

# Should Innovation Rationalize Supra-Competitive Prices? A Skeptical Speculation

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The Pros and Cons of High Prices

KKV (Swedish Competition Authority)  
Stockholm, Sweden

9 November 2007

# Motivation

- Motivation

- Antitrust policy typically tries to reduce prices
- Mergers, collusion, monopolization/abuse

- Exceptions

- Price below competitive price: monopsony, controls
- Vertical restraints/RPM
- Regulation: “AC pricing” vs. price caps

# Innovation: Dynamic trumps static

- **Schumpeter: Compete by successive innovation**
  - Monopoly profit the incentive/cause
  - “The evolution of industrial economics from its static base to its current dynamic form, that recognizes the competition can sometimes be destructive and that firm capability plays a major role in determining market performance, raises doubts about the efficacy of current competition laws. These concerns are exacerbated by the foundation of these laws in the policy implications of static analysis.” Audretsch, Baumol, Burke
- **Increased agency concern:**
  - Innovation “has been decisive in several merger and non-merger enforcement actions that have potentially very significant impacts for consumer welfare.” Gilbert, Tom

## Suggestion: Keep antitrust independent

- Should antitrust enforcers worry about both competition and innovation?
- **NOT** claiming ...
  - Tension illusory, i.e., short-run competition necessarily promotes long-run innovation
  - Or that innovation so powerful that competition policy has no effect at the margin
- **Basic intuition: Other policy tools available**
  - Use IP laws, for example
  - Think macro: # tools = # objectives
  - Should we reduce competition when there's no case?

# Outline 1

- **Arguing static triviality compared to dynamic**
  - Costs vs. price, long-term innovation vs. short-run
  - Identify test conditions
- **Review arguments for static/dynamic tension**
  - Monopoly profit, structure
  - High prices for substitutes
- **Lessons from Microsoft cases**
  - “Easy” static cases do not prove dynamic harm
  - MS + Netscape hypothetical: Does innovation always make mergers benign?

## Outline 2

- **Handling innovation outside AT**
  - Multiple objectives, multiple tools
  - If IP right, inefficient to distort antitrust
  - Optimal division of policy labor
  - Distort presently competitive markets?
- **Conclude with policy recommendations**
  - Follow existing practice
  - Put innovation burden on the side who benefits:  
Agencies (plaintiffs) or defendants
- **What's really going on here?**

## Static trivial? Back to Williamson

- Small cost saving outweighs high price DWL
  - “rectangles bigger than triangles”
  - If  $c = \Delta C/C$ ,  $p = \Delta C/C$ , PCM pre-merger price-cost margin, then welfare up if
  - $c > \frac{1}{2} \left[ \frac{\epsilon p^2}{1 - \epsilon p} \right] + PCM \left[ \frac{\epsilon p}{1 - \epsilon p} \right]$
- Comparisons
  - If  $P = C$  pre-merger, demand elasticity = -1, then .56% reduction in AC outweighs 10% price increase
  - If PCM 20%, costs would have to fall 2.56%

## Analogous quality condition:

- Welfare goes up with an increase in output stimulated by increased quality
  - Greater difference between WTP and cost over more units
- Define
  - $s$ : average increase in WTP divided by initial price
  - $q = \Delta Q/Q$ , if output falls
- Welfare goes up with a fall in output if
  - $s > \frac{1}{2} \left[ \frac{q^2}{1-q} \right] \frac{1}{\epsilon}$

# Static welfare vs. innovation: illustration

- Parameters
  - Incur welfare loss  $WL$  for time  $T$
  - Probability  $\phi$  of getting innovation gain  $IG$ ; otherwise,  $WL$  for all time
  - Discounted rate  $r$
- Welfare loss is worth incurring if

$$\frac{IG}{WL} > \frac{e^{rT}}{\phi} - 1$$

- If  $IG$  would increase at rate  $s < r$ ,

$$\frac{IG}{WL} > \left[ \frac{e^{rT}}{\phi} - 1 \right] \frac{r-s}{r}$$

# Tension 1: Monopoly profit

- Innovation requires profit as reward
  - Rationale for patent rights
  - Also, input if capital markets imperfect (easy claim)
- Segal and Whinston (2007)
  - Incumbent monopoly; entrant decides on R&D
  - If successful, competes with monopoly now, gets to be monopoly next period
  - AT reduces monopoly profits against competitor, increases them when one wins later
  - Stylized; implies collusion optimal
  - Neglects incumbent preemptive innovation

## Tension 2: Monopoly structure

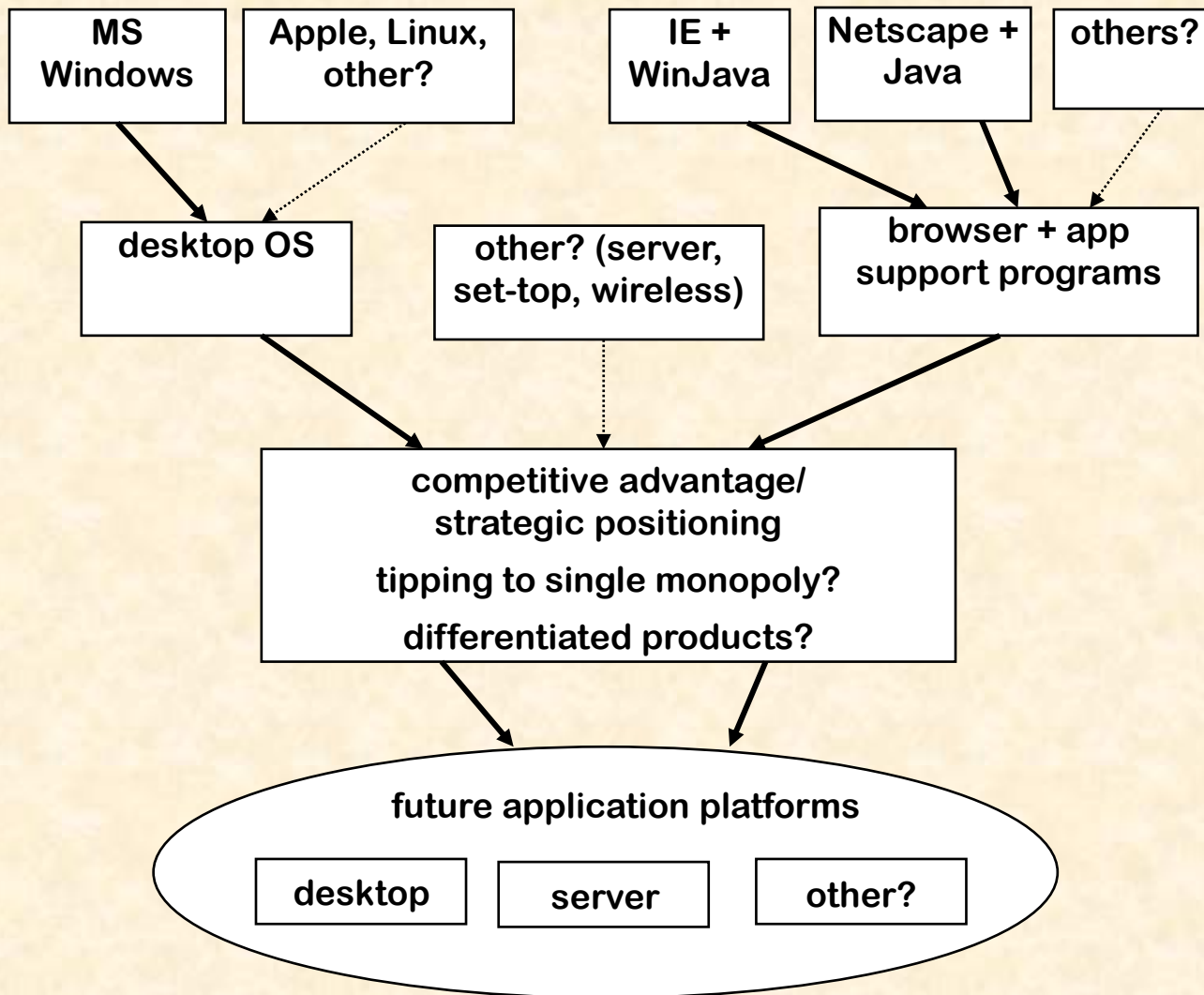
- **More than the profit argument**
  - Mitigating patent races
- **Appropriability, especially with claims uncertain**
  - Increasing role in whether antitrust should oppose patent settlements in (peculiar US) pharmaceuticals
- **What structure best promotes innovation?**
  - No clear theory; competition spur (Baker)
  - Limited empirical support for inverse U; reverse, mutual causation problems
  - Not known where it turns; not very informative

## Tension 3 (CA): Higher substitute price

- Raise price of substitutes to boost demand
- Quigley and Sanderson (2005)
  - Telecom regulation in Canada too effective
  - Stifles wireless innovation, leaving Canada behind
- Faults, specific and general
  - Testimony to efficiency of Canada prices
  - Does wireless innovation depend on CA practice?
  - Canadian wireless not competitive
- Contradicts thrust of other two arguments
  - Theory of second best => substitute price should be lower if good price too low!

# Microsoft lesson: Dynamic cases hard

- U.S. argument dynamic, case static
  - Theory: Netscape threat to MS application platform
  - Case: Microsoft monopolized distributing browsers
- Failed to prove dynamic case
  - Wrong market; not “Intel-based PC OS”
  - Didn’t establish routes to compete in future rel. mkt.
- Costs of reducing hard dynamic to easy static
  - Lost opportunity to show how to make dynamic case
  - Undercut meaningful relief
  - Dynamic standard misapplied to static cases (media)



## Less obvious: mergers and innovation

- **Conventional view: Innovation reduces merger concern**
  - **Market definition: Innovation brings other entrants**
  - **Innovation prevents substantial lessening of competition**
  - **Net effects positive**
- **But could be reverse: Suppose MS had merged with Netscape in 1995!**
  - **Clearly separate complement markets**
  - **Eliminate double marginalization**
  - **But if theory of case right, innovation would make problematic**

# Gross vs. marginal substitutes

- TV/radio; cars/bicycles
- Innovation in products does not eliminate market power in the old
- Shifting demand curve down doesn't make it more elastic
  - Do gross substitutes take demand proportionally more from low WTP or high WTP buyers?
  - If the latter, gross substitutes increase market power in residual market
- Wireless/wireline – “one funeral at a time”

## Why not use AT? More tools available

- **Macro: “Multiple objectives, multiple tools”**
- **We have other tools for promoting innovation**
  - IP law
  - Accelerated depreciation; tax credits
  - R&D subsidies; grants
  - Prizes
- **If other policies are available, it would be distorting to adjust antitrust**
  - The Buchanan/Stubblebine argument re Coase
  - If negotiation feasible, Pigovian tax harmful

# Insights from doing IP economics

- Methodological, not empirical
- Only way to understand one part of IP is to assume rest efficient
- Don't try to fix one problem (e.g., too much, too little protection) by tweaking policies meeting other goals (e.g., fair use, media tax)
- Equivalent of keeping # tools = # objectives
- Smith “division of policy labor”
- Should AT worry about the greenhouse effect?

# Distorting presently competitive markets

- Assume the competition law critics are right
- Quigley and Sanderson's argument would apply to competitive prices, not just regulation
- Then why stop at markets that happen to come up in antitrust cases?
  - Not necessarily those where innovation important
  - Innovation may be negatively correlated, e.g., cartel stability
- Instead, design IP as if most markets are competitive
- Do antitrust consistent with that objective

## What to do: Follow existing practice

- Treat innovation as the evidence warrants
- Have the side invoking innovation bear the burden
- If used to justify intervention, burden on the agency/plaintiff
  - That MS/Netscape merger
  - Innovation markets (US) or future products (CA)
- Keep in mind that dynamic cases are not the same as static ones: No “free lunch”

# For defendants, treat as efficiency defense

- Apply US agency criteria
  - The Agency will consider only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects.
  - [T]he merging firms must substantiate efficiency claims so that the Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific. Efficiency claims will not be considered if they are vague or speculative or otherwise cannot be verified by reasonable means.
- Not simple assertion that dynamic trumps speculative

# Will defendants be able to do this?

- In normal cases, according to the US agencies:
  - [E]fficiencies are most likely to make a difference in merger analysis when the likely adverse competitive effects, absent the efficiencies, are not great
- Not true with innovation
  - Need to show it won't happen absent the merger
  - By the arguments here, concedes the static welfare loss
  - Will defendants make that concession, stake a case entirely on innovation?
- Is this debate really about weakening antitrust rather than getting it right?