Contracting (Away) From Regulatory Rate Review: Evidence From Freight Rail

Economics and Regulation of the Freight Rail Industry Third Annual Research Colloquium

JEFFREY T. MACHER

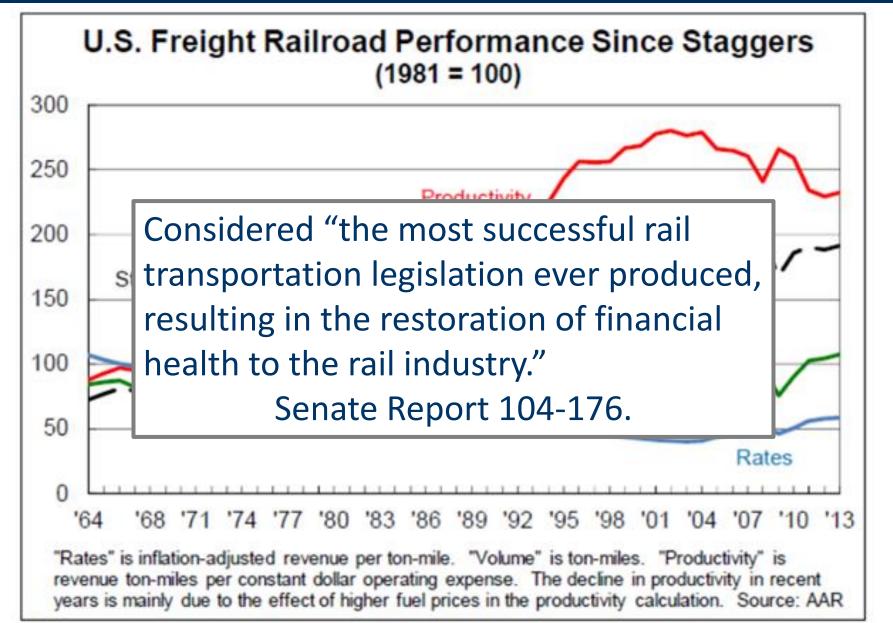
McDonough School of Business Georgetown University Washington, DC 20057 jeffrey.macher@georgetown.edu

JOHN W. MAYO

McDonough School of Business Georgetown University Washington, DC 20052 mayoj@georgetown.edu



US Freight Rail Performance Post-Staggers





Staggers Act and Contracts

Allowance (Section 208)

- Complaint processes expedited.
- Confidential contracts allowed.
- Regulatory challenges to approved contracts prohibited.
- Future restrictions to ensure RRs meet common carrier obligations.

Early Assessment

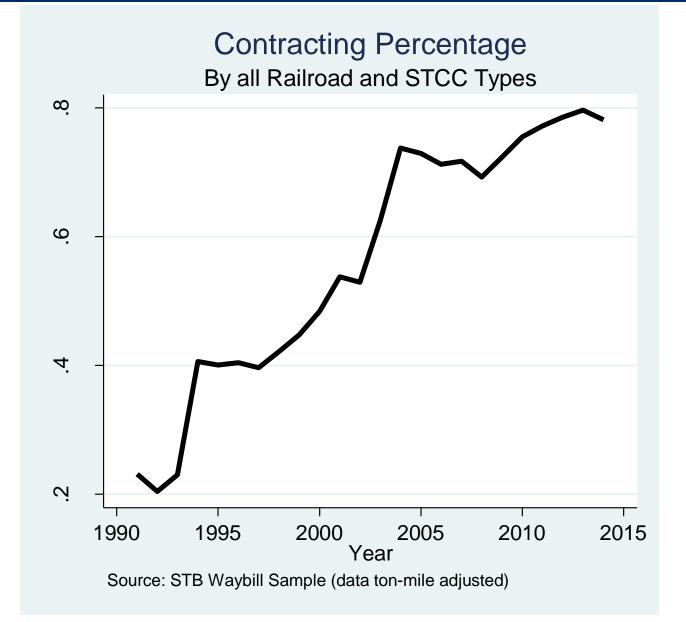
- "contract rate-making has proven to be one of the most successful deregulatory measures provided by the Staggers Act."
 - ICC, March 1984, p. 3.
- "[C]ontracting was mutually beneficial to railroads and shippers."
 - ICC, March 1984, p. 5.

Main Arguments

- Stable / Predictable business.
- Flexible pricing.
- Tailoring (to shipper needs).
- Confidentiality.

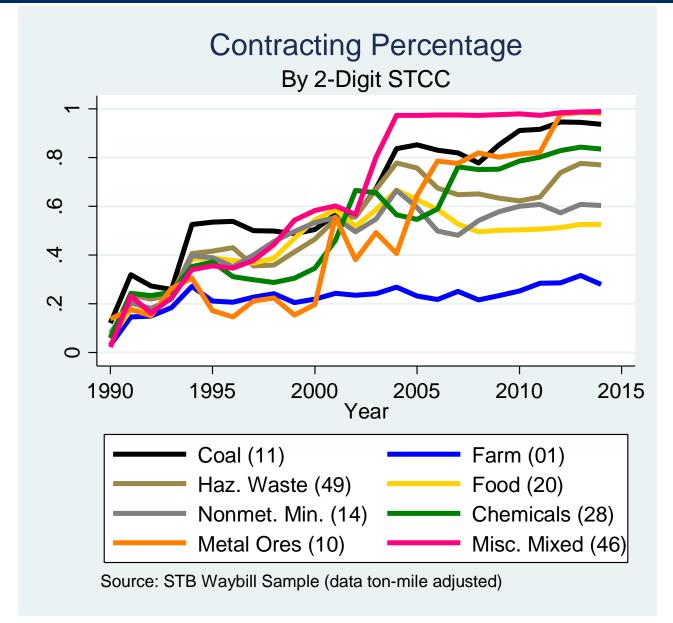


All STCCs (ton-mile adjusted)





Two-Digit STCCs (ton-mile adjusted)





Research Questions

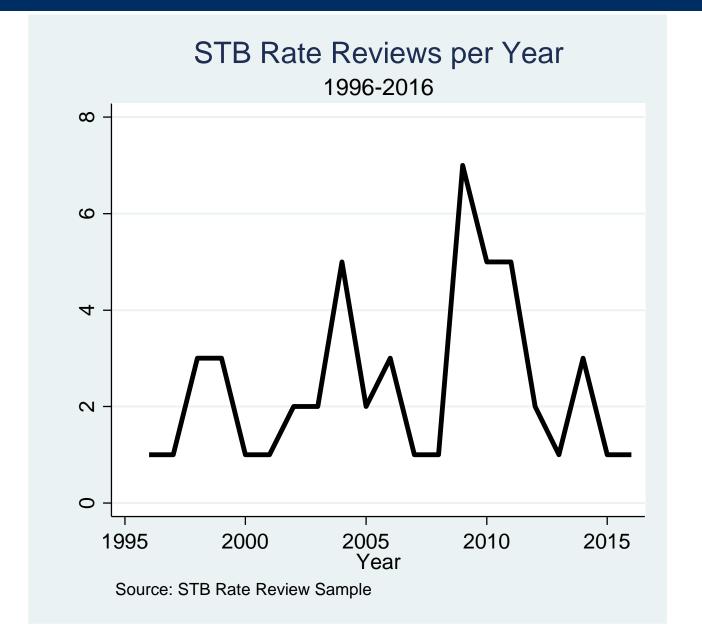
STB Rate Reviews

- Stand-Alone Cost (SAC)
 - "...time, complexity, and costs of filing complaints are barriers that often preclude [shippers] from seeking rate relief." GAO (1999).
- Three-Benchmark
 - "...the shipper community perceives [3B] as too vague, and as requiring prolonged litigation over whether a shipper even qualifies to use them." STB (2007).
- Simplified-SAC
 - "...too complex and too costly relative to the expected benefits." Intervistas (2016).

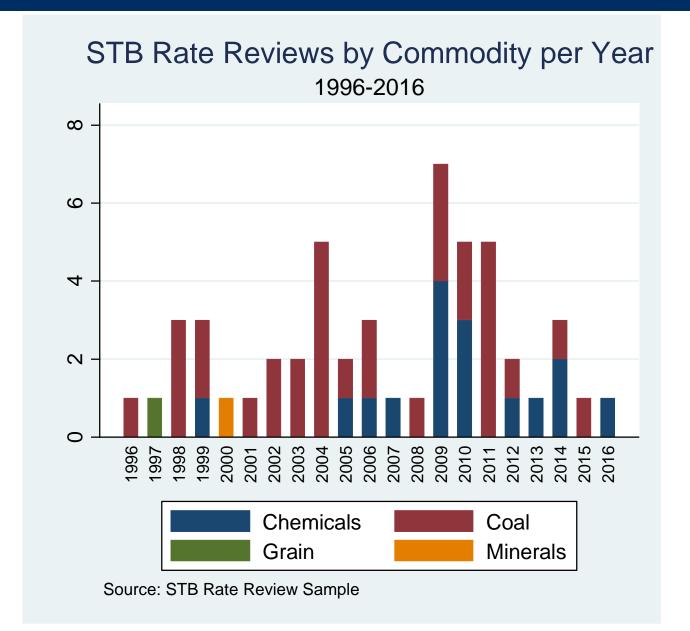
Research Questions

- Have STB rate reviews spurred railroads and shippers to shift from common to contract carriage?
- Does this vary by STB rate-reviewed vs.
 non-STB rate-reviewed commodities
 (STCCs)?
- Does this vary by STB rate-reviewed vs.
 non-STB rate-reviewed freight railroads (RRs)?

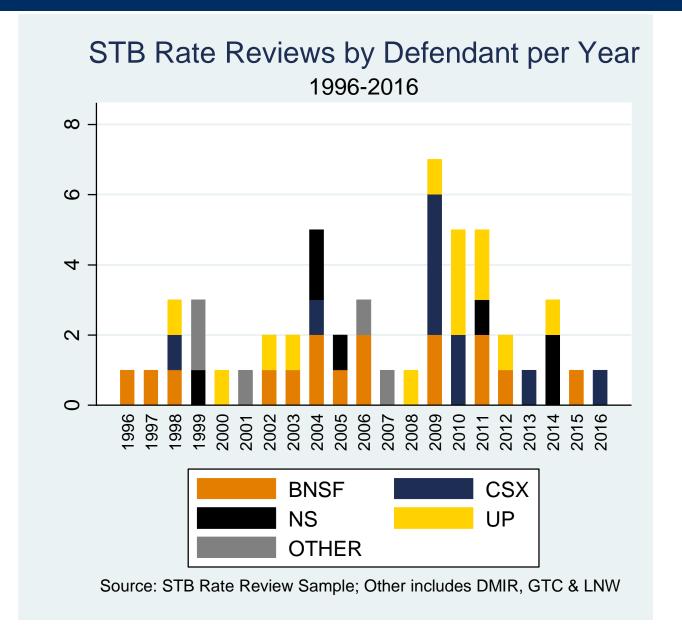














Estimation Approach

Difference-in-Difference (DiD)

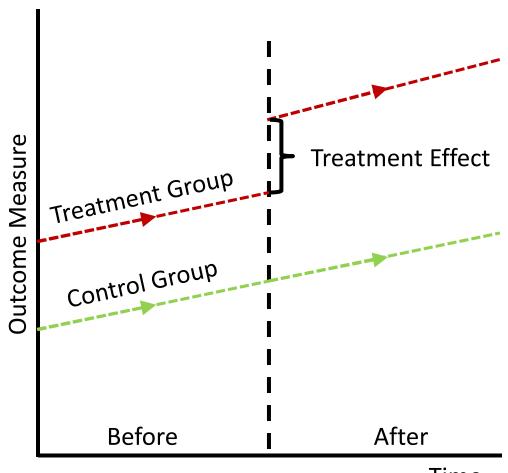
- Effect of a "treatment" at a particular point in time on an outcome measure.
- Average change over time of treatment group compared to control group.

Treatments

- STCC: Chemicals or Coal.
- RR: BNSF, CSX, NS, UP, etc.

Time

- Before: Pre-1999.
- After: Post-1999.



Time



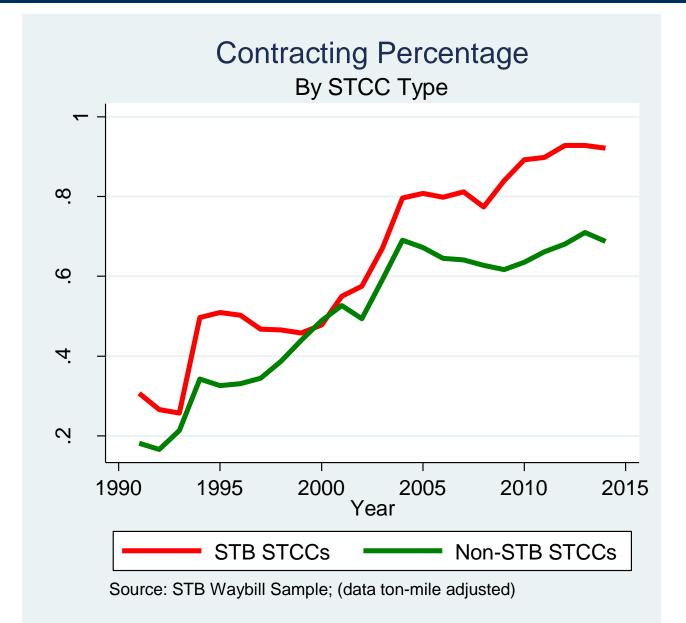
Data and Outcome Measure

- STB Carload Waybill Sample
 - **-** 1990-2014.
 - Drop RRs where ton-mile market share< 0.1% in any STCC-year.
- STB Rate Review Sample
 - 1996-2014.
 - Information on commodity, defendant, date of ruling and outcome.

- Outcome Measure
 - Contract carriage percentage (in tonmiles) of Railroad i for STCC j in Year t.

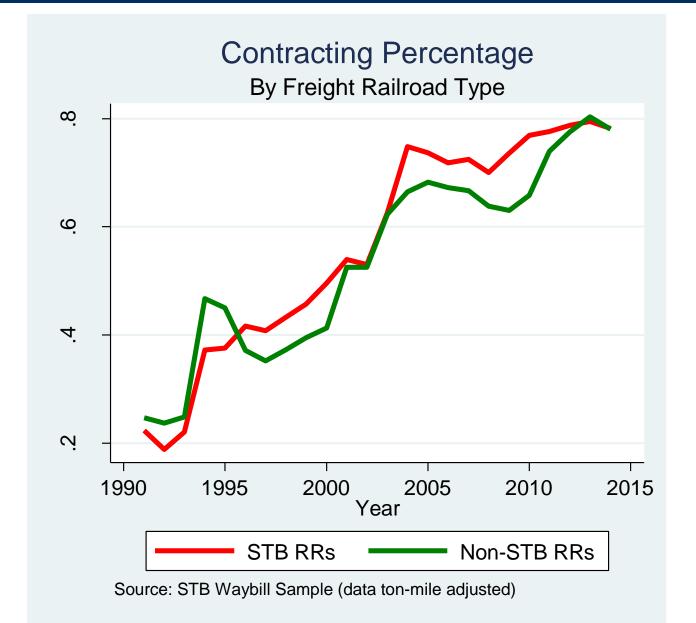


Contract Carriage by STCC Type



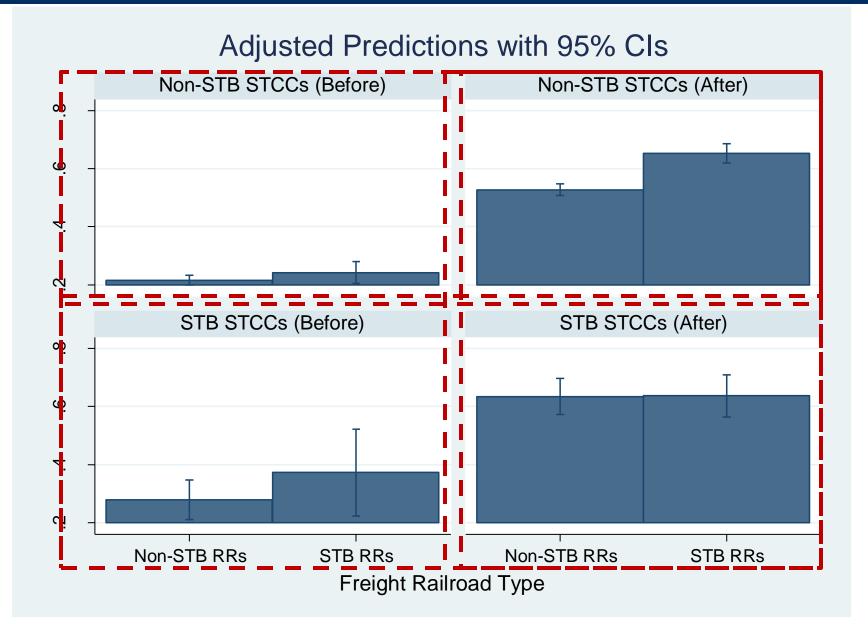


Contract Carriage by RR Type





Contract Carriage Predications





Evolution of Contracting

Discussion

Findings

- Contracting differences over time.
 - Less before STB rate reviews versus more after.
- Contracting differences by commodity.
 - More in coal & chemical versus non-coal & non-chemical (in general).
- Contracting differences by freight railroad post-STB rate review:
 - STB RRs similar across commodities:
 - Non-STB STCCs (65%) vs. STB STCCs (64%).
 - Non-STB RRs different across commodities:
 - Non-STB STCCs (53%) vs. STB STCCs (64%).

Discussion

- STB RRs: Experience spillovers?
 - I.e., writing contracts across <u>all</u> STCCs.
- Non-STB RRs: Comparative adjustments?
 - I.e., avoiding rate reviews in specific STCCs.
- Shippers: Contract preferences?
 - I.e., confidentiality and tailoring benefits.

Next Steps

- Different time windows.
 - E.g., 2003-04 had 7 rate reviews for 4 RRs.
- Particular STB rate review outcomes.
 - I.e., reasonable; unreasonable; settlementown



