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Public Interest Comment[1] on

The Surface Transportation Board's Notice of Public Hearing Railroad Revenue Adequacy, Dockets No. EP 761 and EP 722

November 26, 2019

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The George Washington University Regulatory Studies Center

The George Washington University Regulatory Studies Center improves regulatory policy through research, education, and outreach. As part of its mission, the Center conducts careful and independent analyses to assess rulemaking proposals from the perspective of the public interest. This comment in response to the Surface Transportation Board's (STB's) Notice of Public Hearing on Railroad Revenue Adequacy does not represent the views of any particular affected party or special interest, but is designed to evaluate the effect of the STB's proposals on overall consumer welfare and assist the board in identifying the primary impacts of the proposed rule and feasible alternatives.

Introduction

The Staggers Rail Act of 1980 deregulated most freight rail rates but left the Interstate Commerce Commission (and now the STB) with responsibility for ensuring that rail rates are "just and reasonable" for shippers who lack good transportation alternatives to a single railroad. The STB can regulate a rate if the shipper complains to the STB, the STB finds that the railroad is "market dominant" for the shipment(s) at issue, and the STB finds that the rate is not just and reasonable. The Staggers Act essentially requires the STB to strike a balance between the goals of ensuring that rates are reasonable when a railroad lacks effective competition, providing "fair

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[1] This comment reflects the views of the author, and does not represent an official position of the GW Regulatory Studies Center or the George Washington University. The Center's policy on research integrity is available at http://regulatorystudies.columbian.gwu.edu/policy-research-integrity.

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and expeditious" decisions when regulation is required, and ensuring that carriers earn adequate revenues to provide a "safe and efficient rail transportation system."[3]

This comment addresses three of four recommendations from the STB's Rate Reform Task Force[4] that the STB asked hearing participants to address in its Notice of Public Hearing: (1) Define and calculate long-term revenue adequacy for individual railroads over a multi-year period, (2) Place a ceiling on rate increases for railroads that are long-term revenue adequate and have market dominance over the particular shipment at issue, and (3) Remove bottleneck protections for long-term revenue adequate carriers, so that a shipper could more easily get a regulated rate for the portion of a route on which a single railroad is market dominant and then negotiate with another railroad for a competitive rate on the remainder of the route.

I fully agree with the comments on these proposals submitted by members of the Transportation Research Board's Committee for a Study of Freight Rail Transportation and Regulation (TRB Study Committee), on which I served.[5] I am submitting this separate comment to comply with the STB's requirement that individuals requesting to speak at the December 12, 2019 hearing must submit their written comments by November 26, 2019. This comment solely represents my own views, as it addresses some topics that the former members of the TRB Study Committee did not address in our collective comment.

The idea of calculating railroad revenue adequacy over a multi-year period is a sound one. However, such a calculation is just one aspect of a holistic and in-depth assessment of industry conditions. The STB should also analyze rate trends for shipments for which multiple indicia indicate that a railroad may be market dominant. Such an analysis could furnish systematic empirical evidence to help the STB determine whether there is a widespread, significant problem that might justify significant changes in the regulatory system.

The STB should decline to adopt the proposed caps on rate increases. Because Uniform Rail Costing System (URCS)-based variable cost calculations do not measure true variable costs, caps that depend on URCS-based variable costs will achieve neither economic efficiency nor any concept of equity that depends on altering the markups shippers pay over true variable costs.

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[3] Staggers Rail Act of 1980, Public Law 96-448, §101.

[4] Rate Reform Task Force, REPORT TO THE SURFACE TRANSPORTATION BOARD (2019) [Hereinafter referred to as "Rate Reform Task Force Report."]

[5] See Kenneth D. Boyer, Jerry Ellig, José A. Gómez-Ibáñez, Anne V. Goodchild, Richard L. Schmalensee, Wesley L. Wilson, and Frank A. Wolak, "Public Interest Comment The Surface Transportation Board's Notices of Proposed Rulemaking: Docket No. EP 761, Railroad Revenue Adequacy, and Docket No. EP 722, Railroad Revenue Adequacy," October 17, 2019. These individuals' comments are based on the report they produced for the Transportation Research Board, MODERNIZING FREIGHT RAIL REGULATION, Transportation Research Board Special Report No. 318 (2015), https://www.nap.edu/download/21759 [Hereinafter referred to as "MODERNIZING FREIGHT RAIL REGULATION."]

Given the troubled history of rate regulation in the pre-Staggers era and the difficulty of making credible commitments to limit price regulation, the STB should exercise extreme caution in regard to any proposal for more extensive general rate regulation.

Before deciding whether to move forward with the bottleneck proposal, the STB should estimate the amount of traffic likely to be eligible for competitive access and the potential effect on railroad revenues and investment. These estimates would help the STB ascertain whether there is a widespread problem that might justify the regulatory change and whether the change would likely entail significant cumulative costs.

In two other proceedings, the STB has proposed a streamlined approach to assessing whether a railroad has market dominance[6] and a final offer process for small rate disputes.[7] These proposals, along with improvements suggested by the former members of the TRB Study Committee,[8] have the potential to effectively increase protections for captive shippers without the significant side-effects associated with the rate increase cap and bottleneck proposals discussed in this comment. I respectfully suggest that the STB's resources could be better utilized by conducting a full regulatory impact analysis for those other two proceedings and adjusting the proposals based on what that analysis reveals.[9]

Definition of Long-term Revenue Adequacy

The STB currently calculates each railroad's rate of return annually and compares these figures to an industry-wide cost of capital. The Rate Reform Task Force proposed that the STB calculate a new measure of long-term revenue adequacy over a multi-year period. The time span would cover the length of the business cycle, including a year in which a recession begins and a year after the year in which a recession begins, with a minimum period of five years.[10]

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[6] Surface Transportation Board, "Market Dominance Streamlined Approach: Notice of Proposed Rulemaking," Docket No. EP 756 (September 11, 2019).

[7] Surface Transportation Board, "Final Offer Rate Review: Notice of Proposed Rulemaking," Docket Nos. EP 755 and EP 665 (Sub-No. 2) (September 11, 2019).

[8] Kenneth D. Boyer, Jerry Ellig, José A. Gómez-Ibáñez, Anne V. Goodchild, Richard L. Schmalensee, Wesley L. Wilson, and Frank A. Wolak, "Public Interest Comment The Surface Transportation Board's Notices of Proposed Rulemaking: Docket No. EP 755, Final Offer Rate Review, and Docket No. EP 756, Market Dominance Streamlined Approach," October 17, 2019.

[9] For an outline of how to conduct a regulatory impact analysis for those two proceedings, see Jerry Ellig, "Public Interest Comment on the Surface Transportation Board's Proposed Rules: Market Dominance Streamlined Approach, Docket No. EP-756, Final Offer Rate Review Docket Nos. EP 755 and EP 665 (Sub-No. 2), and Solicitation of Information: Association of American Railroads – Petition for Rulemaking, Docket No. EP 752," November 6, 2019, https://regulatorystudies.columbian.gwu.edu/stbs-market-dominance-and-final-offer-rate-review.

[10] Rate Reform Task Force Report at 32-36.

If the goal is to gauge railroads' financial health, estimating returns over a multi-year period is certainly superior to a series of single-year snapshots. In its report on *Modernizing Freight Rail Regulation*, the TRB Study Committee recommended that the STB replace its annual calculation of revenue adequacy with periodic studies of "the railroad industry's economic performance, competitive conditions, and rate and service levels."[11] The proposal to assess long-term revenue adequacy is a step in this direction.[12]

However, as proposed, the long-term revenue adequacy calculation could itself turn into a mechanical process that provides limited insight. The TRB Study Committee's report envisioned "periodic assessments of economic and competitive conditions in the industry as a whole on the basis of more varied data and analytic techniques."[13] A longer-term assessment of revenue adequacy could be one part of this assessment, but by no means the only part.

A more holistic assessment of industry performance is crucial for determining whether there is a significant problem that might necessitate some change in current regulatory practices. For example, a critical part of such a longer-term assessment would be an analysis of rate trends for traffic that may be captive to a single railroad. Such an analysis could determine whether these rates have increased faster than other rates or faster than the rate of inflation. It could also identify whether rate changes on potentially captive traffic are significantly different for railroads that are long-term revenue adequate. The report of the Rate Reform Task Force does not provide evidence on this issue, noting only that shippers say railroads have increasingly made "take it or leave it" offers without explaining reasons for rate increases.[14] The STB should have empirical evidence of a widespread, significant problem -- not just anecdotal complaints -- before it considers significant changes in the regulatory system such as rate increase caps or removal of bottleneck protections.

Absent a market dominance determination in a rate case for every shipment, the STB cannot know for sure which shipments are carried by a railroad under conditions of market dominance. But the STB could at least identify shipments where multiple indicia suggest market dominance is possible. Using the carload waybill sample and other available data, it is possible to identify whether a shipment lacks feasible competitive alternatives (such as another railroad or water transport), travels a distance that makes truck transport a feasible alternative, travels at a rate above some specified percent of average variable cost (R/VC), or is outside the probability

[11] Modernizing Freight Rail Regulation at 214.

[12] As the TRB Study Committee pointed out, it is not clear whether the business cycle or some other multi-year time period is the most insightful time span to choose for evaluating long-term revenue adequacy. See Boyer et al., *supra* note 5.

[13] Modernizing Freight Rail Regulation at 215.

[14] Rate Reform Task Force Report at 9.

distribution of rates charged for similar shipments that are deemed competitive.[15] Given the unreliability of URCS-derived R/VC calculations as a guide to identifying railroad market power,[16] it is especially important that an additional empirical method, such as rate benchmarking, be employed as a cross-check. After identifying the universe of potentially market-dominant shipments, the STB could then assess whether rates for these shipments have increased more rapidly than rates for other shipments or increased more rapidly than the rate of inflation for railroads that are long-term revenue adequate.

Rate Increase Constraint

The Rate Reform Task Force proposed a rate increase constraint for tariffed rates whose level would depend on the amount by which the railroad's revenues exceed the amount needed to ensure long-term revenue adequacy. A separate rate increase constraint would be calculated for each commodity-service characteristic combination. The surplus revenues would be allocated to each commodity-service characteristic combination based on each category's share of revenues with R/VC ratios exceeding 180 percent.[17]

There are three potential problems with this approach: economic efficiency, equity, and credible commitment. Consider each in turn.

Economic efficiency

The STB may want to take efficiency consequences into account when deciding which commodity-service characteristic combinations are eligible for rate increase caps or how the railroad's surplus profits should be allocated among the commodity-service characteristic combinations to calculate the caps. The proposed approach does not allow the STB to do this.

The proposed approach relies heavily on R/VC ratios to identify which commodity-service characteristic combinations are eligible for rate increase caps and how the railroad's surplus profits will be allocated among the commodity-service characteristic combinations to calculate the caps. The "variable cost" in the denominator of the R/VC ratio is derived from the Uniform Rail Costing System (URCS). URCS arbitrarily allocates many costs that are not actually variable with respect to the individual shipment.[18] As a result, the R/VC ratio does not reliably indicate the ratio of revenue to costs that are actually variable. In other words, the

15 For a list of databases that can be used to identify a shipment's origin, destination, and availability of competitive alternatives, see Wesley W. Wilson and Frank A. Wolak, "Benchmark Regulation of Multiproduct Firms: An Application to the Rail Industry," National Bureau of Economic Research Working Paper No. 25268 (2018) at 10.

16 MODERNIZING FREIGHT RAIL REGULATION at 107-22; Wesley W. Wilson and Frank A. Wolak, "Freight Rail Costing and Regulation: The Uniform Rail Costing System," 49 *Review of Industrial Organization* 229 (2016).

17 Rate Reform Task Force Report at 37.

18 MODERNIZING FREIGHT RAIL REGULATION at 107-22; Wilson and Wolak, *supra* note 16.

URCS-based R/VC ratio does not accurately indicate how large of a markup over actual variable costs the shipper is paying.

Economically efficient pricing requires that customers pay markups that vary based on the customer's elasticity of demand.[19] The efficient markup is a markup over the costs that are actually variable, not a markup over allocated non-variable costs such as URCS provides. In the absence of information about actual variable costs, the STB simply cannot know how the proposed rate increase caps would affect economic efficiency. Given the documented arbitrariness of URCS, it is doubtful that the proposed rate increase caps reflect efficiency considerations, even if the STB wants them to.

Equity

The arbitrariness of R/VC calculations based on URCS also undermines the equity rationale for the proposed rate increase caps. The caps would be calculated by allocating surplus revenues to each commodity-service characteristic combination based on each category's share of revenues with R/VC ratios exceeding 180 percent.[20] According to the Rate Reform Task Force Report, "The purpose of this assignment is to ensure that all commodities derive benefit from the rate increase constraint and that this benefit is proportionate to their contribution."[21] But since URCS-based R/VC ratios are not based on costs that are actually variable, URCS-based R/VC ratios do not actually indicate how much of a contribution a shipment is making to joint and common costs. Therefore, it is not clear whether the proposed caps actually achieve the equity goal of ensuring that different commodity-service characteristic combinations receive benefit from the caps in proportion to their actual contribution.

For similar reasons, it is also unclear whether the proposed caps would achieve any other equity objectives that are based on markups over variable cost. For example, the STB might prefer to offer most of the potential rate relief to shipments paying the very highest markups over variable cost, on the grounds that these shipments pay the most excessive rates, or because these commodities are most likely to be necessities that account for a large portion of the budgets of low-income households.[22] This approach would involve allocating as much of the surplus profit to the commodity-service characteristics with the highest markups as is necessary to bring their markups down to some specified level. Other shipments paying high, but not the highest, markups would be eligible for rate caps only if surplus profits remain after calculating rate caps for the shipments paying the highest markups. Alternatively, the STB might seek to make the

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[19] Wilson and Wolak, *supra* note 15, at 1-2. This is an application of the general economic theory outlined by Frank Ramsey, "A Contribution to the Theory of Taxation," 37 *Economic Journal* 47 (1927).

[20] Rate Reform Task Force Report at 37.

[21] Id.

[22] See, e.g., comments of Mark Cooper, Transcript of Surface Transportation Board Public Roundtable, October 25, 2016, 20-21.

percentage markups as equal as possible for all commodity-service characteristic combinations that qualify for rate caps. My point is not to advocate for any particular concept of equity. My point is simply that URCS-based variable cost calculations will not be reliable guides to implementing any concept of equity that attempts to make markups over variable costs more equitable, because URCS-based variable costs are not true variable costs.

Credible commitment

There is also a broader principle of regulatory design that the STB should consider if it contemplates making such a significant change as adopting rate increase caps. Simply put, can the STB credibly commit to imposing only those caps necessary to prevent railroads from earning surplus revenues – and can current STB members bind future STB members to this commitment?

A regulated firm that makes long-lived capital investments takes the risk that future regulatory decisions could expropriate some of the value of those investments. It is well-known among scholars of public utility economics that if the regulator cannot credibly commit to avoiding expropriation, the firm will likely undertake a sub-optimal level of investment due to the risk of expropriation.[23] Reduced railroad investment could affect the quantity, quality, and safety of rail service. Given the long and unfortunate history of rate regulation in the pre-Staggers era,[24] the STB should exercise extreme caution in regard to any proposal for more extensive rate regulation.[25]

Removal of Bottleneck Protections

The Rate Reform Task Force proposed to make it easier for a shipper served by a single railroad to obtain a regulated rate for a short-haul movement that would take its traffic to an interchange with a competing railroad. The shipper could do this if the railroad is long-term revenue adequate.[26]

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[23] Graeme Guthrie, "Regulating Infrastructure: The Impact on Risk and Investment," 44 J. ECON. LIT. 925, 950–51 (2006).

[24] See, e.g, MODERNIZING FREIGHT RAIL REGULATION at 13-20; Jerry Ellig, "Railroad Deregulation and Consumer Welfare," 21 J. REG. ECON. 143 (2002); C. Winston, T.M. Corsi, C. Grimm. and C.A. Evans, THE ECONOMIC EFFECTS OF SURFACE FREIGHT DEREGULATION (Brookings, 1990); Jerry Ellig and Patrick A. McLaughlin, "The Regulatory Determinants of Railroad Safety," 49 REV. IND. ORG. 371 (2016).

[25] For examples of empirical studies that address this question in the context of telecommunications, see George S. Ford, "Regulation and Investment. in the U.S. Telecomm. Industry," 50 APPLIED ECON. 6073 (2018); Thomas W. Hazlett and Anil Caliskan, "Natural Experiments in Broadband Regulation," 7 REV. NETWORK ECON. 460 (2008); Thomas W. Hazlett & Joshua D. Wright, "The Effect of Regulation on Broadband Markets: Evaluating the Empirical Evidence in the FCC's 2015 'Open Internet' Order," 50 REV. INDUS. ORG. 487 (2017).

[26] Rate Reform Task Force Report at 39-41.

All other things equal, this type of competitive access can serve as a substitute for regulation of the rate for the entire length of the journey. The shipper can obtain a regulated rate for the short-haul and presumably negotiate a lower rate for the rest of the haul with the competing railroad, thus lowering the overall cost of the shipment.

The Task Force's competitive access proposal appears to be much more extensive than the proposal for caps on rate increases. Rather than just capping rate increases, this proposal would allow shippers served by a single railroad to lower their current rates via competitive access as long as the railroad serving the shipper is long-term revenue adequate. Furthermore, there appears to be no built-in limit to the potential rate reduction for an individual shipper. The size of the rate reduction depends on the regulated rate the shipper is able to obtain from the STB for the short-haul, plus the rate the shipper is able to negotiate with the competing railroad.

Before deciding whether to move forward with this proposal, the STB should estimate the amount of traffic likely to be eligible for competitive access and the potential effect on railroad revenues and investment. Estimating the amount of traffic would provide some empirical evidence indicating whether there is a significant and widespread problem that this regulatory change might address. Estimating the effect on railroad revenues and investment would provide some empirical evidence on the likely size of the proposal's cumulative costs. There will necessarily be some uncertainties about the amount of revenue at stake, because the rates a shipper might negotiate with a competing railroad are uncertain. But the STB could estimate a range of possibilities to determine whether the likely effects on railroad revenues would be large or small.

Conclusion

The STB sought comments on recommendations from its Rate Reform Task Force that would (1) Define and calculate long-term revenue adequacy for individual railroads over a multi-year period, (2) Place a ceiling on rate increases for railroads that are long-term revenue adequate and have market dominance over the particular shipment at issue, and (3) Remove bottleneck protections for long-term revenue adequate carriers, so that a shipper could more easily get a regulated rate for the portion of a route on which a single railroad is market dominant and then negotiate with another railroad for a competitive rate on the remainder of the route.

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[27] STB, *supra* note 6.

[28] STB, *supra* note 7.

[29] Boyer et. al., *supra* note 5.

[30] Ellig, *supra* note 9.