Supplemental Material

Introduction to Formal Horizontal Merger Analysis

Merger Antitrust Law

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Topics

- Proving a Section 7 violation
  - The statute
  - Proving a prima facie case
  - The allocation of the burdens of proof under *Baker-Hughes*
- Typical litigation paradigms
- Preliminary injunctions
  - Standards
  - Right of action
  - Appeals
- Relevant product markets
  - The *Brown Shoe* “outer boundaries” and “practical indicia” tests
  - The Merger Guidelines’ “hypothetical monopolist test”
- Relevant geographic markets

Elements of a Section 7 Violation

Clayton Act § 7—Current version

- Provides the U.S. antitrust standard for mergers

> No person engaged in commerce or in any activity affecting commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no person subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another person engaged also in commerce or in any activity affecting commerce, where in **any line of commerce** or in any activity affecting commerce **in any section of the country**, **the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly**. [1]

- Essential elements of a Section 7 violation
  1. Acquisitions of stock or assets that,
  2. “in any line of commerce” (product market)
  3. “in any part of the country” (geographic market)
  4. The effect of the acquisition “may substantially lessen competition or tend to create a monopoly”

Called the *relevant market*

Called the *anticompetitive effects test*

[1] 15 U.S.C. § 18 (emphasis added; remainder of section omitted).

Proving a Section 7 violation

- The prima facie case
  - The plaintiff must adduce evidence sufficient for the finder of fact to find each and every element of a Section 7 violation:
    1. The relevant product market
    2. The relevant geographic market
    3. The requisite anticompetitive effect in the relevant market
  - Note on market definition as an element of the offense
    - Some commentators argue that direct evidence of anticompetitive harm should obviate the need to prove the relevant market
      - For example, say the challenge is to a consummated merger and that the plaintiff can prove the merger resulted in a substantial price increase
    - Opponents of this view argue that by its terms Section 7 requires the showing of the product and geographic dimensions of a relevant market in which the anticompetitive effect would be located
    - Views of the DOJ and FTC
      - The DOJ and FTC agree that the determination of a relevant market is not necessary in order to prove the requisite anticompetitive effect in the vast majority of mergers
      - BUT they have not been willing to test whether they can dispense with the market definition elements in court
    - Courts
      - Have not had to decide a case on point

Proving a Section 7 violation

- The prima facie case
  1. *Product market definition*: Courts broadly look at two types of indicia in evaluating evidence on the relevant product market—
     a. The “Brown Shoe factors”
     b. The “hypothetical monopolist test”
  2. *Geographic market definition*: Courts broadly look at two types of indicia in evaluating evidence on the relevant geographic market—
     a. “The area of effective competition”
        i. The area where customers of the merging firms can practically turn to alternative suppliers (when customers travel to suppliers—think retail stores)
        ii. The area where alternative suppliers exist that can practically service the customers of the merging firm (when suppliers travel to customers—think plumbers)
     b. The “hypothetical monopolist test”
  3. *Anticompetitive effect*: Courts broadly look at two types of indicia in evaluating evidence on the relevant geographic market
     a. The *Philadelphia National Bank* presumption
     b. Theories and supporting direct and circumstantial evidence of likely anticompetitive harm resulting from the merger

Allocation of the burdens of proof

- *Baker Hughes* three-step burden-shifting[1]
  1. The plaintiff bears burden of proof in market definition and in market shares and market concentration within the relevant market sufficient to trigger the *PNB* presumption and thereby prove a prima facie Section 7 violation
  2. If the plaintiff satisfies this burden, the burden of production shifts to defendants to adduce evidence sufficient to rebut *PNB* presumption and any additional supporting evidence
  3. The burden of persuasion then returns to plaintiff to prove in light of all of the evidence in the record that the merger is reasonably probable to have an anticompetitive effect in the relevant market

- Prevailing standard for the allocation of proof burdens in merger antitrust cases
  - D.C. Circuit opinion authored by Clarence Thomas and joined by Ruth Bader Ginsburg and David B. Sentelle
  - Expressly held that the *PNB* "clear showing" standard on the merging parties was implicitly abrogated by subsequent Supreme Court opinions
    - Especially *General Dynamics*[2]

[1] United States v. Baker Hughes Inc., 908 F.2d 981, 982-83 (D.C. Cir. 1990).
[2] United States v. General Dynamics Corp., 415 U.S. 486 (1974)

Relevant Product Markets

Relevant product markets: Some background

- What is a relevant product market?
  - A relevant product market defines the product boundaries within which competition meaningfully exists[1]
  - Although discussed in terms or products, the product market concept equally applies to services or a mixed combination of a product with accompanying services
- Modern concept of relevant markets
  - Products in the relevant market should exert significant price pressure on one another
    - That is, an increase in price of one of the products in the market should cause customers to switch to other products in the market, and this loss of sales should result in the price increase being unprofitable.
  - Some definitions
    - *Inframarginal customers* continue to buy the product after the price increase
    - *Marginal customers* would buy the product at the original price but not at the increased price
- The showing of the relevant market(s) is an essential element of every Section 7 violation
  - The plaintiff must make a prima facie showing of a relevant market as part of its prima facie case and bears the ultimate burden of persuasion

[1] United States v. Continental Can Co., 378 U.S. 441, 449 (1964).

Relevant product markets: Some background

- Two complementary tests in judicial analysis
  1. The "outer boundaries" and "practical indicia" criteria of *Brown Shoe*[1]
  2. The hypothetical monopolist test of the Merger Guidelines[2]

[1] Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

[2] U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines § 4 (rev. Aug. 19, 2010).

Brown Shoe "outer boundaries" test

- *Brown Shoe*:

> The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.[1]

  - This remains the prevailing definition of a relevant product market in the case law
  - Key indicia—
    - Reasonable interchangeability of use
    - [High] cross-elasticity of demand

- General idea
  - The relevant product market should—
    1. *contain* all products that exhibit a reasonable interchangeability of use and a high cross-elasticity of demand with one another, *and*
    2. *exclude* all products that lack reasonable interchangeability of use and have a low cross-elasticity of demand with products in the relevant product market

- Modern usage
  - Reasonable interchangeability of use has largely come to mean high cross-elasticity of demand and is no longer a distinct "outer boundary" test

[1] Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

Brown Shoe "practical indicia" test

- Submarkets and "practical indicia" of relevant markets

> However, within this broad market [defined by reasonable interchangeability of use and high cross-elasticity of demand], well-defined **submarkets** may exist which, in themselves, constitute product markets for antitrust purposes. The boundaries of such a submarket may be determined by examining such **practical indicia** as
>
> [1] industry or public recognition of the submarket as a separate economic entity,
>
> [2] the product's peculiar characteristics and uses,
>
> [3] unique production facilities,
>
> [4] distinct customers,
>
> [5] distinct prices,
>
> [6] sensitivity to price changes, and
>
> [7] specialized vendors.[1]

[1] Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

Brown Shoe "practical indicia" test

- Submarkets and "practical indicia" of relevant markets
  - This list of "practical indicia" was not intended to be exhaustive
  - Some additional factors that courts typically consider—
    1. Relative prices of products in the provisional market
       - A Timex and a Rolex both tell time, but they are unlikely to exhibit a high cross-elasticity of demand with on another
    2. Different functional attributes that might appeal to different classes of buyers
       - Consider the functional difference between a Ferrari 812 (0-60 mph: 2.8 sec.; top speed: 211 mph) and a Nissan Versa (0-60 mph: 10.2 sec.; top speed: 115 mph)
       - Differences in functionality are often accompanied by differences in price (Ferrari 812 base price: $340,712; Nissan Versa base price: $15,625)
    3. Differences in reputation
       - Even without functional differences

- Problems with the *Brown Shoe* "practical indicia" test
  - The list provides some factors to consider, but does not say what weight they should be given or give any other analytical technique to apply them to determine the boundaries of submarkets
  - This created an enormous amount of confusion, bad analysis, and bad decisions

[1] Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

Hypothetical monopolist test

- The original idea
  - The relevant market should be—
    1. the smallest group of products containing the products of interest (say, the products of the merging firms in a horizontal merger)
    2. in which a hypothetical monopolist of those products would raise prices profitably over the current level
    3. by at least "small but significant nontransitory" amount
  - Observations
    - Introduced in the 1982 DOJ Merger Guidelines
    - "SSNIP" = "Small but significant nontransitory increase in price"
    - Under the Merger Guidelines, a SSNIP is usually taken to be a price increase of 5% for at least one year
    - "Candidate market" = the market being tested to see if it is a relevant market

Hypothetical monopolist test (1982)

- Propositions:
  1. If a hypothetical monopolist would not have market power with respect to a group of products to be able to profitably raise prices for those products, then a fortiori a merger of firms producing products within that group could not produce in an anticompetitive price increase
  2. If a hypothetical monopolist would not raise prices by a SSNIP because it would be unprofitable, then products outside the candidate relevant market must be exerting competitive price pressure and the candidate market needs to be expanded to include the next closest substitutes (and the test run again)
  3. Find the smallest group of products for which a hypothetical monopolist would have market power to raise prices and then assess whether a merger of two firms producing products within this group would likely result in an anticompetitive price increase

Hypothetical monopolist test

- Example:
  - Say a hypothetical monopolist—
    - Controls a group of products[1]
    - Faces an (inverse) demand for this group of products: $p = 10 – ½ q$
    - Has no fixed costs and constant marginal costs of 4 per unit of production
    - Starting point: $p_1 = 5$
  - *Question*: If the current market price is 5, would a SSNIP—taken to be 5 percent —be more profitable than the prevailing market price?

Some definitions:

Marginal sales are sales that are lost when the price is increased

Inframarginal sales are sales that continued to be made at the higher price

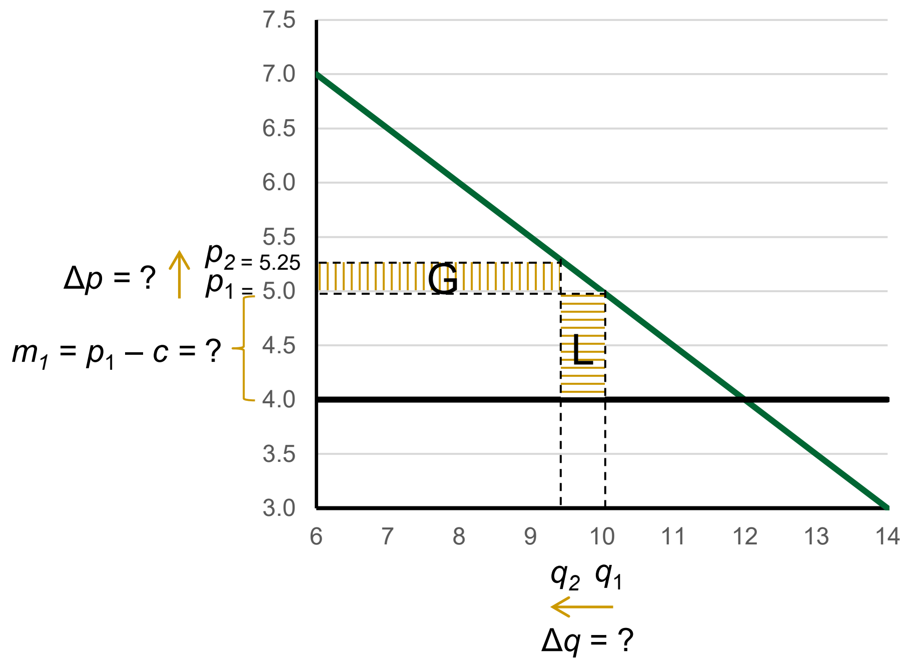
[1] This example begs the important question of how to determine the group of products that the hypothetical monopolist controls to begin the exercise. But we will leave that question until later in order to focus on the basic mathematics behind the test.

Hypothetical monopolist test

- Step 1. Set up the problem with what you know:
  - (Inverse) demand: $p = 10 – ½ q$
  - Prevailing (premerger) price: $p_1 = 5$
  - SSNIP = 5%
  - Constant marginal cost $c = 4$

Hypothetical monopolist test

- Step 1. Set up the problem:
  - (Inverse) demand: $p = 10 - ½ q$
  - Prevailing (premerger) price: $p_1 = 5$
  - SSNIP = 5%
  - Constant marginal cost $c = 4$



Step 2: Figure out what you need:

1. Need the gross gain on inframarginal sales that will be retained (Area G):

   Area G = price increase (Δp) times inframarginal sales (q_2)
   $= \Delta p q_2$

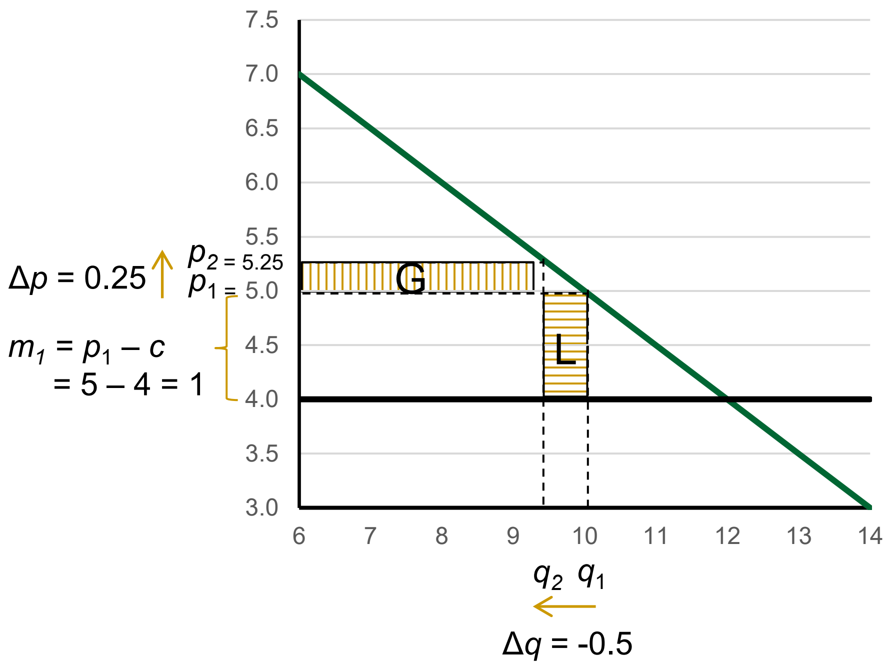
2. The gross loss on marginal sales that will be lost (Area L):

   Area L = gross margin on marginal sales (m_1) times (lost) marginal sales (Δq)
   $= m_1 \Delta q$

So need q_1, q_2, Δq, Δp, p_2, and m_1

Hypothetical monopolist test

- Set up the problem:
  - (Inverse) demand: $p = 10 – ½\ q$
  - Prevailing (premerger) price : $p_1 = 5$
  - SSNIP = 5%
  - Constant marginal cost $c = 4$



Step 3. Solve for the variables you need using the parameters given in the problem and the demand curve:

$q = 20 – 2p$ (the demand curve derived by inverting the inverse demand curve)

$q_1 = 10$ (from the demand curve given $p_1 = 5$)

$\Delta p = 0.25$ (= 5% of p_1—the SSNIP)

$p_2 = 5.25$ (= $p_1 + \Delta p$)

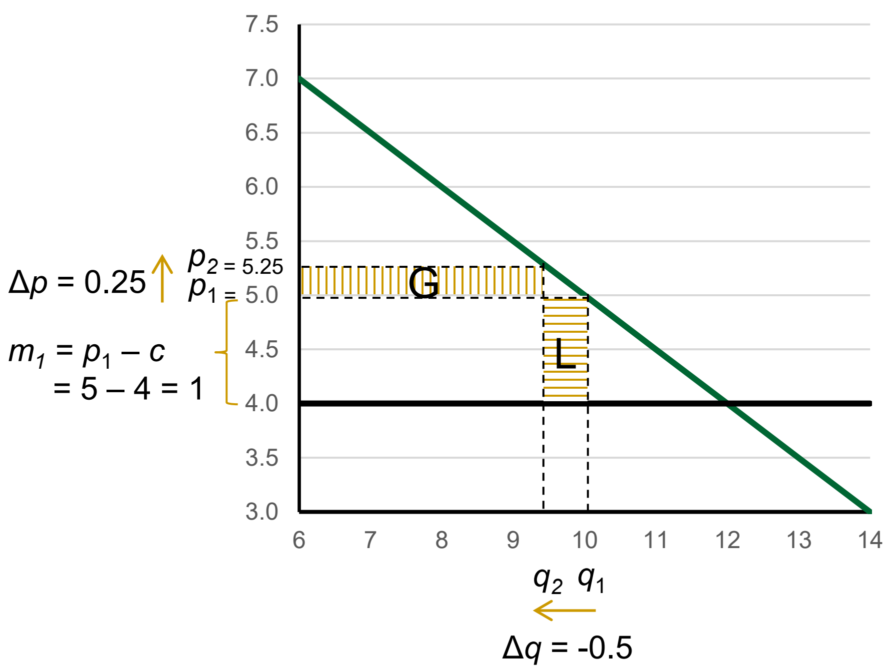
$q_2 = 9.5$ (plugging p_2 into the demand curve)

$\Delta q = q_2 – q_1 = 9.5 – 10 = -0.5$

$m_1 = p_1 – c = 5 – 4 = 1$

Hypothetical monopolist test

- Set up the problem:
  - (Inverse) demand: $p = 10 - ½ q$ $\quad q = 20 - 2p$
  - Starting point: $p_1 = 5$ $\quad q_1 = 10$ $\quad \Delta q = q_2 - q_1 = 9.5 - 10 = -0.5$
  - SSNIP = 5% $\quad q_2 = 9.5$ $\quad \Delta p = p_2 - p_1 = 5.25 - 5 = 0.25$
  - Constant marginal cost $c = 4$ $\quad m_1 = p_1 - c = 5 - 4 = 1$



Step 4. Solve problem

Area G = $q_2 \Delta p = (9.5)(0.25) = 2.375$
Area L = $m_1 \Delta q = (1)(-0.5) = 0.5$

Incremental profits = Area G – Area L
= 2.375 – 0.5 = 1.875

Therefore, a price increase of 5 percent above the current level is profitable and the HMT is satisfied

2010 Merger Guidelines

- Adopts the 1992 Merger Guidelines market definition methodology with some very significant changes
  1. Relegates market definition to one of several tools useful in merger antitrust analysis
     - May not be necessary or even helpful in all cases
     - By contrast, market definition was the point of departure for all merger antitrust analysis under the 1982 and 1992 guidelines
  2. Abandons the “smallest market” principle and unique relevant markets
     - The 1982 and 1992 guidelines considered the relevant product market to be the smallest group of products that satisfied the hypothetical monopolist test
     - The 2010 guidelines accept as a relevant product market *any* group of products that satisfies the hypothetical monopolist test
       - This permits “cherry-picking” of products to include in the relevant product market
       - Also makes it difficult for defendants to argue in court that prosecuting agency misspecified the relevant product market

2010 Merger Guidelines

- Adopts the 1982 Merger Guidelines market definition methodology with some very significant changes
  3. Asks whether a profit-maximizing hypothetical *would* raise price by a SSNIP, not whether it would be profitable to do so
     - *Profitability test*: The 1982 Merger Guidelines asked whether the hypothetical monopolist could make more profits by raising the price by a SSNIP
       - That is, whether it would be profitable to do so, not whether it would be profit maximizing
     - *Profit-maximization test*: The 2010 Merger Guidelines ask whether it would be in the profit-maximizing interest of the hypothetical monopolist to raise price by at least a SSNIP
       - In other words, is the monopoly price higher by at least a SSNIP to the current price?
       - NB: The 1992 Merger Guidelines adopted the "would" formulation, but the agencies continued to use the profitability standard in analyzing mergers and in their briefs in court. They still often waffle on this in court.

2010 Merger Guidelines

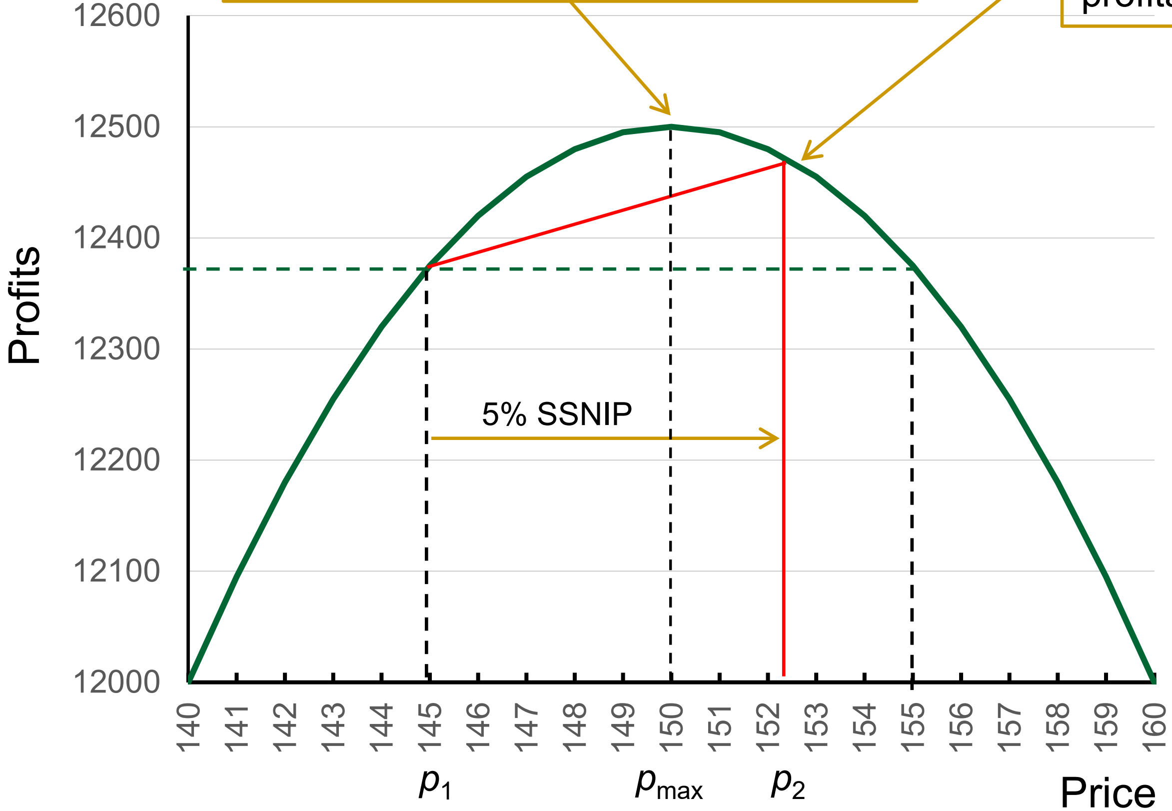
- Adopts the 1982 Merger Guidelines market definition methodology with some very significant changes
  3. Asks whether a profit-maximizing hypothetical *would* raise price by a SSNIP, not whether it would be profitable to do so
     - Adoption by the courts
       - As the courts were adopting the hypothetical monopolist test in the 1980s and early 990s, the 1982 guidelines were in effect
       - Moreover, notwithstanding that change in verb from "could" to "would" in the 1992 Merger Guidelines, the agencies did not change from a profitability test to a profit-maximization test either in their investigations or in their briefs in court
       - As a result, the agencies urged the courts to adopt, and the courts did adopt, the profitability version of the hypothetical monopolist test
       - Given this precedent, the profitability test remains the judicial test in most courts notwithstanding the change in the 2010 Guidelines
     - Conventional wisdom
       - Since the current price would be close to the monopoly price only if the market is operating close to a perfect monopoly, in most cases the profitability test and the profit-maximization test will reach the same result with respect to a candidate market
     - *Query*: Were the 2010 Guidelines correct in adopting the profit-maximization test?
       - Won't it reject markets close to being monopolized and increase the probability of a *Cellophane* fallacy (see below)?

2010 Merger Guidelines

- *Example*: HMT profitability and profit maximization tests in a close-to-monopolized market

The HMT “profit maximization test” is not satisfied—Hypothetical monopolist would not price as high as a 5% SSNIP

The HMT “profitability test” is satisfied—a 5% SSNIP would be profitable



Model:
$q = 1000 – 5p$
$p_1 = 145$
$q_1 = 275$
$f = 0$
$mc = 100$
$\pi_1 = 12{,}375$

$p_{max} = 150$
$q_{max} = 250$
$\pi_{max} = 12{,}500$

SSNIP = 5%
$p_2 = 152.25$
$q_2 = 238.75$
$\pi_2 = 12{,}475$

2010 Merger Guidelines

- The *Cellophane* fallacy
  - *Rule*: A monopolist will not price in the inelastic portion of the demand curve
    - Implication 1: A monopolist will increase its price until other goods become sufficiently substitutable to make a further price increase unprofitable
    - Implication 2: At the profit-maximizing price, a monopolist will not be able to profitably increase its price, much less increase its price by a SSNIP
    - Implication 3 (the *Cellophane* fallacy): Using prevailing prices, the hypothetical monopolist test will reject a perfectly or close to perfectly monopolized market as a relevant market
  - The *Cellophane* case[1]
    - In 1947, the DOJ sued DuPont for monopolizing cellophane, a flexible wrapping material duPont had developed, through anticompetitively restrictive patent practices
    - The Court evaluated the relevant market using duPont's prevailing prices for cellophane
    - At these prices, other wrapping materials—including aluminum foil and Saran wrap—exhibited significant cross-elasticity with cellophane
    - *Court's conclusion*: In the proper relevant market of all flexible wrapping paper, cellophane's relatively small market share negated the DOJ's monopolization claim
  - Implications for the hypothetical monopolist test
    - The profit-maximization version of the hypothetical monopolist test is more susceptible to the *Cellophane* fallacy than the profitability version, since it is more likely to reject close-to-monopolized markets

[1] United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377 (1956) ("Cellophane").

Relevant Geographic Markets

Relevant geographic markets

- Definition
  - For each relevant product market, there is one or more associated relevant geographic markets
  - A single firm may operate in a number of different geographic markets
    - For example, a dialysis firm operating in a retail dialysis product market can operate in multiple distinct geographic markets
  - Relation to the sales area of the merging parties
    - The relevant geographic market is not necessarily, and indeed frequently is not, congruent with the sales area of one or both of the merging parties
    - The boundaries of the relevant geographic market turn not on where customers in fact have gone to purchase the relevant product, but rather where they practically could go to protect themselves in the event the merger or acquisition was in fact anticompetitive

Relevant geographic markets

- Judicial tests: *Philadelphia National Bank*
  - Defined the relevant geographic market to be "the area of effective competition . . . in which the seller operates, and to which the purchaser can practically turn for supplies."[1]
  - The Court also observed that an element of "fuzziness would seem inherent in any attempt to delineate the relevant geographic market" and that the market need not be defined by "metes and bounds as a surveyor would lay off a plot of ground."[2]
  - Can be applied separately from the test for relevant product market definition
- Merger Guidelines test
  - Hypothetical monopolist test
    - Applied simultaneously to the candidate product market and the associated candidate geographic market
    - That is, you cannot apply the HMT to a product market without knowing also delineating the area in which the products may be obtained

[1] United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 359 (1963) (emphasis removed) (quoting Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 327 (1961) (Sherman Act § 2).
[2] *Id*. at 360 n.37; *see* United States v. Connecticut Nat'l Bank, 418 U.S. 656, 669 (1974) (geographic markets "need not—indeed cannot—be defined with scientific precision").

Relevant geographic markets

- Geographic markets are often stipulated by the parties
  - In many mergers, there is no serious dispute over geographic market definition
    - Example 1: National markets
      - Where manufacturers produce products at a single location, but ship and sell nationally at no competitive disadvantage, the relevant geographic market is are usually found to be national
    - Example 2: Regional or local markets
      - Where a firm and its rivals sell their product only in a limited geographic area and their customers have no ready access to an outside source of supply, the general rule is to define the geographic market as that particular area and to include only sales made within the market
  - Notable exceptions where geographic market definition can be highly contentious:
    - Products sold in retail stores and purchased by end-user consumers
      - So that consumers have to travel to the retail stores
      - Broadly defined to include, for example, grocery stores, department stores, banks, hospitals, dialysis clinics
    - Intermediate products with high transportation costs relative to their prices
      - So that it is costly to ship products to customers (e.g., glass beer bottles shipped to breweries)

[1] 1992 Horizontal Merger Guidelines § 1.21.

The *PNB* Presumption

United States v. Philadelphia National Bank

- Background
  - Decided in 1963, during the “restrictive” post-war period of antitrust law between 1946-1973
  - Perhaps the single most important case in merger antitrust law
- Market environment
  - Merger of two banks in the four-country Philadelphia metropolitan area
    - PNB (#1 w/21% total assets) to acquire Girard Corn Exchange Bank (#3 w/16% total assets) → Combined bank (#1 w/36% total assets)
  - Area experienced a trend toward concentration: Since 1950—
    - 7-FCR: 61% → 90%
    - PNB made 9 acquisitions representing 59% of its growth
    - Girard made 6 acquisitions, representing 85% of its growth
  - Acquisition would significantly increase concentration
    - 2-FCR: 44% → 59% (assets)
    - 4-FCR: __% → 78% (assets)[1]

The “*n*-FCR” is the *n-firm concentration ratio*, that is, the sum of the market share of the largest *n* firms in the market.

[1] The opinions do not contain sufficient information to determine the premerger 4-FCR.

United States v. Philadelphia National Bank

- District court
  - E.D. Pa.: Dismissed complaint on merits
    - Section 7 was inapplicable to the transaction
      - Section 7 applies to asset acquisitions only by “corporations subject to the jurisdiction of the Federal Trade Commission”
      - Banks are excluded from FTC jurisdiction under FTC Act § 5
      - The district court deemed the merger to be an asset acquisition for Section 7 purposes
    - But even assuming Section 7 applied, the transaction was not likely to substantially lessen competition because PNB and Girard actively compete in commercial banking with other banks throughout the northeastern United States
  - United States appealed directly to the Supreme Court under the Expediting Act

United States v. Philadelphia National Bank

- Supreme Court: Reversed with instructions to enter an injunction
  - Majority: Brennan for a 6-member majority
    - Created in 1963 as the Court was becoming increasingly restrictive on business
      - Next merger antitrust case after *Brown Shoe*
      - Written by Richard Posner, law clerk to Justice Brennan (who did not like to draft opinions)
    - Section 7 applies to mergers
      - Within the statutory scheme (especially after the 1950 Celler-Kefauver Amendments), mergers are better viewed as stock acquisitions
      - Section 7 reaches any stock acquisition by a corporation (whether or not within the jurisdiction of the FTC)
    - Product market: Commercial banking
    - Geographic market: Four-county Philadelphia metropolitan region

The *PNB* presumption

"This intense congressional concern with the trend toward concentration warrants dispensing, in certain cases, with elaborate proof of market structure, market behavior, or probable anticompetitive effects. Specifically, we think that a merger which **produces a firm controlling an undue percentage share of the relevant market**, and **results in a significant increase in the concentration of firms** in that market is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects."[1]

- Requires—
  - The combined firm to pass some (undefined) threshold of market share, *and*
  - The increase in market concentration caused by the transaction

  NB: The opinion is careful to note that it is not setting a lower bound and that commentators have suggested 20% as a threshold of "undue" market share
- Supposed to reflect the latest in economic thinking in the then prevailing structure-conduct-performance paradigm
  - "[T] the test is fully consonant with economic theory."[2]
  - "[C]ompetition is greatest when there are many sellers, none of which has any significant share."[3]

[1] United States v. Philadelphia National Bank, 374 U.S. 321, 363 (1963).
[2] *Id*. (citing extensively to structure-conduct-performance literature).
[3] *Id*.

The *PNB* presumption

- Application in *Philadelphia National Bank*
  - Combined firm had at least a 30% share in the relevant market
    - Enough for an "undue market share"
  - Share of the two largest banks in the relevant market should increase from 44% to 59%:
    - Enough for a "significant increase" in market concentration
  - *Court's conclusion*: *PNB* presumption satisfied
  - Nothing in record to rebut presumption
    - District court's reliance on testimony by competitors that competition was vigorous and would continue to be vigorous post-merger misplaced
      - Problem was too complex
      - Witnesses failed to give "concrete reasons" for conclusions
    - Summarily rejects testimony as sufficient to establish that dissatisfied customers can turn to one of 40 other banks in four-county region
      - Outside of outright monopoly, customer always has alternatives
      - Purpose of statute is to arrest tendency to monopoly in incipiency; purpose ill-served if law could not act until customer choice has largely disappeared
        - *Query*: At what point do you worry?
      - Testimony provided by small bank competitors must treat skeptically
      - Barriers to entry (primarily in government regulation)
      - Government regulation insufficient to ensure competition

Problems with the *PNB* presumption

- Presumption depends critical on boundaries of the relevant market, but there was no economically sound test for market definition to use when applying the *PNB* presumption
- The "Potter Stewart rule"
  - In the absence of a test, courts generally defer to the government's alleged market definition
  - So if the government gets to define the market, it essentially can ensure that the market shares will trigger the *PNB* presumption of anticompetitive effect

> The sole consistency that I can find is that in litigation under § 7, the Government always wins.[1]

- Although originally created as a rebuttable presumption, soon treated by lower courts as a conclusive presumption—essentially admitted no defenses

[1] United States v. Von's Grocery Store, 384 U.S. 270, 301 (1966) (Stewart, J., dissenting).

Some early Supreme Court precedents

- The Court in the 1960s was very aggressive on the market share thresholds of the *PNB* presumption
  - Brown Shoe/Kinney (1962)
    - Combined share of as little as 5% in an unconcentrated market
  - Von’s Grocery/Shopping Bag Food Stores (1966)
    - 4.7% (#3) + 4.2% (#6) → 8.9% (#2) in an unconcentrated market
  - Pabst Brewing/Blatz Brewing (1966)
    - 3.02% (#10) + 1.47% (#18) → 4.49% (#5) in an unconcentrated market

Bottom line: Through the 1960s and into the 1970s, antitrust law prevented most significant horizontal mergers and acquisitions

[1] Brown Shoe Co. v. United States, 370 U.S. 294 (1962).
[2] United States v. Von's Grocery Co., 384 U.S. 270 (1966).
[3] United States v. Pabst Brewing Co., 384 U.S. 546 (1966).

United States v. General Dynamics Corp.

- In the 1970s, the economy took a downturn
  - Significant inflation as a result of the debt financing of the Vietnam war and the Mideast oil shocks
  - Substantial concern about U.S. competitiveness in the world market
- General Dynamics (1974)[1]
  - DOJ action—Filed September 22, 1967
    - DOJ relied on PNB presumption
      - 1959: 15.1% (#1) + 8.1% (#5) → 23.2% (#1) (in Illinois market)
      - 1967: 12.9% (#2) + 8.9% (#6) → 21.8% (#2) (in Illinois market)
      - Increasing concentration
  - Supreme Court—No violation
    - Agreed that DOJ's evidence triggered *PNB* presumption
    - BUT defendants rebutted presumption
      - Since competition was manifested more in rivalry for new long-term contracts, and since the ability to compete for long-term contracts depended on available coal reserves, share of uncommitted reserves a better measure of future competitive significance
      - United Electric's uncommitted reserves very weak → DOJ's prima facie case rebutted
  - There has been no significant merger antitrust case on the merits in the Supreme Court since *General Dynamics* in 1974

Key: *General Dynamics* reestablished the *PNB* presumption as rebuttable by showing that the merger would not increase the exercise of market power

[1] United States v. General Dynamics Corp., 415 U.S. 486 (1974).

The 2010 Merger Guidelines

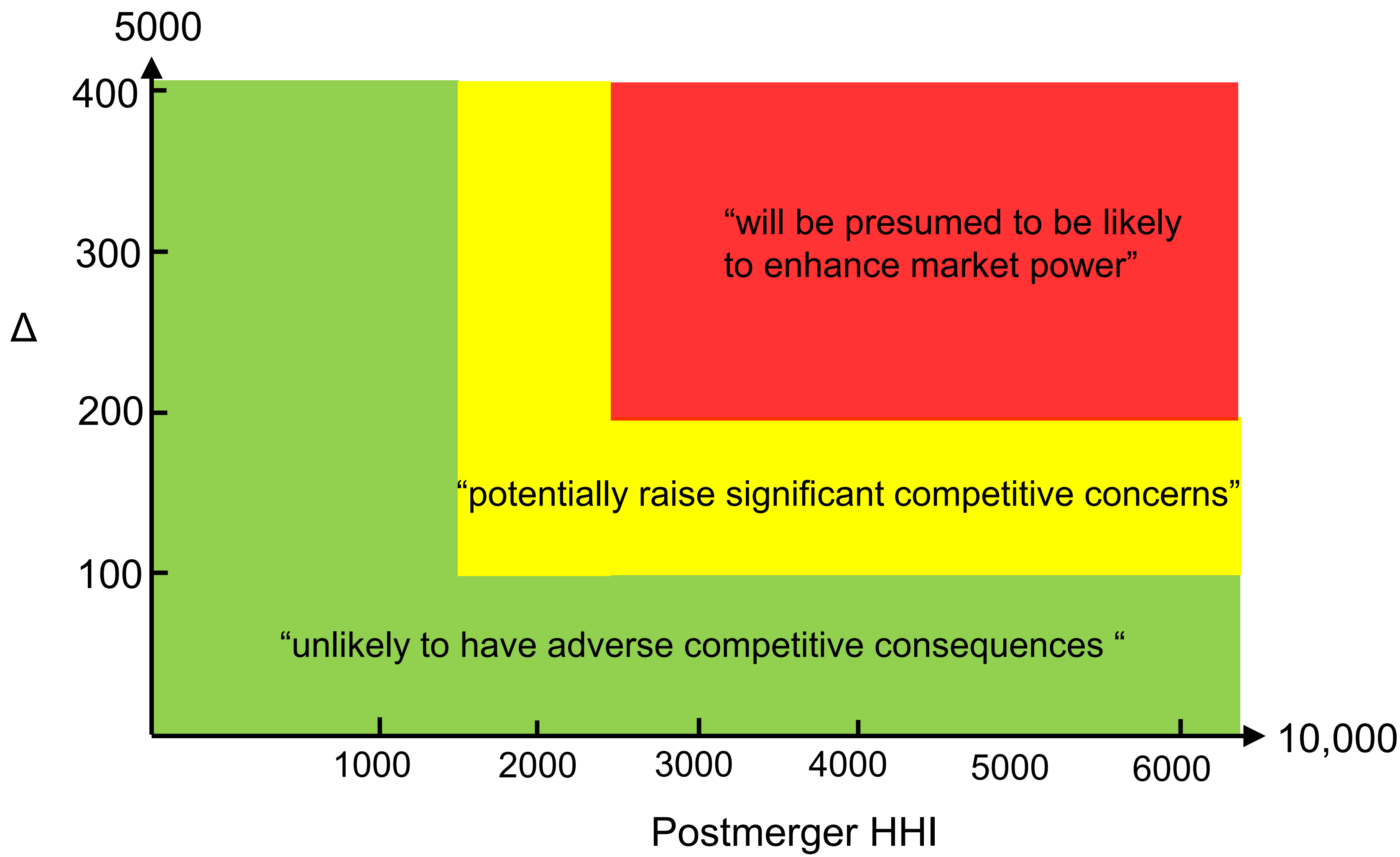
- "HHI thresholds"[1]
  - Not really *PNB* thresholds, but courts tend to use them that way[1]

Postmerger HHI	ΔHHI	Guidelines
--	< 100	"unlikely to have adverse competitive consequences and ordinarily require no further analysis"
< 1500	--	"unlikely to have adverse competitive consequences and ordinarily require no further analysis"
Between 1500 and 2500	≥ 100	"potentially raise significant competitive concerns and often warrant scrutiny"
> 2500	100-200	"potentially raise significant competitive concerns and often warrant scrutiny"
	≥ 200	"will be presumed to be likely to enhance market power. The presumption may be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power."

[1] The "HHI" is a market concentration statistic. To calculate it, take the square of the market share of each firm in the relevant market and square it, and then add up all of the squared market shares. The "ΔHHI" is the difference between the HHI after the merger and the HHI before the merger.
[2] "The purpose of these thresholds is not to provide a rigid screen to separate competitively benign mergers from anticompetitive ones, although high levels of concentration do raise concerns. Rather, they provide one way to identify some mergers unlikely to raise competitive concerns and some others for which it is particularly important to examine whether other competitive factors confirm, reinforce, or counteract the potentially harmful effects of increased concentration." 2010 Merger Guidelines § 5.3.

The *PNB* presumption

- The current thresholds: 2010 Merger Guidelines



HHIs in Successful DOJ/FTC Challenges

- The DOJ and FTC have not brought "close" cases in alleged markets

Agency	Complaint	Defendant	Combined share[1]	PreHHI	PostHHI	Delta	Deal Status
FTC	2018	Wilhelmsen	84.7	3651	7214	3563	Preclosing
DOJ	2017	Energy Solutions	100	6040	10000	3960	Preclosing
DOJ	2016	Anthem	47	2463	3000	537	Preclosing
DOJ	2016	Aetna			>5000[2]		Preclosing
FTC	2016	Penn State Hershey	64	3402	5984	2582	Preclosing
FTC	2015	Advocate Heath	55	2094	3517	1423	Preclosing
FTC	2015	Staples	75[3]	3036	5836	2800	Preclosing
FTC	2015	Sysco	71[4]	3153	5519	1966	Preclosing
DOJ	2015	Electrolux		3350[5]	5100	1750	Preclosing
DOJ	2013	Bazaarvoice	68	2674	3915	1241	Consummated
FTC	2013	Saint Alphonsus	57	4612	6129	1607	Consummated

[1] When the complaint alleged multiple markets, the market with the most problematic highest HHIs is reported.
[2] The DOJ challenged Aetna's proposed acquisition of Humana in 17 geographic markets. The complaint did not provide HHI statistics for each market, although it noted that in 75% of the markets, the post-HHI would be greater than 5000.
[3] The FTC also challenged the transaction in 32 alleged relevant local geographic markets, with the smallest combined share being 51% and the largest being 100%.
[4] The complaint alleged multiple markets in food distribution. The numbers given are for national broadline distribution.
[5] The complaint alleged three markets. The numbers given are for ranges. Cooktops and wall ovens were similar.

HHIs in Successful DOJ/FTC Challenges

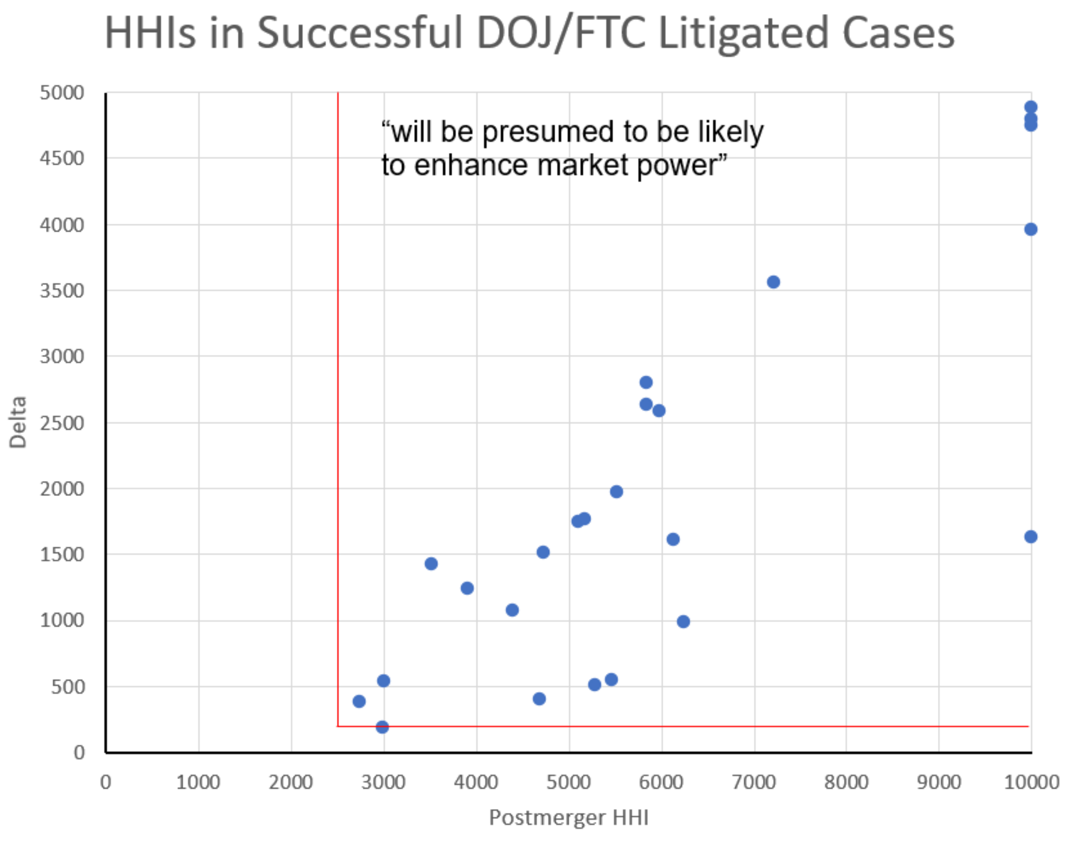
- The DOJ and FTC have not brought "close" cases in alleged markets

Agency	Complaint	Defendant	Combined Share[1]	PreHHI	PostHHI	Delta	Deal Status
DOJ	2013	US Airways	100[2]	5258	10000	4752	Preclosing
DOJ	2013	ABInbev	100	5114	10000	4886	Preclosing
FTC	2011	OSF Healthcare	59	3422	5179	1767	Preclosing
FTC	2011	ProMedica	58	3313	4391	1078	Preclosing
DOJ	2011	H&R Block	28	4291	4691	400	Preclosing
FTC	2009	CCC	65	4900	5460	545	Preclosing
FTC	2008	Polypore	100	8367	10000	1633	Consummated
FTC	2007	Whole Foods	100[3]		10000		Preclosing
FTC	2004	Evanston	35	2355	2739	384	Consummated
DOJ	2003	UPM-Kemmene	20	2800	2990	190	Preclosing
FTC	2002	Libbey	79	5251	6241	990	Preclosing
FTC	2001	Chicago Bridge	73	3210	5845	2635	Consummated
FTC	2000	Heinz	33	4775	5285	510	Preclosing
FTC	2000	Swedish Match	60	3219	4733	1514	Preclosing
DOJ	2000	Franklin Electric	100	5200	10000	4800	Preclosing

[1] When the complaint alleged multiple markets, the market with the most problematic highest HHIs is reported.
[2] The complaint alleged 1043 markets.
[3] In some local geographic markets, this was a merger to monopoly in the FTC's alleged product market of premium, natural, and organic supermarkets.

HHIs in Successful DOJ/FTC Challenges

- The DOJ/FTC in practice
  - Hardly ever bring litigated cases where the HHIs and deltas are anywhere close to the merger guidelines thresholds



Defenses

Defenses to anticompetitive effect

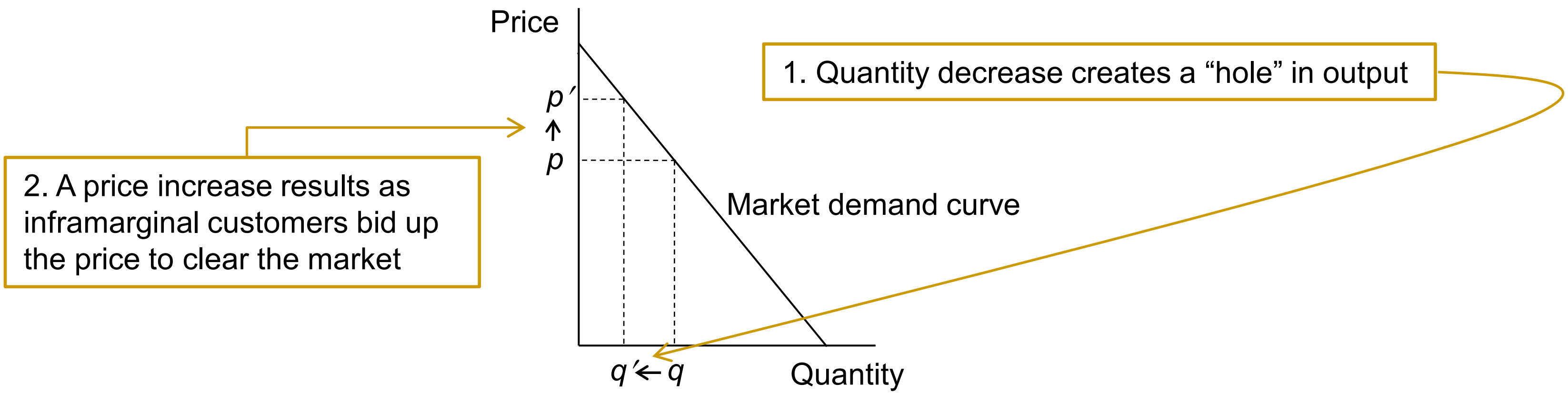
- Common defenses
  - Entry/expansion/repositioning
  - Power buyers
  - Efficiencies
  - Failing firm
- Defenses are negative defenses, *not* affirmative defenses
  - A negative defense says that the merger is not anticompetitive in the first instance
  - An affirmative defense says that even if the merger is anticompetitive, it is nonetheless not unlawful
- *Baker Hughes* burden shifting
  - Formally, the plaintiff can make out its *prima facie case* on the *PNB* presumption without addressing any defense
  - The defendant has the *burden of production* with evidence predicating the defense (including challenging the *PNB* presumption)
  - If the defendant adduces sufficient evidence to permit the trier of fact to find for the defendant on the defense, then the plaintiff has the *burden of persuasion* shifts on the ultimate question of whether the merger, with all evidence taken as a whole, is anticompetitive

Entry/Expansion/Repositioning Defenses

REVIEW 2010 DOJ/FTC HORIZONTAL MERGER GUIDELINES § 9

Entry/Expansion/Repositioning

- The story
  - General idea
    - Think of a merger's anticompetitive effect being achieved by a reduction in market output



    - The defense depends on showing that the "hole" in the output will be filled by—
      - New firms entering the market and adding new output
      - Incumbent firms expanding their output over premerger levels, *or*
      - Incumbent firms extending or repositioning their product lines in product or geographic space to replace output loses resulting from unilateral effects
  - Proof of actual postmerger entry/expansion/repositioning is not necessary
    - The mere *threat* of entry/expansion/repositioning may be enough to deter incumbent firms from acting less competitively for fear of inducing new competition
    - The "threat" variation of the defense is often easier to prove than actual postmerger behavior by third-party firms

Entry/Expansion/Repositioning

- The Merger Guidelines[1]
  - The formalities
    - 1982 and 1992: Depended largely on actual entry having a significant impact within two years of the merger
      - This allows for a short-run anticompetitive effect
    - 2010: Requires entry to “deter or counteract” any anticompetitive effects “so the merger will not substantially harm customers”
      - Does not allow any grace period
  - Guidelines requirements—Entry must be:
    1. Timely
    2. Likely
    3. Sufficient
  - Courts have adopted these requirements

[1] References to “entry” in this section also include expansion and repositioning.

Entry/Expansion/Repositioning

- The Merger Guidelines[1]
  1. Timely
     - "In order to deter the competitive effects of concern, entry must be rapid enough to make unprofitable overall the actions causing those effects . . . ."
     - "Even if the prospect of entry does not deter the competitive effects of concern, post-merger entry may counteract them. This requires that the impact of entrants in the relevant market be rapid enough that customers are not significantly harmed by the merger, despite any anticompetitive harm that occurs prior to the entry."
     - "The Agencies will not presume that an entrant can have a significant impact on prices before that entrant is ready to provide the relevant product to customers unless there is reliable evidence that anticipated future entry would have such an effect on prices."
  2. Likely
     - "Entry is likely if it would be profitable, accounting for the assets, capabilities, and capital needed and the risks involved, including the need for the entrant to incur costs that would not be recovered if the entrant later exits."
     - "Profitability depends upon (a) the output level the entrant is likely to obtain, accounting for the obstacles facing new entrants; (b) the price the entrant would likely obtain in the post-merger market, accounting for the impact of that entry itself on prices; and (c) the cost per unit the entrant would likely incur, which may depend upon the scale at which the entrant would operate. "

[1] All quotations are from 2010 DOJ/FTC Horizontal Merger Guidelines § 9.

Entry/Expansion/Repositioning

- The Merger Guidelines[1]
  3. Sufficient
     - Even where timely and likely, entry must be sufficient to deter or counteract the competitive effects of concern
       - "For example, in a differentiated product industry, entry may be insufficient because the products offered by entrants are not close enough substitutes to the products offered by the merged firm to render a price increase by the merged firm unprofitable."
       - "Entry may also be insufficient due to constraints that limit entrants' competitive effectiveness, such as limitations on the capabilities of the firms best placed to enter or reputational barriers to rapid expansion by new entrants."
     - Sufficient condition for sufficiency
       - "Entry by a single firm that will replicate at least the scale and strength of one of the merging firms is sufficient. Entry by one or more firms operating at a smaller scale may be sufficient if such firms are not at a significant competitive disadvantage."

[1] All quotations are from 2010 DOJ/FTC Horizontal Merger Guidelines § 9.

Entry/Expansion/Repositioning

- Likelihood of a successful defense
  - Almost impossible to make out in an agency investigation
    - The agency starts by insisting that the potential entrants be identified by name
    - It then calls the identified firms and asks: “Would you enter this market if prices increased by 5% to 10%?”
    - The company almost always answers “no”
      - Can be a kneejerk reaction—Firm has not considered entry and does not know what it would do
      - Can be a “go away staff” reaction—Firm may appreciate that if it answer “yes” the staff will begin a much more detailed investigation to determine whether the firm is in fact likely to enter. This will not be pleasant for the firm.
      - Can be an informed “no”: If the firm has not already entered or is not actively considering entry, the likelihood is that a relatively small increase in margin will not cause it to enter, especially since its entry is likely to increase postmerger competition and decrease postmerger margins below the SSNIP
        - *Note*: As a general rule of business behavior, firms do not enter existing markets just for margin. They almost always require some nonprice competitive advantage against incumbent firms to cause them to entry. The problem is that entry can too easily precipitate a price war and destroy the pre-entry margin that made entry attractive in the first instance.
  - Barriers to entry: Some examples

Capital requirements	Patents/other IP	Skilled employees
Development time	Reputation	Skilled sales reps
Regulatory barriers	Skilled management	

Entry/Expansion/Repositioning

- Burden of proof/likelihood of a successful defense
  - When has the defense been successful?
    - When there has been a significant history of entry and the market has continued to operate competitively even with variations in concentration levels
    - When the market is operating premerger close to competitively and a significant firm is already planning on entering
      - NB: Technically, this should not work. If the new entrant was already planning on entering absent the challenged merger, then on a going-forward basis the new entrant would be a committed entrant and should already be considered a market participant in the competitive analysis and not a new entrant. Only when the merger precipitates the entry should the entry defense be applied.
      - But if the market was operating premerger close to competitively, then the presence of an additional firm in the postmerger market may be enough to negate any anticompetitive effect of the merger. So there is a defense; it is just not an entry defense.
      - The key here is the market must be close to operating competitively premerger. But in highly concentrated markets this may not make sense
      - Suppose that there are two incumbent firms, which are merging, and a third firm in the process of entering with the prospect of gaining significant market share. The merging parties are likely to argue that, in light of the pending entry, the transaction is a 2-to-2 merger and therefore should not be challenged[1]
      - But if the third firm had already entered some time ago and actually gained significant share, then the transaction would be a 3-to-2 merger, which would likely be challenged. Why then should the pending entry of a new firm serve as a defense to a 2-to-1 merger?

[1] FTC v. Staples, Inc., No. CV 15-2115 (EGS), 2016 WL 2899222, at 22 (D.D.C. May 17, 2016) (making entry defense, which the court considered but rejected for lack of sufficient evidence that Amazon Business would restore lost competition).

Powerful Buyers Defenses

REVIEW 2010 DOJ/FTC HORIZONTAL MERGER GUIDELINES § 8

Power buyers defense[1]

- The idea
  - The upward pricing pressure that otherwise would be created by a merger in negated by the ability of buyers to "force" the combined company to charge premerger prices in the postmerger period

[1] *See* U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines § 8 (rev. 2010).

Power buyers defense

- *Key question #1*: What is the mechanism by which this “forcing” takes place?
  - The agencies will not assume that a buyers can ensure that its suppliers will act competitively postmerger simply because the buyer is large and sophisticated
  - There are three (and perhaps only three) situations when a buyer may be able to protect itself from an anticompetitive merger:
    1. *Share shifting*: Where the purchases of the product by the buyer from the merged firm are sufficiently large that a shift of some or all of these purchases to alternative suppliers would make the price increase to that buyer unprofitable
       - This requires that sufficient alternative suppliers be available to the power buyer
       - The buyer does not have to shift all of its purchases from the merged firm. It only needs to be able to shift enough to make the price increase unprofitable to the merged firm.
    2. *Inducing entry*: Where the purchases of the product by the buyer are sufficiently large that the buyer could sponsor the entry of a minimum efficient scale firm to supply the buyer
    3. *Vertical integration*: A special case of sponsored entry where the buyer itself vertically integrates into production of the input
  - Even when there is an arguable mechanism for a given buyer, the defense is likely to fail for lack of sufficient evidence if—
    1. the putative power buyer does not support the defense, *or*
    2. there is evidence of historical episodes where the putative power buyer (or a similarly situated firm) has not been able to prevent a merged firm from raising prices to it

Power buyers defense

- *Key question #2*: Are all of the purchasers in the market able to protect themselves
  - Even if some buyers could protect themselves from a price increase in the wake of an otherwise anticompetitive merger, other buyers may not be able to do so and the merger will be anticompetitive with respect to these other (targeted) buyers

Power buyers defense

- *Key question #3*: Is the only anticompetitive effect threatened by the merger an anticompetitive price increase or output reduction?
  - Power buyer defenses work best, if they work at all, against postmerger price increases or output reductions
  - Other types of anticompetitive effects, especially a reduction in the rate of innovation or product improvement, are much more difficult to negate
    - The buyer may not perceive a reduction postmerger
    - Even if the buyer does perceive a reduction postmerger, it may not be able to trace the reduction to an anticompetitive effect from the merger (as opposed to other causes)
    - *Example*: While it is easy (in principle) to direct a seller to maintain premerger prices and other terms postmerger, it is much more difficult to direct the merged firm “to continue to innovate at premerger rates”

Power buyers defense

- Other observations
  - The parties bear the burden of production of evidence of a mechanism that would be sufficient to negate the upward pricing pressure that the merger otherwise would have
    - Under *Baker-Hughes*, the ultimate burden of persuasion should be on the plaintiffs in Step 3[1]
  - The standard bargaining models used by the agencies predict that buyers, no matter how large or sophisticated they are, will not be able to negate the entirety of a postmerger price increase if the merger increases the combined firm's market power (Nash bargaining models)

[1] *See* FTC v. Sanford Heath, 926 F.3d 959, 965 (8th Cir. 2019).

Efficiencies Defenses

REVIEW 2010 DOJ/FTC HORIZONTAL MERGER GUIDELINES § 10

Efficiencies

- Basic idea
  - “Efficiencies” are loosely defined to be public benefits that result from the deal
  - Contrast this with synergies, which are benefits to the merging parties resulting for the deal
    - Although sometimes the terms are used interchangeably
    - In this case, “cognizable efficiencies” is the term used to denote public benefits

Efficiencies

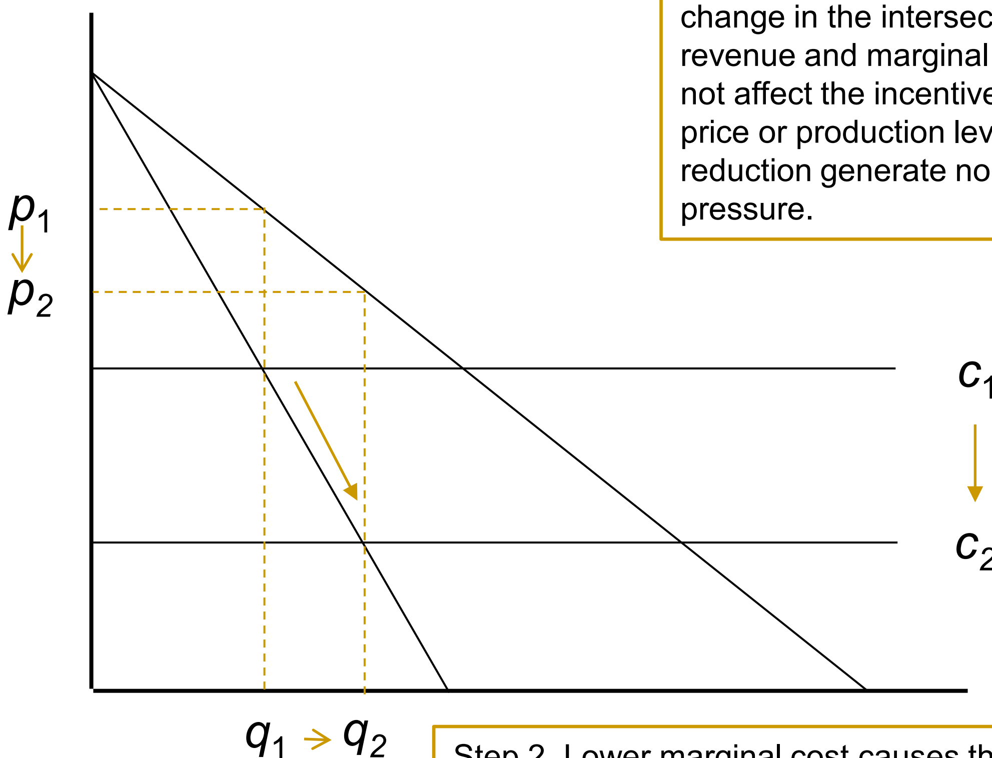
- Types of efficiencies
  - Cost efficiencies
    - Types of cost efficiencies
      - Reductions in fixed costs
        - *Fixed costs* are costs that do not change with the level of production—that is, they are expenses that have to be paid by a company, independent of any business activity
        - Some fixed costs may be incurred only once, such as the building cost for a new facility
        - Other fixed costs may be recurring, such as the compensation for the CEO, the annual maintenance costs for the headquarters building, the annual interest on the company's debt, insurance costs, and property taxes
        - Fixed cost efficiencies usually result from the elimination of duplicative costs: the combined company does not need two CEOs , two headquarters buildings, or two back office accounting systems
      - Reductions in variable costs/marginal costs for a given level of production
        - *Variable costs* are costs that depend on the level of output
        - Economies of scale or scope (one factory or one sales force may be able to handle the production and sales of both companies)
        - The combination of complementary technical assets and skills (the combined company may be able to produce products with lower costs or better products faster).
  - Non-cost efficiencies
    - Increases in production
    - Improvements in product or service quality
    - Increase in the rate of R&D

Efficiencies and downward pricing pressure

- A reduction in marginal cost will even cause even a profit-maximizing monopolist to lower price

BUT NOTE: Reductions in fixed costs do *not* change in the intersection of the marginal revenue and marginal cost curves and hence do not affect the incentives of the firm to change its price or production level. Therefore, fixed cost reduction generate no downward pricing pressure.

Step 3. Increased output requires a reduction in the price to clear the market

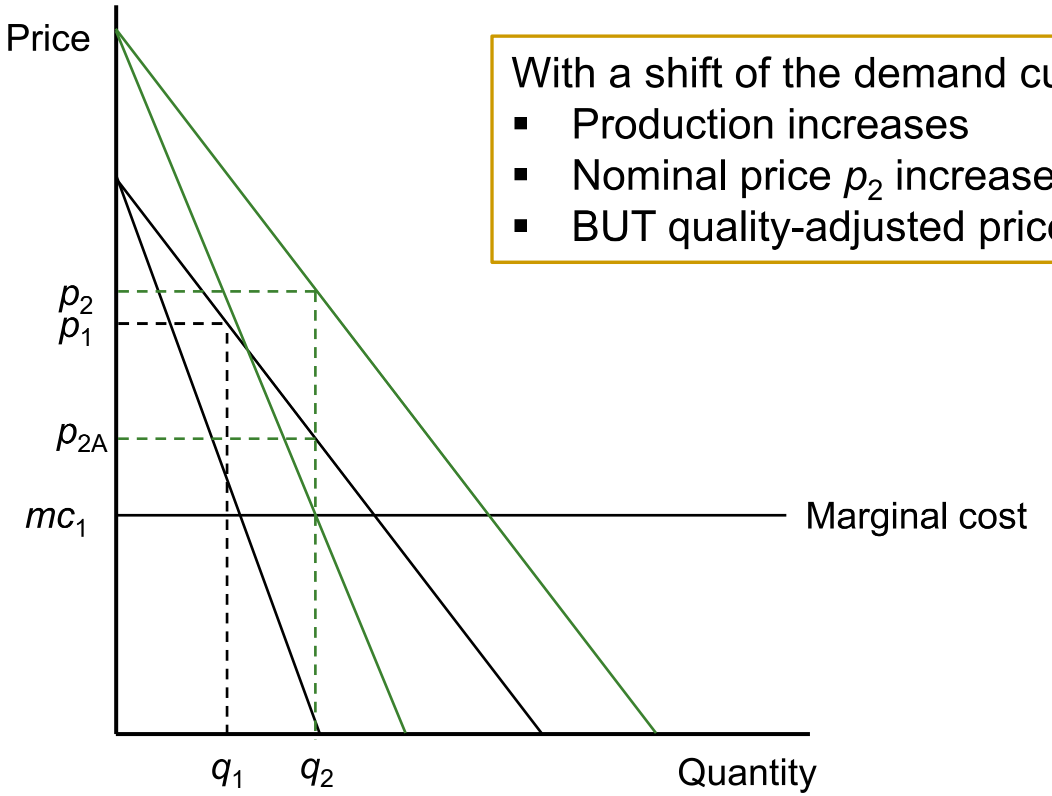


Step 1. Firm obtains a lower marginal cost due to a production efficiency

Step 2. Lower marginal cost causes the intersection with marginal revenue curve to move to the right, thus increasing output

Efficiencies and downward pricing pressure

- Shifting the demand curve to the right reduces quality-adjusted prices



With a shift of the demand curve to the right:
- Production increases
- Nominal price p_2 increases
- BUT quality-adjusted price p_{2A} decreases

Efficiencies and downward pricing pressure

- Caution
  - The two prior diagrams assume that the residual demand and marginal revenue curves of the firm remain the same before and after the efficiency
  - BUT a prima facie anticompetitive merger is anticompetitive precisely because it makes the firm's residual demand curve more inelastic, which in turn makes the marginal revenue curve fall faster and creates the upward pricing pressure
  - It is am empirical question whether the downward pricing pressure resulting from an efficiency is sufficient to offset the upward pricing pressure resulting from the reduction in competition
    - This is reflected in the requirements of an efficiency defense in the Merger Guidelines

Efficiencies under the Merger Guidelines

- Basic idea

> [A] primary benefit of mergers to the economy is their potential to generate significant efficiencies and thus enhance the merged firm's ability and incentive to compete, which may result in lower prices, improved quality, enhanced service, or new products. For example, merger-generated efficiencies may enhance competition by permitting two ineffective competitors to form a more effective competitor, e.g., by combining complementary assets. In a unilateral effects context, incremental cost reductions may reduce or reverse any increases in the merged firm's incentive to elevate price. Efficiencies also may lead to new or improved products, even if they do not immediately and directly affect price. In a coordinated effects context, incremental cost reductions may make coordination less likely or effective by enhancing the incentive of a maverick to lower price or by creating a new maverick firm. Even when efficiencies generated through a merger enhance a firm's ability to compete, however, a merger may have other effects that may lessen competition and make the merger anticompetitive.[1]

- Examples of how efficiencies can offset the anticompetitive effects a merger would otherwise have:
  - Offset the unilateral anticompetitive effect by sufficiently reducing marginal costs
  - Create a new or better product that consumers prefer
  - Create a more effective competitor by combining complementary assets (e.g., IP rights)
  - Diminish incentives for coordinated interaction by creating a firm with the cost structure to engage in disruptive conduct

[1] 2010 DOJ/FTC Horizontal Merger Guidelines § 10.

Efficiencies under the Merger Guidelines

- Efficiencies are a *negative defense*
  - Efficiencies mitigate the anticompetitive effects a merger otherwise would have
    - That is, they result in *downward pricing pressure* that counters the upward pricing pressure of the merger's anticompetitive aspects
  - Standing alone, to be a sufficient defense, efficiencies must fully offset the upward pricing pressure of the transaction
- Downward pricing pressure
  - Efficiencies effect downward pricing pressing to the extent that they—
    - Reduce the marginal costs of production
    - Shift the demand curve to the right
  - These efficiencies change the postmerger intersection of the firm's marginal revenue and marginal cost curves, causing—
    - Production to increase
    - Price to decrease
  - Reductions in fixed costs do not change the intersection of the firm's marginal revenue and marginal cost curves and hence are not recognized as efficiencies under the Merger Guidelines

Efficiencies

- Examples of how efficiencies can offset the anticompetitive effects a merger would otherwise have:
  - Offset the unilateral anticompetitive effect by sufficiently reducing marginal costs
  - Create a new or better product that consumers prefer
  - Create a more effective competitor by combining complementary assets (e.g., IP rights)
  - Diminish incentives for coordinated interaction by creating a firm with the cost structure to engage in disruptive conduct

[1] 2010 DOJ/FTC Horizontal Merger Guidelines § 10.

Efficiencies

- Efficiencies as a merger defense under the Merger Guidelines
  - Four requirements
    1. Merger specificity
    2. Verifiability
    3. Sufficiency
    4. Not anticompetitive

Merger specificity

1. Are the alleged efficiencies *merger specific*?

> The Agencies credit only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects. These are termed merger-specific efficiencies.[13] Only alternatives that are practical in the business situation faced by the merging firms are considered in making this determination. The Agencies do not insist upon a less restrictive alternative that is merely theoretical.
>
> ______________
>
> [13] The Agencies will not deem efficiencies to be merger-specific if they could be attained by practical alternatives that mitigate competitive concerns, such as divestiture or licensing. If a merger affects not whether but only when an efficiency would be achieved, only the timing advantage is a merger-specific efficiency.

Merger specificity

1. Are the alleged efficiencies *merger specific*?
   - The “would”/”could” debate
     - *Could* the efficiencies be achieved in the absence of the transaction? Or is the right question “*Would* they be achieved in the absence of the transaction”?
     - Although the Merger Guidelines ask the second question, in practice the agencies (and to an extent the courts) ask only the first question
       - WDC: Even apart from the language of the Guidelines, this is analytically a mistake. The antitrust laws are concerned with competition as it occurs in the marketplace. If a firm “could” theoretically achieve the efficiency in question absent the merger but has indicated no interest or intent to do so, but the efficiency would occur if the merger takes place, why regard this efficiency as not cognizable? If the efficiencies were large enough to offset the gross anticompetitive effect, then rejecting the defense under the “could” standard only deprives consumers of the benefits of efficiencies that they would otherwise receive if the defense was permitted and the merger was allowed to take place.
       - *Example*: Firm 1 I may be able to develop a better formula for baby food if it makes a large investment, but it would rather use the funds for another investment. Firm 2 has a better formula that could easily be transfer to Firm 1. The transfer would be consider a cognizable efficiency under the “would” standard but not under the agencies’ “could” standard.

Verifiability

2. Are the alleged efficiencies *verifiable*?

> [I]t is incumbent upon the merging firms to substantiate efficiency claims so that the Agencies can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific.

- Have the efficiencies been rigorously demonstrated by the parties?
- Can they be objectively ascertained by a third party?
  - The agencies usually regard this "third party" as an accountant or an economist, who typically lack experience and expertise in the industry in question
    - The agencies' use of "experts" who lack knowledge or judgment about the business operations in question can often lead them to reject of a legitimate efficiency simply because the agency's expert does not understand it
  - Courts are trending this way as well
  - The merging parties may be able to mitigate this problem somewhat by retaining an outside industry expert to present to the investigating agency or court

Timeliness/sufficiency

3. Are the alleged efficiencies *timely and sufficient*?

> [I]t is incumbent upon the merging firms to substantiate efficiency claims so that the Agencies can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific.

- Will the claimed efficiency occur in time and with sufficient magnitude to offset the anticompetitive effects of the merger that would be likely to occur in the absence of the efficiencies?
- NB: Inherent in sufficiency is the requirement that to be cognizable the efficiencies *must be passed to consumers* and not retained by the merged firm[1]

Very important

[1] *See, e.g.*, FTC v. Univ. Health, Inc., 938 F.2d 1206, 1223 (11th Cir. 1991); New York v. Deutsche Telekom AG, 439 F. Supp.3d 179, 208-10 (S.D.N.Y. 2020); United States v. Aetna Inc., 240 F. Supp. 3d 1, 9 (D.D.C. 2017); United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 87 (D.D.C. 2011); FTC v. Swedish Match, 131 F. Supp. 2d 151, 172 (D.D.C. 2000); FTC v. Cardinal Health, Inc., 12 F. Supp. 2d 34, 62 (D.D.C. 1998); United States v. Long Island Jewish Med. Ctr., 983 F. Supp. 121, 149 (E.D.N.Y. 1997).

Do not arise from an anticompetitive effect

4. Do the efficiencies arise from an anticompetitive effect of the transaction?

> Cognizable efficiencies are merger-specific efficiencies that have been verified **and do not arise from anticompetitive reductions in output or service**.

- The idea here is that cost savings from a reduction in output or service are not cognizable efficiencies
  - This is uncontroversial
  - It is also probably superfluous, since it is hard to see how downward pricing pressure would result from a reduction of output or service
  - Rarely analyzed by courts

Efficiencies in court

- Judicial skepticism
  - The Supreme Court has cast doubt on an efficiencies defense in three cases
    1. In *Brown Shoe*, the Supreme Court, though acknowledging that mergers may sometimes produce benefits that flow to consumers, stated:

> "Congress appreciated that occasional higher costs and prices might result from the maintenance of fragmented industries and markets. It resolved these competing considerations in favor of decentralization."[1]

    2. In *Philadelphia National Bank*, the Court observed:

> [A] merger the effect of which "may be substantially to lessen competition" is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial.... Congress determined to preserve our traditionally competitive economy. It therefore proscribed anticompetitive mergers, the benign and the malignant alike, fully aware, we must assume, that some price might have to be paid.[2]

[1] Brown Shoe Co. v. United States, 370 U.S. 294, 344 (1962).
[2] United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 371 (1963).

Efficiencies in court

- Judicial skepticism (con't)
  - The Supreme Court has cast doubt on an efficiencies defense in three cases
    3. In *Procter & Gamble*, the Supreme Court enjoined a merger without any consideration of evidence that the combined company could purchase advertising at a lower rate:

> "Possible economies cannot be used as a defense to illegality. Congress was aware that some mergers which lessen competition may also result in economies but it struck the balance in favor of protecting competition."[1]

  - Significantly, in these older cases an accepted goal of antitrust law was the protection of small business
  - In light of these Supreme Court statements, lower courts have expressed skepticism that an efficiencies defense exists[2]

[1] FTC v. Procter & Gamble Co., 386 U.S. 568, 580 (1967) (citing Brown Shoe Co. v. United States, 370 U.S. 294, 344 (1962).
[2] *See* United States v. Anthem, Inc., 855 F.3d 345, 353-54 (D.C. Cir. 2017) (expressing doubts about an efficiency defense in light of *Procter & Gamble*, which has never been overruled); FTC v. Penn State Hershey Med. Ctr., 838 F.3d 327, 348-49 (3d Cir. 2016).

Efficiencies in court

- Modern practice
  - Notwithstanding the Supreme Court precedent, modern lower courts recognize that efficiencies resulting from the merger may be considered in rebutting the government's prima facie case
  - *Advocate Health Care*:

> Although the defense has never been sanctioned by the Supreme Court, the Horizontal Merger Guidelines and some lower courts recognize that defendants in a horizontal merger case may rebut the government's *prima facie* case by presenting evidence of efficiencies offsetting the anticompetitive effects.[1]

[1] FTC v. Advocate Health Care, No. 15 C 11473, 2017 WL 1022015, at *12 (N.D. Ill. Mar. 16, 2017) (entering preliminary injunction on remand).

Efficiencies in court

- Modern practice
  - *Penn State Hershey Medical Center*:

> Remaining cognizant that the "language of the Clayton Act must be the linchpin of any efficiencies defense," and that the Clayton Act speaks in terms of "competition," we must emphasize that "a successful efficiencies defense requires proof that a merger is not, despite the existence of a prima facie case, anticompetitive."[1]

> The efficiencies defense, on the other hand, is a means to show that any anticompetitive effects of the merger will be offset by efficiencies that will ultimately benefit consumers.[2]

[1] FTC v. Penn State Hershey Med. Ctr., 838 F.3d 327, 349 (3d Cir. 2016).
[2] *Id*.

Efficiencies in court

- Modern practice
  1. Interpretation
     - The most sensible way to read the modern approach is that efficiencies can be used as a *negative* defense to disprove the anticompetitive effect element of the prima facie case

       > It is clear that whether an acquisition would yield significant efficiencies in the relevant market is an important consideration in predicting whether the acquisition would substantially lessen competition.[1]

     - But they cannot be used to as an *affirmative* defense to permit a merger that has the requisite anticompetitive effect in the relevant market

       > Of course, once it is determined that a merger would substantially lessen competition, expected economies, however great, will not insulate the merger from a section 7 challenge.[2]

     - This distinction essentially reflects a consumer welfare standard over a total welfare standard

[1] *See, e.g.*, FTC v. Univ. Health, Inc., 938 F.2d 1206, 1222 (11th Cir. 1991).
[2] *See, e.g.*, Univ. Health, 938 F.3d at 1222 n. 29.

Efficiencies in court

- Modern practice
  2. Difficulty in application
     - Plaintiffs establish their prima facie case through the *PNB* presumption and additional supporting evidence of unilateral and/or coordinated effects, which collectively gives a qualitative result that the merger is presumptively likely to substantially lessen competition and harm consumers
     - But how is the qualitative result to be negated by a showing of efficiencies, even if the efficiencies are in some way quantified?
     - Practical solution
       - Defendants must find customer-witnesses that would be harmed if the transaction was in fact anticompetitive who will testify that they believe that the balance of the merger's harmful and beneficial effects will be procompetitive (i.e., beneficial to customers), or, more precisely, not anticompetitive
       - Since the defendants must at least make a prima facie case that the efficiencies will offset any of the merger's anticompetitive tendencies, the defendants' failure to adduce such evidence is likely to result in a rejection of their efficiencies defense

Efficiencies in court

- Modern practice
  - “Pass on”
    - In any event, claimed efficiencies can offset an anticompetitive effect on consumers only to the extent that the efficiencies are “passed on” by the merged company to the consumers that otherwise would be competitively harmed.
    - *Anthem* court:

> [T]the claimed medical cost savings only improve consumer welfare to the extent that they are actually passed through to consumers, rather than simply bolstering Anthem’s profit margin. After all, the merger potentially harms consumers by creating upward pricing pressure due to the loss of a competitor, and so only efficiencies that create an equivalent downward pricing pressure can be viewed as “sufficient to reverse the merger’s potential to harm consumers . . . , e.g., by preventing price increases.”[1]

  - In *Anthem*, the court appears to have rejected the idea that an aggregate dollar savings greater than the aggregate dollar value of an anticompetitive price increase would make out an efficiencies defense
    - That is, it is not sufficient that the gross consumer surplus from efficiencies outweigh the gross wealth transfer resulting from an anticompetitive price increase
  - Rather, the court appeared to require that the downward pressure on prices from efficiencies at least offset the upward pressure on prices from the anticompetitive effect, so that there would be no net price increase to customers

[1] United States v. Anthem, Inc., 855 F.3d 345, 362 (D.C. Cir. 2017) (internal citations omitted); *see* FTC v. Penn State Hershey Med. Ctr., 838 F.3d 327, 348 (3d Cir. 2016) (“In order to be cognizable, the efficiencies must, first, offset the anticompetitive concerns in highly concentrated markets.”).

Efficiencies in court

- Modern practice
  4. Rent shifting
     - *Query*: Is a lowering of input prices due to greater bargaining power gained by the merger a cognizable efficiency when—
       - the lower prices do not reflect any production efficiency
       - even if the cost savings in procurement is passed on to the downstream customers?
     - *Anthem* court:

> The district court also expressed doubt as to whether the type of efficiencies claimed by Anthem, which merely redistribute wealth from providers to Anthem and its customers rather than creating new value, are even cognizable under Section 7.[1]

- The court of appeals also expressed skepticism, but found it was unnecessary to answer the question given the facts in the case
- Other courts have not opined on this

[1] United States v. Anthem, Inc., 855 F.3d 345, 352 (D.C. Cir. 2017) (internal citations omitted).

Efficiencies

- Efficiencies in court (con't)
  - Judicial practice
    - Courts essentially have adopted the requirements of the Merger Guidelines[1]
      - "Projections of efficiencies may be viewed with skepticism, particularly if they are generated outside of the usual business planning process."[2]
      - "The difficulty in substantiating efficiency claims in a verifiable way is one reason why courts generally have found inadequate proof of efficiencies to sustain a rebuttal of the government's case."[3]
    - No court has yet held that the merging parties have successfully defended a merger through a showing of efficiencies

[1] *See, e.g.*, FTC v. Penn State Hershey Med. Ctr., 838 F.3d 327 (3d Cir. 2016) (reversing question of whether an efficiencies defense exists, but assuming it does applying the Merger Guidelines standard and finding that claimed efficiencies cannot offset the merger's likely anticompetitive effects).
[2] FTC v. ProMedica Health Sys., Inc., No. 3:11 CV 47, 2011 WL 1219281, at *40 (N.D. Ohio Mar. 29, 2011) .
[3] United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 91 (D.D.C. 2011) .

Failing Firm Defenses

REVIEW 2010 DOJ/FTC HORIZONTAL MERGER GUIDELINES § 11

Failing firm defense

- Theory
  - A "failing firm" is a firm that will exit the market *with its assets* in the absence of an acquisition
  - The original idea behind a failing firm defense is that it is better to permit an "anticompetitive" acquisition than to allow the failing firms assets—and therefore productive capacity—to exist the market
    - While this may sound like an affirmative defense, it is actually a negative defense.
    - If the firm's productive capacity would exit the market in the acquisition, then it has no competitive significance going forward and its acquisition by a competitor cannot reduce competition
    - The key here is whether the firm's productive assets would in fact exit the market in the absence of the challenged acquisition—if, in the "but for" world, the failing firm's assets would be acquired by another firm in a transaction that would make consumers better off than with the challenged acquisition, then the challenged acquisition is anticompetitive

Failing firm defense

- Requirements: The allegedly failing firm—
  1. would be unable to meet its financial obligations in the near future,
  2. would not be able to reorganize successfully under Chapter 11 of the Bankruptcy Act, *and*
  3. has made unsuccessful good-faith efforts to elicit reasonable alternative offers that would keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed merger[1]
     - NB: The alternative buyer need not match the purchase price of the original buyer—as long as the alternative buyer is willing to pay a price above liquidation value the alternative buyer qualifies[2]

[1] 2010 DOJ/FTC Horizontal Merger Guidelines § 11.
[2] *Id*. at § 11 n. 6 (stating that a reasonable alternative offer is "[a]ny offer to purchase the assets of the failing firm for a price above the liquidation value of those assets"); *see* United States v. Energy Sols., Inc., 265 F. Supp. 3d 415, 446 (D. Del. 2017) (quoting Horizonal Merger Guidelines).

Failing firm defense

- Observations
  - The failing firm defense works in principle for a failing division or subsidiary
  - The failing firm defense has had essentially no success since the Supreme Court recognized it in 1930 by the Supreme Court in *International Shoe*[1]
    - Even if the firm is failing in the sense that it cannot meet its financial obligations, there defense is likely to fail before the agencies and the courts because either—
      - The firm can be reorganized in bankruptcy and continue to operate without its assets existing the market, OR
      - The firm has failed to conduct the requisite search to the satisfaction of the agencies or the court for an alternative, less anticompetitive buyer

[1] International Shoe Co. v. FTC, 280 U.S. 291, 302 (1930).