Pros and Cons 2018

The As Efficient Competitor Test

The law and economics of rebates

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CONTENTS

The Concept of Abuse

ANTICOMPETITIVE BEHAVIOUR

- **Unilateral actions that (a) distort the competitive process and (b) reduce (long-run) consumer welfare are anticompetitive**
- Conditions (a) and (b) are cumulative
- **Example**: *Tying*
  - Distorts competitive process?
    - Only tying company may be able to compete in the tied product market with a bundle comprising the tying product
    - If so an as-efficient competitor will not be able to match the price of the tied good profitably
    - It is likely to exclude as-efficient competitors in some circumstances (product homogeneity, single homing
  - Reduces consumer welfare?
    - It may do so unless it gives rise to offsetting efficiencies

DOMINANCE

- In most jurisdictions competition law only controls the competitive behaviour of firms with market power (i.e. dominant firms)

- Why?

  – **Ability**. Some of their actions may not be replicable by competitors

    - Example 1: only a dominant firm in the tying market can tie that product with a product offered on a stand-alone basis by many other firms

    - Example 2: only a dominant firm in the supply of an essential upstream input can improve the competitive position of its downstream subsidiary by offering the essential input to competitors at higher costs

  – **Incentive.** Firms with market power can raise prices (or reduce quality and investment) significantly and for a sustained period of time. So they may be able to benefit from the exclusion of some of its rivals, while non-dominant firms may not be able to do so

SPECIAL RESPONSIBILITY

- Does that mean that dominance is a *sufficient condition* for condition (a) (distortion of the competitive process)? No
  - Certain actions of dominant companies may be profitably replicated by competitors and, hence, need not distort competition on the merits
    - Example 1: investment in quality
    - Example 2: bundle to bundle competition
    - Example 3: Plain-vanilla below-cost pricing
  - To the extent that they can be replicated, those actions may actually be “rivalry enhancing” and procompetitive
- But dominance is (typically) a *necessary condition* for condition (a) (distortion of the competitive process) and also for condition (b) (reduction of consumer welfare)
- Dominant firms should monitor that their actions do not distort the competitive process and harm consumers, but should not be required to act inefficiently

REPLICABILITY

- **When is the competitive process distorted?**
  - *Replicability condition*: as-efficient competitors cannot respond to those actions profitably
  - If as-efficient competitors are able to “match” those unilateral actions then consumers’ interests will be protected by effective competition
  - This condition may be satisfied even if the as-efficient competitors are not able to “match” the actions in question, since they may be able to replicate profitably the unilateral action under scrutiny by other means

The As-Efficient Competitor Test

TESTING FOR REPLICABILITY

- **The As-Efficient Competitor Test:** *Matching Test* and *Attribution Test*
- **Example 1**: *Mixed Bundling*
  - **Matching test** – Are as-efficient competitors able to offer similar bundles profitably?
  - If Yes, then there is no distortion of the competitive process
  - If No, can they compete effectively by reducing the price of the bundled product profitably? (**Attribution Test**)
- **Example 2**: *Rebates*
  - **Matching test** – Are as-efficient competitors able to offer similar rebate schemes profitably?
  - If Yes, then there is no distortion of the competitive process;
  - If No, can they compete effectively by reducing their prices profitably? (Attribution Test)
    - First-mover advantages; incumbency advantages ("musthavedness", switching costs, network effects, capacity constraints, …

AS-EFFICIENT COMPETITOR – STATIC THEORY OF HARM

- **Affected market –** market allegedly foreclosed by the unilateral conduct under scrutiny
- **As-efficient competitor**
  - Owns the tangible and intangible assets needed to operate efficiently in the affected market:
    - Same production technology
    - Same product quality
  - As-efficient competitor ≠ Dominant firm
    - First-mover advantages: sunk costs
    - Incumbency advantages: switching costs, network effects, learning-by-doing
    - Other asymmetries: capacity constraints, portfolio length, vertical integration, financial position

AS-EFFICIENT COMPETITOR – DYNAMIC THEORY OF HARM

- **Directly affected market –** market allegedly foreclosed <u>in the first instance</u> by the unilateral conduct under scrutiny
- **Indirectly affected markets –** markets allegedly foreclosed as a result of the foreclosure of the directly affected market
- **As-efficient competitor**
  - Owns the tangible and intangible assets needed to operate efficiently in the directly affected market
  - Would be able to operate efficiently in the indirectly affected markets absent foreclosure in the directly affected market

Fidelity Discounts

WHAT IS A FIDELITY DISCOUNT?

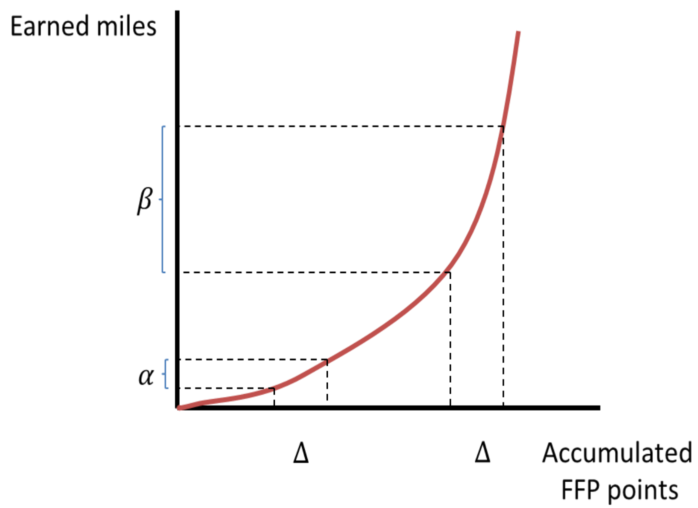
- Fidelity discounts are **conditional discounts**
  - The seller promises to discount the sales of its goods or services if the buyer accepts to increase its purchases of those goods or services

- Not all conditional discounts induce loyalty and, hence, not all of them can be considered **fidelity discounts**
  - An incremental volume discount is unlikely to produce lock-in effects
  - A discount that links past purchases to future purchases may produce lock-in effects:
    - Frequent Flyer Programs and other “convex” discount schemes
  - A discount that links contestable sales to non-contestable sales may produce lock-in effects:
    - Retroactive discounts
    - Bundled discounts

FREQUENT FLYER PROGRAMS

- A passenger with a FFP has an incentive to concentrate its flights with a single carrier because the FFP points accumulated with each additional flight are more valuable the more FFP points that passenger has already accumulated in her FFP card. (See Figure 1 below.)

Figure 1 – A convex FFP scheme



An increase in the number of FFP points Δ translates into α miles when the number of accumulated miles is small or β miles, a number of miles greater than α, when the number of accumulated miles is large.

RETROACTIVE DISCOUNTS

- Domco sells a “must have” product. It costs €7 euros per unit to produce
- Customer has an inelastic demand for 1,000 units with a reservation price of €10 euros per unit
- Customer needs 800 units of must have product but it may purchase the remaining 200 from Domco or a competitor (Entco)
  - Contestable demand: 200 units
  - Non-contestable demand: 800 units
- Domco can leverage non-contestable demand onto contestable sales by offering a retroactive or all-unit discount:
  - Domco sets a price of €10 euros per unit but offers a 15% discount if Customer purchases all its needs from Domco
    - Discount equals 15% X 10 X 1,000 = 1500 euros
    - Domco earns (8,500 - 7000) = 1500 euros
    - Rival can not profitably replicate the same discount: (10 - 7) X 200 – 1500 < 0

BUNDLED DISCOUNTS

- Domco sells products A and B. Entco sells only product A. Product B is non-contestable, but product A is contestable. Product A cost €7 euros per unit to produce; product B costs €6 euros per unit. Domco and Entco have a common cost of production of €1 euro
- Customer has a unit inelastic demand for A and B with a reservation price of €10 euros per unit for each of them. Customer needs to purchase both products: they are strict complements
- Domco offers a bundled discount: It would sell A and B on a stand alone basis at €10 euros per unit but the bundled at €17.5 euros
- This cannot be replicated profitably by Entco: It would need to sell A below total cost at €7.5 euros per unit
- Domco is better off:
  - It makes €17.5 euros - €13 euros - €1 euro = €3.5 euros
  - While it would make €10 - €6 euros -€1 euros = €3 euros

ARE EXCLUSIVITY DISCOUNTS DIFFERENT?

- Exclusivity discounts are conditional discounts
  - The seller promises to discount the sales of its goods or services if the buyer accepts to concentrate all (or most) of its purchases of those goods or services with the seller

- Exclusivity discounts may link contestable sales to non-contestable sales and, hence, exploit lock-in / consumer loyalty

- Exclusivity discounts may be easier to replicate than standard fidelity discounts if the sales affected by the discount are all contestable
  - In the absence of must have sales
  - And/or capacity constraints

- Exclusivity discounts may or may not have the same foreclosure potential than fidelity discounts depending on the circumstances

CAN FIDELITY DISCOUNTS PRODUCE ANTICOMPETITIVE EFFECTS?

- **A fidelity discount will produce anticompetitive effects if *all* the following conditions hold:**
  - Competitors are unable to match the discount offering
  - The discount is sufficiently large that cannot be profitably replicated by competitors which can only offer unconditional discounts
  - The proportion of the relevant market foreclosed is sufficiently large to prevent the entry of new rivals or force the exit of established competitors
    - If the proportion of the market that is foreclosed is small relative to the minimum efficient scale of those competitors, the discount won't have an impact on market structure and
    - The seller will not be able to raise prices in the future

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If these conditions hold, then we can conclude that the **competitive process** has been distorted – The AEC test

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    - If the proportion of the market that is foreclosed is small relative to the minimum efficient scale of those competitors, the discount won't have an impact on market structure and
    - The seller will not be able to raise prices in the future

If this condition holds, then we can conclude that **consumers** are worse off

The Attribution Test

THE ATTRIBUTION TEST

- s: contestable share
- h: contractual demand threshold
- d: conditional discount – awarded if quantity demanded from incumbent equals $h > 1 - s$
- P: undiscounted price
- p: entrant price

- Entrant will be able to compete for the contestable share only if

$$ps + P(1 - s) \leq (P - d)h + P(1 - h) \text{ or}$$

$$p \leq P - \frac{dh}{s}$$

- Conditional discount can be replicated profitably if

$$\left(P - \frac{dh}{s}\right)s > C \in \{AAC, LRAIC\}$$

THE CONTESTABLE SHARE

- The Attribution Test can be re-written as

$$s > \bar{s} = \frac{dh + C}{P}$$

- Critical contestable share $\bar{s}$ is increasing in d, h and C and decreasing in P
- Contestable market share s:
  - Share of the market that the entrant can supply
  - Smaller than the share of the market allegedly foreclosed by the conduct under scrutiny – the foreclosure share
  - The relevant contestable share may be greater than the share of the market the entrant can currently supply if, for instance, the entrant is about to expand its product line or increase its capacity

PRACTICAL DIFFICULTIES (1): MEASURING C

- Scott-Morton and Abrahamson (2017): $C = LRAIC \approx P$ (??) – I disagree
- DG Comp Guidance

43. Where the effective price is below AAC, as a general rule the rebate scheme is capable of foreclosing even as efficient competitors. Where the effective price is between AAC and LRAIC, the Commission will investigate whether other factors point to the conclusion that entry or expansion even by as efficient competitors is likely to be affected.

18 Average avoidable cost is the average of the costs that could have been avoided if the company had not produced a discrete amount of (extra) output, in this case the amount allegedly the subject of abusive conduct. In most cases, AAC and the average variable cost (AVC) will be the same, as it is often only variable costs that can be avoided. Long-run average incremental cost is the average of all the (variable and fixed) costs that a company incurs to produce a particular product. LRAIC and average total cost (ATC) are good proxies for each other, and are the same in the case of single product undertakings. If multi-product undertakings have economies of scope, LRAIC would be below ATC for each individual product, as true common costs are not taken into account in LRAIC. In the case of multiple products, any costs that could have been avoided by not producing a particular product or range are not considered to be common costs. In situations where common costs are significant, they may have to be taken into account when assessing the ability to foreclose as efficient competitors.

PRACTICAL DIFFICULTIES (2): CONTESTABLE MARKET SHARE s

- Scott-Morton and Abrahamson (2017): Share of the market that the entrant can supply in the **short run**
- Suppose entrant can supply s in the short run but if it manages to do then it could compete $S > s$ in the **long run**. Suppose further that the incumbent sets a price P and offers a discount d in both periods in exchange for exclusivity $(h = 1)$. Then, the entrant will be able to compete for the contestable share in the long-run if:

$$p \leq P - \frac{dh}{S}$$

- Hence, the conditional discount in the short-run can be replicated profitably if

$$\left(P - \frac{dh}{s}\right) s - C + \delta V(S) > 0$$

where $V(S) = \left(P - \frac{dh}{s}\right) S - C$ and δ is the discount factor

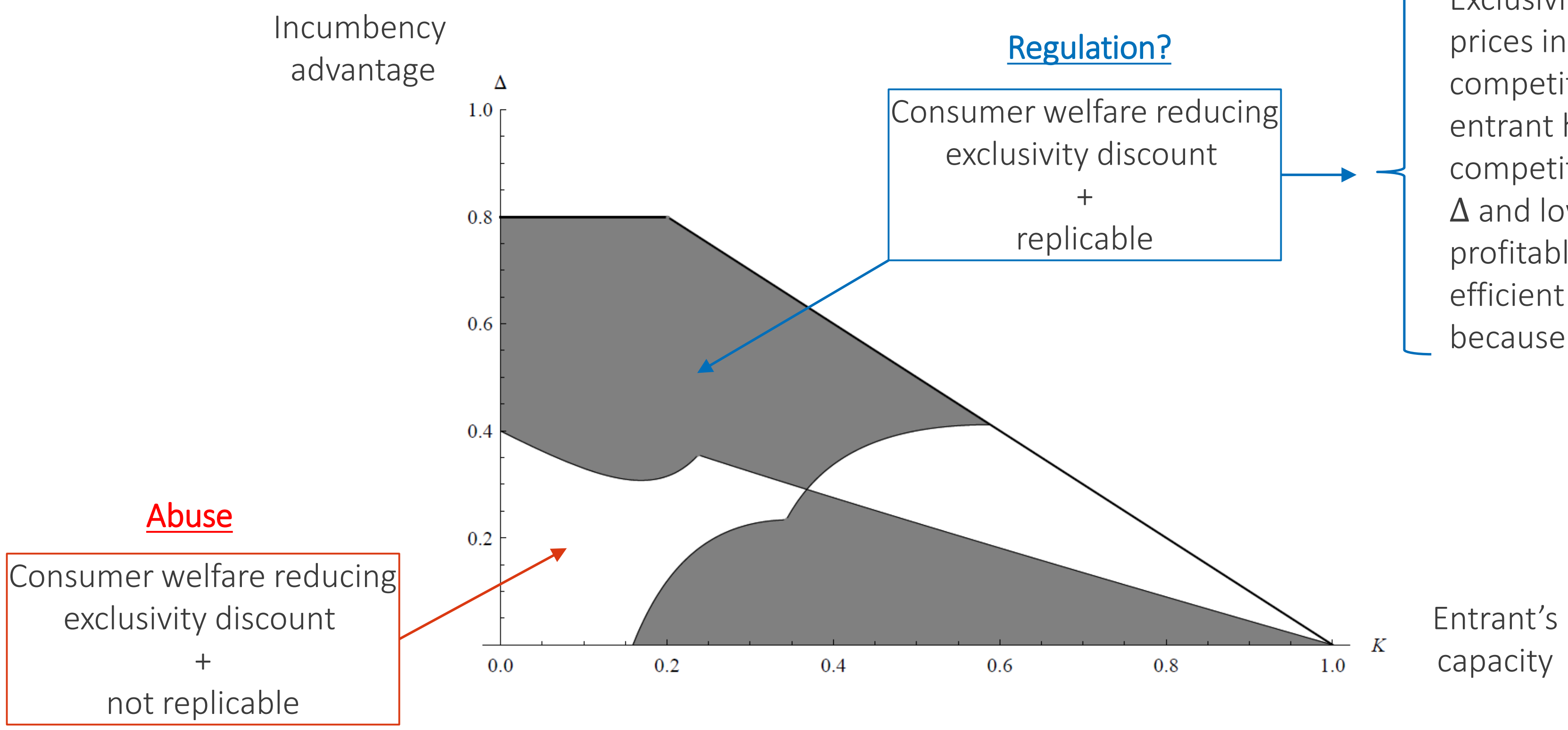
- New critical contestable share

$$\hat{s} = \bar{s} - \delta \frac{V(S)}{P}$$

- If $S > \bar{s}$, then $V(S) > 0$ and $\hat{s} < \bar{s}$; consequently, entry in the short run will occur for $\hat{s} < s < \bar{s}$
- Profit sacrifice in the short run may not distort competition in dynamic set ups

THE ATTRIBUTION TEST AND CONSUMER WELFARE (1)

- **The Attribution Test is not supposed to determine whether the conduct under scrutiny (e.g. the fidelity discount scheme) is welfare reducing; it is merely a way to determine whether as-efficient competitors are able to compete on the merits**

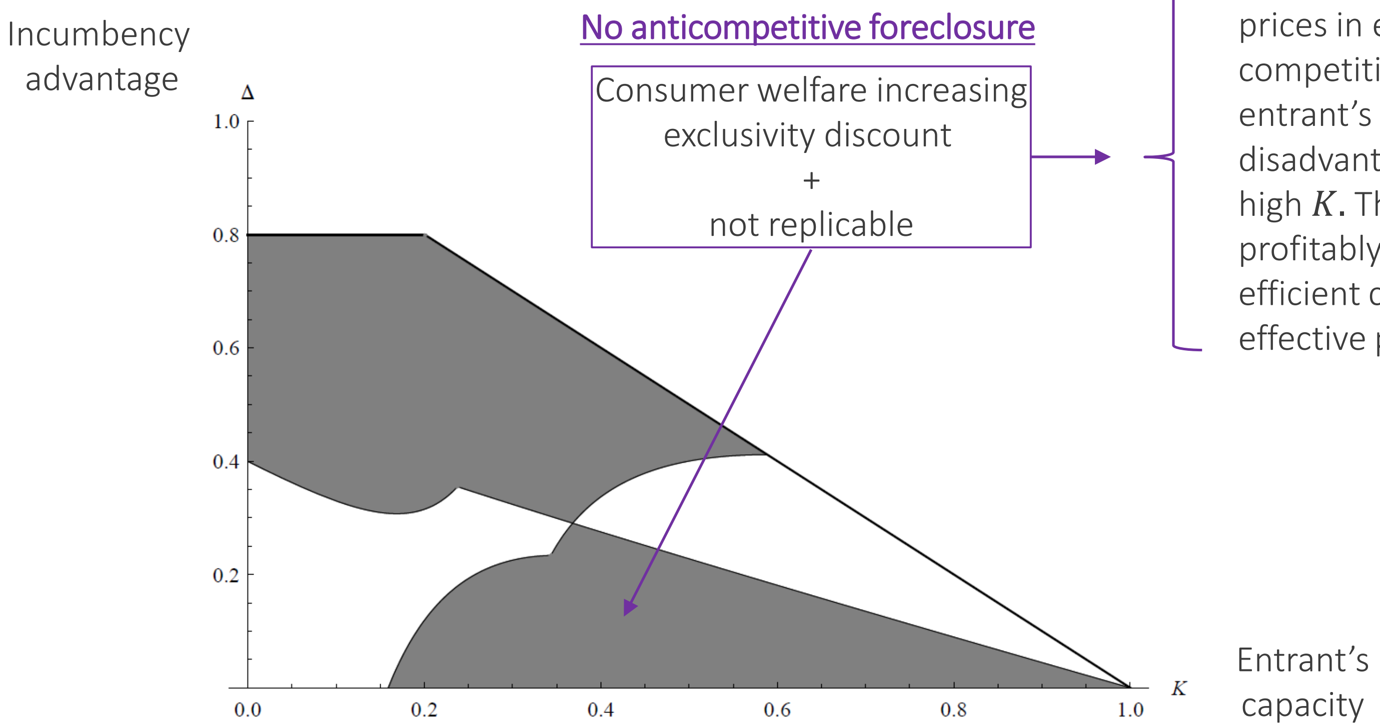


Exclusivity discount leads to higher prices in equilibrium because competition is weak given that entrant has a significant competitive disadvantage (high Δ and low K). These prices can be profitably replicated by an as-efficient competitor, however, because the effective price is high

Calzolari and Denicolò, 2018

THE ATTRIBUTION TEST AND CONSUMER WELFARE (2)

- **The Attribution Test is not supposed to determine whether the conduct under scrutiny (e.g. the fidelity discount scheme) is welfare reducing; it is merely a way to determine whether as-efficient competitors are able to compete on the merits**



Exclusivity discount leads to lower prices in equilibrium because competition is fierce, since entrant's competitive disadvantage is small (low Δ and high K. These prices cannot be profitably replicated by an as-efficient competitor because the effective price is low.

Calzolari and Denicolò, 2018

Policy Implications

POLICY IMPLICATIONS (1)

- No unilateral conduct can be regarded as abusive unless it distorts the competitive process. Hence, competition authorities and courts must necessarily apply the ***As-Efficient Competitor Test*** in their abuse of dominance inquiries
- Implementing the As-Efficient Competitor Test requires characterizing the As-Efficient Competitor, which in turn requires identifying
  - The markets directly and indirectly affected by the unilateral conduct under scrutiny, and
  - Any relevant asymmetries between the allegedly dominant firm and the As-Efficient Competitor
- None of this is possible unless a **cogent theory of harm** is specified

POLICY IMPLICATIONS (2)

- The As-Efficient Competitor Test has two legs: the ***Matching Test*** and the ***Attribution Test***
- The role of the Attribution Test is to determine whether the As-Efficient Competitor can replicate profitably the unilateral action under scrutiny by undercutting …
- … its role is not to check whether the dominant company's unilateral company involves a ***profit sacrifice …***
- **…** or to distinguish between welfare reducing and welfare increasing conducts

THANK YOU!

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View my research on my SSRN author page: http://ssrn.com/author=47132