

POST MERGER PRODUCT REPOSITIONING

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Price Only Mergers

- Differentiated Products
- Merging firms internalize price competition; raise prices based on how closely products compete.
- Econometric task: Estimate own and cross price elasticities, compute post merger equilibrium.

Price Only Mergers (cont)

- Non-merging firms get a “free ride” – gain more from merger than merging firms.
- Poses problems for endogenous merger formation: Everyone wants to be an outsider. How to write down a model where there is incentive to be insider. Profitability of merger not important.

Product Repositioning

- Price-plus-location game versus price only game.
- What happens to anti-competitive effects of merger (are price only predictions misleading).
- What happens to merging versus non-merging profits.

Demand

- Uniform distribution of consumers on Hotelling line.
- Demand at each point x on line is logit – mean utility of a product is a function of (price + travel cost) of product at x .
- Aggregate demand is mixed logit; Allows closer products to be better substitutes. (Nevo 2000, Anderson 1992)

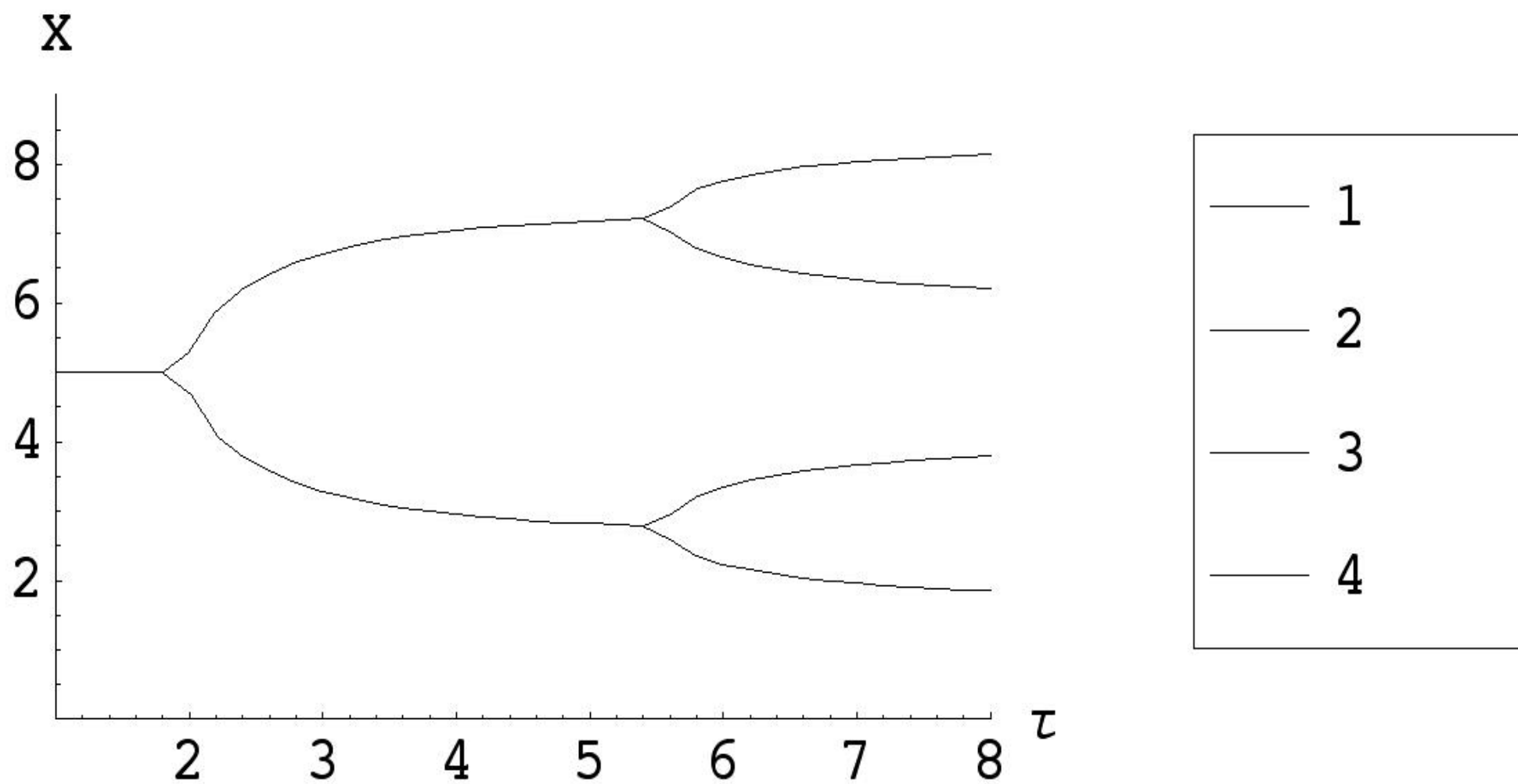
Supply

- Pre-merger: 4 single product firms play price+location game.
- Post-merger: 2 firms merge, then play new price+location game.
- How do merger effects in price+location game compare to a price-only game?

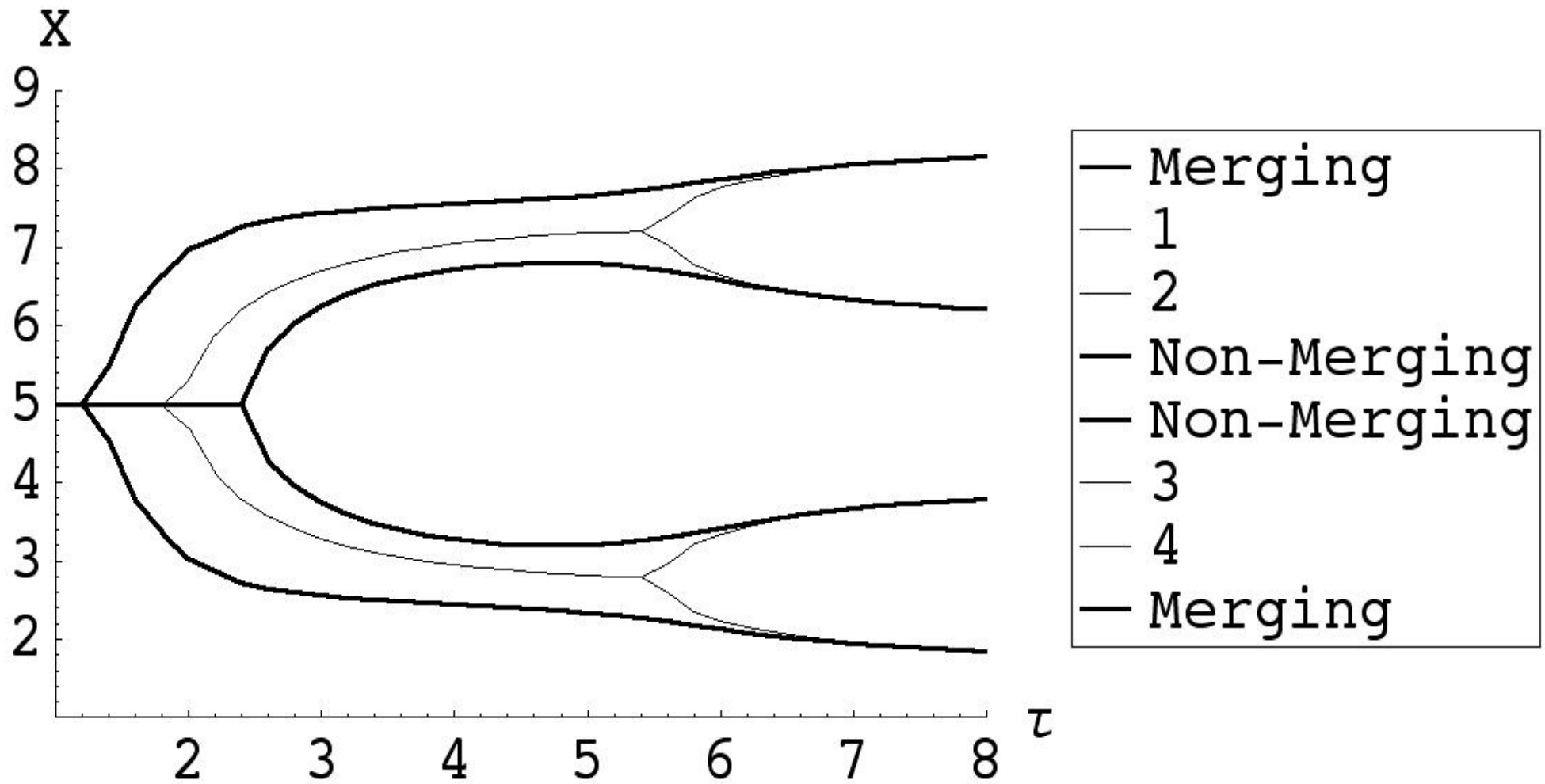
Computing Equilibrium

- Game is analytically intractable, and numerically challenging to solve.
- We use a new learning algorithm, “The stochastic response dynamic” (Gandhi, forthcoming). Does not require FOC's.

Premerger locations



Pre/Post merger locations



What changes post merger?

- Changes relative to price only merger
- “Softening of Price Competition effect” - merging firms are more isolated; upward price pressure.
- “Cross Elasticity effect” - merging firms are less substitutable (cross price elasticity is lower); downward pressure on price.
- Which effect dominates?

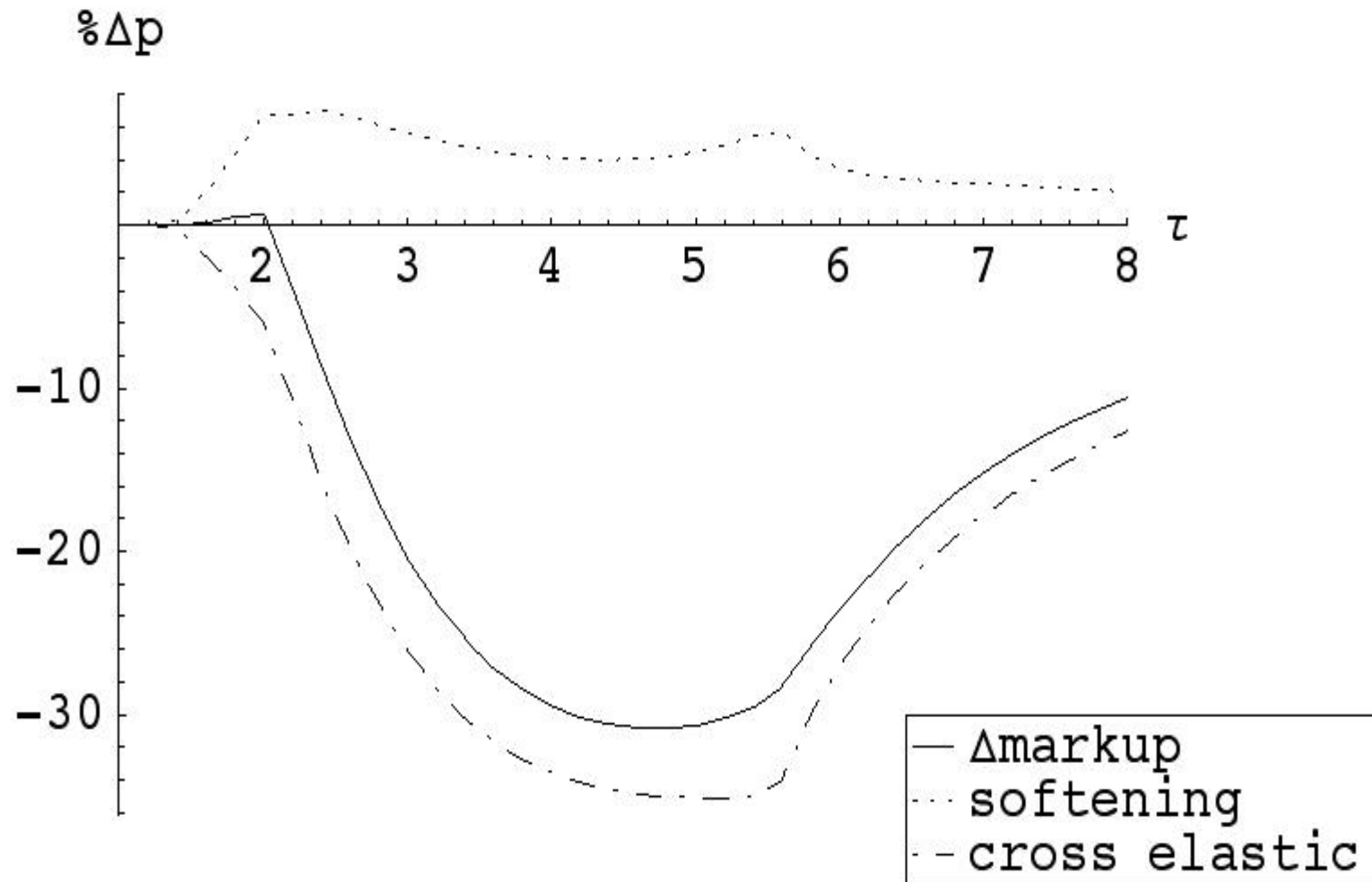
Intuition

If merging products are close in the pre-merger, then there is more repositioning. Hence cross price elasticity will be reduced by a larger amount. Thus price-only merger model is likely to overstate the anti-competitive effect of merger.

Analysis

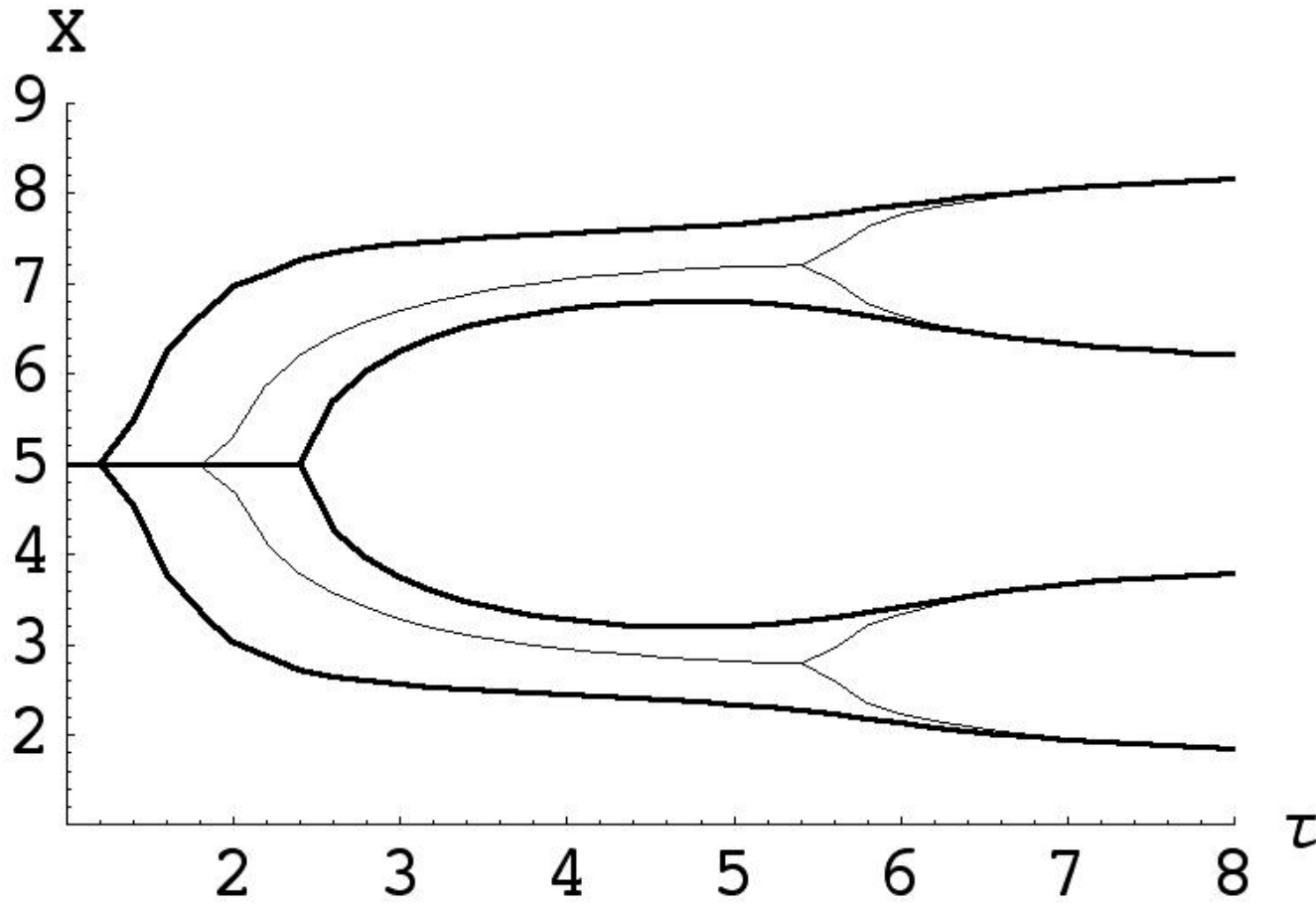
$$\Delta \text{markup} = (\text{price} + \text{location markup}) - (\text{price. only markup}).$$

Merging Prices



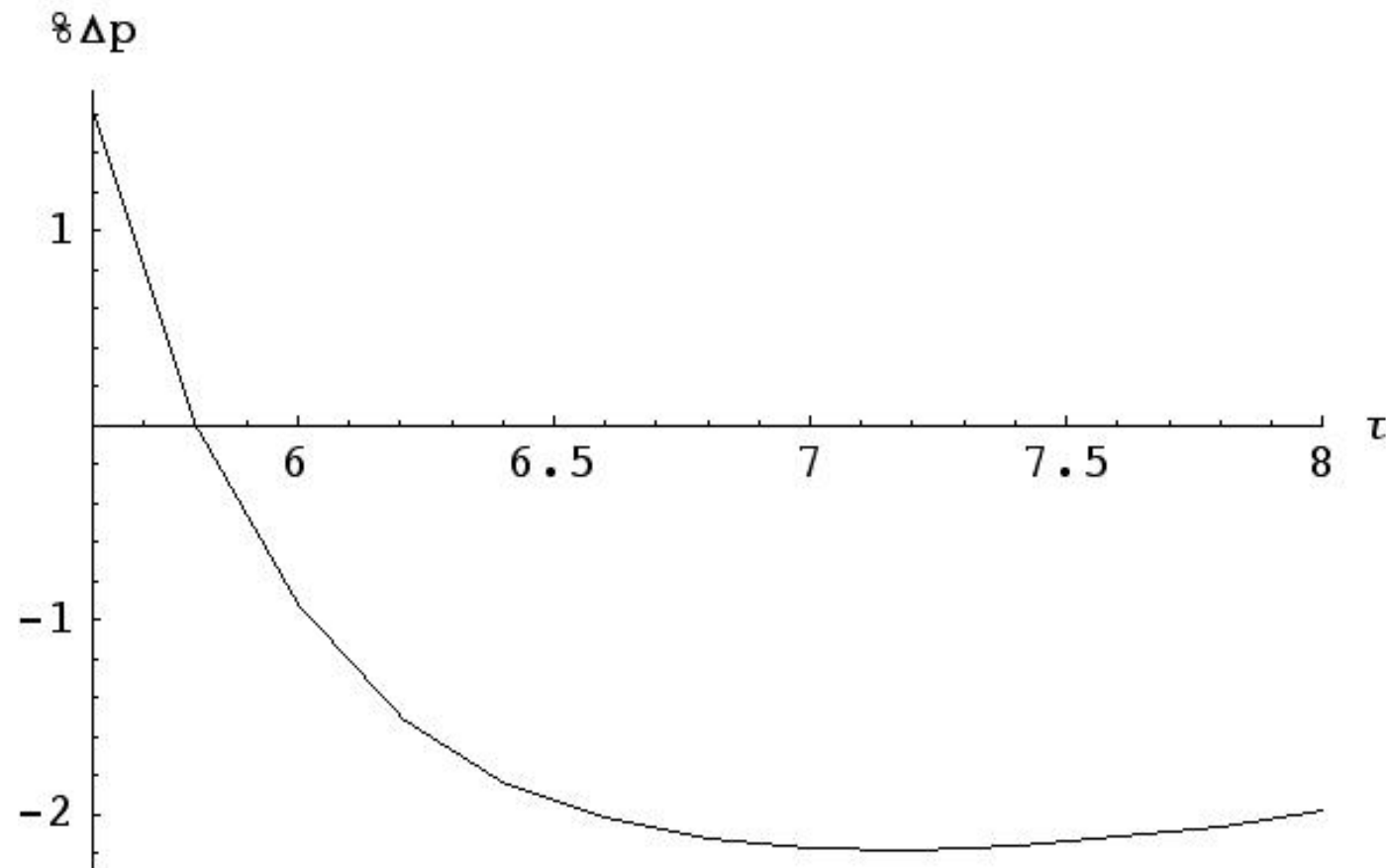
What about nonmerging firms?

The “softening of price competition” effect could work in opposite direction for nonmerging.
Intensifies price competition; downward price pressure.

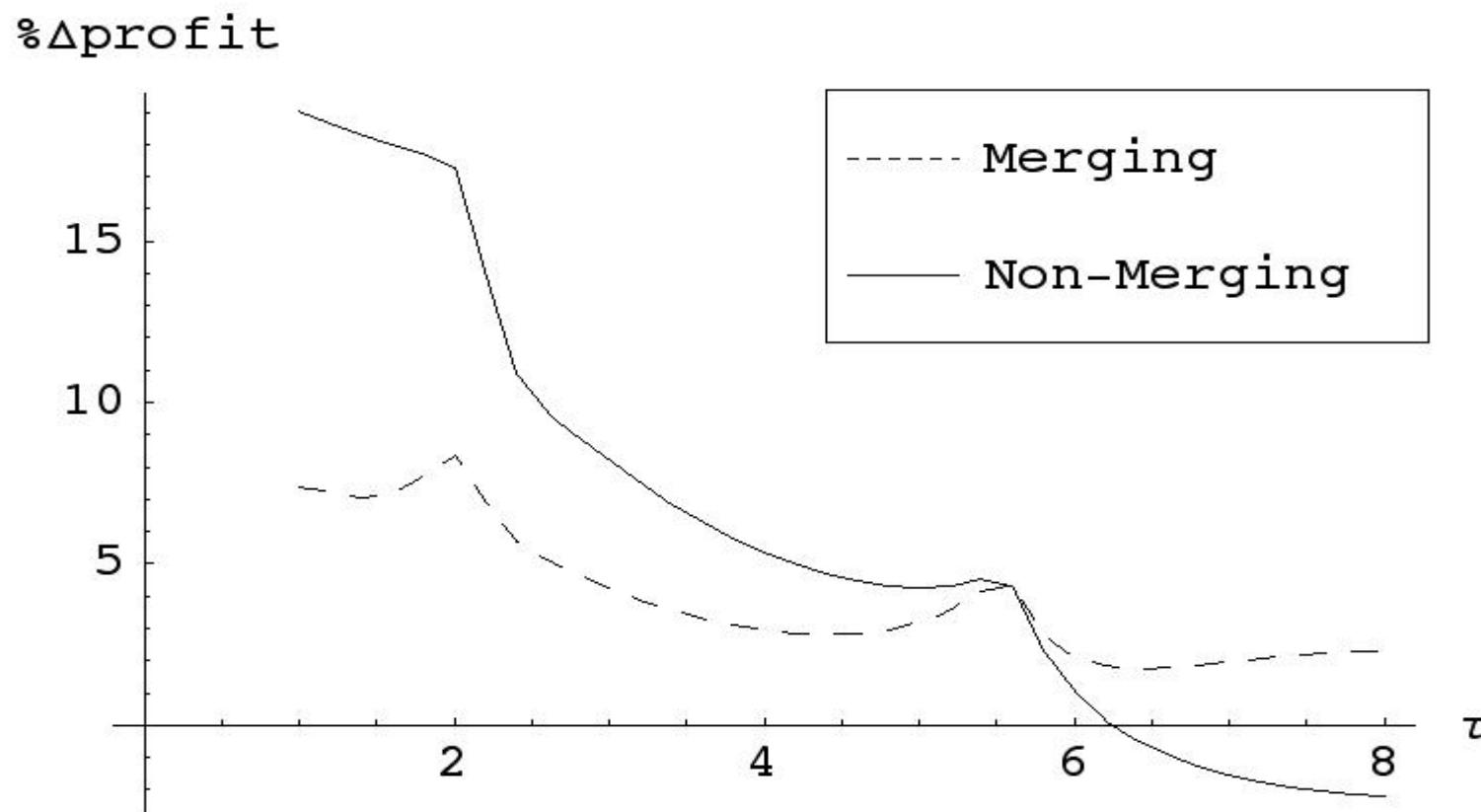


- Merging
- 1
- 2
- Non-Merging
- Non-Merging
- 3
- 4
- Merging

“softening” effect for nonmerging firms



Gains from merger shift to insiders



Conclusion

- Post Merger Product Repositioning Matters.
- Adds product variety and reduces cross elasticity between merging firms.
- Price only models overstate anti-competitive effects.
- Gains from merger shift to merging firms.