



Bates White Sixth Annual Antitrust Conference

June 1–2, 2009 | Washington, DC

Analysis of Consummated Mergers

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2009 Bates White Antitrust Conference

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Why analyze consummated mergers?

- Investigation for purpose of possible enforcement
 - Un-reported transactions
 - Reinvestigation based on post-merger allegations
 - Merger consummated before review is complete
- To learn about competitive conditions in specific industries
 - Past mergers as natural experiments
 - Interest in price effects, quality effects, realized efficiencies, actual entry
 - Can inform enforcement decisions for proposed mergers
 - May inform choice of appropriate remedies for challenged mergers
 - Academic interest

Why analyze consummated mergers? (continued)

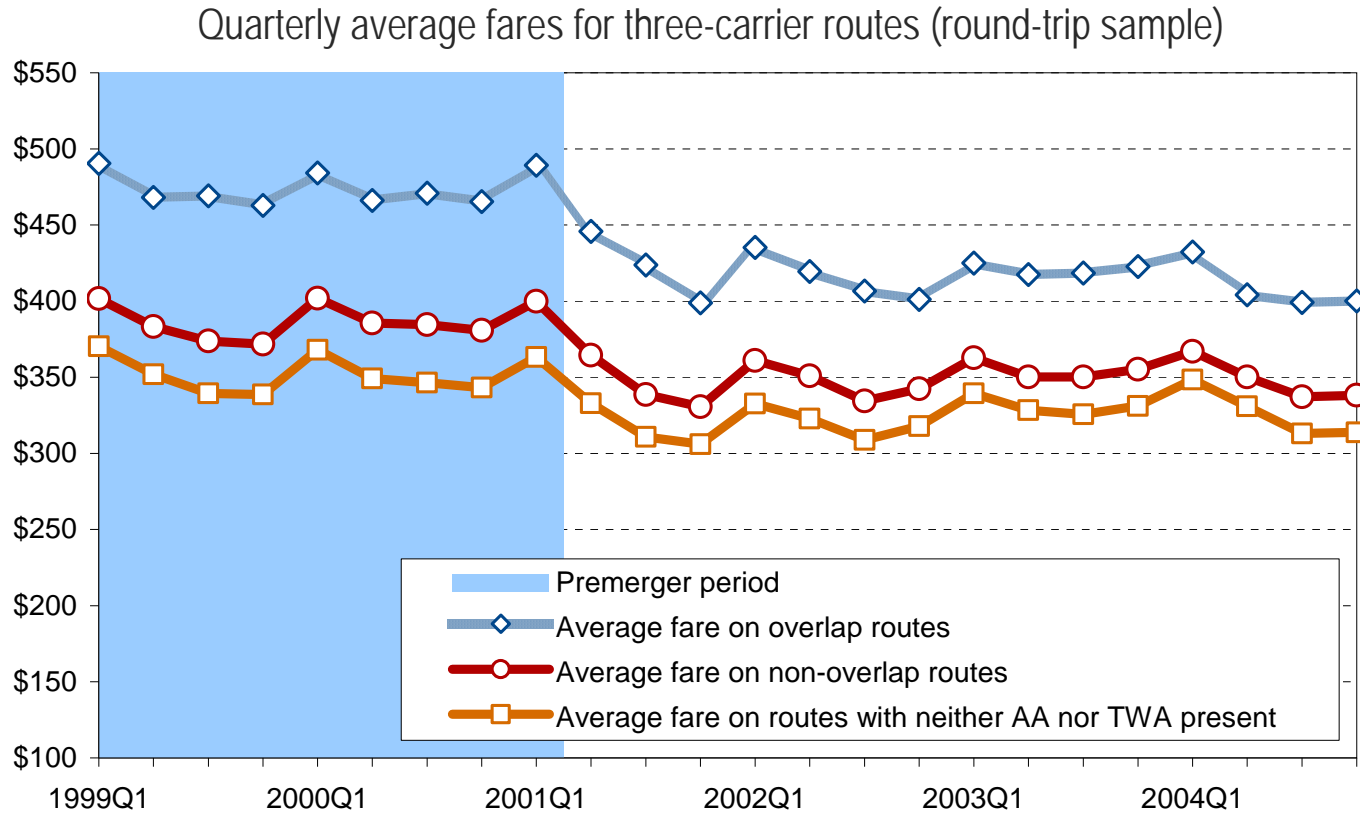
- To inform merger enforcement policy
 - Are the agencies getting the economics right?
 - Agency “scorecard” of outcomes vs predictions in specific cases
 - Evaluate performance of specific tools or models for predicting effects
 - Evaluate effectiveness of merger remedies
 - Is enforcement policy too aggressive or too lenient?
- Conceptual difficulties
 - Sample selection bias (consummated mergers not representative)
 - Probabilistic predictions (e.g. “coordination more likely”)

Some methods for retrospective estimation of merger effects

- Before/after price comparisons
 - Fails to control for influences on price that changed coincidental to the merger
- Difference-in-differences (DID)
 - Uses a “control group” of observations unaffected by the merger as a benchmark to control for these other influences
 - Conceptually simple but requires a valid control
- Dynamic Treatment Effects (DTE)
 - Uses relationship between price and economic predictor variables (e.g. cost and demand shifters) in the pre-merger period to forecast a “but for the merger” price benchmark in the post-merger period
 - Predictor variables must be free from merger influence

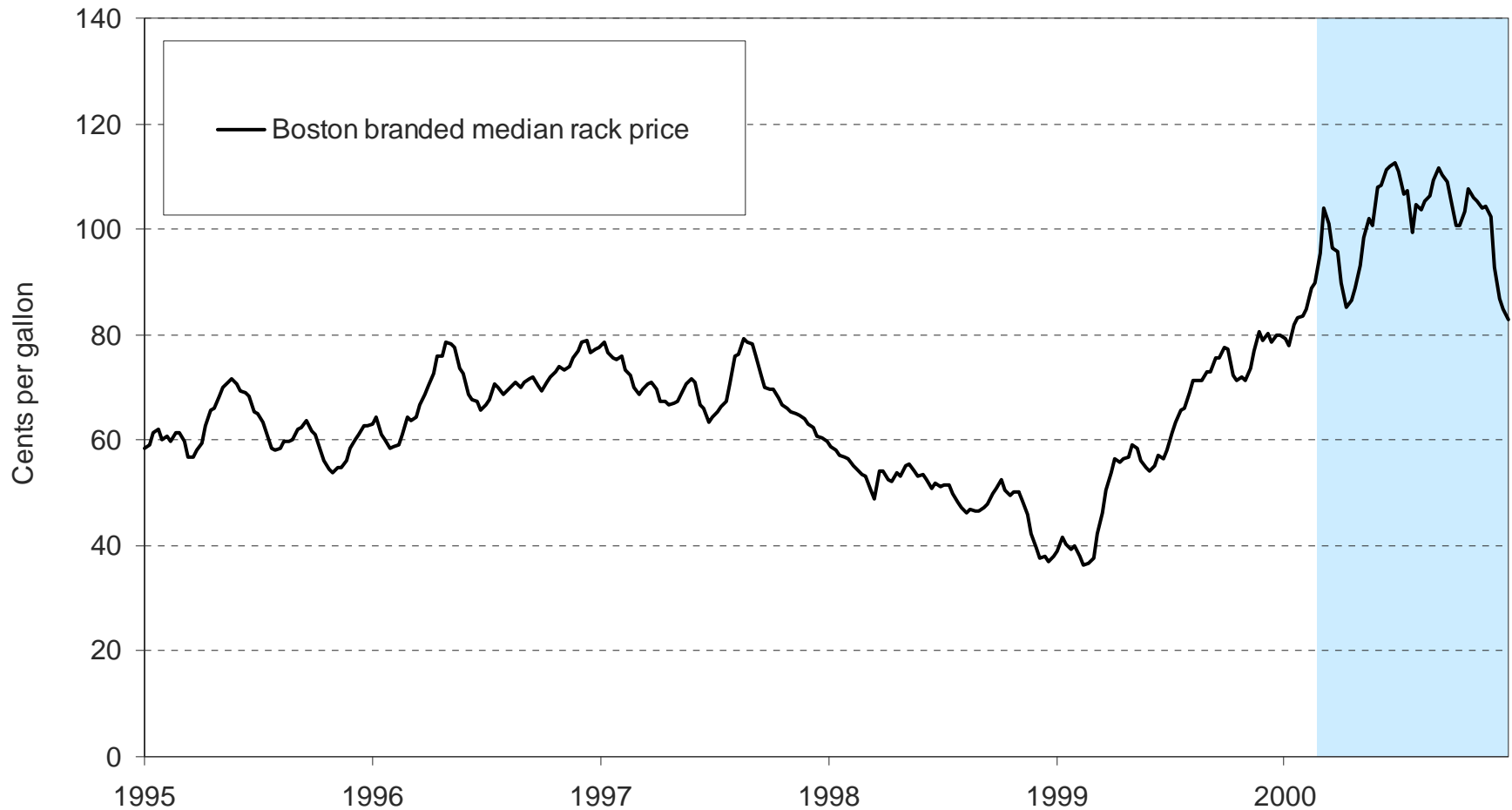
Retrospective study of American Airlines-TWA

Difference-in-differences



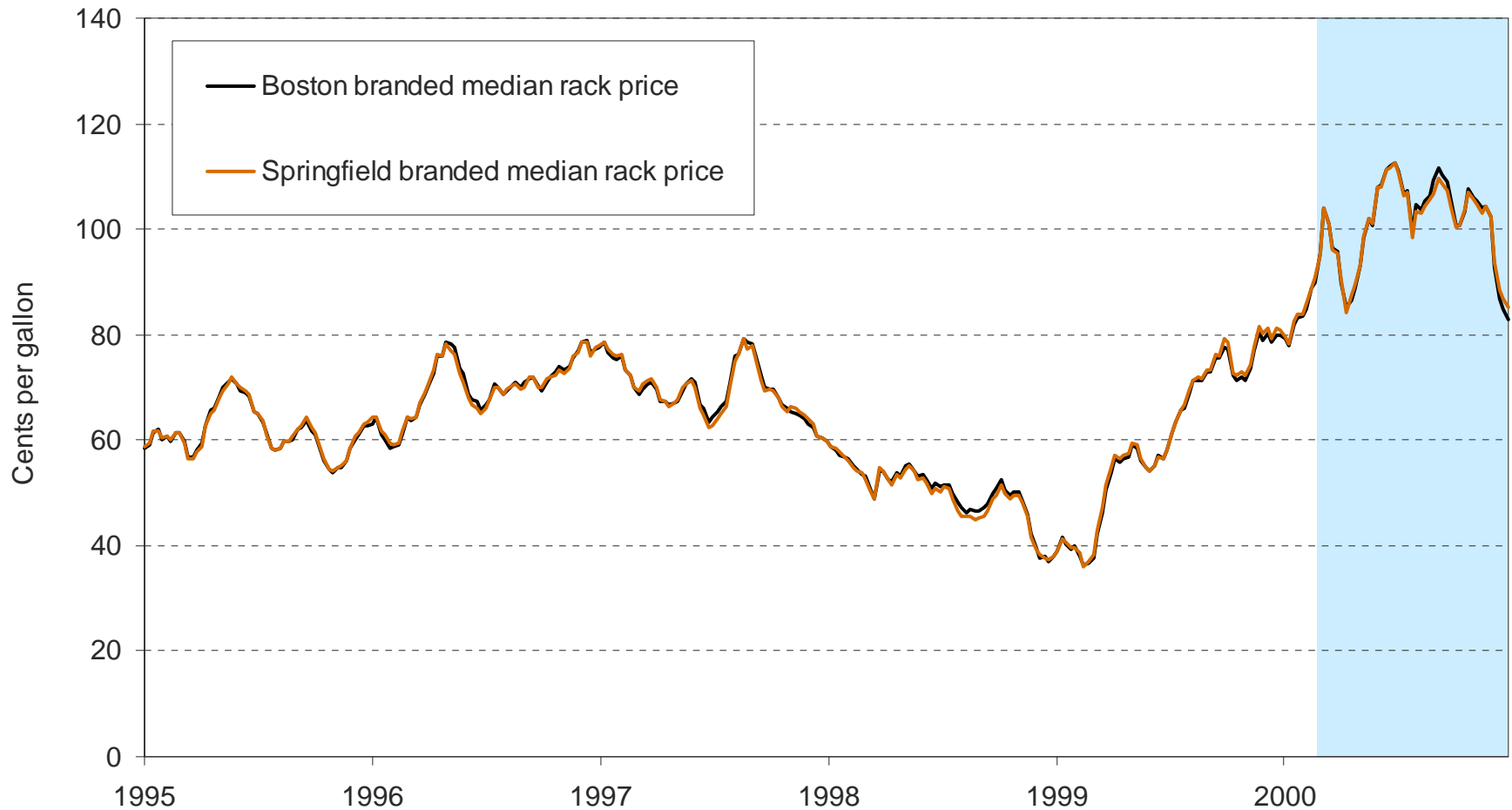
Regression analysis confirms visual impression that the gap narrowed slightly following the merger

Retrospective study of Exxon-Mobil Dynamic Treatment Effects

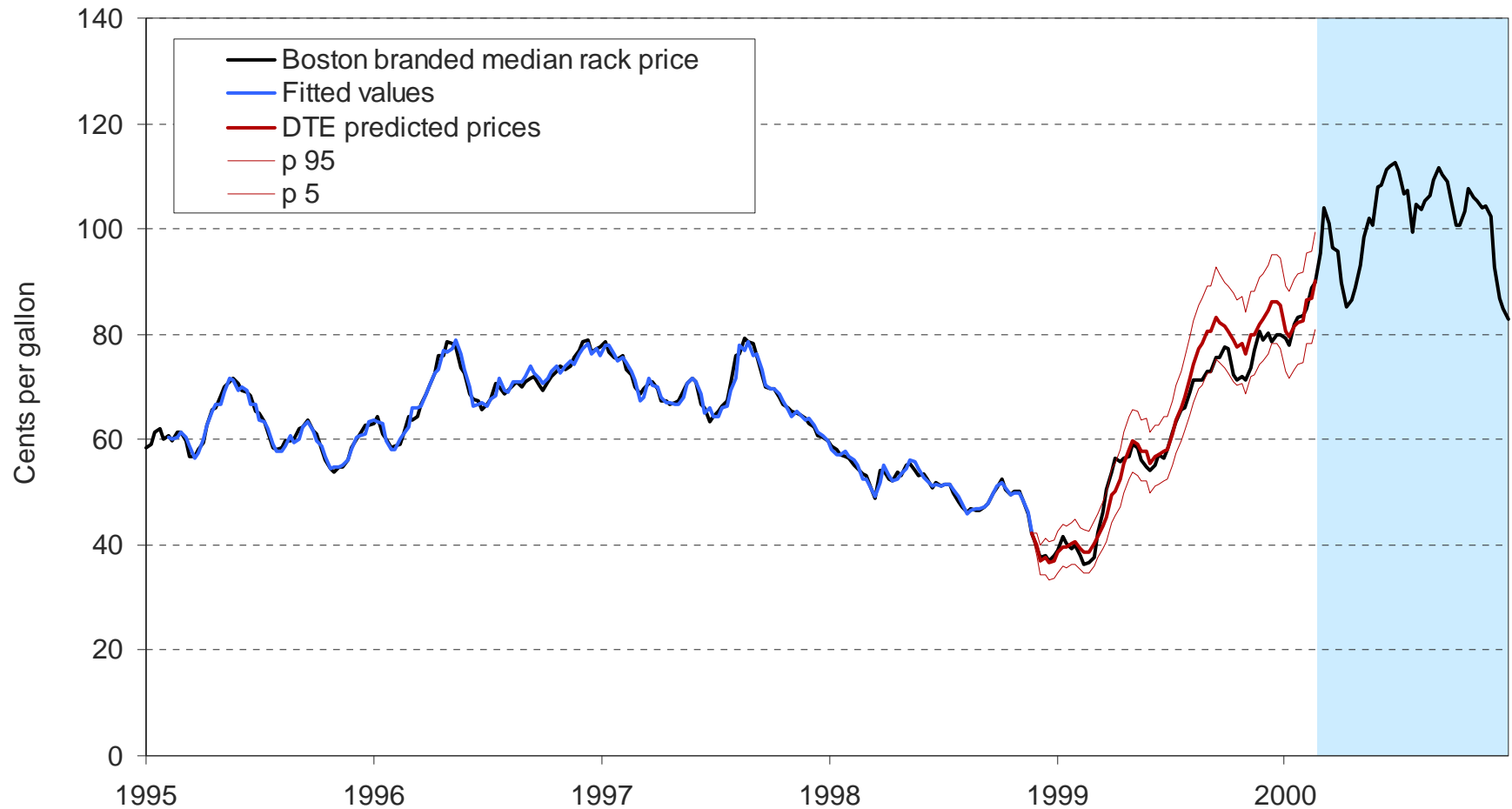


GAO study assumed no effects in Springfield, Massachusetts

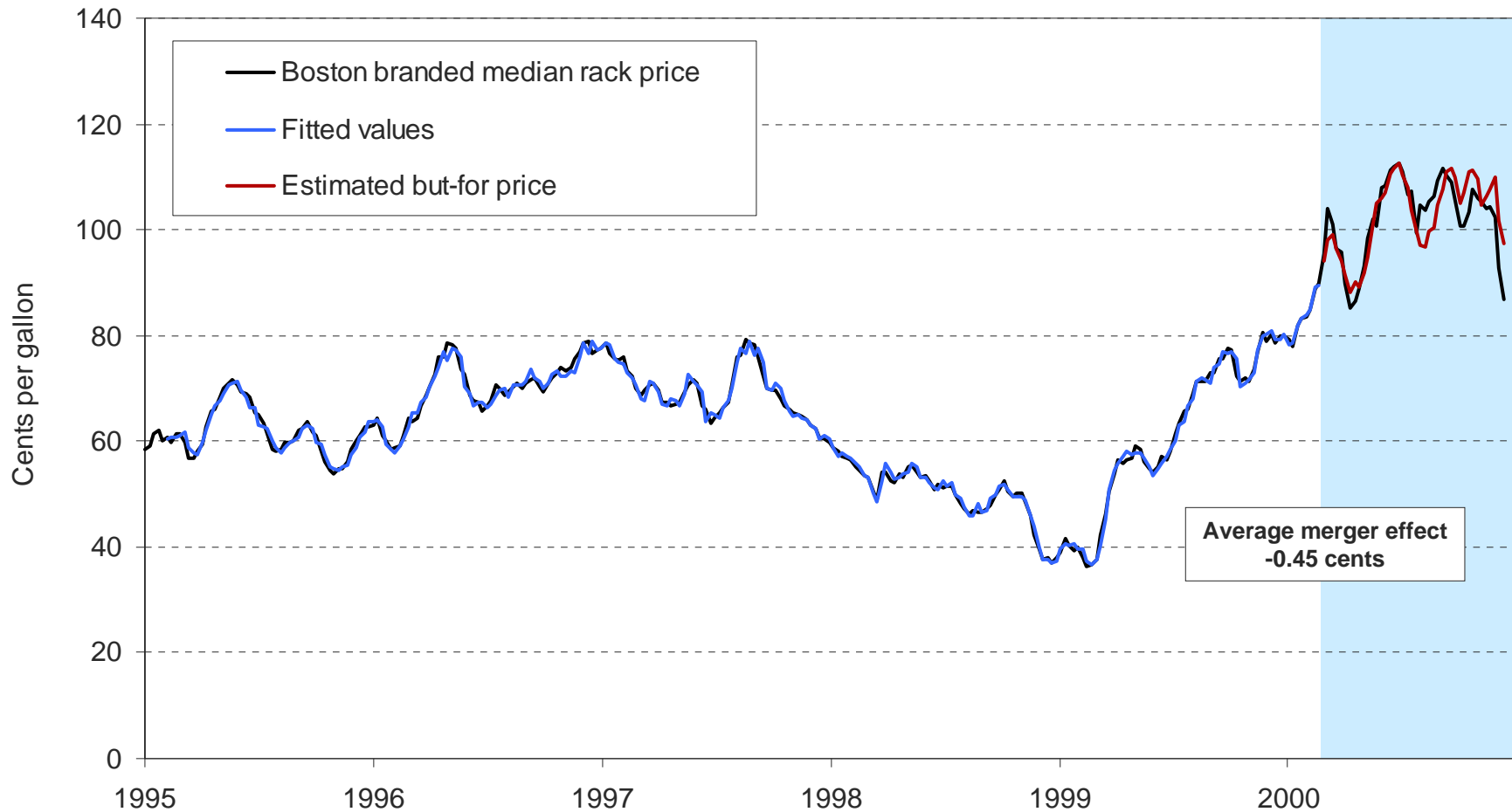
90 miles from Boston on I-90



Dynamic Treatment Effects (DTE) model tracked price volatility well in pre-merger data



DTE analysis showed no significant post-merger price increases



Conclusions

- There are many reasons why we might look back at evidence of effects from consummated mergers
- Appropriate analysis and interpretation depends on the purpose of the study
- Choice of methodology cannot be divorced from the merger theory being applied to a specific case



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