

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

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.

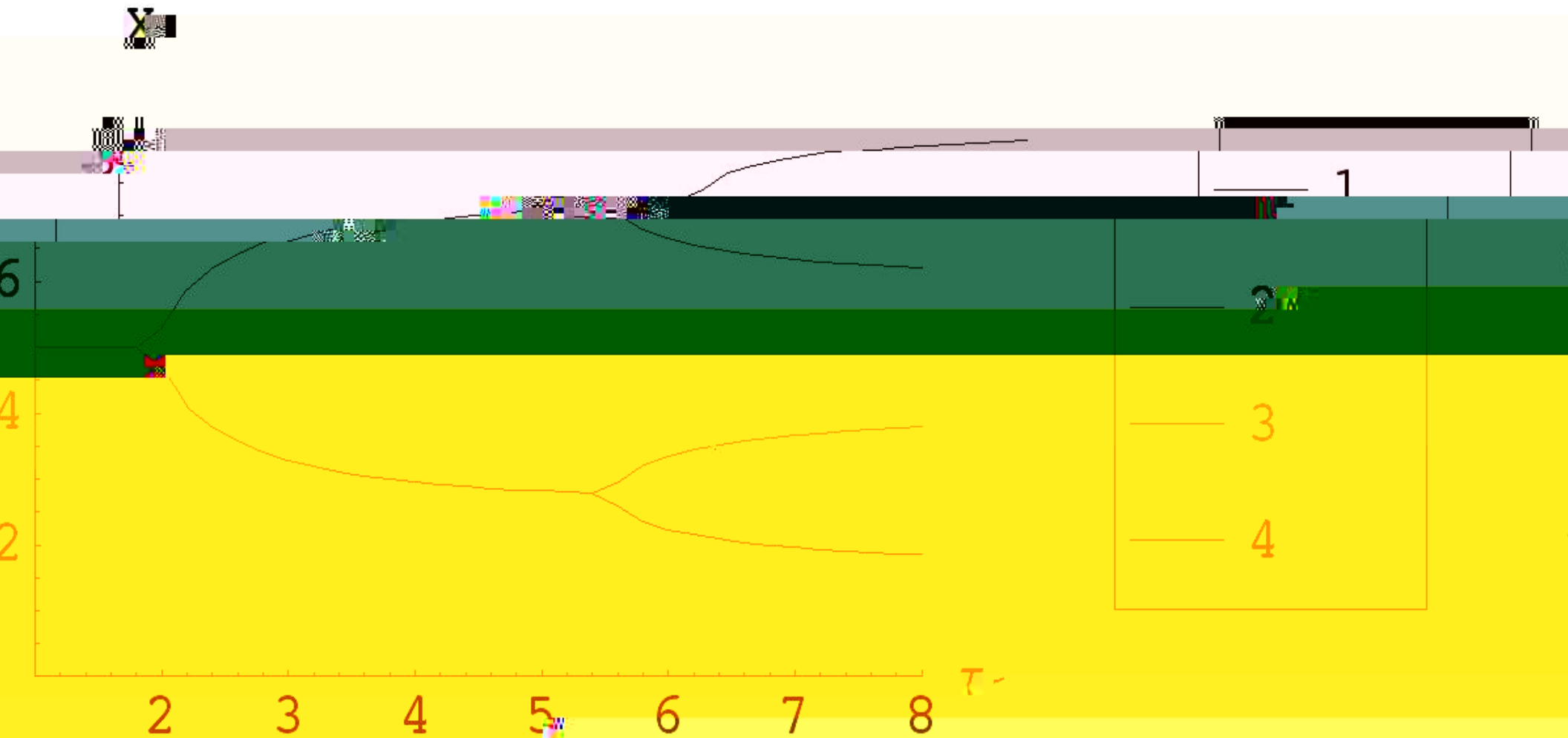
How do merger effects in price+location game compare to a price-only game?

Computing Equilibrium

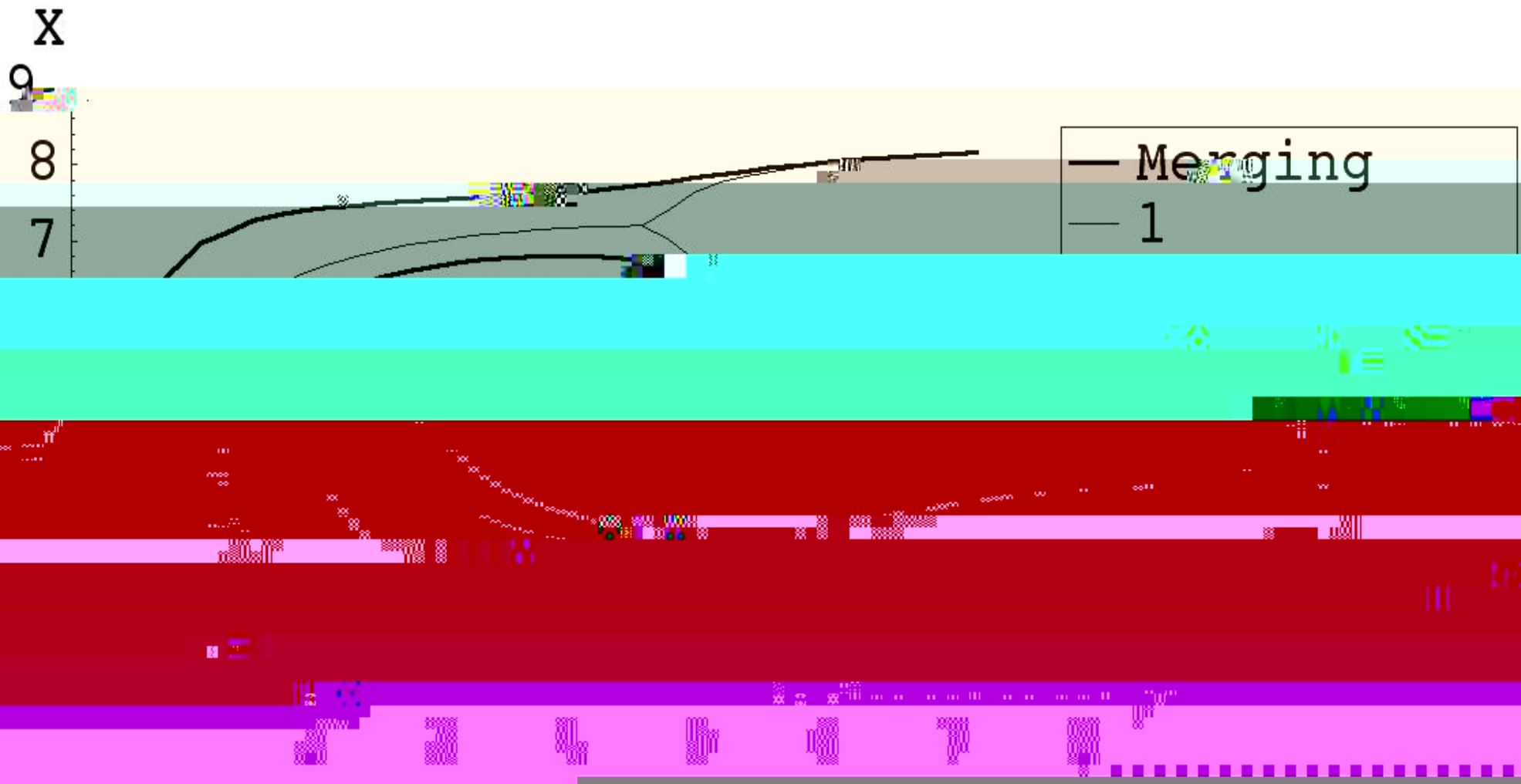
Game is analytically intractable, and numerically challenging to solve.

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

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

Merging Prices

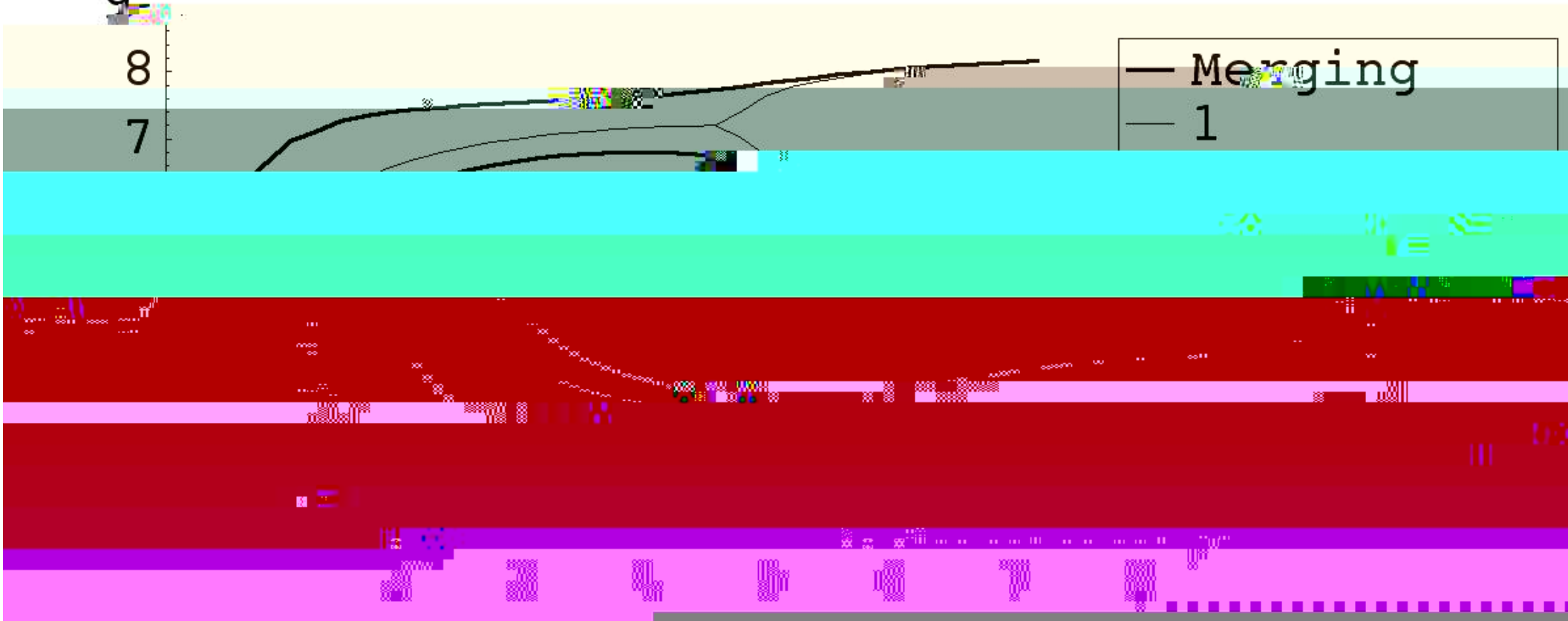


What about nonmerging firms?

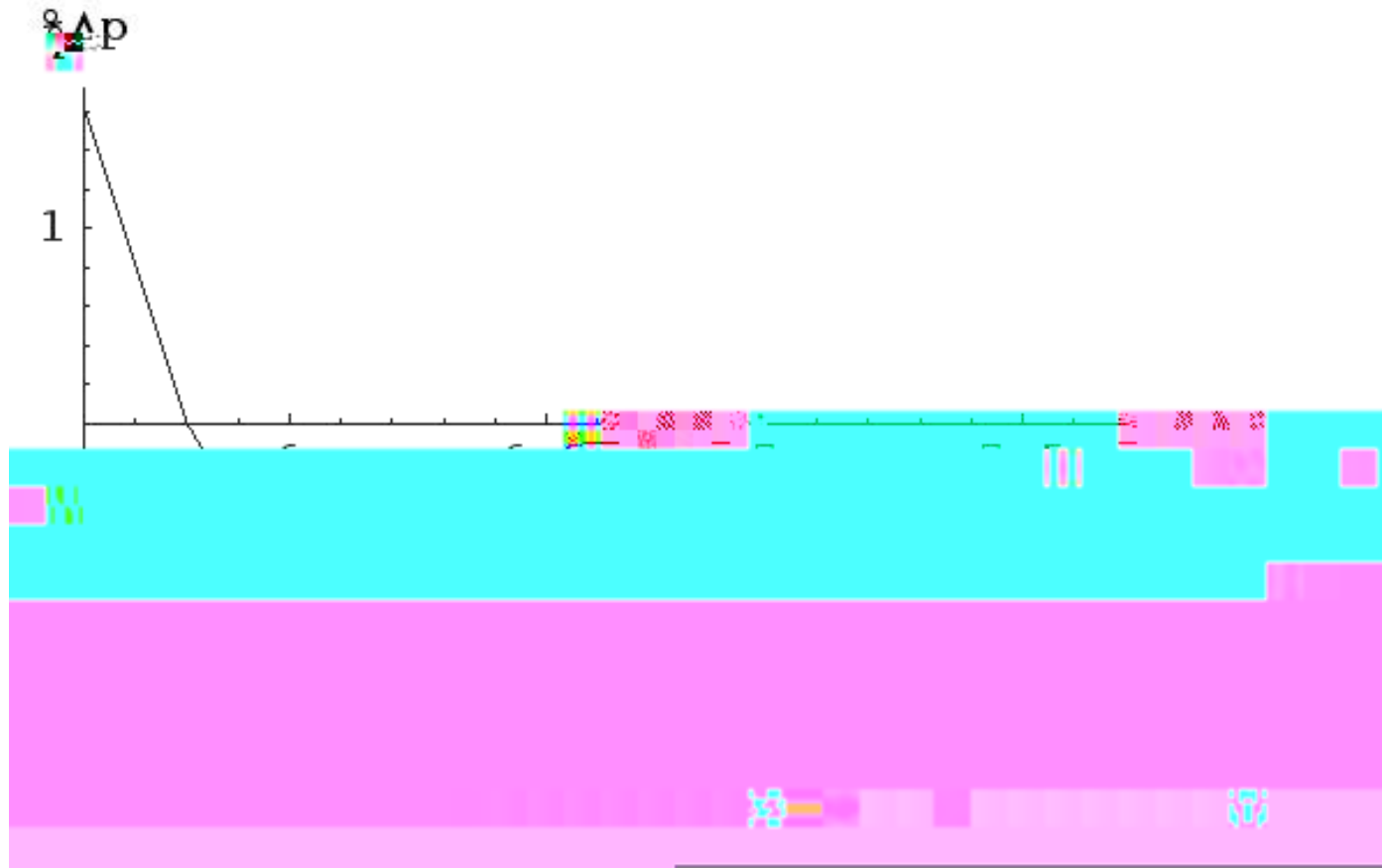
The “softening of price competition” effect could work in opposite direction for nonmerging.
Intensifies price competition; downward price pressure.

X
9
8
7

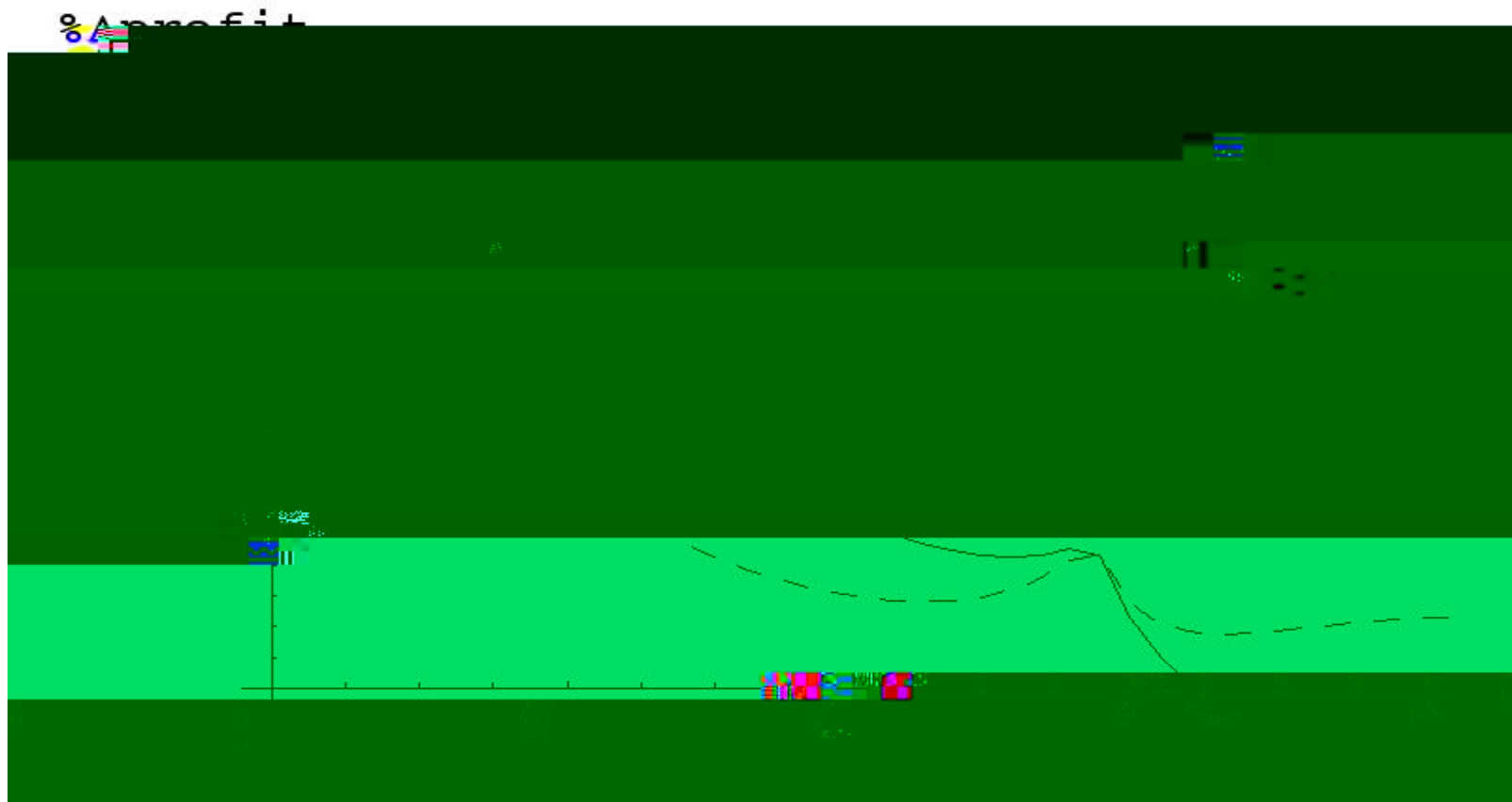
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“softening” effect for nonmerging firms



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.