

Supply Chain Research and Public Policy: The Case of Slotting Allowances

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Woodstock, Vermont
July 29, 2004

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Outline

- Slotting allowances
- Controversy and debate
- Government actions
- Supply chain research and public policy
- Looking forward...
 - Areas of interest to us
 - What we should do

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Slotting Allowances

- Lump-sum, up-front payments made by a manufacturer to a retailer to have a new product carried by the retailer and placed on its shelves (FTC report). (Also a variant known as pay-to-stay fees.)
- Slotting allowance per SKU:
 - \$75-300 per store; \$3,000-40,000 per regional chain, \$1.4 to 2 million for a national introduction.
 - 16% of a new product's introductory costs (R&D and market analysis expenditures account 14%)

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The Debate

- Make business sense, contribute to consumer welfare
 - Efficient allocation of scarce shelf space
 - Risk sharing (given high new product failure rate)
 - Signaling (Lariviere and Padmanabhan 1997)
- Anti-competitive, harm consumer welfare
 - Small manufacturers are disadvantaged
 - Higher retail prices (Shaffer 1991)
 - Lower
 - Output
 - Quality
 - Variety
 - Innovation

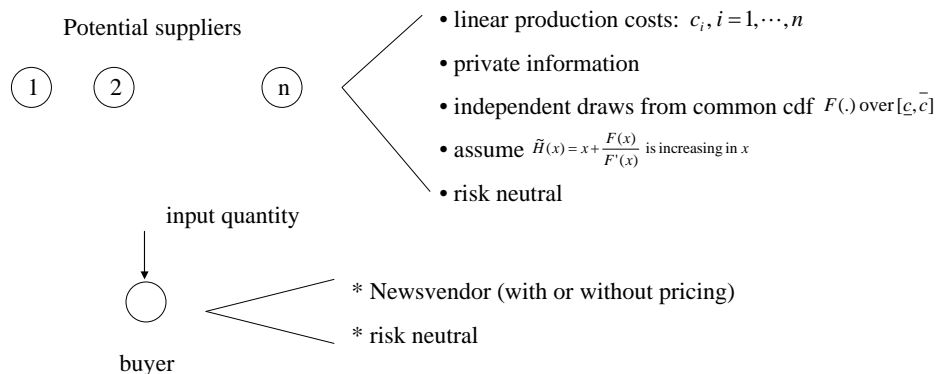
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Government Actions

- Bureau of Alcohol, Tobacco, and Firearms (BATF)
 - Banned slotting allowances in the alcohol trade in 1995
- Federal Trade Commission
 - Refuses to issue guidelines on slotting allowances for the grocery industry, citing more research necessary
- Justice Department
 - Investigation of Frito-Lay focusing on slotting allowances

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A supply chain model



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Entry-fee Auctions

- Buyer announces a supply contract $P(Q)$
 - E.g., a returns contract, or a revenue-sharing contract
- Suppliers indicate entry fees they are willing to pay
 - English auction, Dutch auction, first-price sealed-bid auction, or Vickrey auction
 - Highest fee wins
- The winner is given quantity decision right
- Entry-fee auctions are optimal.

This optimal design has two features that correspond to two common practices in the grocery industry, i.e., the use of slotting allowances and VMI.

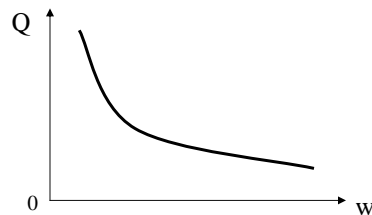
This research supports the efficiency argument for the use of slotting allowances.

Details in F. Chen "Auctioning supply contracts," working paper.

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Alternative Design: wholesale price auction

- Buyer announces a purchasing schedule, i.e., purchase quantity as a function of wholesale price



- Suppliers each name a wholesale price in sealed bid
- Lowest wholesale price wins

No slotting allowances here.

The actual purchase quantity is the same as in the entry-fee auction.

For newsvendor with pricing, retail price is the same under both designs.

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To inform policy debate...

- Efficiency
 - Cost minimization, profit maximization, risk sharing...
- Welfare
 - Competition
 - Production output: quantity, quality, price, variety, innovation
 - Consumer welfare

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Some policy areas

- Robinson-Patman act
- Trade policy
- Gun control
- Healthcare
- Etc.

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