Banning price discrimination by dominant firms

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Lexonomics

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Background

- “Banning Price Discrimination by Dominant Firms” with Jan Bouckaert (University of Antwerp) and Hans Degryse (Tilburg University), working paper, February 2007
- “Dominant” firms
- Working paper analyses two price discrimination bans for dominant firms:
  1. Ban on “higher-prices-to-sheltered-consumers”
  2. Ban on “lower-prices-to-rival’s-customers” ? focus today

Motivation: cases in regulation and antitrust

- Restrictions on former monopolist in liberalised sectors to "win back" customers that switched to competitors
  - Eg. uniform rate requirements for cable operators in the US in order "to prevent cable operators from dropping the rates in one portion of a franchise area to undercut a competitor temporarily"
- "Selective price cutting" targeted at customers of competitors can be an abuse of dominance under Article 82 of EC Treaty
  - Eg. *AKZO; Irish Sugar; Compagnie Maritime Belge; Hilti*
  - Prices above marginal costs ? no predatory pricing
  - Not illegal in the US (*Brooke; American Airlines*)

Economic intuition

- Prohibiting targeted response by dominant firm encourages entry or prevents exit
- More "costly" for dominant firm to respond to entry with lower prices because of lost revenues of infra-marginal consumers
  - ? relaxes competition: dominant's firm prices are higher without targeted response
- Higher prices imply more scope for entry

Modelling framework

- Two segments and two asymmetric firms
  - Sheltered segment with dominant firm (firm A)
    - Dominant firm's overall market share > 50%
  - Competitive segment with dominant and non-dominant firm (firm B)
    - Competition on competitive segment à la Hotelling

- Two periods
  - **Period 1**: each firm charges uniform prices on the competitive segment
  - **Period 2**: different prices to own customers and rival's customers ("poaching" or "behavior-based price discrimination")

- All consumers buy each period (repeated sales)

Interpretation of model

- Covers following scenarios:
  - Former monopolist faces entry only in liberalised segment (period 1) and responds selectively to entrant (period 2)
  - Dominant firm faces competitive threat in part of the market (eg. only business customers or only at geographical border) and responds selectively to that threat

- Ban on “lower-prices-to-rival’s-customers”:
  - Firm A is known to be dominant in period 2
  - Dominant firm A has to charge a uniform price in the competitive segment in period 2 (same price to own and rival’s customers – no selective price cutting)
  - In period 1 both firms anticipate the ban for the dominant firm in period 2

First period without ban

A

B

$$p_1^A = \frac{t(3+\mathbf{d})}{3}$$

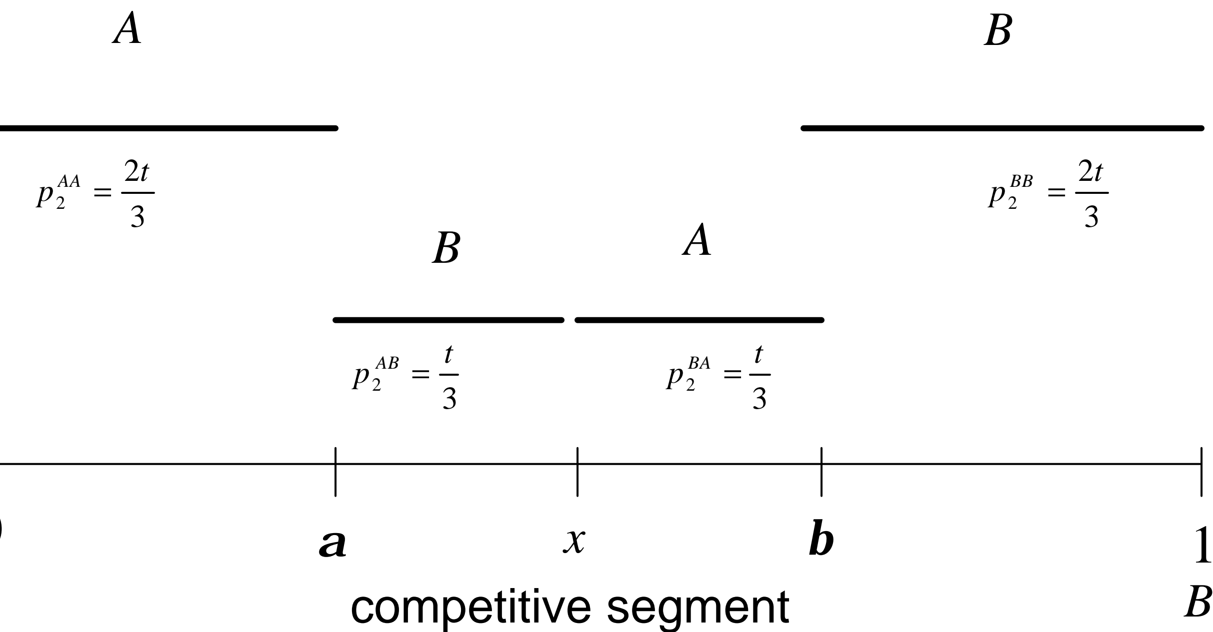
$$p_1^B = \frac{t(3+\mathbf{d})}{3}$$

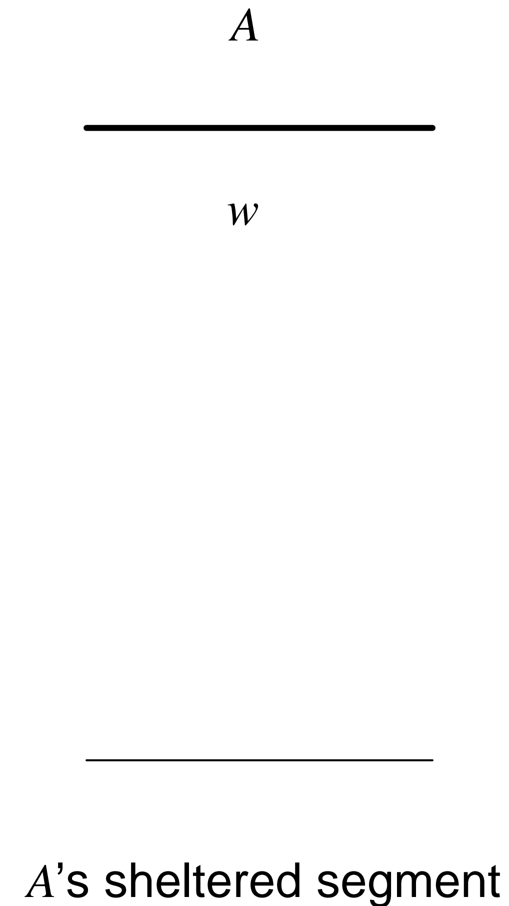
0 x 1

B

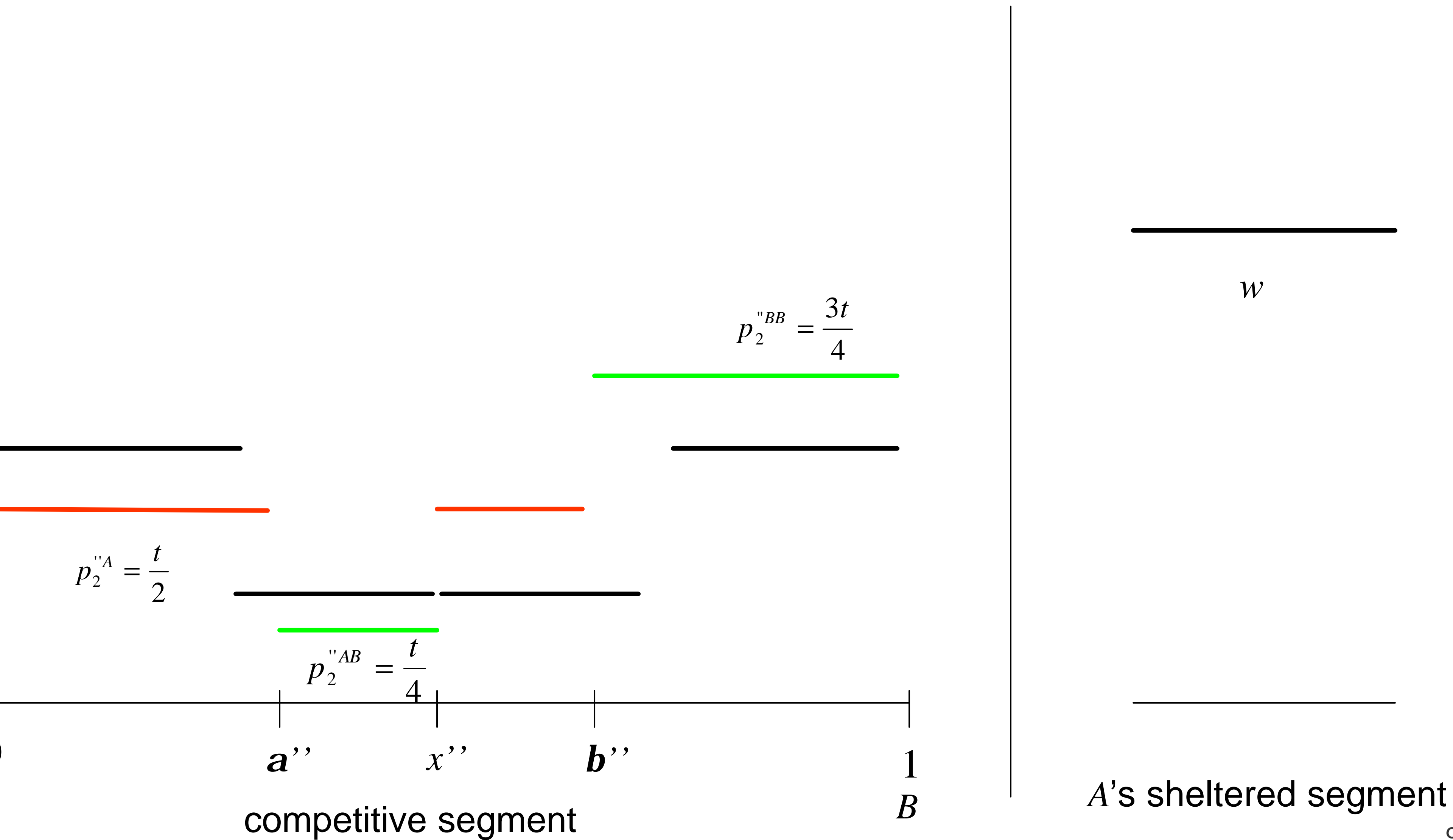
competitive segment

Second period <u>without ban</u>





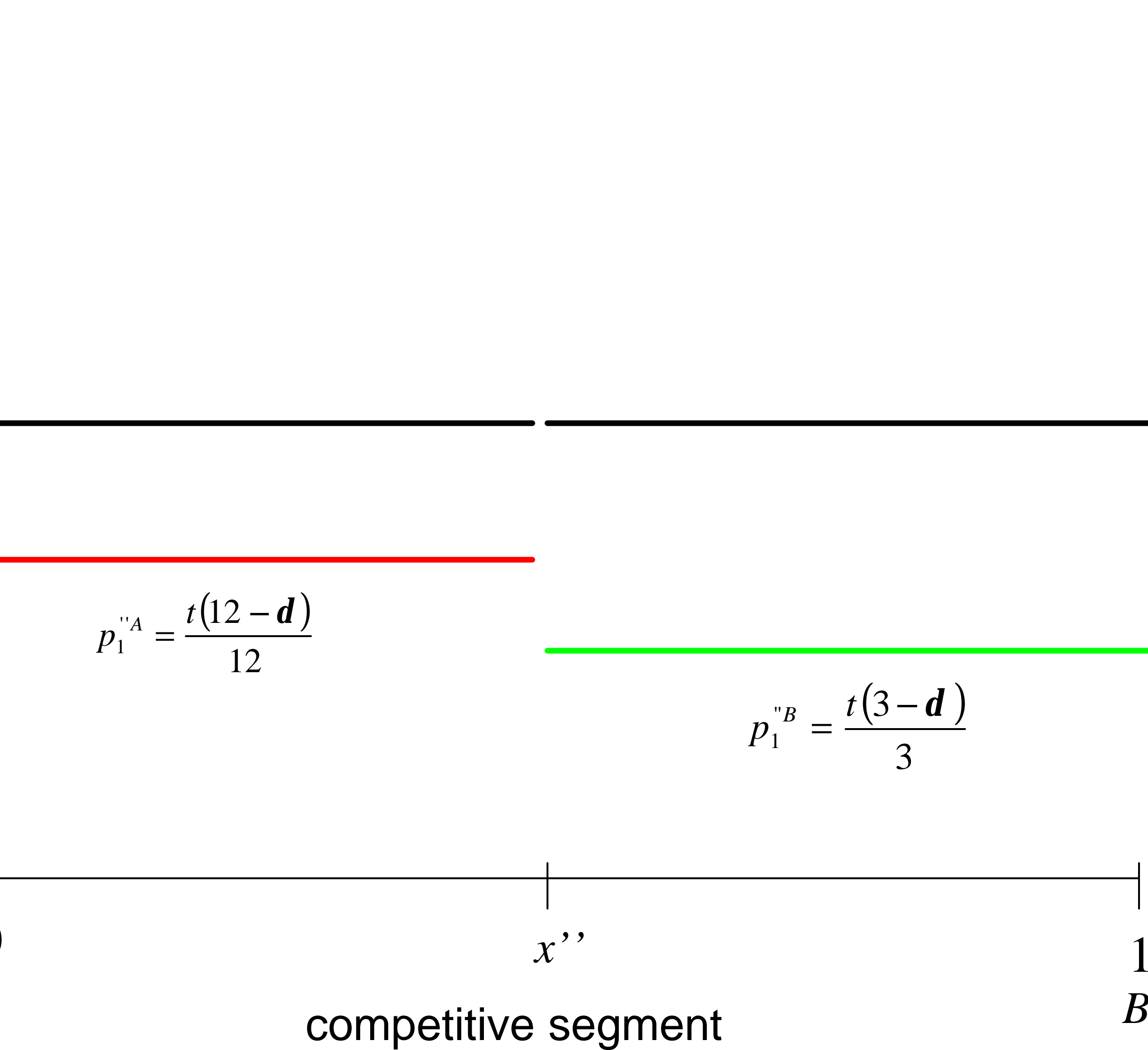
Second period with ban (static analysis)



Static analysis

- Economic intuition is confirmed in static analysis (only second period)
  - Competition for B’s customer base relaxes as A poaches less aggressively
  - Competition for A’s customer base intensifies
  - Overall prices and profits for B are higher ? ban encourages entry
- Thisse & Vives (AER 1988) and Armstrong & Vickers (JIE 1993) have similar results

First period with ban



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A's sheltered segment

Dynamic analysis

- First period is added, in which both firms anticipate the ban for firm A in the second period

- This leads to harsher competition in the first period
  - First-period demand becomes substantially more elastic
  - Marginal customer becomes more price sensitive in first period
    - When the dominant firm decreases its first-period price by one unit, the second-period poaching price of the other firm goes up by less than one unit

- Harsher competition across both periods
  - Discounted average prices decrease
  - Discounted average profit firm B decreases ? ban discourages entry

Various effects of the ban

	With ban
Consumer surplus	**+**
Discounted average prices	-
Average transportation costs	-
Producer surplus	**-**
Average first-period prices	-
Average second-period prices for A’s customer base	-
Average second-period prices for B’s customer base	+
Total welfare	**+**

Policy discussion: ban or no ban?

- Bans on win-back campaigns and selective price cuts by dominant firms are imposed to encourage entry
  - In static model, ban works by relaxing competition for the entrant
- In dynamic model, ban intensifies overall competition
  - Dominant firm initially competes more aggressively in to create optimal situation when ban becomes effective
    - ? discourages entry
    - ? increases consumer surplus and total welfare
- What is the main objective of competition policy?
  - To increase consumer surplus?; to increase total welfare?; to facilitate the competitive process?