



# MARKET DEFINITION, MARKET POWER, AND COMPETITIVE EFFECTS

## ***Antitrust Boot Camp***

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# WHAT IS THE ECONOMIC PURPOSE OF ANTITRUST LAWS?

- **Two Schools of Thought:**
  - **“Consumer welfare standard”** – does the challenged conduct increase or decrease the aggregate benefits to *consumers* of the product or service?
  - **“Total welfare standard”** – does the challenged conduct increase or decrease the aggregate benefits to the combined benefits obtained by both consumers and producers of the product or service?
    - Focus on overall economic efficiency.
    - If a practice harms consumers but profits increase by more than consumers are harmed, the practice should be permitted.
  - In general, the consumer welfare standard seems to prevail.
    - But many defenses are offered for conduct that has anticompetitive effects; sometimes these involve benefits to sellers..
- **Primary economic question: did/does/will the conduct benefit or harm consumers?**
  - Or, the public at large (“society”).

# TOPICS

1. Market definition and market power: an overview
2. The “Hypothetical Monopolist Test”
3. Mergers vs. Non-Merger Contexts
4. Anticompetitive effects

# MARKET DEFINITION

- Courts expect or require plaintiff to define “relevant market” in “rule of reason” antitrust cases.
  - Not necessary in “per se” cases such as price fixing, bid rigging, market allocation.
    - Why per se? Benefits from conduct are considered so rare or unlikely as to not warrant deeper investigation.
  - But not uncommon in follow-on civil litigation for damages relating to overcharges.
  - Market definition has a product dimension and a geographic dimension.
- Economists sometimes find a requirement to define a market... annoying.
  - Market definition may involve reducing complex economic relationships to a simplistic label.
    - Defining markets often eliminates rather than adds economic information and insights.
  - Defining markets is typically less useful (to economists) in non-merger contexts.
- Why define a market?
  - Part of an indirect analysis of the extent of a defendant’s actual or potential *market power*.

# MARKET POWER OR MONOPOLY POWER?

- **Supreme Court:**

- Market power: "the ability to raise prices above those that would be charged in a competitive market."
- Monopoly power: "the power to control prices or exclude competition."

- **DOJ:**

- "Precisely where market power becomes so great as to constitute what the law deems to be monopoly power is largely a matter of degree rather than one of kind. Clearly, however, monopoly power requires, at a minimum, a substantial degree of market power."
- "[P]ower in question is generally required to be much more than merely fleeting; that is, it must also be durable."

<https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act>

- **I will treat them as synonymous, and the distinction arbitrary.**

- Economists might also be vague or arbitrary, focus on "significant" market power.

# WHY DO WE CARE ABOUT MARKET POWER?

- **Market power is an indicator of a defendant's *economic ability* to harm the public.**
  - Or, in cases involving collective action, possibly defendants' *joint ability* to cause harm.
- **What constitutes economic harm?**
  - Higher prices.
  - Reduced output.
  - (Or, e.g., reduced quality, innovation.)
- **Higher prices and reduced output typically are closely linked:**
  - ***Law of Demand***: all else equal, consumers buy less when price is higher.
  - OPEC reduces output to increase oil prices.
  - Relevant “consumer” in antitrust cases can be businesses, including intermediaries that resell.
  - Sometimes anticompetitive conduct by *buyers* harms *sellers* (e.g., bid-rigging at auctions).
    - Antitrust typically treats anticompetitive conduct by buyers symmetrically with that of sellers.
    - But there are differences of opinion concerning whether exercise of “buyer power” is desirable (e.g., WalMart).

# NOT ALL MARKET POWER IS CONSIDERED UNDESIRABLE

- **Distinction between market power achieved through **procompetitive** vs. **anticompetitive** means.**
  - **Anticompetitive, e.g.:**
    - Mergers that significantly reduce competition.
    - Cartel conduct.
    - Exclusionary conduct.
  - **Procompetitive, e.g.:**
    - Efficiencies, cost reductions, superior products, innovation.
  - ***Sometimes challenged conduct has both anticompetitive and procompetitive effects.***
    - Under rule of reason these are balanced, but often one or the other is considered *de minimis*.
- **The quest for monopoly profits can drive innovation that benefits the public.**
  - We protect monopoly profits under intellectual property laws for this reason.
    - *But IP rights are limited* – many antitrust actions flow from claims that IP rights were wrongly asserted.
  - Generally it is a bad idea to sanction firms merely because they were successful.
    - There can be exceptions that justify regulation or market redesign.

## DIRECT EVIDENCE OF MARKET POWER

- High profits.
- High prices relative to costs (“price-cost margins”).
- Low demand elasticity *facing the defendant(s)*.
  - A highly competitive market (high firm elasticity of demand) may have very low market demand elasticity.
  - **Example:** bottled water on summer day in Las Vegas. →
- **Collusion can be tempting if market demand elasticity is low.**
  - And more likely if sellers can communicate and coordinate effectively.
- Determining what constitutes “high” profits, prices is difficult.
- A solution sometimes is to examine *changes or differences* in prices and profits.
  - Before-during-after some alleged anticompetitive conduct.
  - Between products or locations affected and not affected by the conduct.





# INDIRECT EVIDENCE OF MARKET POWER

- **Long tradition in antitrust.**
  - “Structure-Conduct-Performance Paradigm” (originally described by economists in 1933).
  - Hypothesis:
    - Firms with high **market shares** will be more likely to exercise market power.
    - Firms in highly **concentrated markets** will be more likely to exercise market power.
  - *This requires determination of **market shares** → which requires definition of the **relevant market**.*
- **Indirect, structural evidence of market power involves analysis of, e.g.:**
  - Market share(s) of defendant(s).
  - Market concentration. (Modern measure: the HHI.)
  - Supply-side substitution and “barriers to entry.”
  - Perhaps characteristics of customers and nature of marketplace and transactions.

# MECHANICS OF THE HERFINDAHL-HIRSCHMAN INDEX (HHI)

- **Sum of the squared market shares of each supplier.**
- **Example:**
  - Firm 1 market share = 40%; squared share = 1600
  - Firm 2 market share = 30%; squared share = 900
  - Firm 3 market share = 20%; squared share = 400
  - Firm 4 market share = 10%; squared share = 100
- **Sum of shares = 100%; sum of *squared* shares = 3000**
- **Monopolist (100% share) → HHI = 10,000; 10 equal firms:  $HHI=10 \times 100 = 1000$**
- **DOJ/FTC Merger Guidelines:**
  - HHI below 1500: “Unconcentrated”
  - HHI between 1500 and 2500: “Moderately Concentrated”
  - HHI above 2500: “Highly Concentrated”
- **“Not a rigid screen... although high levels of concentration do raise concerns.”**

<https://www.justice.gov/atr/file/810276/download>

# HYPOTHETICAL MONOPOLIST TEST (I)

- **Used to define relevant markets.**
  - Designed to aid antitrust analysis of *proposed mergers*.
  - But often used in other contexts.
- **Important difference between mergers and other antitrust cases:**
  - Merger analysis is predictive: will the public be harmed in the future if we let these firms merge?
  - Other cases:
    - Did/does the defendant(s) past/present conduct harm the public?
    - Does the defendant possess market power *now*?
  - We'll come back to this distinction.

# HYPOTHETICAL MONOPOLIST TEST (II)

- Start with smallest set of products that include those at issue.
  - I.e., in merger cases, the firms' narrow overlapping products.
  - Example: KKR's acquisition of RJR Nabisco had several overlaps, e.g.:
    - Del Monte and Hunts tomato products.
    - Chung King and La Choy prepared Asian food products.
    - **Planters and Fisher nuts** →
  - **If relevant market is “roasted nuts” shares and HHI are high; if market is “salty snacks” shares and HHI are much lower.**
  - Under hypothetical monopolist test (HMT) we start tentatively with a market for nuts.
    - (In theory it is possible for there to be even narrower markets, e.g., peanuts, cashews, mixed nuts, etc.)



# HYPOTHETICAL MONOPOLIST TEST (III)

- Would a hypothetical monopolist of the narrow market be able to profitably sustain a “small but significant, non-transitory increase in price” (SSNIP)?
  - If so, the narrow proposed market is in fact a relevant market.
  - If not, this means:
    - Consumer substitution to other products would defeat a price increase.
    - “Nearest” competing products are added to the proposed market. →
    - Analysis is repeated.
  - Process continues until hypothetical monopolist over the set of products can profitably increase prices.
    - *That is, until the hypothetical monopolist can exercise market power.*



## MARKETS MAY INCLUDE *SUBSTITUTES* IN DEMAND

- **Question investigated: does the existence of a substitute constrain the pricing of the product?**
  - E.g., does the ability of consumers *to switch* to pretzels prevent a nut monopolist from exercising market power?
- **Supply factors can also be relevant: can pretzel manufacturers quickly enter with a line of nuts?**
- **Collections of products or the sale of collections of products can be a relevant market.**
  - Supermarkets
  - Office supply superstores
  - Food service distributors
- **Paper clips are not a substitute for pencils. Carrots are not a substitute for milk.**
  - But sale of milk by gas stations, carrots by produce stands, likely cannot constrain supermarket monopolist from exercising market power as can competition from other supermarket chains.

# DETERMINATION WHETHER HYPOTHETICAL MONOPOLIST COULD SUCCESSFULLY IMPOSE A SSNIP

- **This can be difficult and disputed.**
- **History in marketplace and “natural experiments” sometimes makes it clear.**
  - What happened when there was entry in the past (e.g. patents expired)?
  - Hypothetical example:
    - Drugs A and B have been in use for many years and have many generic equivalents.
    - Drug C is newer but treats same condition as A and B.
    - Upon patent expiration, generic equivalents for C are introduced and price declines significantly.
    - This suggests Drug C is a relevant market: hypothetical monopoly of C would enable restoration of high price.
- **Evidence (documents, testimony, econometrics) on substitution as prices increase.**

# HYPOTHETICAL MONOPOLIST TEST IN NON-MERGER CASES (I)

- Merger issue is whether control of both products will enable merged company to exercise market power (or more market power).
- In non-merger contexts defendant is alleged to *already* possess (and exercise) market power.
- “Cellophane fallacy” →
  - Other products were good substitutes only at monopoly price for cellophane, not at the competitive price.
  - *Monopolists increase price until they lose significant sales, often as customers switch to alternatives.*
  - At *competitive* price, cellophane had low price elasticity.
- HMT can sometimes be used, with caveats.

## Cellophane





# HYPOTHETICAL MONOPOLIST TEST IN NON-MERGER CASES (II)

- HMT can be a *conservative* test for defining the relevant market in a non-merger case.
- Example: Visa, Mastercard, Amex enforced rules that had allegedly already had anticompetitive effects.
  - Amex: **debit cards** are in market, Amex share low, no market power.
  - HMT:
    - Hypothetical merger of all credit card operations, so only one firm offers credit cards and serves merchants for credit card transactions. →
    - Debit cards still offered by many banks, processed by several networks.
    - Seems obvious that hypothetical monopolist of credit cards could profitably increase fees, reduce rewards.
    - (Probably for same reason, Amex expert avoided HMT. Amex dropped debit argument on appeal, prevailed on “two-sided market” grounds.)



## HYPOTHETICAL MONOPOLIST TEST IN NON-MERGER CASES (III)

- In many cases, the monopolist is alleged to be not hypothetical, but actual (or a cartel).
  - In such circumstances economists sometimes question the importance of market definition.
    - Direct evidence of harm to competition (e.g. higher prices) means whatever the extent of the relevant market, it was insufficiently broad to prevent the defendant(s) from exercising market power.
    - Reminder: the reason we define market is to determine if the defendant has market power.
    - The reason we evaluate market power is to determine if the defendant *can* cause economic harm.
    - But all of this is superfluous if we can establish economic harm directly.
- ***Evidence of economic harm can be used to establish market power and market definition.***
- Recall the generic drug C example (alternative to drugs A and B).
    - If we observe significant increase in price for C controlling for cost and notwithstanding continued competition from A and B, this can be evidence of e.g. collusion and the joint exercise of market power.
    - It also is evidence that the relevant market excludes A and B.
- **Often both direct and indirect approaches are used for market power and market definition.**

## COMPETITIVE EFFECTS: THE ULTIMATE QUESTION

- **Firms typically are permitted to exercise their unilateral market power.**
- **But firms typically may not act *collectively* to exercise market power.**
- **Individual firms with unilateral market power may be prohibited from:**
  - Merging with a rival supplier that significantly increases its market power.
    - Unless perhaps efficiencies from merger are substantial and are sure to result in consumer benefits.
  - Undertaking exclusionary actions
  - Undertaking conduct that has collusive-like effects.
- **Economists analyze evidence to determine if conduct causes antitrust injury.**
  - Also analyze potential efficiencies or procompetitive effects (potential defense).
  - Also analyze damages, likely competitive effects of proposed injunctions, etc.

- I am happy to answer questions.
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