

MONOPOLY POWER, MARKET DEFINITION, AND THE *CELLOPHANE* FALLACY

Philip Nelson
Economists Incorporated

Washington DC

Suite 400
1200 New Hampshire Avenue, NW
Washington DC 20036-6802
Tel (202) 223-4700
Fax (202) 296-7138
info@ei.com

San Francisco, CA

Suite 250
5980 Horton Street
EmeryStation North
Emeryville, CA 94608
Tel (510) 547-6910
Fax (510) 547-5162
info@ei.com

Antitrust Market Power: Definition

- “*Market Power*” is the ability of a firm or group of firms within a market to *profitably* charge prices above the *competitive level* for a *sustained period of time*.
- Economists and courts often use “*market power*” and “*monopoly power*” interchangeably.
- However, not all firms with market power have sufficient market power to have “*market power*” in an antitrust sense.

Analysis of Market Power To Evaluate Market Conduct: The Monopolization Case Market Power Paradigm

- Product Market Definition
- Geographic Market Definition
- Market Concentration
- Entry Conditions
- Other Structural Characteristics of Market
- Analysis of Market Performance

Product Market Definition Under Merger Guidelines

- Demand-side Substitution--As the DOJ and FTC Merger Guidelines indicate, economists attempt to identify those products that consumers will substitute for a given product in response to a “small but significant and nontransitory” price increase when identifying the products that compete in an antitrust market. (§1.11)
- Supply-side (Production) Substitution--As the DOJ and FTC Merger Guidelines indicate, economists will include in an antitrust market all producers that currently produce a relevant product and all producers that could easily and economically produce and sell the relevant product in a short period of time (e.g., one year) in response to a “small but significant and nontransitory” price increase. (§1.32)

Geographic Market Definition Under Merger Guidelines

- Antitrust economists will start with a fairly narrow area and then determine if firms located in that area are insulated from competitive pressures from firms located in other areas.
- They will continue to include firms in the market (and hence expand the geographic scope of the market) until they identify an area in which a hypothetical monopolist could profitably impose a “small but significant and nontransitory” increase in price. (§1.21)

Relevant Market Under Merger Guidelines: Conclusion

In sum, an antitrust market is defined: “as a product or group of products and a geographic area in which it is produced or sold such that a hypothetical, profit maximizing firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose a ‘small but significant and nontransitory’ increase in price, assuming the terms of sale of all other products are held constant.” (§1)

Avoiding The *Cellophane* Fallacy:
Market Definition Must Be Based On Substitution
At Competitive Prices, Not Monopoly Prices

- Market definition analysis under the Merger Guidelines uses the “prevailing prices” unless “premerger circumstances are strongly suggestive of coordinated interaction [and probably also the unilateral exercise of market power], in which case the Agency will use a price more reflective of the competitive price.” (§1.11)
- Undertaking a market definition analysis at monopolistic prices can lead one to define too broad a market and fail to identify market power when it is present, which is known as the “*Cellophane* Fallacy.”

Illustration of *Cellophane* Fallacy: Example

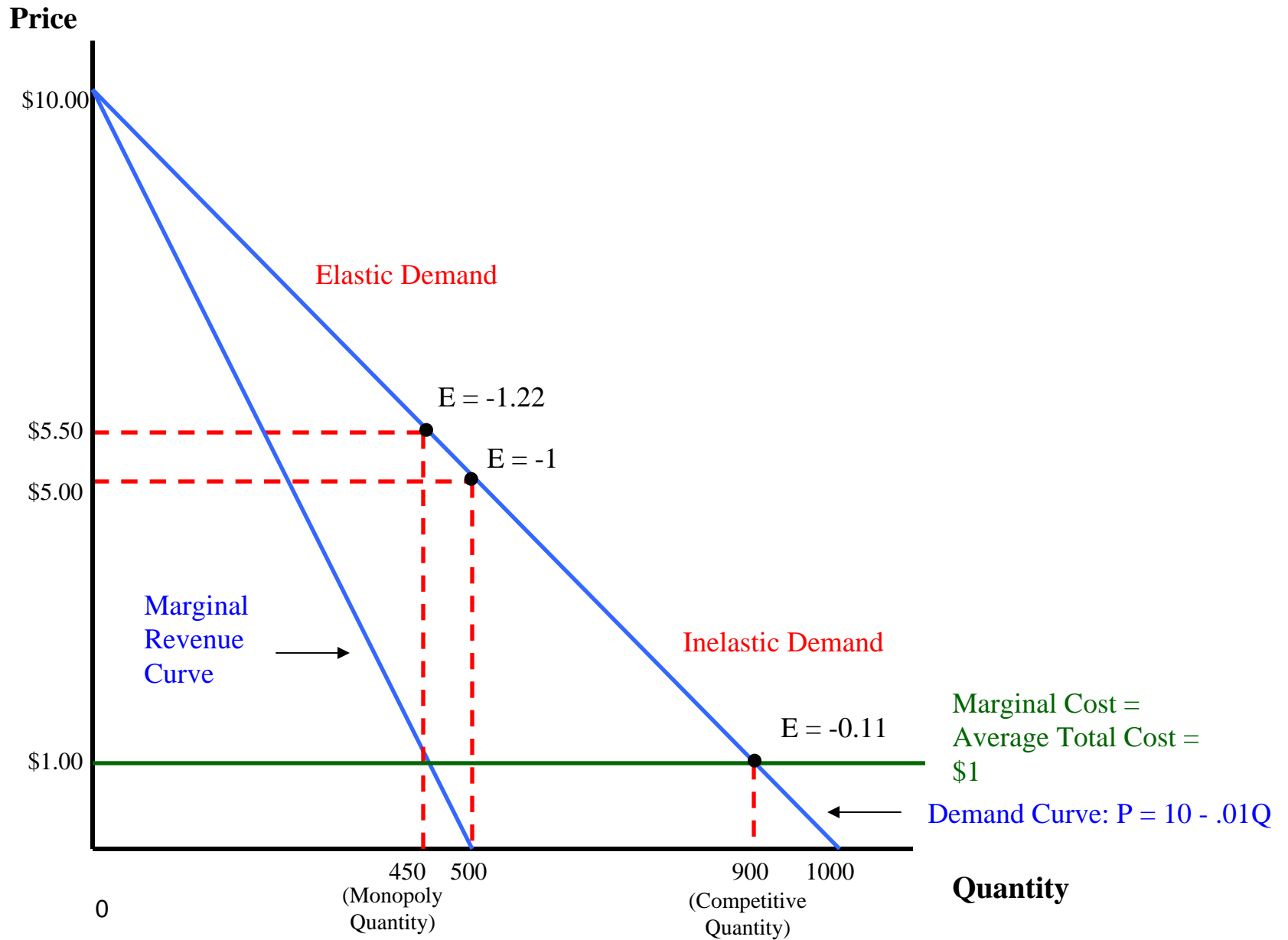


Illustration of Cellophane Fallacy: Interpretation of Example

- A monopolist maximizes its profits by charging \$5.50, which is \$4.50 above the competitive price of \$1.00.
- At the monopoly price, the own demand elasticity is -1.22, which is substantially higher than the elasticity of demand at the competitive price (-0.11).
- A hypothetical monopolist would not profit from a 5% price increase above \$5.50 (because this is the profit maximizing price).
- As a result, application of the Merger Guidelines' paradigm at a price of \$5.50 would suggest that the relevant market includes other products, even though it is profitable for a "hypothetical monopolist" of the product to raise price above the \$1.00 competitive price.

Implications of Cellophane Fallacy For Market Definition Analysis

- Estimated demand elasticities and cross-elasticities, by themselves, cannot be used to define a relevant market because one needs to measure these elasticities at the competitive price level to avoid the *Cellophane* Fallacy.
- If one needs to identify the competitive price level before measuring demand elasticities:
 - How can one define a relevant market before reaching a conclusion about the existence of market power?
 - Why bother to define a relevant market and undertake the rest of the monopolization case market power paradigm if one already knows what the competitive price is and thus can compare it to the current price to determine if a firm has market power?

How can one define a relevant market before reaching a conclusion about the existence of market power?

- A key lesson of the *Cellophane* Fallacy is that in some circumstances it may be sensible for economists to consider all of the elements of the monopolization case market power paradigm and to develop an internally consistent analysis that aligns with the available factual evidence before reaching a final conclusion about the scope of the relevant market.
- In particular, in monopolization cases it can be important to consider “performance” evidence to understand how a market is structured and/or directly determine if a firm has market power.

Why bother with the monopolization case market power paradigm?

- Recognition of the *Cellophane* Fallacy suggests that the monopolization case market power paradigm is best viewed as an organizational methodology for the presentation of evidence, rather than as a rigid set of sequential steps that must be undertaken in order.
- As an organizational methodology, the monopolization case market power paradigm is helpful because it provides a way for courts to make sure that the antitrust analysis is complete and that important economic evidence that will shed light on the internal consistency of the parties' arguments is available to the court.
- However, there may be circumstances when something short of a complete analysis is required. In particular, there may be situations where there is direct evidence of market power or where it is clear that a firm does not have market power.

Is the *Cellophane* Fallacy a major problem for all monopolization cases?

- The *Cellophane* Fallacy is most relevant when a determinative issue is demand-side substitution.
 - In many cases, a firm or group of firms will not have significant shares even when the narrowest conceivable market is considered, which may mean that one does not have to reach a final conclusion about the scope of the relevant market.
 - Many cases involve markets where there is substantial supply-side substitution, which may allow one to avoid fully analyzing the demand-side issues that underlie the *Cellophane* Fallacy.
- Detailed analysis of the relevant market may be less important when there are clear procompetitive business justifications for the allegedly anticompetitive behavior or where there is direct evidence that a firm has market power.
- Nonetheless, recognition of the *Cellophane* Fallacy may make it harder for Defendants to obtain early dismissal of cases, since it can lead to the conclusion that there are significant factual issues that need to be resolved before finding that a Defendant does not have antitrust market power.

There Is No “Cookbook” Methodology For Defining Markets

- The fact that two products serve the same end use does not mean that they are in the same relevant product market (e.g., lessons from collusion cases) and the fact that two products are somewhat differentiated does not mean that they do not compete.
- Price levels and price movements by themselves do not necessarily indicate that two products are in the same market (e.g., simple price correlations may reflect spurious relationships), but they nonetheless may be relevant.
- Simple tests (such as Elzinga-Hogarty shipment patterns test) that rely on simplifying assumptions (such as product homogeneity) can be misleading.

What types of evidence will shed light on how the relevant market should be defined in a monopolization case?

- Interviews of businessmen
- Corporate documents
- Trade Publications
- Industry Statistics
- Corporate financials
- Event Analyses/Econometrics

Interviews, Corporate Documents, Trade Press

- Market participants often have insights into why particular conduct is observed and the importance of particular structural characteristics of the market.
- Nonetheless, care must be taken in interpreting this information because the perspectives of market participants may be biased.

Industry Statistics

- Data on key industry and firm statistics, such as prices, output levels, and trade flows, can provide insights into the industry structure, and thus market definition.
- Industry statistics can also identify the key propositions that deserve testing (e.g., trade flow data may identify flows between particular geographic areas that should be explored more fully to understand the scope of the geographic market).

Financial Data

- Economists have come to recognize that accounting data often are flawed, which argues against relying exclusively on price-cost margins or rates of return as indicia of market power.
- Nonetheless, financial data can provide helpful insights into economic costs and thus may be helpful in understanding market relationships (e.g., helpful in identifying shifts in costs that must be understood to interpret market events).
- As a result, financial data when used carefully can inform economists about such things as the importance of particular firm activities, why prices are set at particular levels, and why they change over time.

Event Analyses, Econometrics

- Time Series Analysis—Output/Price/Profitability changes over time can provide insights into the extent to which a firm (or group of firms) is insulated from competition in certain situations.
- Cross-Section Analysis—Output/Price/Profitability differences across different geographic areas or products can provide insights into the extent to which a firm (or group of firms) is insulated from competition in certain situations.
- Time Series and Cross Section analysis does not have to involve regression analysis. “Natural Experiments” (e.g., cost shocks, entry, and sharp shifts in demand or supply) can often provide valuable insights.

Conclusion

- In monopolization cases, relevant markets are defined to help determine if a firm has market power, although one need not define a relevant market if there is direct evidence of market power.
- When defining a relevant market, one must consider the pitfalls associated with the *Cellophane* Fallacy.
- The challenges posed by the *Cellophane* Fallacy do not mean that one should abandon the traditional monopolization case market power paradigm as a way of organizing market power presentations.
- To the contrary, recognition of the problems posed by the *Cellophane* Fallacy suggest that there can be risks associated with truncating the market power analysis (although there are circumstances when one does not need to analyze every issue).

Conclusion

(continued)

- The market definition analysis should not only employ questions about what will happen if prices increase from current levels, but also ask what will happen if prices are decreased, since this will provide insights into both demand-side and supply-side substitution and will help avoid committing the *Cellophane* Fallacy.
- The “short cuts” that can be used to reduce litigation costs, while also avoiding the *Cellophane* Fallacy, are case specific because the available data and determinative issues vary across cases.