# Price-cost tests and loyalty discounts

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# General framework: Exclusivity discounts

## Two sellers offer one product each

- Dominant seller is more efficient: lower cost, higher quality, larger capacities
- Play simultaneously
- Post linear prices or two-part tariffs
  - Unconditional
  - and possibly conditional on exclusivity: Exclusivity discounts

## One buyer

- Elastic demand
- Taste for variety
- No buyer commitment – No exclusive dealing

# Exclusive discounts: Welfare analysis
Firms compete to attract the whole of buyer's demand

Exclusive dealing comes with less variety!

- By definition
- Loss of product variety

Competition more intense if firms are more symmetric

- Buyer decides based on profit provided by each firm under exclusivity
- Competition in utility à la Bertrand
- Winner gives the buyer the maximal utility possibly offered by competitor

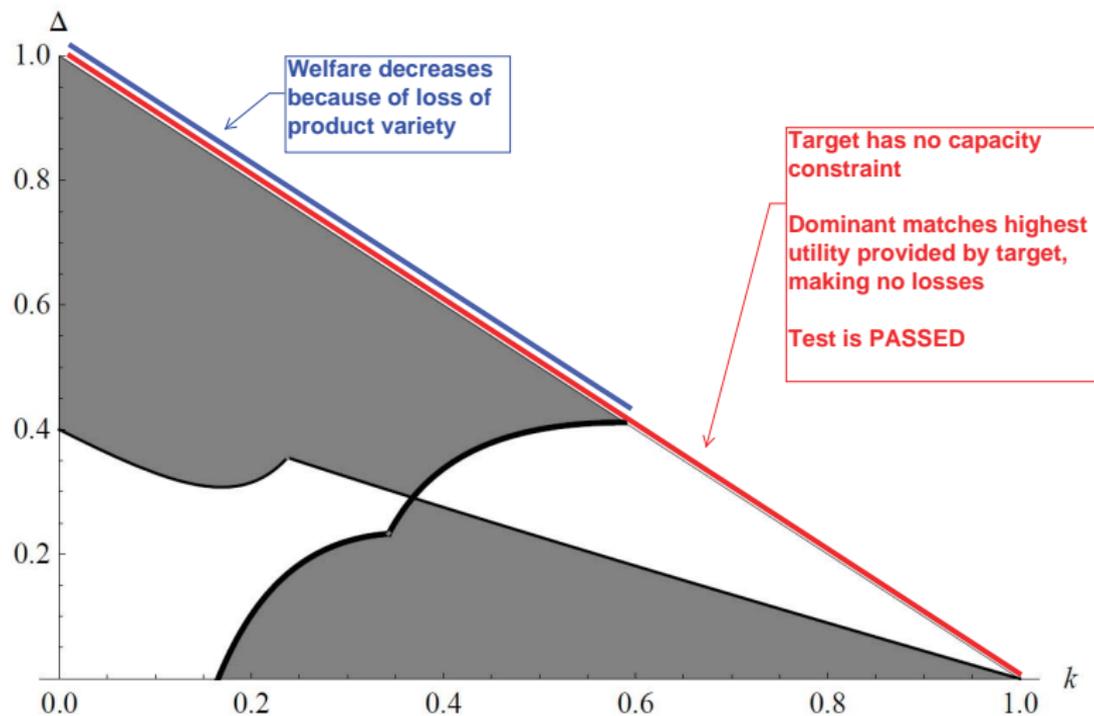# Exclusive discounts: Welfare analysis
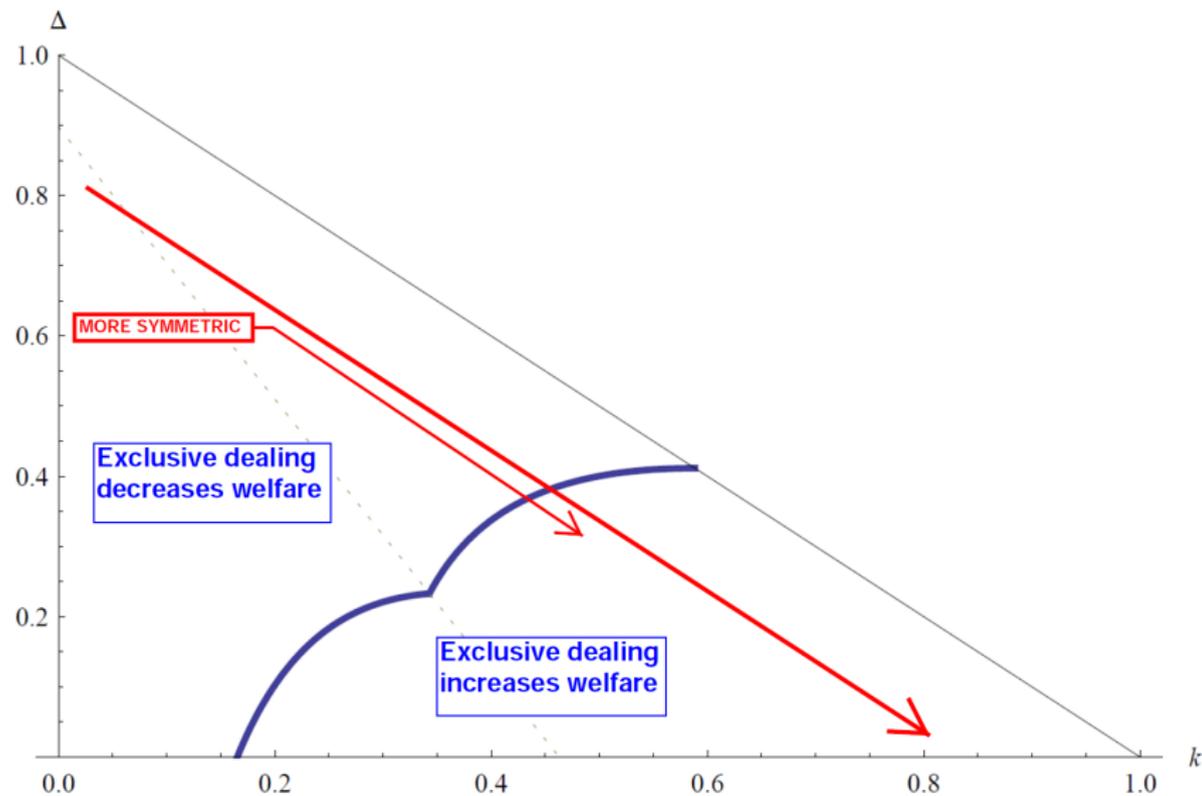
How do we know in practice whether loyalty discounts increase or decrease welfare?

- Depends on product differentiation: To be assessed/quantified?
- AEC test is of little help

False negative in particular when target is not capacity constrained but is much less efficient than dominant firm

- Dominant firm matches highest utility provided by target
- Dominant firm prices *above* cost
- Test is implemented on full quantity range: PASSED

# AEC test: False negative

Test is designed to detect exclusion of efficient competitors. But here:

- Competitor is less efficient
- Consumer harm: Loss of product variety –combined with competitor being much less efficient
  - If the products were homogenous ($\gamma = 1$) and there is no capacity constraint ($k = 1 - c_2$ as above), exclusive dealing does not change the nature of competition, no consumer harm

False negative when anticompetitive exclusion and no sacrifice

- Examples in Fumagalli & Motta (2017) [e.g. deep-pocket predation]
- Another example in Choné, Linnemer & Vergé (2018)
  - Homogenous good
  - More efficient competitor excluded
  - No below-cost pricing

# AEC test: False positive ("False alarm")

Occurs for instance when $c_1 = c_2$ and target is capacity constrained

- The dominant can deliver more utility
- The buyer prefers exclusive deal with dominant to common representation, thus foregoing product variety
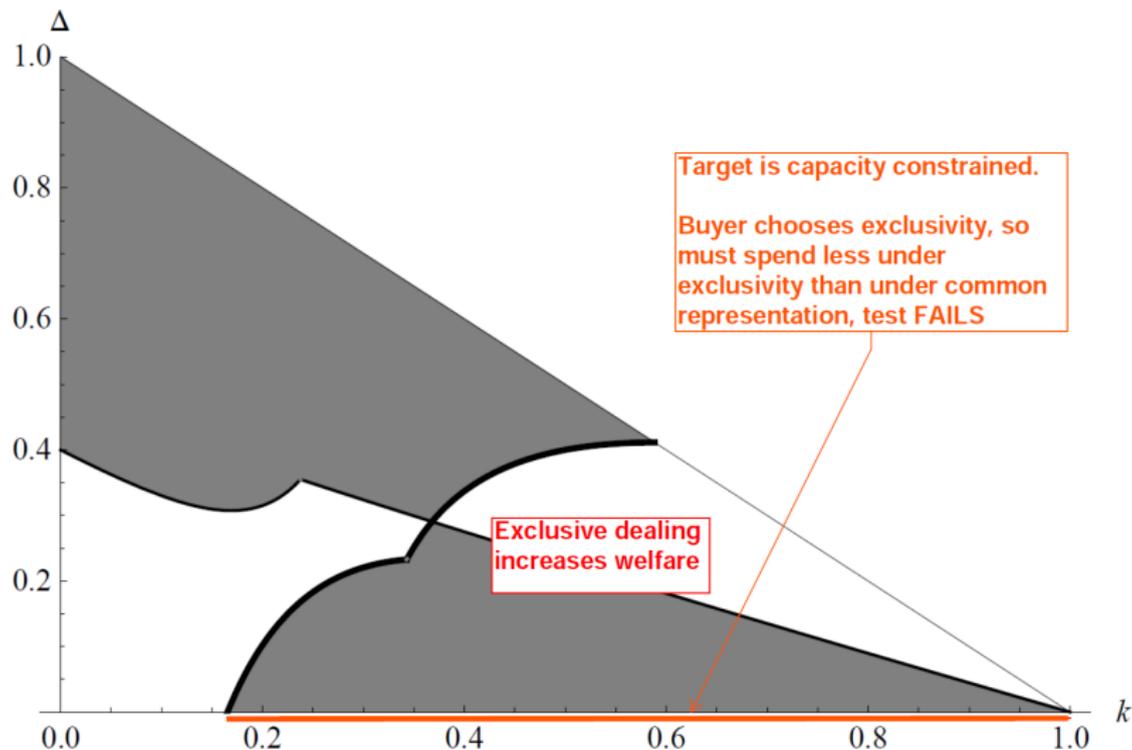- It must therefore be the case that buyer spends less under exclusivity

$$p_H(q_1^E - k) + c_2 k = p_H(q_1^E - k) + c_1 k > p_L q_1^E$$

- Test: FAILED, while welfare increases if firms not to asymmetric

AEC test not well-designed under product differentiation

- Focus on buyer expenditure (in €)
- Less and less relevant as the products become less substitutes

# AEC test: False positive ("False alarm")



Target is capacity constrained.

Buyer chooses exclusivity, so must spend less under exclusivity than under common representation, test FAILS

Exclusive dealing increases welfare

# Remarks / Questions

Benchmark without loyalty discounts: Competition in linear price with capacity constraint

- Residual demand if capacity constraint binding, reaction functions
- Equilibrium in pure strategy? in mixed strategy?

Posted prices?

- Bargaining power to suppliers
- In practice, negotiations (at least on product specifications)
- Procurement or selling mechanisms (CLV 2018)

# Use of AEC test in practice?

AEC test is not universal. In particular, does not capture well

- product differentiation
- theories of harm with no sacrifice

AEC test presented as a screening device to help case prioritization

- In practice extremely time and data consuming
- Can / Should we disconnect test and theory of harm?