# Pricing Strategies and Competition Law & Economics:

How to measure the actual effects?

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## Empirical evidence: some relevant questions

- 1. Is the <u>definition</u> of the anti-competitive practice satisfied?
  - Requires sensible definition, caution under effects-based approach!
  - May involve implementation issues
- 2. How are <u>consumers</u> affected by the practice?
  - Contributes to provide/rebut theory of harm
- 3. Does the firm have a <u>profit incentive</u> to engage in the practice?
  - Contributes to provide/rebut a theory of harm
- 4. Are there <u>efficiencies</u> to justify the practice?
  - Provides justification / may counterbalance harm
- 5. Are <u>competitors</u> hurt by the practice?
  - Caution: may be counterproductive in identifying anti-competitive practice
  - More relevant in calculating damages



## Empirical evidence: a variety of methods

- Measurement of costs
  - Excessive pricing, margin squeeze, rebates, ...
- Yardstick/benchmarking approach
  - Margin squeeze, ...
- Before/after approach (and "difference in difference")
  - o Tying, ...
- Structural approach: estimating demand substitution
  - Exclusive distribution, bundling, ...



# Excessive pricing

- There are many suggested methododologies
   See e.g. OECD (2011)
  - Profitability analysis
  - Price cost comparisons
  - Price comparisons
- But: there is <u>no clear definition</u> of the practice in the first place!
   See again e.g. OECD (2011)

One obvious (?) definition: "excessive price is the monopoly price"

- How define a monopoly?
- o How account for price elasticity of demand?
- Convict any firm that maximizes profits?



## Margin squeeze

Common definition (if still controversial...)

retail price – wholesale price < cost

But: implementation issues, i.e. measuring cost (e.g. Telefonica case)

- Cost of "equally efficient competitor" = incumbent's cost
- Long-run average incremental costs
- Yardstick/benchmarking approach to measure consumer effects
  - Compare performance in countries with and without price squeeze
  - Control for other reasons for performance differences between countries
     Examples: mobile telecom or broadband penetration
- Yardstick/benchmarking approach to measure competitor profit effects
  - Caution to use it to demonstrate anti-competitive effects
  - Potentially more useful in damages assessment (if correctly used)



#### Rebates

- Example of Intel vs. AMD
  - Rebates for X86 CPUs to OEMs (Dell, HP) in return for buying mainly from Intel
- European Commission:
  - Efficient competitor test, a <u>price-cost test</u> as in margin squeeze
  - "AMD foreclosed from market"
  - Implementation of test controversial, but important advance over previous cases
  - Need evidence of theory of harm that Intel weakened AMD



# Vertical restraints, in general

#### Slade and Lafontaine (2008)

- Review of empirical evidence on exclusive dealing, exclusive territories, tying, bundling, RPM
- Variety of approaches: regression, natural experiment, event study (stock prices), structural
- Empirical evidence from academic studies is still scarce (as opposed to mergers, cartels)
- Their main conclusion
  - Voluntary vertical restraints often benefit consumers (prices, consumption)
  - Government-mandated vertical restraints hurt consumers



# Vertical restraints, in general

Cooper, Froeb, O' Brien, Vita (2005)

- Little support for proposition that vertical restraints harm consumers
- Evidence that vertical restraints may benefit consumers: elimination of double markups and cost savings
- Evidence that vertical restraints may increase demand



#### Price discrimination and trade restrictions

#### Brenkers and Verboven (2006)

- Selective or exclusive distribution prevents companies to sell to foreign consumers
  - E.g. cars, pharmaceuticals
  - This restriction to parallel trade enables price discrimination
- Structural approach: estimating demand substitution
  - Effects on consumers ambiguous: some countries gain, others loose
  - Profit incentives are weak: firms probably have other motive for selective and exclusive distribution



## Bundling

#### Chevalier and Scott Morton (2008)

- Funeral services: funeral homes have licensed monopoly
- Funeral goods (caskets): funeral homes may have monopoly
  - Some states: always bundling
  - Other states: never bundling
  - Other states: restriction removed
- Before/after method (difference in difference)

	service	good (=casket)	both
No bundle	1450	700	2150
Bundle	1250	950	2200
Difference	-200	+250	+50

 Evidence for Chicago one-monopoly-profit argument: bundling raises price of good by 250\$, but lowers price of service by 200\$



# Reducing rival interoperability

Genakos, Kuhn, van Reenen (2011)

- Microsoft case: one-monopoly profit argument may not hold
  - Consumers with high price sensitivity for PCs may have low willingness to pay for servers
  - Bundling may be used as price discrimination device
- Bundling through reduced interoperability implies
  - Gains in the server market
  - Reduced sales in the PC market
- Structural approach: estimating demand substitution
  - Policy test quantifies positive profit incentives for bundling

Relative margin effect > relative output effect



# Some concluding remarks

- Many seemingly anti-competitive pricing practices
  - benefit consumers,
  - and if not, they are often government-mandated
- Variety of empirical methods is available to assess the validity of a theory of harm
- Finding convincing evidence of harm is more challenging than finding a theory of harm!

