers can do this, the railroad must compete with the railroad serving the alternate source or destination. Product competition occurs when a receiver or shipper can use a substitute(s) for the product covered by the rail rate. In that case, the railroad must compete with the railroad or other mode who carries that other product, and again, must keep its rate competitive if it wants the traffic.

See *id.*

100. See Market Dominance Determinations, Ex Parte No. 627, 1998 WL 887185 (Surface Transp. Bd. Dec. 21, 1998).

101. See Frank N. Wilner, *Be Reasonable*, TRAFFIC WORLD, Jan. 25, 1999, at 11.

102. See, e.g., *FMC Wyoming Corp. v. Union Pac. R.R. Co.*, Fin. Docket No. 42022, 1998 WL 177709, at *2 (Surface Transp. Bd. Apr. 15, 1998). See also Market Dominance Determination, 365 I.C.C. at 132; Product and Geographic Competition, 2 I.C.C.2d 1, 15 (1985).

103. 49 U.S.C. section 10709(c)(1) explicitly states that such contracts "may not be subsequently challenged before the Board or in any court on the grounds that such contract violates a provision [of the rate reasonableness statutes and regulations]." 49 U.S.C. § 10709 (c)(1) (1994).

104. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 (Surface Transp. Bd. Dec. 27, 1996) at 13.

105. See *id.* at 12. The STB has emphasized this point with regard to the relevance of contracts in various disputes. The STB has explained that in "competitive access" cases, i.e., those cases involving a request by a shipper or railroad firm to obtain a through route, reciprocal switching or terminal access, "a contract may be used by a shipper to demonstrate that a connecting carrier should be required to provide competitive service." See *id.* at 13 n.23. However,

an earlier United States Supreme Court case that said: "The shipper's only interest is that the charge shall be reasonable as a whole."¹⁰⁶ In a recent ruling, the STB concluded that this approach "has continuing 'vitality.'"¹⁰⁷

C. APPLICATION OF THE COMPETITIVE ACCESS CASES

When these access remedies are construed narrowly and combined with a very onerous standard of federal appellate court review,¹⁰⁸ it is unsurprising that many shippers have felt that the "deck is stacked against [them]" in obtaining regulatory relief.¹⁰⁹ A review of the STB's application of these principles in two recent cases supports this perception.

The first, *Central Power & Light Co. v. Southern Pacific Transportation Co.* was a consolidated case that involved three different shippers and fact patterns.¹¹⁰ The first shipper, Central Power & Light (CP&L), opened a new generating facility in Coletto Creek, Texas, which could burn low sulfur coal mined from Wyoming's Powder River Basin. Southern Pacific (SP), whose railroad network did not extend to the Powder River Basin, provided exclusive service to CP&L. CP&L sought to obtain a rate on the SP network to the nearest interchange points with carriers who had direct access to the Powder River Basin coal mines and then sought to contract separately with those parties for that portion of the movement between the interchange point and the mine. SP refused to provide such a rate and CP&L petitioned the STB to prescribe a rate for the bottleneck portion of movement on the SP network.

The second shipper, Pennsylvania Power & Light (PP&L), owned

the STB notes, "In a rate case, review of the through rate would indeed subject the contract to regulation." *See id.* Other older ICC decisions emphasize that rate relief is generally allowed only for the entire freight movement. *See, e.g., BN-SF, supra* note 10, at 76 (quoting *Union Pacific R.R. Co. - Control-Missouri Pac. R.R. Co.*, 366 I.C.C. 462, 538 (1982)).

106. *See CP&L, supra* note 5, at 12 (quoting *Great Northern Ry. v. Sullivan*, 294 U.S. 458, 463 (1935)).

107. *See id.* at 13 (citing *Metropolitan Edison Co. v. Conrail*, 5 I.C.C.2d 385 (1989)).

108. *See, e.g., Western Resources, Inc. v. Surface Transp. Bd.*, 109 F.3d 782 (D.C. Cir. 1997) (examining "substantial evidence" standard of review for STB's findings of no anticompetitive effects from merger); *Midtec Paper Corp.*, 857 F.2d at 1496-97 (federal appellate court will overturn an agency's interpretation of an ambiguous statute only if it is unreasonable).

109. *See Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242, at 9 (Surface Transp. Bd. Dec. 27, 1996). *See also* Janusz Ordovery & Russell Pittman, *Restructuring the Railway for Competition*, in *WORLD BANK CONFERENCE ON COMPETITION AND REGULATION IN NETWORK INFRASTRUCTURE INDUSTRIES*, 273, 275 (OECD 1995) ("Captive shippers regularly complain that such regulation does a poor job of protecting them from monopoly rail rates and seek tighter regulation to better protect their interests."). *See also supra* note 52 and accompanying text (shipper complaints in the U.S. growing after UP-SP merger).

110. *See Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 (Surface Transp. Bd. Dec. 27, 1996).

four power stations served exclusively by Conrail. While PP&L originally received coal from mines in Pennsylvania, also served by Conrail, it sought to contract with mines that provided low sulfur coal in Kentucky and West Virginia served by other carriers. In earlier proceedings, the ICC prescribed a through route for access to the other mines. However, PP&L petitioned the STB to challenge the rate reasonableness of the bottleneck portion of the service at the established interchange points or, alternatively, to provide a local rate for the bottleneck portion of the movement.

The third shipper, MidAmerican, owned a power plant in Iowa that was served exclusively by Union Pacific (UP). UP provided single-line service to the shipper, delivering coal from mines in the Powder River Basin to MidAmerican under a contract set to expire in 1997. Anticipating the expiration of the contract, MidAmerican sought to obtain a local rate for coal movements to the plant from an interchange point with a competitor. MidAmerican then sought to bargain separately with the competitor for the competitive segment of the movement. UP denied MidAmerican's request and MidAmerican then petitioned the STB for prescription of a local rate.

The shippers argued that they could request a rate reasonableness review for bottleneck portions of a freight movement. The shippers tried to support their position by suggesting that their freight moved on "two journeys," one over a competitive segment and then a localized bottleneck movement.¹¹¹ A shipper could then subject the bottleneck portion of the movement to separate review as a "local rate."¹¹² The shippers relied on two previous United States Supreme Court cases that suggested that such a division of rates was permissible in certain circumstances.¹¹³

However, the STB rejected each of the petitions and distinguished the facts of each case the shippers had brought forward. It concluded that CP&L failed to demonstrate that SP was providing inadequate service or that SP was exploiting its market power to trigger the competitive access remedies.¹¹⁴ The STB also rejected PP&L's application to the extent that it could challenge the through route rate only over the entire

111. *See id.* at 2.

112. A local rate is "a rate for transportation originating and terminating on the carrier's line." *See id.* at 2 n.3.

113. *Great N. Ry. v. Sullivan*, 294 U.S. 458 (1935) arose out of a dispute involving a Canadian published tariff rate that was outside the ICC's jurisdiction. Under these facts, a rate reasonableness analysis was applied only to the U.S. portion of the movement. The other case, *Atchison, Topeka & Santa Fe Ry. v. United States*, 279 U.S. 768 (1929) involved a dispute between railroads where one firm alleged that it was being foreclosed from using an established through route.

114. *See Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 (Surface Transp. Bd. Dec. 27, 1996) at 15.

portion of the movement and could not seek a local rate prescription for the bottleneck segment.¹¹⁵ The STB also denied MidAmerican's petition on grounds substantially similar to the other shipper petitions.¹¹⁶ Finally, the STB bolstered its disposition of the MidAmerican petition on ripeness grounds since the contract with UP had not yet expired.

As the fact patterns of *Central Power & Light* indicate, the STB has avoided an approach that directly regulates the bottleneck portion of a freight movement for competitive access or rate reasonableness remedies. STB Commissioner Owen perceived the dispute in *Central Power & Light* as a tug-of-war "to transfer wealth from one great corporate entity to another [railroads to electric utilities] without a showing that the *status quo* is causing electricity rates to be higher than they otherwise would be and without a showing that there are inherent inefficiencies in the *status quo*."¹¹⁷

The woeful state of shipper redress, however, is perhaps best illustrated by the litigation in *McCarty Farms v. Burlington Northern Railroad Co.*, which spanned approximately eighteen years.¹¹⁸ The petitioners in *McCarty Farms* were wheat producers in Montana that shipped much of their crop to ports in the Pacific Northwest. During the period in dispute, Burlington Northern (BN) was nearly the exclusive railroad transportation provider, serving 98 percent of all Montana grain elevators.¹¹⁹ BN controlled approximately 75 to 80 percent of the transportation market for transporting grain to these ports from Montana for the period 1981-

115. See *id.* at 16-17. Interestingly, the Eighth Circuit, which reviewed *CP&L*, relied on the agency's "considerable expertise in the economic underpinnings of the railroad industry" to affirm the decision. See *MidAmerican Energy Co. v. Surface Transp. Bd.*, No. 97-1081, 1999 WL 60501, at *6 (8th Cir. Feb. 10, 1999).

116. The STB reasoned that ripeness was an issue because the contract with UP had not yet expired during adjudication. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242 (Surface Transp. Bd. Dec. 27, 1996) at 17.

117. See *id.* at 19 (Commissioner Owen, commenting). Commissioner Owen believed that "[t]he economic benefits of fewer railroads, coupled with deregulation have been enormous and largely shared with railroad customers." See *id.* However, these shippers now "complain that they want an even bigger share" of the savings even though they have considerable competitive options that place caps on market exploitation. See *id.* at 20. At the same time, Commissioner Owen apparently conceded that railroads were no longer revenue inadequate. See *id.* at 19.

With respect to the electric industry, Commissioner Owen observed that 55 percent of the nation's electricity is generated from coal and that somewhat over half of that coal was moved by railroad. Commissioner Owen also alluded to a new competitive option for electric utilities to "wheel" power on the wholesale market. Presumably, this option will allow utilities who have lower shipping rates to transmit power to other utilities facing steeper shipping costs. Wheeling power then acts as a form of intermodal competition. See *id.* at 20.

118. *McCarty Farms v. Burlington Northern Inc.*, Fin. Docket No. 37809 1997 WL 472908 (Surface Transp. Bd. Aug. 14, 1997); *McCarty Farms, Inc. v. Surface Transp. Bd.*, 158 F.3d 1294, 1296 (D.C. Cir. 1998).

119. *McCarty Farms v. Burlington N., Inc.*, 3 I.C.C.2d 822, 828 (1987).

84.¹²⁰ Based on this evidence and other evidence showing a lack of geographic and product competition, the ICC concluded that BN was market dominant.¹²¹

Despite the congressional benchmark setting the revenue-variable cost ratio at 180 percent, the ICC concluded that a reasonable benchmark in this case would be approximately 230 percent by obtaining data of comparable grain movements during the period in question.¹²² Nonetheless, using this elevated benchmark, the ICC found that rates in certain years were excessive. After a subsequent reversal and remand from a federal court, however, the STB used the stand alone cost method to determine the reasonableness of BN's rates. The STB concluded that the McCarty Farms stand-alone cost hypothetical railroad had a "cumulative shortfall in revenues" and that BN's rates were not unreasonable "[b]ecause the revenues that would be collected from the shipping group would not be sufficient for the [hypothetical] carrier."¹²³ Prior to this final STB decision, the *McCarty Farms* case was used as a model of an effective example of market dominance and unreasonable rates.¹²⁴

IV. ALTERNATIVE POLICIES TO INJECT COMPETITION

This section discusses three regulatory reforms that could better protect shippers from anticompetitive behavior stemming from bottleneck control: (1) divestiture; (2) enhanced price regulation and open routing reforms; and (3) various forms of mandated open access of the national railroad network. Before delving into these options, the burdens associated with escalating the level of regulation is examined.

A. THE ROLE OF REGULATION

Other regulations that enhance competition provide a means of offsetting the undesirable effects of deregulation. However, the cure may often prove worse than the disease, especially in situations where increased regulation imposes administrative costs for the regulatory agency and regulatory costs for the industry. Burdensome regulatory policies in the 1970s played a significant role in the financial decline of the railroad industry.¹²⁵ Economists generally agree that extensive re-regulation would saddle the railroad industry's ability to compete with other modes

120. *See id.* at 830.

121. *See id.* at 837-39.

122. *McCarty Farms v. Burlington N., Inc.* 4 I.C.C.2d 262, 278 (1988).

123. *McCarty Farms v. Burlington N. Inc., Fin. Docket No. 37809 1997 WL 472908 at *13* (Surface Transp. Bd. Aug. 14, 1997).

124. *See Wilson, supra* note 8, at 58-62.

125. *See, e.g., KEELER, supra* note 5, at 96.

of transportation.¹²⁶ Therefore, regulators need to carefully assess the regulatory tools available to them to minimize the burdens on the industry while encouraging the benefits of robust competition.

Regulators will invariably consider the effects of such policies on shippers and railroads. As one commentator has observed with respect to deregulating the gas industry and allowing some customers to “bypass” traditional service providers:

Changes in regulatory policies create winners and losers. In particular, competitive entry may improve the position of large industrial customers seeking to bypass the regulated utility while creating losses for captive customers who face higher prices after entry. Policymakers inevitably compare gains and losses, weighting them on the basis of various considerations, including the preferences of regulators, the political influence of the winners and losers and the ability of market participants to communicate with the regulators. If bypass leads to a price increase for captive customers and a price drop for switching customers, the regulator must evaluate the welfare effects in formulating regulatory policy toward entry.¹²⁷

This regulatory calculus is further complicated by rail labor - a third interest group affected by competitive access reforms.¹²⁸ Rail unions will most actively oppose regulatory reforms that are perceived as policies that adversely affect employment levels or working conditions.¹²⁹ Access

126. See Woodman & Starke, *supra* note 67 at 290. See, e.g., Ordovery & Pittman, *supra* note 110, at 275 (“tighter regulation in the United States in the past . . . brought many railroads to bankruptcy.”); Tye, *supra* note 10, at 216 (a goal of railroad regulators should be to “minimize the scope of regulatory intervention”).

127. See Paul W. MacAvoy, et al., *Is Competitive Entry Free? Bypass and Partial Deregulation in Natural Gas Markets*, 6 YALE J. ON REG. 209, 232-33 (1989). See also NEIL K. KOMESAR, *IMPERFECT ALTERNATIVES* 138-42 (1994). The direction of policy is also vulnerable to regulator bias. Just as the market may “fail” through monopoly or other forms of market abuse, regulators may become vulnerable to constituent groups determined to derail regulatory efforts. See *id.* at 115-21.

128. While the rail workforce has decreased significantly, rail unions still remain well organized with the ability to reshape regulatory outcomes that would otherwise benefit railroads and shippers. See Rip Watson, *Rail, Unions Unite To Deflect Shippers*, J. COM., Feb. 1, 1999, at 1A. In the 1993-94 election cycle, rail unions contributed \$1,929,507 to House and Senate campaigns throughout the country. Union contributions exceeded contributions from railroads. See David Barnes, *Where the Money Flows*, TRAFFIC WORLD, June 19, 1995, at 8.

In addition to rail labor, other interest groups, such as railroad industry suppliers or trade groups representing competing modes of transportation, may also seek to influence regulatory outcomes to their perceived benefit. For example, one trucking industry trade group has sought to have an impact on potential railroad competitive access reforms before Congress. See Frank N. Wilner, *Truck-Rail War Looms*, TRAFFIC WORLD, Feb. 22, 1999, at 12. However, such groups may play a less influential role than labor, shippers and railroads, because their interests are less directly affected by policy changes.

129. For example, labor unions were active in challenging recent STB policies that curtailed certain benefits that employees enjoyed if their railroad employer was the target of a takeover. See *Association of American Railroads v. Surface Transp. Bd.*, 162 F.3d 101 (D.C. Cir. 1998).

reforms are sufficiently amorphous in their impact on rail labor that they may provoke support or opposition. For example, divestiture and open access may be viewed positively because such reforms would create employment opportunities in the new firms that may enter the market to compete with incumbents. Rail labor may be less receptive if these reforms are perceived as worsening working conditions or displacing unionized workers of the incumbent railroads with a non-unionized workforce of the new entrants.¹³⁰ Rail unions appear to have embraced the latter view.¹³¹ With respect to rail labor unions, regulators will face pressure to weigh the economic benefits of competition against labor impacts on unions.

Reforms encouraging competitive access will inevitably affect these parties differently and will require a careful consideration of these impacts. However, injecting competition into the industry eliminates the dead-weight loss to society associated with monopolies and creates greater efficiency in the industry. Pursuing a policy of efficiency should improve social welfare as shippers pass their cost savings to consumers.¹³² While using regulatory tools to guide the market toward efficiency may seem counterintuitive, successful policies to spur or preserve competition have often required government intervention. In their roles as antitrust regulators, for example, the U.S. Department of Justice and the Federal Trade Commission have attempted to preserve competition in the marketplace.¹³³ While some role in policing the market improves social welfare through enhanced efficiency, the appropriate extent of antitrust regulation and an optimal regulatory policy for the railroad industry that avoids over-regulation remain contentious issues.¹³⁴

B. DIVESTITURE

In retrospect, some mergers have increased bottleneck problems and

130. In the European Union, rail labor has become opposed to access reforms, fearing that unionized employees of state railways will lose their jobs to non-unionized workers. See Aviva Freundmann, *Strikes in EU Protest Railroad Competition Plan*, J. COM., Nov. 24, 1998, at 12A.

131. See Watson, *supra* note 129, at 1A.

132. Shippers who are competing against other firms in their respective industries have incentives to pass these costs off to consumers unless regulations or other factors preclude competition. See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 7-10 (1986).

133. See UNITED STATES DEPARTMENT OF JUSTICE & FEDERAL TRADE COMMISSION, *supra* note 39, at 1-3.

134. See ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 10-11, 20-21 (1978); POSNER, *supra* note 133, at 265-96. Posner emphasizes that antitrust policy should primarily police inefficient behavior. However, antitrust enforcement may play other important roles, including reducing economic concentration and corporate influence over the political system. See, e.g., Harlan M. Blake, *Conglomerate Mergers and the Antitrust Law*, 73 COLUM. L. REV. 555, 575-78 (1973).

failed to deliver better service or increased efficiency.¹³⁵ A policy of selective divestiture of certain railroad lines to create competing networks offers one solution to alleviate competitive concerns. Such a policy recognizes that many railroad mergers may benefit consumers or fail to raise competitive concerns in many instances. And, such a policy may encourage mergers that *enhance* competition. For example, the recent Norfolk Southern and CSX acquisition and division of the Conrail network has created two competing railroad networks linking the Northeastern states with the Midwest, replacing a single firm.¹³⁶

However, logistical problems may plague the effective implementation of divestiture policies. As railroad networks have consolidated, they have shed substantial portions of their track network and deferred maintenance on other portions, especially in the case of mergers involving parallel lines.¹³⁷ In many instances, effective divestiture would tax substantial resources in simply rebuilding abandoned lines or improving existing secondary lines that would provide competition. Existing railroads face similar capacity and logistical problems from shedding too much trackage.¹³⁸ In divestiture situations, the issue of who should pay for the restoration of the network also exists.

In addition to the high costs involved with rebuilding a network, divestiture also raises the challenge of recreating corporate entities that were merged out of existence several years ago. The lack of institutional knowledge of operations for these newly independent lines would create logistical problems unless other more experienced railroad operators assumed control of the lines. Because of the significant number of railroad mergers, few major railroads remain that have experience in large-scale

135. The implementation of the UP-SP merger illustrates this point. See *supra* notes 52-56 and accompanying text.

136. Some investors have questioned the wisdom of this merger because of the high acquisition price. The merger was the result of a bidding war, where Norfolk Southern and CSX Transportation agreed to split Conrail's assets rather than allow either to acquire it entirely. See Daniel Machalaba, *Conrail's Breakup Plan Is Released by Norfolk Southern, CSX Corp.*, WALL ST. J., Apr. 9, 1997, at B4. See also Stephen R. Klein, *Transportation: Commercial*, STANDARD & POORS INDUSTRY SURVEYS, July 17, 1997, at 3. Interestingly, the proposal to divide Conrail has the effect of undoing another poorly crafted merger: the Penn Central merger which combined two significant competing networks in the 1960s. See DAUGHEN & BINZEN, *supra* note 40, at 67-68.

137. Dempsey has observed this trend since the early 1980s. See Dempsey, *supra* note 62, at 568. As a recent example, the current plans to split Conrail also involve the elimination of "redundant" tracks. See Klein, *supra* note 137, at 3.

138. For example, in 1989, Burlington Northern decided to abandon parallel trackage that linked the Tacoma and Seattle, Washington areas to the Cascade Mountains. This segment of trackage linked a route that reached the Midwest. When capacity problems plagued Burlington Northern's other track segment, it decided to reopen the trackage in 1996. The cost of rebuilding the 77.9 mile mountain crossing was estimated at \$125 million. See Bruce Kelly, *The Thunder Returns to Stampede Pass*, TRAINS, Nov. 1997, at 40.

operations, and even fewer have the operating knowledge of the region where independent operations are to be restored.¹³⁹ Moreover, for these new entities or operators to succeed, they must be able to be competitive relative to their larger rivals. This could require access to a track network larger than the bottleneck or monopoly segments.

Regulators would also have to monitor other circumstances surrounding the implementation of a divestiture scheme carefully. The timing of the sale could alter the competitive position of any newly divested firm. The choice of buyers for the new entities is also an important consideration. An incumbent firm may attempt to weaken its divested rival by selling the divestiture assets to a competitively weaker buyer or selling during an unattractive time. These basic monitoring issues have been problematic in previous divestitures of other industries.¹⁴⁰

As operating problems persisted on UP-SP, the STB considered limited divestiture to alleviate competitive and service problems in the Houston, Texas, area.¹⁴¹ However, the STB ultimately rejected all divestiture schemes because service levels began improving on UP-SP.¹⁴² The board also concluded that the merger had not spawned anticompetitive conduct that would justify divestiture. In spite of the STB inaction, UP-SP has voluntarily coordinated operations and has even allowed joint ownership of certain facilities to limit the impact of its recent service difficulties.¹⁴³ In the short term, these changes will probably not alleviate the service problems UP-SP has encountered since its consolidation, although it might enhance competition in the long run.

The limited scope of the STB proceedings with respect to a UP-SP divestiture in portions of Texas perhaps reflects the practical considerations discouraging divestiture. In short, the difficulties in determining which areas are adversely affected by competition, in allocating costs for rebuilding abandoned or ill-maintained trackage, and in determining the scope of a divested firm's operations require significant regulatory intervention. Moreover, while divestiture may limit the competitive problems

139. East of the Mississippi River, two major systems will remain after the Conrail consolidation: CSX Transportation and Norfolk Southern. West of the Mississippi, BN-SF and UP-SP remain. There are also a few regional railroads that are dwarfed by the major networks, such as Wisconsin Central, Illinois Central and Kansas City Southern. *See also supra* note 5.

140. An internal study conducted by the Federal Trade Commission has raised these concerns in examining the effectiveness of previous divestitures. *See* George S. Cary & Marian R. Bruno, *Merger Remedies*, 49 ADMIN. L. REV. 875, 876-77 (1997).

141. *See* Union Pac. Corp. - Control - Southern Pac. Rail Corp., Fin. Docket No. 32760, 1998 WL 141745 (Surface Transp. Bd. Mar. 31, 1998).

142. *See* Union Pac. Corp. - Control - Southern Pac. Rail Corp., Fin. Docket No. 32760, 1998 WL 887183 (Surface Transp. Bd. Dec. 21, 1998).

143. *See* Daniel Machalaba, *Union Pacific Reverses Course with Burlington Pact*, WALL ST. J., Feb. 17, 1998, at B4.

associated with bottleneck control, it is unlikely to eliminate every bottleneck situation.

C. REGULATION OF RATES AND CHOICE OF INTERCHANGE POINT

Over the years, shippers have advanced proposals, such as creating easier access for reciprocal switching, terminal facilities, or joint rates to encourage greater competition.¹⁴⁴ Shut out from the STB, shippers are again petitioning for relief from Congress.¹⁴⁵ The latest incarnation of these reform efforts is the Railroad Competition and Service Improvement Act of 1999 pending before Congress that seeks to “ensure reasonable rail rates for captive shippers.”¹⁴⁶ Among other things, the proposed bill overturns *Central Power & Light* in favor of shippers. It permits a shipper to request a rate for any two points of a movement “where traffic originates, terminates, or may reasonably be interchanged” without regard to “whether the rate established is for only part of a movement between an origin or destination” or “whether the shipper has made arrangements for transportation for any part of that movement.”¹⁴⁷

The proposed bill extends STB rate review even if the parties have contracted for some form of service as long as the shipper is seeking a rate that does “not apply to transportation covered by such a contract.”¹⁴⁸ In addition, the proposed bill supports the STB’s most recent position and prohibits consideration of “evidence of product or geographic competition in making a market dominance determination”¹⁴⁹ The proposed bill also remedies many of the barriers agricultural shippers have faced in cases like *McCarty Farms*.¹⁵⁰ However, it does not address the appropriate measure for establishing the reasonableness of rates, which currently appears to be the stand-alone cost method used in *McCarty Farms*.¹⁵¹

144. For example, Woodman and Starke analyzed a bill that was proposed in 1987. See Woodman & Starke, *supra* note 67, at 282-90. See also The Railroad Shipper Protection Act, S. 1429, 105th Cong., § 5 (1997) (the most recent failed bill seeking shipper relief).

145. While many shippers seek reforms, they are not a monolithic group. Many shippers disagree on the appropriate approach and form of any remedial legislation. See Rip Watson, *Rail Reform Uncertainty Remains as Sides Differ*, J. COM., Jan. 27, 1999, at 1A; Rip Watson, *Rail Group Ponders Approaches To New Congress on Competition*, J. COM., Nov. 12, 1999, at 1A. One group, however, plans to use the failed bill as a model for the new one. See Rip Watson, *Shippers Seek CURE for Rail Competition Ills*, J. COM., Feb. 10, 1999, at 1A.

146. See S. 621, 106th Cong., § 2(3) (1999).

147. See *id.* at § 5.

148. See *id.* at § 5.

149. See *id.* at § 8.

150. See *id.* at § 6. Section 6 shortens the length of proceedings, lowers the cost of filing an action, simplifies rate reasonableness review, and creates service obligations on railroads for captive grain shippers that ship fewer than 4,000 cars annually.

151. See *McCarty Farms v. Burlington N., Inc.*, Fin. Docket No. 37809, 1997 WL 472908 at *3

The adoption of such proposed reforms would effectively regulate all bottlenecks for rate reasonableness and allow greater routing freedom for shippers. The Association of American Railroads (AAR), a trade group that represents the major railroads in North America, submitted comments in *Central Power & Light* which suggested that bottleneck shippers constituted a substantial traffic base of the major railroads.¹⁵² Moreover, the AAR's experts estimated that enforcing price ceilings on bottleneck movements, like the reforms envisioned in the failed legislation, would reduce annual industry-wide revenues by \$1.5 to \$2.4 billion.¹⁵³

Reforms of this type will also impose administrative costs. In the short term, the reforms would increase the number of cases the STB would have to resolve. However, once a growing body of administrative decisions shapes the extent of shipper relief, these costs would probably decrease.¹⁵⁴

Such reforms may also harm the railroad industry. The reforms return railroad policy closer to an "open routing" and "rate equalization" system.¹⁵⁵ Critics of such regulations allege that they effectively limit the ability of railroads to differentially price commodities.¹⁵⁶ One critic has argued:

Any mandated reduction in rates for a specific commodity would have a destructive effect on the rail carriers' ability to differentially price. Any such mandated reduction would require rail carriers to increase rates on other traffic. As a result, traffic subject to intermodal competition would shift to other transportation modes where it could move at lower rates, leaving the rail carriers with less market share and decreased sources of revenue to cover their costs. Any contribution made by those shippers to capital and

(Surface Transp. Bd. Aug. 14, 1997), *affd sub. nom.*, 158 F.3d 1294 (D.C. Cir. 1998). See also *supra* notes 93-96 and accompanying text.

152. See Association of American Railroads (AAR), Comments, at 20, *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 41242 (Surface Transp. Bd. Dec. 27, 1996).

153. See *id.*, at 12, n.21.

154. Posner's general observations that the force of precedent in the adjudicative process is illustrative. See POSNER, *supra* note 133, at 509-15. As precedent builds in an area of law, it "reduces the costs of litigation by enabling the parties to a case, and the tribunal also, to use information that has been generated . . . in previous cases." *Id.* at 515.

155. See *Baltimore Gas & Elec. Co. v. United States*, 817 F.2d 108, 110 (D.C. Cir. 1987); See also *supra* note 63 and 86-88 and accompanying text.

156. In *Central Power & Light*, the AAR asserted that the requested shipper relief prevents railroads from pricing services differentially. See *Central Power & Light Co. v. Southern Pac. Transp. Co.*, Fin. Docket No. 31242, at 12, n.21 (Surface Transp. Bd. Dec. 27, 1996). The AAR contends that differential pricing is essential to recoup joint and common costs associated with interchanging from the bottleneck and to "earn sufficient revenues." See *id.*; AAR, *supra* note 153, at 34. See also AAR, *Forced Access — Reregulation by a New Name* (visited May 14, 1998) <<http://www.aar.org/comm/position.nsf>>. Woodman and Starke lodge a similar argument. See Woodman & Starke, *supra* note 67, at 282.

operating costs would be lost, forcing carriers to make up that shortfall through rate increases on the remaining traffic to the extent competitive pressures permit. The ultimate effect would be a loss of the ability to differentially price rail service, resulting in rate increases, lost traffic, decline in revenues, lost jobs and deterioration in service¹⁵⁷

However, a profit-seeking firm would not provide transportation for freight that does not generate additional profits, relying on other captive shippers to subsidize this traffic. Instead, a railroad would decline to offer or provide services that face excessive levels of competition.¹⁵⁸ However, this critique does have force to the extent that railroads have returns to density.¹⁵⁹ Intuitively, this conclusion seems reasonable since railroads require massive fixed costs to establish a functional right-of-way. Once these costs are paid, the railroad simply incurs the variable costs associated with moving freight up to the physical capacity of the network.¹⁶⁰ Thus, a railroad has incentives to price differentially to the extent it can obtain from captive shippers a greater share of fixed costs in order to pursue other traffic as long as it provides revenues in excess of variable cost and there are no capacity constraints in adding more freight.¹⁶¹ In this manner, the firm can acquire an optimal mix of traffic.

The validity of this critique rests on two important assumptions.

157. See *id.* In criticizing the shipper petition for relief in *Central Power & Light*, the AAR also provided a grim forecast of the effect of such remedies. The AAR contended that railroads will substantially curtail capital expenditures and that the industry will begin to decline less profitable intermodal traffic, so that trailers and shipping containers "would be driven back onto the highway" rather than on trains. See Association of American Railroads, *supra* note 153, at 21-22.

158. See, e.g., Jim Giblin, *Making Rail Intermodal Profitable*, TRAINS, July 1998, at 64, 66 (describing Santa Fe's decision to abandon Chicago to Denver routing of intermodal traffic for cost reasons).

159. See Douglas W. Caves, et al., *Network Effects and the Measurement of Returns to Scale and Density in the Railroad Industry*, in ANALYTICAL STUDIES IN TRANSPORT ECONOMICS 97-120 (Andrew F. Daughety, ed., 1985) [hereinafter Caves et al., *Network*]; Douglas W. Caves, et al., *Productivity Growth, Scale Economies, and Capacity in U.S. Railroads, 1954-74*, 71 AM. ECON. REV. 994 (1981) [hereinafter Caves et al., *Productivity*]. Caves et al., have described returns to density as "the proportional increase in output made possible by a proportional increase in all inputs, with network and input prices held fixed." See Caves et al., *Network, supra*, at 100. Returns to density should not be confused with returns to scale, which they define as a "a proportional increase in both output made possible by a proportional increase in all inputs, with input prices fixed." See *id.* They conclude that the industry does have returns to density, but not returns to scale. See *id.* at 109-10, 112.

160. In economic terms, variable cost is defined as a cost directly related to output, increasing as output increases. See PAUL A. SAMUELSON, ECONOMICS 464-66 (9th ed. 1973).

161. Baumol and Willig described the need for differential pricing in *Central Power & Light* by noting that

with vigorous competition in the non-bottleneck portion of an end-to-end railroad service, market forces can be relied upon to drive the prices of that portion of the rail service toward incremental cost. If the revenues attributable to the related bottleneck service are not allowed to cover more than the purported stand-alone costs of the bot-

First, it assumes that railroads are unable to price their services differentially. Railroads may still use differential pricing until reaching the price ceiling. Even if shippers have open routing and some form of rate equalization, railroads may raise their rates on competitive segments of the line to shippers of certain commodities that are traditionally considered “captive,” like coal shipments, to recover a greater contribution of their fixed costs rather than at the bottleneck. This pricing strategy would equalize rates across commodity groupings, treating bottleneck and non-bottleneck shippers similarly. Second, this critique assumes that the price ceiling placed on the STB’s rate reasonableness review is so low that it prevents any discriminatory pricing practices. The resolution of the *McCarty Farms* case demonstrates that the price ceiling on rate reasonableness is relatively high and underscores the need for limiting the upper bound of rates because of the limited competitive options many shippers face.¹⁶²

The Canadian experience also undermines criticism of such reforms. In the late 1980s, Canada adopted similar legislation to counteract other deregulatory measures.¹⁶³ The regulations apply to shippers who have access to only a bottleneck carrier at either the origin or destination.¹⁶⁴ The regulations permit shippers to request a “competitive line rate applicable to the movement of the traffic between the point of origin or destination, whichever is served exclusively by the local carrier, and the nearest interchange with a connecting carrier.”¹⁶⁵ Thus, a shipper may “designate the continuous route for the movement of the . . . traffic.”¹⁶⁶ This relief is subject to certain restrictions, including a cap on the length of the bottleneck portion and consent from the connecting carrier to provide service.¹⁶⁷ Such relief is available to all shippers, except for intermodal shippers, unless their traffic originates or terminates in a port.¹⁶⁸ The

tleneck(s), it follows inexorably that there would be no source for which to recoup any of the very substantial fixed and common costs of an end-to-end movement.

See Baumol & Willig, *supra* note 16, at 12.

162. See *McCarty Farms v. Burlington N., Inc.*, Fin. Docket No. 37809, 1997 WL 472908 at 3 (Surface Transp. Bd. Aug. 14, 1997), *affd sub. nom.*, 158 F.3d 1294 (D.C. Cir. 1998). See also *supra* notes 93-96 and accompanying text.

163. See Paul S. Dempsey, et al., *Canadian Transport Liberalization: Planes, Trains, Trucks & Buses Rolling Across the Great White North*, 19 *TRANSP. L.J.* 113, 149-50 (1990). Nearly ten years later, the Canada Transportation Act of 1996, which adopted additional railroad reforms, left the access provisions unchanged. See Canada Transportation Act, ch. 10, 1996 S.C. §§ 129-36 (Can.); Canadian Transportation Agency, *The Canadian Transportation Act and the Rail and Marine Transportation Branch* (visited May 16, 1998) <<http://www.cta.otc.gc.ca/eng/rail/rmb-bro.htm>>.

164. See Canada Transportation Act, ch. 10, 1996 S.C. § 129(1) (Can.).

165. See *id.* at § 130(1).

166. See *id.* at § 130(3).

167. See *id.* at § 131(1) and (4).

168. In the language of the statute, a competitive line rate cannot be established for “the

longevity of such reforms and the present strength of the Canadian railroad industry suggest that the dire consequences propounded by critics of such reforms may be exaggerated.¹⁶⁹ However, the benefits of the regulations also remain unclear.

D. MORE RADICAL REGULATORY REFORM: OPEN ACCESS

Railroad firms provide two distinct services: they maintain track networks and operate trains. By “unbundling” these services, firms could “rent” railroad trackage for their operations without owning a network, while other firms may simply own the right-of-way, renting it to operators, without moving any freight. Open access would foster the most direct form of competitive access. Just as truckers pay for their highway usage, tenants of the track network would operate over something akin to a system of private toll roads, paying according to their usage.¹⁷⁰

Conceptually, such an arrangement is not far removed from the present state of the industry. Joint use of facilities and equipment coordination are not uncommon in the industry and have deep historical origins. *United States v. Terminal Railroad Association* provides an excellent example of directly mandated joint use of facilities.¹⁷¹ The Terminal Railroad Association represented a collective of railroads that owned terminal trackage in St. Louis, Missouri. Twenty-four railroads converged on St. Louis, terminating in an equal proportion west and east of the Mississippi River, but none crossed the river. The association controlled the only two toll bridges that crossed the river and connected the

movement of trailers on flat cars, containers on flat cars or less than carload traffic, unless they arrive at a port in Canada by water for movement by rail or by rail for movement by water.” *Id.* at § 131(3).

169. In the mid-1990s, Canadian railroads faced competitive difficulties as a result of government regulation. The subsequent adoption of the Canada Transportation Act, 1996, and the privatization of CN Rail have greatly improved the industry. Christopher J. Chipello, *Canada's Freight Railroads Try to Board the Gravy Train*, WALL ST. J., July 7, 1997, at B4; *Rising Railway Profits Make CN, CP Shares Attractive, Analysts Say*, FIN. POST, July 8, 1997, at 24.

170. The European Union has made a similar analogy, viewing high density railroad tracks as “freeways.” See European Union, *Trans-European Rail Freight Freeways* (visited Dec. 16, 1998) <<http://www.europa.eu.int/en/comm/dg07/speech/sp983.html>>; Makeda F. Jahanshahi, *The U.S. Railroad Industry and Open Access*, 65 J. TRANSP. L., LOGISTICS & POL'Y 22, 24 (1997). To a large extent, interstate highways are funded through the collection of fuel taxes. See, e.g., John D. Schulz, *Group Says Taking Highway Trust Fund 'Off Budget' Would Spur Road Investment*, TRAFFIC WORLD, Mar. 13, 1995, at 50. Of course, some debate exists as to whether the trucking industry pays its “fair share” of the costs of maintaining roads. See UNITED STATES GENERAL ACCOUNTING OFFICE, *HIGHWAY USER FEES* 7, 18 (1994) (noting that certain heavy vehicles may pay only 50 percent of their “fair share” of total costs associated with maintaining the interstate system).

171. See *United States v. Terminal R.R. Ass'n*, 224 U.S. 383 (1912). *Terminal Railroad* has also been recognized as the case that founded the “essential facilities” doctrine in antitrust law. See AREEDA & HOVENKAMP, *supra* note 11, ¶ 772b1, at 179.

carriers.¹⁷² Eventually, it also gained control of the terminal trackage of the only ferry line that offered rail transportation service across the river.¹⁷³

The association was effectively a monopoly in control of all bridge traffic in St. Louis,¹⁷⁴ charging non-member railroads higher rates and increasing rates on certain shippers.¹⁷⁵ The association enforced the higher rates by limiting membership, which was allowed only on the unanimous consent of the existing members, and by foreclosing future rivals from entering the market through the membership agreement which obligated members to forever use the association's facilities for their traffic.¹⁷⁶ Recognizing that efficiencies and public policy considerations favored maintaining unified terminal lines rather than having "the city . . . cut to pieces with the many lines of railroad intersecting it in every direction,"¹⁷⁷ the United States Supreme Court elected to require open access to the terminal facilities.¹⁷⁸ The open access remedy allowed all railroads to join the association if they wished and required nondiscriminatory pricing for any party using the terminal service. The remedy also created the opportunity for other rivals to become terminal network providers by allowing anyone in the association to use other terminal facilities in the future.¹⁷⁹

More contemporary examples of open access situations also exist. Trackage rights arrangements, which allow a tenant railroad to operate on a designated segment of the network paying on a use basis, represent another manifestation of joint use of a network. In the most recent wave of railroad consolidations, the STB and ICC imposed expansive trackage rights arrangements on merging parties and competing carriers to protect competition in regions adversely affected by the mergers.¹⁸⁰ The STB has recently permitted open access on a national scale by allowing Amtrak, the nationalized passenger rail provider, to provide express service for freight on lines it rents from railroads who compete for the same traffic.¹⁸¹ In addition, voluntary agreements exist, although they typically in-

172. See Terminal R.R. Ass'n, 224 U.S. at 395.

173. See *id.* at 394.

174. Significantly, as a case decided during the early part of the twentieth century, intermodal competition was not an issue in this case because it predated trucking.

175. See Terminal Railroad Ass'n, 224 U.S. at 406-10.

176. See *id.* at 399-400.

177. See *id.* at 403 (quoted source omitted).

178. See *id.* at 411-12.

179. See *id.* at 411.

180. See *supra* note 62 and accompanying text.

181. See Application of the National Passenger Corp. under 49 U.S.C. 24308(A) - Union Pac. R.R. Co. and Southern Pac. Transp. Co., Fin. Docket No. 33469 (Surface Transp. Bd. May 28, 1998).

volve the coordination of the movement of freight and do not permit the tenant operator to compete with the landlord for customers on the network.¹⁸² One clear explanation for the lack of such an arrangement is that the owners of the network are better able to fully exploit their bottleneck segments without access because it would be impractical for a new firm to build a competing network.¹⁸³

Generally, open access regulation requires network owners to allow any operators to use their network on a nondiscriminatory basis, with the landlord charging itself the same cost to use the network as any other competitor.¹⁸⁴ The key to engendering effective competition under an open access system is to ensure that landlords receive an amount of rent that encourages them to maintain the network without exploiting their ownership of the network.¹⁸⁵ A rental rate that is set too low would encourage tenants to exploit the low rate while creating competitive burdens on the landlord. The assessment of the appropriate fee has been a contentious issue in the railroad industry where parties have often challenged the fees assessed by landlord railroads for trackage rights.¹⁸⁶

The general principles of open access have been endorsed in other deregulation settings, most notably in the telecommunications field. After the AT&T antitrust settlement in the early 1980s, newly created regional telephone companies, carved from AT&T, were required to provide long distance telephone companies "equal access" to local tele-

182. Numerous examples of such arrangements are provided in Massa, *supra* note 5, at 432 n. 104. See also, e.g., Hemphill, *supra* note 32, at 36-47. Another form of a track sharing arrangement is provided in the National Detour Agreement, signed by several railroads, which allow "one railroad to use the tracks of another railroad to avoid temporary service disruptions caused by construction or other unforeseen events such as derailments or natural disasters." Jahan-shahi, *supra* note 171, at 29.

183. As Alfred Kahn has put it: "Mandatory interconnection becomes the logical way to ensure competition in the presence of concentrated control over nodes that cannot practicably be duplicated . . . it makes sense to request railroads to make their trackage available to competitors, where nobody is going to build a new major track for over 1,000 miles." See Alfred E. Kahn, panelist, in *Exclusionary Conduct*, 57 ANTITRUST L.J. 723, 740 (1989). And, according to the AAR's filings in *Central Power & Light*, railroads have approximately \$1.5 to \$2.4 billion in annual revenues at stake if bottleneck segments were opened to competition. See Association of American Railroads, *supra* note 153, at 20.

184. See WILLIAM J. BAUMOL & J. GREGORY SIDAK, TOWARD COMPETITION IN LOCAL TELEPHONY 122 (1994).

185. See *id.* at 97-101. Baumol and Sidak argue that the rent a tenant should pay on the network should include the economic costs associated with use, such as wear and tear on the track network, as well as the opportunity cost of allowing the operator to occupy the track when the landlord could be providing the service.

186. For example, in the UP-SP merger proceedings, the compensation for trackage rights agreements became a contentious issue. See Union Pac. Corp.—Control—Southern Pac. Rail Corp., Fin. Docket No. 32760, 1996 WL 467636, at *119-21 (Surface Transp. Bd. Aug. 6, 1996). See also Marshall & Cook, *supra* note 4, at 25-29 (arguing the costs associated with labor protection liability should be included in competitive access fees).

phone lines and switching facilities required to reach local customers.¹⁸⁷ And more recently, Congress created an affirmative duty on local exchange carriers,¹⁸⁸ who have historically controlled bottleneck networks - local telephone lines - to provide to "any requesting telecommunication carrier" interconnection onto the network at nondiscriminatory rates "at any technically feasible point within the . . . network."¹⁸⁹ The regulations also permit the local exchange carrier to charge a rate that is "based on the cost . . . of providing the interconnection or network element" and includes a "reasonable profit."¹⁹⁰

One observer explained the necessity of such regulations:

There is only one local exchange network today - that of the incumbent LEC [local exchange carrier]. At present, all LEC competitors are dependent on the ability to use that existing network - in part or in whole - in order to provide local exchange service comparable to the LEC. To meaningfully compete with the LEC competitors must have access to that network at the same price as the incumbent, i.e., the direct economic cost of such access.¹⁹¹

These regulations allow other firms to rent capacity on the local bottleneck to provide any range of services at their cost plus a reasonable return for the network owner. Because of the nondiscriminatory element of these regulations, one local exchange provider has actually unbundled network ownership and service over the network by separating its operations.¹⁹² However, the success of these recent open access measures remains uncertain, in part because of the novelty of the reforms and unresolved issues with respect to implementation,¹⁹³ and also in part because of legal questions.¹⁹⁴

187. See *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 196 (1982), *aff'd*, 460 U.S. 1001 (1983).

188. A local exchange carrier is "[a] provider of local transport and exchange service—the local telephone company." See BAUMOL & SIDAK, *supra* note 185, at 147.

189. See 47 U.S.C. § 251(c)(2) & (3) (Supp. II 1996).

190. 47 U.S.C. § 252(d)(i) (Supp II 1996).

191. See J. Michael Brown, *Interconnection, Unbundling and Access: Creating Full Service Competition Under the Telecommunications Act of 1996*, 440 P.L.I. 457, 460 (1996). See also BAUMOL & SIDAK, *supra* note 185, at 9-10 (noting that local exchange carriers still possess bottlenecks, although competition in the form of new technologies threatens to erode them).

192. The Frontier Corporation, based in Rochester, New York, created the Open Market Plan, which split its operations into two subsidiaries: a network owner and a retail service provider. See Craig D. Dingwall, *The Last Mile: A Race for Local Telecommunication Policy*, 48 FED. COMM. L.J. 105, 112-13 (1995).

193. Using the Frontier example in *supra* note 193, as of mid-1997, the incumbent service provider appeared to maintain in excess of 95 percent of the business in spite of open access. See *Duff & Phelps Cites Poor Results in Downgrading Frontier Ratings*, COMM. BUS. & FIN., May 26, 1997, at 4. However, more vigorous competition is expected as new start-up firms emerge. See Mike Dickinson, *Tiny Phone Firm Plans Local Service*, ROCHESTER BUS. J., Apr. 11, 1997, at 1.

194. Some debate has arisen with respect to the constitutionality of rate regulation in the telecommunications industry. The arguments center on the question of whether the Takings

Other nations have implemented varying open access strategies in the railroad industry to achieve different goals.¹⁹⁵ For example, in the United Kingdom, government efforts to privatize the industry and encourage competition led to the creation of a firm that owns the track network and rents it to train operators.¹⁹⁶ This open access policy has attracted foreign investment, including one U.S. firm that manages a train operator in the United Kingdom.¹⁹⁷ Three freight operators compete under this system, with one firm maintaining an 80 percent market share; others are considering entry into the market.¹⁹⁸ At present, the freight operators seem to be enjoying economic success and greater investment in the railroad infrastructure is occurring, although some conflicts have arisen with the entity that owns the track network over infrastructure and the appropriate rental fee.¹⁹⁹

Clause of the United States Constitution is violated when regulators require competition in markets traditionally granted monopoly franchises. See J. G. Sidak & Daniel F. Spulber, *Deregulatory Takings and Breach of the Regulatory Contract*, 71 N.Y.U.L. REV. 851, 933-34 (1996); William J. Baumol & Thomas W. Merrill, *Deregulatory Takings, Breach of the Regulatory Contract, and the Telecommunications Act of 1996*, 72 N.Y.U. L. REV. 1037, 1038 (1997).

195. For example, Sweden has "separated track services and train operation into two public agencies, with the train operator paying charges for track use." See Ordovery & Pittman, *supra* note 110, at 276. Competing train operators have also used the network. However, the purpose of this reform was to facilitate equalization of rail and truck carriers, and not to engender competition. See *id.* In contrast, the United Kingdom's effort to create an open access system, which is described in the text, was intended to encourage competition and efficiency over the previous national railroad system. See *id.* In addition, reforms in the European Union are underway to transform the national railway systems into "freeways" open to other private operators. These reforms, however, are in their infancy. See *supra* note 171. In Germany, United Parcel Service is now considering running overnight trains over state owned tracks. See *UPS Will Decide Soon If Overnight Rail Service in Germany Is Feasible*, J. COM., Jan. 5, 1999, at 12A.

196. See Ordovery & Pittman, *supra* note 110, at 276.

197. Wisconsin Central Transportation has acquired a 34 percent stake in the English Welsh & Scottish Railway, a train operator. Interestingly, Wisconsin Central has characterized its main competitive rival as the trucking industry. See WISCONSIN CENT. TRANS. CORP., ANNUAL REPORT 10-13 (1997). See also Mel Holly & Nigel Harris, *Britain's Freight Rail Revolution*, TRAINS MAG., July 1998, at 54.

198. See Holly & Harris, *supra* note 198, at 62-63.

199. See *id.* at 58, 63. In a very recent decision, the British courts have limited the permissible return the track owning entity can earn. The decision will likely lower access fees to operators. See Aviva Freundmann, *British Rail Owner Reined In*, J. COM., Dec. 11, 1998, at 13A.