Unit 3D. Introduction to Anticompetitive Effects

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Topics

- Anticompetitive effects
  - Part 1: The *PNB* presumption
  - Part 2: Explicit theories of anticompetitive harm
    - Coordinated effects
    - Unilateral effects
    - Elimination of a maverick

Refresher:
Anticompetitive Effect under Section 7

Section 7 of the Clayton Act

- Section 7 supplies the antitrust standard to test acquisitions:

> 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]

- Test of anticompetitive effect under Section 7
  - Whether "the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly" in any relevant market
  - *Incipiency standard*: The Supreme Court has interpreted the "may be" and "tend to" language in the anticompetitive effects test to—
    - Require proof only of a *reasonable probability* that the proscribed anticompetitive effect will occur as a result of the challenged acquisition
    - *Not* require proof that an actual anticompetitive effect will occur

[1] 15 U.S.C. § 18.

“May be substantially to lessen competition”

- No operational content in the statutory language itself
  - What does it mean to “substantially lessen competition”?
  - Judicial interpretation has varied enormously over the years
- *Modern view*:[1] Transaction threatens—with a reasonable probability—to hurt some identifiable set of customers through:
  - Increased prices
  - Reduced market output
  - Reduced product or service quality
  - Reduced rate of technological innovation or product improvement[2]
  - (Maybe) reduced product diversity[3]

These are called *anticompetitive effects*

A firm that has the power to produce or strengthen an anticompetitive effect is said to have *market power*

[1] The modern view dates from the late 1980s or early 1990s, after the agencies and the courts had assimilated the 1982 DOJ Merger Guidelines.

[2] *See, e.g.*, FTC v. Hackensack Meridian Health, Inc., 30 F.4th 160, 172 (3d Cir. 2022); Viamedia, Inc. v. Comcast Corp., 951 F.3d 429, 475 (7th Cir. 2020); United States v. Anthem, Inc., 855 F.3d 345, 361 (D.C. Cir. 2017); United States v. JetBlue Airways Corp., No. CV 23-10511-WGY, 2024 WL 162876, at *28 (D. Mass. Jan. 16, 2024).

[3] The idea that reduced product diversity may be a cognizable customer harm was formally introduced in the 2010 DOJ/FTC Horizontal Merger Guidelines. Courts have recognized that a merger’s elimination of a product option that consumers value is a cognizable harm to competition. *See, e.g.*, United States v. Anthem, Inc., 855 F.3d 345, 366 (D.C. Cir. 2017); United States v. JetBlue Airways Corp., No. CV 23-10511-WGY, 2024 WL 162876, at *28 (D. Mass. Jan. 16, 2024).

Clayton Act § 7

- The incipiency standard
  - *The law*: Beginning in 1957 with the Supreme Court's decision in *duPont/GM*, courts consistently have interpreted the "may be" and "tend to" language in the anticompetitive effects test to—
    - Require proof only of a *reasonable probability* that the proscribed anticompetitive effect will occur as a result of the challenged acquisition
    - Not require proof that an actual anticompetitive effect will result from the merger

> Section 7 is designed to arrest in its incipiency not only the substantial lessening of competition from the acquisition by one corporation of the whole or any part of the stock of a competing corporation, but also to arrest in their incipiency restraints or monopolies in a relevant market which, as a reasonable probability, appear at the time of suit likely to result from the acquisition by one corporation of all or any part of the stock of any other corporation. The section is violated whether or not actual restraints or monopolies, or the substantial lessening of competition, have occurred or are intended.[1]

  - Section 7 tests all mergers—horizontal, vertical , and conglomerate—under the same reasonable probability standard[2]

[1] United States v. E.I. duPont de Nemours & Co., 353 U.S. 586, 589 (1957); *accord* Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962); United States v. Penn-Olin Chem. Co., 378 U.S. 158, 173 (1964); United States v. Cont'l Can Co., 378 U.S. 441, 444 (1964); United States v. Von's Grocery Co., 384 U.S. 270, 272 (1966); FTC v. Procter & Gamble Co., 386 U.S. 568, 576-77 (1967); Ford Motor Co. v. United States, 405 U.S. 562, 567 n.4 (1972); United States v. Falstaff Brewing Corp., 410 U.S. 526, 531 (1973); United States v. Marine Bancorporation, Inc., 418 U.S. 602, 616, 640-41 (1974);

[2] *Procter & Gamble*, 386 U.S. at 577 ("All mergers are within the reach of § 7, and all must be tested by the same standard, whether they are classified as horizontal, vertical, conglomerate.").

Clayton Act § 7

- The incipiency standard
  - Three courts of appeals have used "appreciable danger" to describe the incipiency standard
    - The Ninth Circuit appears to use "appreciable danger" and "reasonable probability" synonymously[1]
    - The Seventh Circuit is more ambiguous[2]
    - The D.C. Circuit has reserved on whether there is a difference between "appreciable danger" and "reasonable probability"[3]
    - The Biden administration appears to be pushing "appreciable danger" as a lesser standard
    - WDC: But if "appreciable danger" means something less than a reasonable probability, there is no reason to adopt contrary to the clear statements by the Supreme Court and the Clayton Act's legislative history
      - A change in the incipiency standard is a judgment motivated by policy considerations, not by new economic learning that sheds light on the competitive implications of specific practices

[1] *See* Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775, 783 (9th Cir. 2015) ("In practical terms, this means adequately alleging facts that an acquisition creates 'an appreciable danger' or a 'reasonable probability' of anticompetitive effects in the relevant market."); *accord* DeHoog v. Anheuser-Busch InBev SA/NV, 899 F.3d 758, 763 (9th Cir. 2018); Boardman v. Pac. Seafood Grp., 822 F.3d 1011, 1021, 1023 (9th Cir. 2016)
[2] *See* Hospital Corp. of America v. Federal Trade Comm'n, 807 F.2d 1381, 1389 (7th Cir. 1986) ("All that is necessary is that the merger create an appreciable danger of such consequences in the future."); *accord* FTC v. Advocate Health Care Network, 841 F.3d 460, 467 (7th Cir. 2016).
[3] *See* United States v. AT&T, Inc., 916 F.3d 1029, 1037 (D.C. Cir. 2019).

Clayton Act § 7

- The incipiency standard
  - The practice
    - In practice, courts do not employ any nuanced view of a "reasonable probability," although they give lip service to the term
    - Rather, they appear to ask whether it is more likely than not that a challenged merger will have an anticompetitive effect
  - The critics
    - Critics argue that this is tantamount to requiring proof of an actual anticompetitive effect
      - That is, it is the same standard for proving that the merger will have an anticompetitive effect under the preponderance of the evidence standard
    - To critics, this is too high a standard: Proof of a "reasonable probability" should recognize violations when the mergers presents an appreciable risk of an anticompetitive effect, even if the merger is not more likely to be anticompetitive
      - Strictly interpreted as a matter of mathematics, the proper standard is whether the preponderance of the evidence shows that the merger has a reasonable probability of having an anticompetitive effect
        - If the preponderance of the evidence requires a greater than 50% probability that the proposition is true and the reasonable probability standard requires a greater than 50% probability that an anticompetitive effect will occur, then the proper standard would be that the merger has a greater than 25% chance of producing an anticompetitive effect.
    - The problem for courts
      - Courts apply a preponderance of the evidence standard in everyday practice
      - It is unclear how—or even if—courts would deal with a probability threshold less than 50%

Baker Hughes burden shifting[1]

- *Baker Hughes* set out a three-step approach to shift the burdens of proof between the plaintiff and the defendants in merger antitrust cases:
  - *Step 1*: The plaintiff must adduce sufficient evidence to make out a prima facie case of a Section 7 violation
    - Requires the production of evidence sufficient to permit the finder of fact to find each of the following three elements in the absence of any defense by the merging parties
      1. Relevant product market
      2. Relevant geographic market
      3. Section 7 anticompetitive effect (i.e., a showing of a gross anticompetitive tendency)
    - In a horizontal merger case, the plaintiff can make out a prima facie case of anticompetitive effect through the *PNB* structural presumption
  - *Step 2*: The defendants bear the *burden of production* to rebut the plaintiff's prima facie case
    - To meet this burden, the merging parties must adduce sufficient evidence to raise a genuine issue of fact on any element they contest
    - Two ways to rebut:
      - Contest the law or the factual predicates the plaintiff used to make out its prima facie
      - Assume arguendo that the plaintiff has made out its prima facie case and adduce evidence of the merger's procompetitive tendencies to create a genuine issue of whether the merger has a net anticompetitive effect
  - *Step 3*: For each element that the defendants put into issue, the plaintiff bears the burden of persuasion

[1] United States v. Baker Hughes, Inc., 908 F.2d 981 (D.C. Cir. 1990).

Baker Hughes burden shifting

- Operative *Baker Hughes* language:

> By showing that a transaction will lead to undue concentration in the market for a particular product in a particular geographic area, the government establishes a presumption that the transaction will substantially lessen competition. The burden of producing evidence to rebut this presumption then shifts to the defendant. If the defendant successfully rebuts the presumption, the burden of producing additional evidence of anticompetitive effect shifts to the government, and merges with the ultimate burden of persuasion, which remains with the government at all times.[1]

- Observations
  - *Baker Hughes* itself used only the *PNB* presumption to establish the prima facie case in Step 1.
  - Other cases have generalized Step 1 to allow the plaintiff to make out its prima facie case using any sufficient evidence[2]
  - The practice today in horizontal cases is for the government to “strengthen” the *PNB* presumption by supplementing it with evidence supporting one or more explicit theories of anticompetitive harm
  - *Baker Hughes* recognizes a “sliding scale” in Step 2: the stronger the government’s prima facie case, the more substantial the defendant’s evidence must be to rebut it[3]

[1] *Baker Hughes*, 908 F.2d at 982-83 (footnote and internal citations omitted).
[2] *See* United States v. AT&T Inc., 310 F. Supp. 3d 161 (D.D.C. June 12, 2018) (AT&T/Time Warner) (no *PNB* presumption available in a vertical case), *aff'd*, 916 F.3d 1029 (D.C. Cir. 2019).
[3] *Id*. at 991 (“The more compelling the prima facie case, the more evidence the defendant must present to rebut it successfully.”)

Baker Hughes burden shifting

- Acceptance by courts
  - The *Baker Hughes* three-step burden-shifting approach has been widely accepted by the other courts
    - The panel decision was unanimous
    - Apart from the logic of the approach, the fact the author of the opinion (Clarence Thomas) and one other panel member (Ruth Bader Ginsburg) soon afterwards became Supreme Court justices probably helped in the opinion gaining wide acceptance
    - *WDC*: I am unaware of any court rejecting the *Baker Hughes* approach[1]

[1] For circuit courts adopting the approach, see Illumina, Inc. v. FTC, No. 23-60167, 2023 WL 8664628, at *4 (5th Cir. Dec. 15, 2023); United States v. United States Sugar Corp., 73 F.4th 197, 203-04 (3d Cir. 2023); *In re* AMR Corp., No. 22-901, 2023 WL 2563897, at *2 (2d Cir. Mar. 20, 2023); Steves & Sons, Inc. v. JELD-WEN, Inc., 988 F.3d 690, 703-04 (4th Cir. 2021); FTC v. Sanford Health, 926 F.3d 959, 963 (8th Cir. 2019); United States v. AT&T, Inc., 916 F.3d 1029, 1032 (D.C. Cir. 2019); United States v. Anthem, Inc., 855 F.3d 345, 349 (D.C. Cir. 2017); FTC v. Penn State Hershey Med. Ctr., 838 F.3d 327, 337 (3d Cir. 2016); Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775, 783 (9th Cir. 2015); ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 568-72 (6th Cir. 2014); Chi. Bridge & Iron Co. v. FTC, 534 F.3d 410, 423-26 (5th Cir. 2008); FTC v. Butterworth Health Corp., 121 F.3d 708 (6th Cir. 1997) (unpublished); FTC v. Univ. Health, Inc., 938 F.2d 1206, 1218-19 (11th Cir. 1991).

Anticompetitive Effects:
Part 1: The *PNB* Presumption

Introduction

- Likely competitive effect
  - Having established the dimensions of the relevant market in which to assess the merger, the next step in the proof of the prima facie case is to assess the merger's likely competitive effect in this market
- *Baker Hughes*
  - Recognizes that a prima facie showing of the requisite anticompetitive effect may be made through the *Philadelphia National Bank* presumption
- The *PNB* presumption

> 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]

[1] United States v. Philadelphia National Bank, 374 U.S. 321, 363 (1963).

The *PNB* presumption

- *Philadelphia National Bank*:
  - 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)
  - Originally created as a *rebuttable* presumption of the requisite anticompetitive effect where the combined firm passed some (undefined) thresholds of—
    1. Combined market share, *and*
    2. Increasing market concentration
  - But quickly became a *conclusive* presumption in the lower courts
    - Essentially eliminated any defense once the prima facie case was proven
  - Returned to a rebuttable presumption by the Supreme Court in *General Dynamics*[2] in 1974

[1] United States v. Philadelphia National Bank, 374 U.S. 321, 363 (1963).
[2] United States v. General Dynamics Corp., 415 U.S. 486 (1974).

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).

Problems with the *PNB* presumption

- Presumption depends critically 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 recognized no defenses

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

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 Merger Guidelines approach

- Beginning in 1982, maintained a *PNB*-like presumption to guide prosecution discretion, but with two significant changes:
  - Measure of market concentration
    - The guidelines replaced the *n*-firm concentration ratio with the Herfindahl-Hirschman Index (HHI)
    - The HHI is defined as the sum of the squares of the market shares of the firms in the market of interest:

$$HHI = \sum_{i=1}^{n} s_i^2 = s_1^2 + s_2^2 + \cdots + s_n^2$$

      where there are n firms in the market, with firm i having a market share of s_i
  - Thresholds
    - The guidelines use two variables to set the thresholds for triggering the presumption:
      - The postmerger HHI (that is, the HHI assuming the merger has closed)
      - The change in the HHI caused by the merger (known as the “delta” or “Δ”)

Calculating the delta: Let *a* and *b* be the market shares of the merging companies.

Premerger contribution to the HHI:	$a^2 + b^2$
Postmerger contribution to the HHI:	$(a + b)^2 = a^2 + 2ab + b^2$
Difference (= HHI delta):	$2ab$ ← This is important to know

HHI sample calculations

Example 1: Firms 1 and 3 merge

Firm	Share	HHI contribution
1	50%	2500
2	30%	900
3	15%	225
4	5%	25
	100%	3650

Combined share	65%
Premerger HHI	3650
Delta (2*ab*)	1500
Postmerger HHI	5150

Example 2: Firms 4 and 5 merge

Firm	Share	HHI contribution
1	35%	1225
2	25%	625
3	20%	400
4	15%	225
5	5%	25
	100%	2500

Combined share	20%
Premerger HHI	2500
Delta (2*ab*)	150
Postmerger HHI	2650

Be sure you know how to do these calculations!
You will be called upon to do them whenever analyzing a horizontal merger

The 2010 & 2023 Merger Guidelines

- 2010 Horizontal Merger Guidelines

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."

Significantly reduced threshold

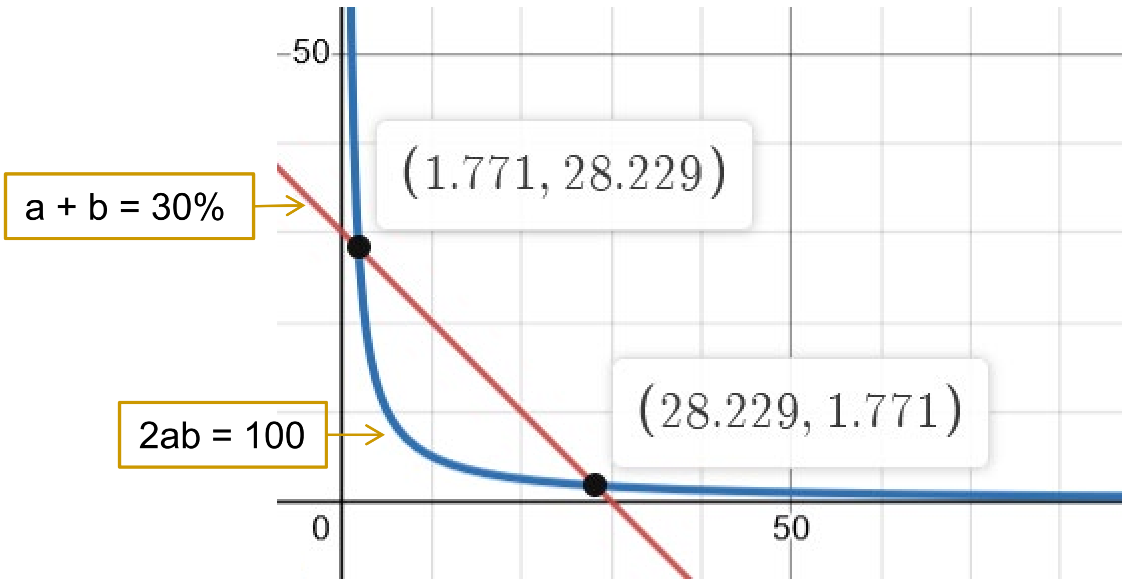
- 2023 Merger Guidelines: "Thresholds for Structural Presumption"

New

Postmerger HHI > 1800 or Combined share > 30%	Δ > 100

The 2023 Merger Guidelines

- The new 30% threshold almost always triggers the *PNB* presumption whenever the two firms have a combined market share of over 30%
  - That is, the ΔHHI > 100 requirement only comes into play if one of the merging firms has a market share of less than 2%, and then not always (depending on the market share of the larger firm)



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	2024	Tapestry	58.7	1449	3646	2197	Preclosing
FTC	2023	IQVIA	46	2538	3635	997	Preclosing
DOJ	2021	Bertelsmann	49	2220	3111	891	Preclosing
FTC	2020	Hackensack	≈50	1994	2835	841	Preclosing
FTC	2020	Peabody Energy	68	2707	4965	2258	Preclosing
FTC	2018	Wilhelmsen	84.7	3651	7214	3563	Preclosing
FTC	2017	Sanford Health	98.6[2]	5333	9726	4393	Preclosing
DOJ	2017	Energy Solutions	100	6040	10000	3960	Preclosing
DOJ	2016	Anthem	47	2463	3000	537	Preclosing
DOJ	2016	Aetna			>5000[3]		Preclosing
FTC	2016	Penn State Hershey	64	3402	5984	2582	Preclosing
FTC	2015	Advocate Heath	55	2094	3517	1423	Preclosing

[1] When the complaint alleged multiple markets, the market with the most problematic highest HHIs is reported.
[2] Pediatricians market. The FTC alleged three other physician markets. The lowest problematic delta was in OB/GYN with a premerger HHI of 6211, a postmerger HHI of 7363, and a delta of 1152.
[3] 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.
[4] 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%.

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	2015	Staples	75[2]	3036	5836	2800	Preclosing
FTC	2015	Sysco	71[3]	3153	5519	1966	Preclosing
DOJ	2015	Electrolux		3350[4]	5100	1750	Preclosing
DOJ	2013	Bazaarvoice	68	2674	3915	1241	Consummated
FTC	2013	Saint Alphonsus	57	4612	6129	1607	Consummated
DOJ	2013	US Airways	100[5]	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[5]		10000		Preclosing

[1] When the complaint alleged multiple markets, the market with the most problematic highest HHIs is reported.

[2] 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%.

[3] The complaint alleged multiple markets in food distribution. The numbers given are for national broadline distribution.

[4] The complaint alleged three markets. The numbers given are for ranges. Cooktops and wall ovens were similar

[5] The complaint alleged 1043 markets.

[5] 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

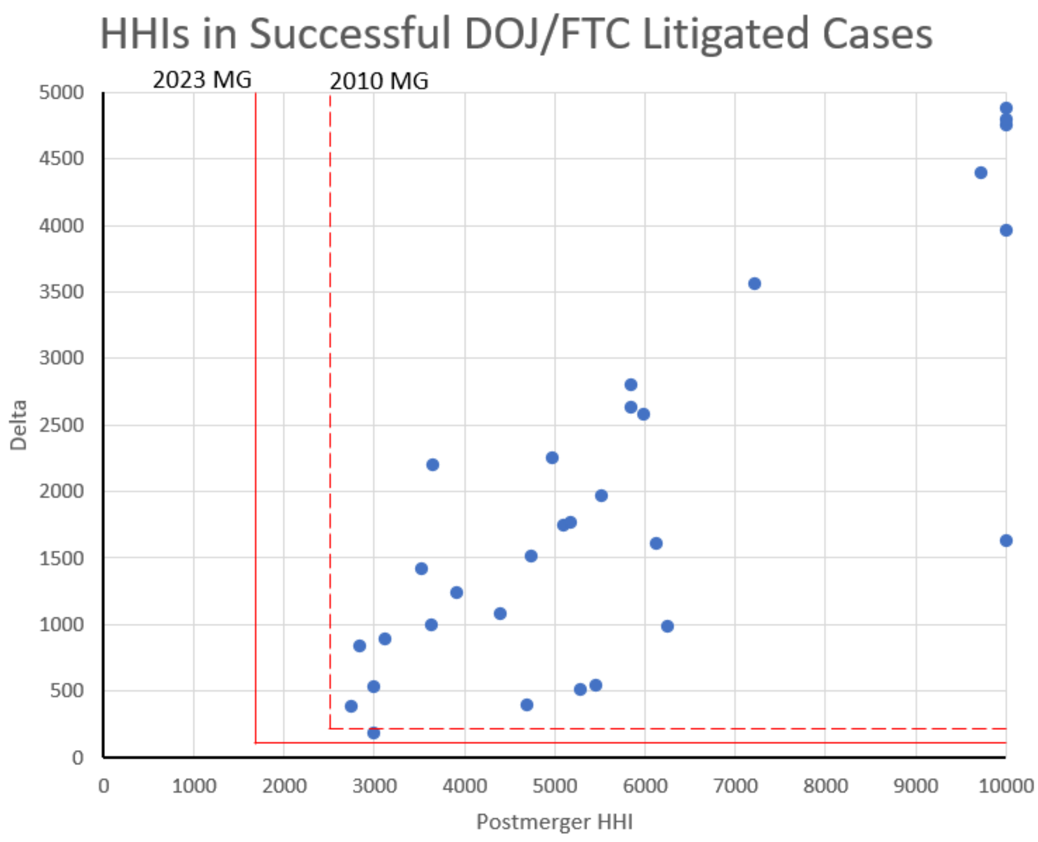
- The DOJ and FTC have not brought "close" cases in alleged markets

Agency	Complaint	Defendant	Combined Share[1]	PreHHI	PostHHI	Delta	Deal Status
FTC	2004	Evanston	35	2355	2739	384	Consummated
DOJ	2003	UPM-Kymmene	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.

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



Example: Albertsons/Safeway

- Challenged markets with the highest Δs (130 markets)

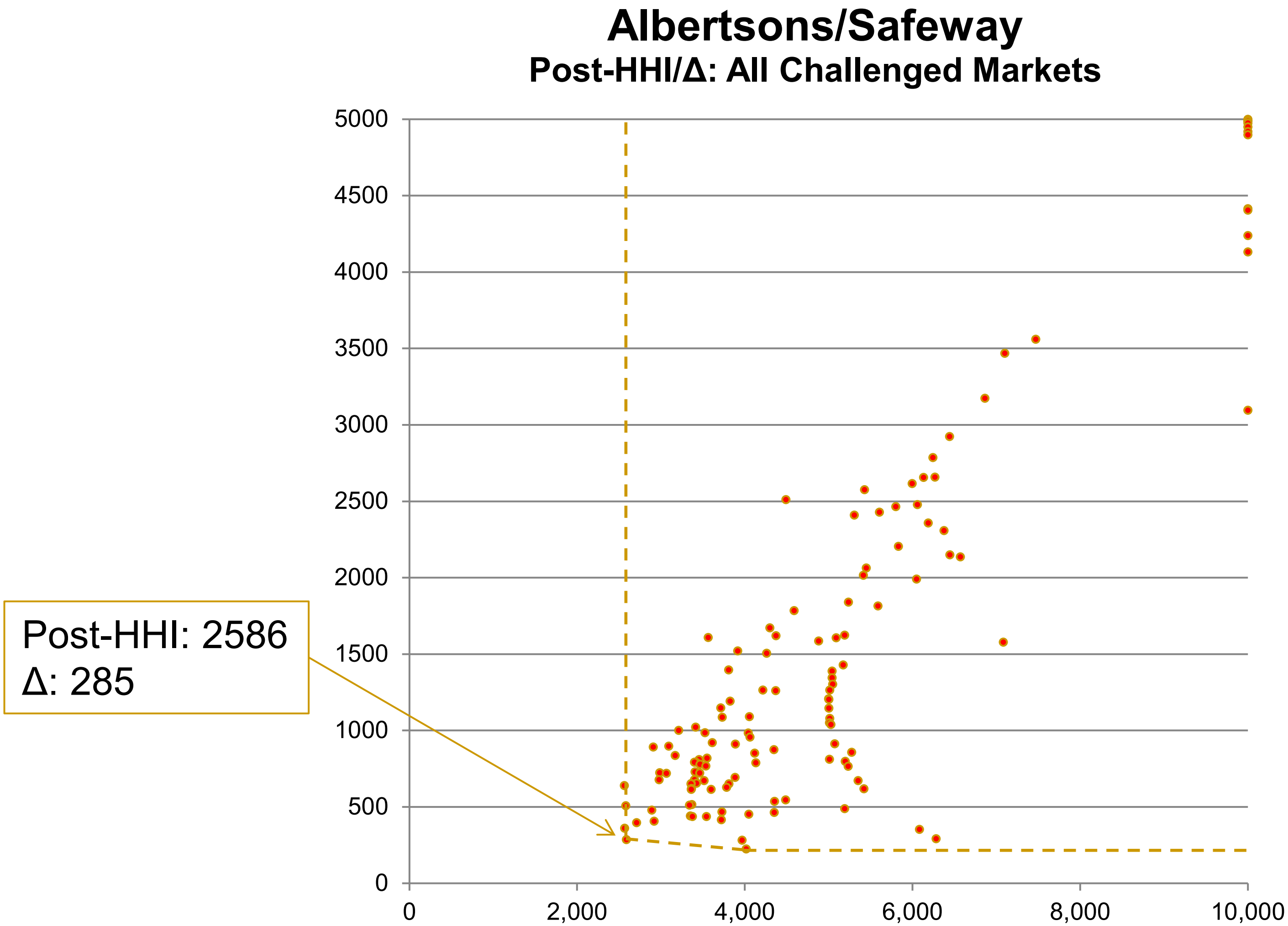
Area Number (See Para. 16 of Complaint)	City	State	Merger Result	HHI (pre)	HHI (post)	Delta
72	Deer Lodge	MT	2 to 1	5000	10,000	5000
83	Happy Valley/ Clackamas	OR	2 to 1	5006	10,000	4994
19	Carpinteria	CA	2 to 1	5012	10,000	4988
78	Ashland	OR	2 to 1	5013	10,000	4987
22	Coronado Island	CA	2 to 1	5025	10,000	4975
74	Boulder City	NV	2 to 1	5051	10,000	4949
29	Ladera Ranch	CA	2 to 1	5081	10,000	4919
79	Baker County	OR	2 to 1	5102	10,000	4898
53	San Diego, CA (Tierrasanta)	CA	2 to 1	5586	10,000	4414
122	Snohomish	WA	2 to 1	5595	10,000	4405
119	Sammamish	WA	2 to 1	5761	10,000	4239
26	Imperial Beach	CA	2 to 1	5869	10,000	4131
58	Santa Barbara/ Goleta	CA	3 to 2	3909	7469	3560
62	Simi Valley	CA	5 to 4	3633	7101	3468
11	Arroyo Grande/ Grover Beach	CA	3 to 2	3690	6864	3174

Example: Albertsons/Safeway

- Challenged markets with the lowest Δs (130 markets)

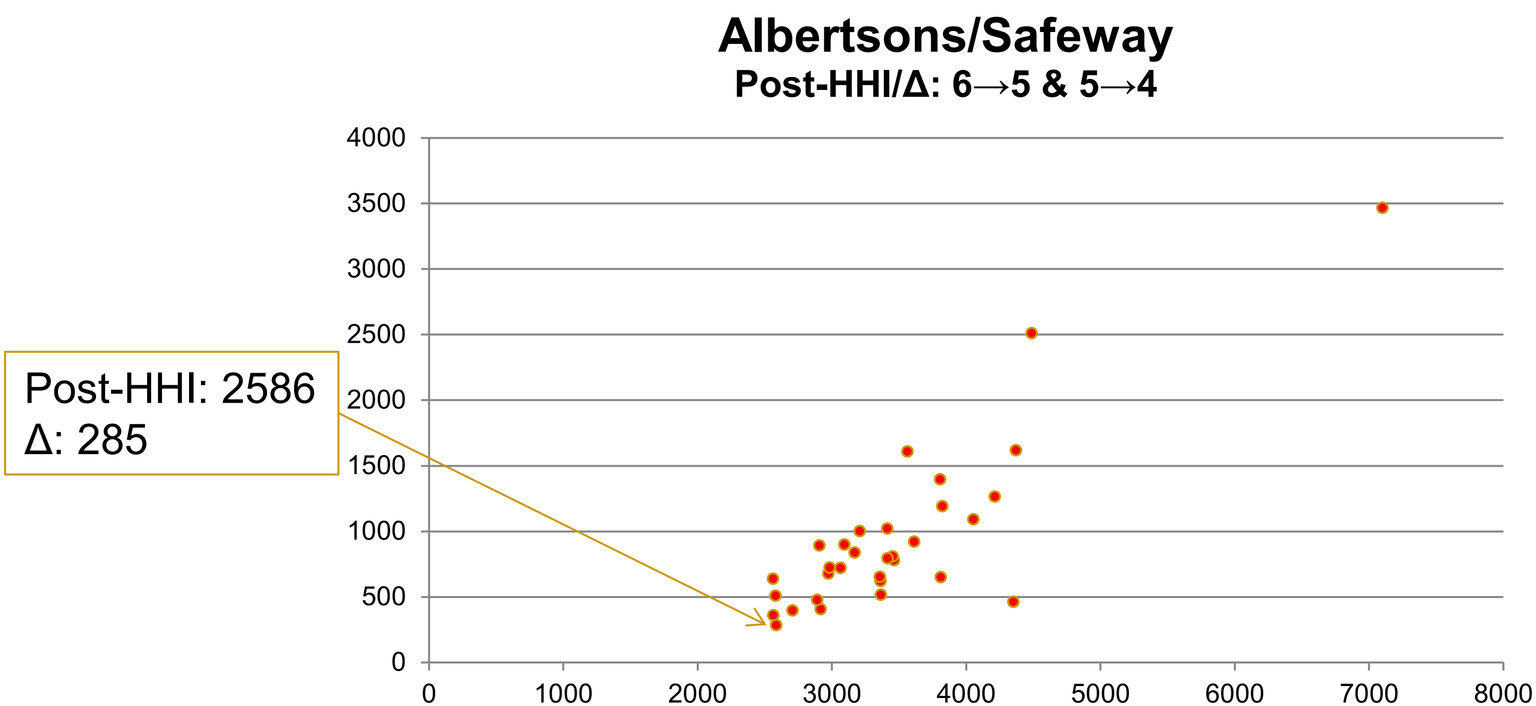
Area Number (See Para. 16 of Complaint)	City	State	Merger Result	HHI (pre)	HHI (post)	Delta
32	Lakewood	CA	6 to 5	2073	2581	508
71	Butte	MT	3 to 2	4701	5189	488
93	Dallas (Far North)	TX	5 to 4	2413	2891	478
123	Tacoma (Eastside)	WA	4 to 3	3260	3727	467
106	Lake Forest Park	WA	5 to 4	3889	4352	463
21	Chino Hills	CA	4 to 3	3596	4047	451
111	Monroe	WA	4 to 3	2911	3352	441
44	Oxnard	CA	4 to 3	2939	3375	436
98	Plano	TX	4 to 3	3105	3541	436
117	Renton (East Hill- Meridian)	WA	4 to 3	3304	3719	415
85	Klamath Falls	OR	5 to 4	2511	2917	406
104	Federal Way	WA	5 to 4	2312	2709	397
113	Olympia (East)	WA	6 to 5	2205	2566	361
87	Milwaukie	OR	3 to 2	5729	6082	353
55	San Marcos	CA	3 to 2	5991	6282	291
103	Everett	WA	5 to 4	2301	2586	285
65	Tujunga	CA	3 to 2	3688	3969	281
120	Shoreline	WA	4 to 3	3792	4017	225

Example: Albertsons/Safeway



6 to 5	5
5 to 4	27
4 to 3	43
3 to 2	42
2 to 1	13
	130

Example: Albertsons/Safeway



Anticompetitive Effects: Part 2: Explicit Theories of Anticompetitive Harm in Horizontal Mergers

We will examine the explicit theories of anticompetitive harm in horizontal mergers in detail in the next case study. They are not well-developed in *Sanford Health/MDC*, so we will just briefly summarize them here.

Explicit theories of anticompetitive harm

- Some history
  - The 1992 DOJ/FTC Horizontal Merger Guidelines, the most economically sophisticated of any Guidelines, required agency staff to go beyond the *PNB* presumption by advancing one or more explicit theories of harm with supporting evidence
  - In effect, the Guidelines required the staff to tell a coherent story about how the merger would likely reduce consumer welfare or economic efficiency
- Three principal explicit theories of harm in horizontal mergers
  - The 1992 Guidelines detailed three explicit theories:
    - Coordinated effects
    - Elimination of a maverick
    - Unilateral effects
  - These three theories are firmly embedded in modern merger antitrust law
  - The Guidelines do not limit explicit theories to these three, but no other explicit theories have emerged
- Acceptance by the courts
  - Since the 1992 Guidelines, agencies have consistently supplemented their *PNB* with explicit theories in litigation—and courts now expect to see such theories developed with substantial evidence in both briefing and trial.

Explicit theories of anticompetitive harm

- A little more detail
  1. Coordinated effects
     - Merger of significant competitors where customers have few realistic alternatives
     - Anticompetitive effect occurs when the merger facilitates pricing or other harmful tacit coordination ("accommodating conduct") among some or all the firms in the market
  2. Unilateral effects
     - Merger of close competitors
       - The 1992 DOJ/FTC Horizontal Merger Guidelines were widely interpreted to require the merging parties to be each other's closest competitors and to have a combined share of at least 35%
       - These requirements were dropped in the 2010 revision
     - Anticompetitive effect depends only on the elimination of "local" competition between the merging firms
     - Anticompetitive effect does not depend on changes in the behavior of other firms in the market (i.e., assumes no accommodating conduct)
  3. Elimination of a "maverick" firm
     - A maverick is a firm that is disruptive in the marketplace and tends to drive market prices down, even though it may have a small market share
     - This is a very ill-defined concept and may be entirely dependent on the business strategy of the current management
       - Has has a "know it when you see it" quality

Coordinated effects

- The concept
  - *Coordinated effects* arise when a merger increases the probability, effectiveness, or stability of *tacit collusion*
    - Tacit collusion is the process by which firms in an oligopoly coordinate their behavior—such as pricing or output decisions—without any explicit agreement, relying instead on mutual recognition of interdependence and *accommodating responses* over time
    - Coordinated effects involve conduct that is profitable *only if* rivals engage in accommodating responses—strategies that can be rational in oligopoly markets where firms recognize their interdependence and seek to maximize profits over time[1]

    Think of coordinated effects as rivals pulling their "competitive punches," resulting, for example, in higher prices

  - Introduced in the 1992 DOJ/FTC Horizontal Merger Guidelines
  - Well-accepted by the courts as a Section 7 theory of anticompetitive harm in horizontal mergers when the result is likely to be higher prices, lower market output, reduced market product or service quality, or a reduced rate of technological innovation or product improvement

[1] Theories of anticompetitive strategies that can be implemented postmerger by the merged firm alone, without accommodating conduct by rivals, are classified as *unilateral effects* (addressed below).

Coordinated effects

- The law
  - Two-element test:

    This is key

    1. The relevant market must be susceptible to tacit coordination
    2. The merger must make tacit coordination more likely, more effective, or more stable
  - Primary factors in Requirement 1:

    Most important factors

    1. The market is highly concentrated
    2. Prior actual or attempted coordination (whether successful or unsuccessful, whether unlawful or lawful)
    3. Market transparency on the dimensions of competition that firms will allegedly coordinate (usually prices or output, but it can be other variables)
    4. Limited competitive responses from noncoordinating firms that would disrupt coordination (e.g., entry, expansion, or repositioning)
    5. Aligned incentives to coordinate
    6. Profitability or other advantages of coordination
    - NB: Some courts presume that if the market satisfies the *PNB* thresholds premerger, the market satisfies Requirement 1
  - Primary factors in assessing Requirement 2:
    - If Requirement 1 is satisfied, most courts find that the elimination of a significant competitor through the merger makes out a prima facie showing of Requirement 2
  - *Burden of proof*: The plaintiff has the burden of proving a prima facie case of anticompetitive effects in its prima facie case

Coordinated effects

- Susceptibility: Generally accepted economic wisdom—
  - *3 or fewer firms*: Tacit coordination is highly plausible
  - *4 to 6 firms*: Tacit coordination is possible, depending on symmetry (incentive alignment), transparency, and product homogeneity
  - *7 or more firms*: Coordination is generally considered unstable or implausible absent explicit agreement or extraordinary conditions
- Scope of coordination
  - Coordinated effects does not need to involve every firm in the relevant market
  - It is sufficient that coordination occurs among some subset of firms (the *collusive group*) that collectively can influence a dimension of competition, especially market price or aggregate output, even if others do not participate
    - In applying the generally accepted economic wisdom, agencies and courts only look at the firms in the putative collusive group
  - As a result, courts often ignore fringe firms in the market when assessing a theory of competitive effects
- When a merger facilitates coordinated effects—
  - It is not enough that a collusive group likely tacitly colludes to violate Section 7
  - The result of the tacit collusion must be a Section 7 anticompetitive effect

Unilateral effects

- The concept
  - Unilateral effects is the elimination of significant "local" competition between the merging firms, allowing the merged entity to raise prices or otherwise act anticompetitively independently of how other competitors inside or outside the market react
    - Unilateral effects requires no accommodating conduct by other firms in the market

- An example

Suppose two of the three producers of premium ice cream merge. Although differentiated, the merging firms are each other's closest substitutes. They also compete with regular ice cream producers, but the cross-elasticity of demand with regular ice cream is substantially lower.

A premium-only candidate market fails the HMT, and the *Brown Shoe* indicia—such as pricing, product features, and customer usage—support a broader all-ice-cream market. In that broader market, the postmerger HHI and delta fall below the thresholds needed to trigger the *PNB* structural presumption. On traditional structural analysis, the merger appears competitively unobjectionable.

Nonetheless, the merger eliminates significant head-to-head competition between the merging premium brands. Premerger, a large share of sales lost by one of the merging firms would have been captured by the other merging firm. The merged firm internalizes this diversion and thus finds it profitable to raise price postmerger.

The unilateral effects theory captures this loss of localized competition. Even without coordinated behavior or high market concentration, the merger may substantially lessen competition under Section 7 by enabling unilateral price increases through internalization of competitive externalities.

Unilateral effects

- The history
  - The 1992 DOJ/FTC Horizontal Merger Guidelines introduced unilateral effects and recognized it as an anticompetitive effect cognizable under Section 7
  - The courts quickly and widely adopted the theory
  - In practice, it is rare for the agencies to challenge a horizontal merger that would not produce a unilateral effect
- Two theories of unilateral effects
  - *Recapture unilateral effects*, which depends on the merged firm being able to increase prices in one product and "recapture" a large portion of the lost marginal sales through substitution to the other merging product (assuming no price increase in the second product)
  - *Auction unilateral effects*, which depends on the merging firms being the likely number 1 and number 2 low bidders when sales are made in an auction process

We will focus only on recapture unilateral effects in these slides. We will return to auction unilateral effects in the Sysco/US Foods case study

Unilateral effects

- Some important economic concepts
  - Differentiated products
    - *Definition*: *Differentiated products* are similar but not identical, so that customers substitute imperfectly among them based on price, features, brand, or other differentiating factors
    - Examples:
      - Smartphones (iPhone, Samsung Galaxy)
      - Cola soft drinks (Coca-Cola, Pepsi, Dr Pepper)
      - Running shoes (Nike, Adidas)
      - Streaming services (Netflix, Prime Video, Hulu)
      - Toothpaste brands (Colgate, Crest)
      - Fast food (McDonald's, Burger King, Wendy's)
      - Ride-sharing apps (Uber, Lyft)
      - Cars (Toyota Camry, Honda Accord)
  - Diversion
    - *Definition*: *Diversion* is the switching of sales by marginal customers from one product to another due to a price increase in the first product
  - Diversion ratio
    - The diversion ratio from Product A to Product B is the percentage of the Product A's lost marginal unit sales that divert to Product B due to a given price increase in Product A
      - Product A's price increases by 5%. A loses a total of 100 units, 30 of which divert to Product B. The diversion ratio ($D_{A \to B}$ or simply D_{AB}) is 30%.

$$D_{AB} = \frac{\Delta q_B}{\Delta q_A} = \frac{30}{100} = 0.3 \text{ or } 30\%$$

> *Note*: The sum of the diversion ratios across all substitute products is 100%

      - *Important*: The diversion ratio is a function of the change in Product A's price. While the diversion ratio may be constant across different price changes, it does not have to be. The usual change in price used in antitrust analysis is the SSNIP used in the HMT in defining the relevant market.

Unilateral effects

- Recapture unilateral effects:
  - The mechanics
    - Premerger, each of the merging firms sets price to maximize its *individual* profits
      - If Firm 1 were to increase its price, it would lose its marginal sales and reduce its profits
    - Postmerger, the merged firm sets its prices to maximize its joint profits
      - Again, if the merged firm increased Product 1's prices, Product 1 would lose its marginal sales and reduce the profits it earns
      - BUT to the extent Product 2 "recaptures" some of Product 1's marginal sales because they now have become attractive at Product 2's (unchanged) price, Product 2 will increase its profits
    - *Bottom line*: The merged firm can increase its total profits by increasing Product 1's price if the recaptured profits in Product 2 are greater than the lost profits in Product 1
      - True even if no other firm in the market accommodates this price increase

Unilateral effects

- Recapture unilateral effects
  - We can express this in terms of incremental profits:

$$\Delta\pi_M = \underbrace{\Delta\pi_1}_{} + \underbrace{\Delta\pi_2}_{}$$

$$= \underbrace{\left[\Delta p_1\left(q_1 - \Delta q_1\right) - \$m_1\Delta q_1\right]}_{\text{Incremental profit loss on Product 1}} + \underbrace{D_{12}\Delta q_1 \$m_2}_{\text{Incremental profit gain on Product 2}}$$

If $\Delta\pi_M > 0$, the price increase is profitable
If $\Delta\pi_M < 0$, the price increase is unprofitable

where D_{12} is the *diversion (recapture) ratio* from Product 1 to Product 2

- That is, D_{12} is the percentage of the marginal unit sales lost by Product 1 that is recaptured by Product 2
  - *Example*: If the price increase causes Product 1 to lose 100 units and Product 2 recaptures 40 of those units, then the diversion ratio is 40/100 = 40%
- $D_{12}\Delta q_1$ is the diversion ratio times the lost marginal unit sales of Product 1, which are the unit sales recaptured by Product 2
  - *Example*: Using the numbers above, 40% x 100 = 40

Unilateral effects

- Recapture unilateral effects: Example 1

Consider two merging companies, Koka-Kola and Depsi Cola, that sell competing soft drinks. Before the merger, each company sells its cola for $2.00 per can with a marginal cost of $1.00. After the merger, the combined firm considers raising Koka-Kola's price by $0.10 to $2.10 while keeping Depsi Cola's price unchanged at $2.00. For every 1000 cans Koka-Kola sells at the original price, it will lose 100 cans at the higher price: 30 of these lost sales would divert to Depsi Cola, while 70 would be lost entirely (either to other competitors or as foregone purchases). Does the merged firm have a profit-maximizing incentive to implement this price increase in Koka-Kola?

Data		**Firm with the price increase Koka-Kola**		**Recapturing firm Depsi**	
Price (p_1 & p_2)	$2.00 per can	**Loss on marginal sales**			
Marginal cost (c_1 & c_2)	$1.00 per can	Δq_1	100		
Dollar margin ($\$m_1$ & $\$m_2$)	$1.00 per can	$\$m_1$	$1.00		
Price increase (Δp_1)	$0.10	Gross loss	$100.00		
Quantity (q_1)	1000 cans				
Marginal sales (Δq_1)	100 cans	**Gain on inframarginal sales**		**Gain on recaptured sales**	
Diversion ratio (D_{12})	30%	$q_1 - \Delta q_1$	900	$D_{12}\Delta q_1$	30
Recapture unit sales (Δq_2)	30 cans	Δp_1	$0.10	$\$m_2$	$1.00
		Gross gain	$90.00	Gross gain	$30.00
		Net gain	-$10.00	**Net gain to merged firm**	
				$\Delta\pi_1 + \Delta\pi_2$	$20.00

Here, there is a profit gain of $20, or 2% of total profits on Product 1.

Query: Would a court consider a 2% price increase a “substantial lessening of competition?

Unilateral effects

- Recapture unilateral effects: Example 2

Two merging full-service supermarkets, GreenMart and TownGrocer, are located on opposite corners of the same intersection in the town center. Before the merger, GreenMart sells an average customer "basket" for $100 with $80 marginal cost, while TownGrocer sells an average basket for $110 and a $95 marginal cost. After the merger, the combined firm contemplates raising GreenMart's basket price by $5 to $105 while keeping TownGrocer's price at $110. For every 1,000 baskets GreenMart sells at the original price, the $5 increase is expected to reduce its sales by 250 baskets; of these lost baskets, 75 are recaptured by TownGrocer and 175 are lost to other stores in the town center or foregone. Does the merged firm have a profit-maximizing incentive to implement the contemplated price increase at GreenMart?

#NAME? Data		Firm with the price increase GreenMart		Recapturing firm TownGrocer	
Price (p_1)	$100 per baske	**Loss on marginal sales**			
Marginal cost (c_1)	$80 per baske	Δq_1	250		
Dollar margin ($\$m_1$)	$20 per baske	$\$m_1$	$20.00		
Price increase (Δp_1)	$5	Gross loss	$5,000.00		
Quantity (q_1)	1000 baskets				
Marginal sales (Δq_1)	250 baskets	**Gain on inframarginal sales**		**Gain on recaptured sales**	
		$q_1 - \Delta q_1$	750	Δq_2	75
Price (p_2)	$110 per baske	Δp_1	$5.00	$\$m_2$	$15.00
Marginal cost (c_2)	$95 per baske	Gross gain	$3,750.00	Gross gain	$1,125.00
Dollar margin ($\$m_2$)	$15 per basket				
Recapture unit sales (Δq_2)	75 baskets	**Net gain**	-$1,250.00	**Net gain to merged firm**	
				$\Delta\pi_1 + \Delta\pi_2$	-$125.00

Here, the merged firm would sustain a profit loss of $125 per 1000 baskets sold if it implemented the contemplated price increase.

Query: What is going on here?

Unilateral effects

- The law
  - In practice, modern courts generally require four *necessary* (but not sufficient) elements to prove “recapture” unilateral effects:
    1. *Differentiated products*: The merging firms' products must be sufficiently differentiated—pre- or postmerger—to permit meaningful diversion between them
       - Firms with differentiated products face downward-sloping residual demand curves, so that they can increase price and lose only some, but not all, of their sales (that is, they retain their inframarginal customers)
    2. *Close substitutes*: The merging products must be close (but not necessarily the closest) substitutes
       - That is, the merging products must have a high diversion ratio from at least one merging product to the other merging product
       - It is not necessary for the diversion ratios to be high in both directions
    3. *Distant substitutes from other products*: Most rival firms’ products must be poor substitutes
       - That is, the diversion ratio from the merging product whose price is expected to increase postmerger to most other substitute products should be low
       - This still allows a few products to have high diversion ratios: the merging products do not have to be uniquely close substitutes
    4. *Barriers to entry, expansion, or repositioning*: It must be difficult for rivals to offset the merged firm’s price increase through timely and sufficient new entry, expansion, or repositioning
       - The merged firm must be able to increase price for at least one product without being disciplined by new competition

Unilateral effects

- For a given price increase to be profitable under the unilateral effects theory to apply, one more condition must be satisfied:

    The incremental profit gain on the sales recaptured by Product B must be greater than the incremental profit loss on the foregone marginal sales of Product A

    - In later classes, we will develop formulas to test whether this profitability condition holds

Unilateral effects

- Practical and evidentiary considerations
  - The plaintiff must show more than product differentiation—it must prove that one merging product significantly constrains the pricing of the other
  - A successful case typically includes—
    - High diversion ratios between the merging products, indicating that lost sales from a price increase in one product would mostly be recaptured internally by the merged firm by the other product (assuming no increase in the price of the second (recapturing) product)
      - Evidenced by internal documents, win-loss records, customer testimony, or econometric modelling showing that the merging products are particularly close competitors
    - High gross margins on the recaptured product, meaning that the recaptured sales are highly profitable postmerger
    - Economic modeling quantitatively estimating predicted postmerger price increases (which we will explore in later case studies)
  - Courts may discount:
    - Diversion spread among many rivals to the merging firms, weakening the link between the merger and price effects
    - Anecdotal or historical rivalry unless tied to enduring structural features or current market realities
  - Unlike coordinated effects, unilateral effects do not require showing any response by other firms in the market

Elimination of a "maverick"

- The concept
  - A *maverick* is a firm that disrupts tacit coordination in a way that materially benefits consumers, often through aggressive pricing, innovation, or other competitive conduct
    - The antitrust concern is that the merger would eliminate a uniquely disruptive firm whose conduct materially constrains market pricing or behavior—either by deterring coordination or disciplining a rival—thus resulting in a less competitive postmerger equilibrium
  - Anticompetitive effect
    - *Coordinated effects*: Often arises as a special case of coordinated effects theory when the maverick is acquired by a firm that is more accommodating to its rivals and likely to suppress the maverick's disruptive behavior
      - The theory can also apply if the maverick acquires a rival and the evidence shows that postmerger the merged firm is likely to be more accommodating to rivals, degrading or eliminating the maverick's premerger disruptive conduct
    - *Unilateral effects*: Can also arise as a special case of unilateral effects, when the maverick exerts a significant competitively disciplining influence on the acquiring firm, and the merger is likely to eliminate that discipline
      - The theory can similarly apply when the maverick is the acquiring firm, and the evidence shows that the merged firm is unlikely to maintain the maverick's disruptive proconsumer strategy postmerger
  - Courts and the agencies recognize elimination of a maverick as a valid theory of Section 7 anticompetitive harm
    - But require strong evidence that the firm truly is, and will remain, a maverick absent the merger

Elimination of a "maverick"

- The law
  - *Coordinated effects*: The leading doctrinal framework comes from *H&R Block*,[1] which sets out a four-part test:
    1. The market must be conducive to a materially higher degree of coordinated interaction than it currently exhibits
    2. The disruptive conduct of the maverick must materially contribute to the market's current lower level of coordination
    3. The merger must make it likely that the disruptive conduct will be discontinued
    4. The loss of disruptive conduct must likely result in a materially higher degree of coordination that harms consumers

[1] United States v. H&R Block, Inc., 833 F. Supp. 2d 36, 80 (D.D.C. 2011). H&R Block/TaxACT will be our case study for Classes 8-11.

Elimination of a "maverick"

- The law
  - *Unilateral effects*: There is no case law on the requirements, but they follow directly from the general theory of unilateral effects:
    1. The merging firms must be close substitutes, with most other products in the relevant market significantly more distant
    2. The maverick must be exerting a significant disciplining effect on the other merging firm, causing it to price more aggressively, innovate more, or otherwise behave more competitively than it otherwise would in the absence of the maverick
    3. The merged firm is unlikely to continue the maverick's premerger procompetitive strategy, resulting in a less competitive equilibrium and consumer harm that would not have occurred absent the merger
    4. Other firms must not be able to enter, expand, or reposition in a manner that is timely, likely, and sufficient to restore the competitive discipline lost with the maverick's elimination

Elimination of a "maverick"

- A central question: Why are "mavericks" mavericks?
  1. Mavericks are often smaller firms
     - Smaller firms have fewer inframarginal sales at risk and more to gain from aggressive pricing or innovation, making them more willing to disrupt coordination than larger firms
  2. Mavericks may be pursuing a long-term, growth-oriented business model
     - Firms prioritizing scale or customer acquisition may compete aggressively to expand their market position, even at the expense of short-term profits
  3. Mavericks may have lower marginal costs or unique cost advantages
     - Cost advantages can make it profitable to undercut rivals even when others would find such pricing unsustainable
  4. Maverick conduct may reflect the firm's internal culture or leadership incentives
     - Disruptive strategies may be driven by executives rewarded for risk-taking, innovation, or price competition
  5. Mavericks may not be aligned with industry norms or expectations
     - Structural differences or outsider status may lead the firm to disregard implicit coordination or industry conventions
  6. Mavericks may face limited risk of retaliation from rivals
     - Firms insulated by niche positions, geographic distance, or vertical integration may be less vulnerable to punishment for aggressive conduct.

Elimination of a “maverick”

- Practical and evidentiary considerations
  - Courts and agencies are skeptical of labeling a firm a maverick without clear evidence of persistent, distinctive procompetitive conduct that constrains rivals
  - Evidence must show that the firm’s disruptive conduct is both material and likely to continue absent the merger
    - Past behavior alone may be insufficient if it is not durable or tied to structural features likely to persist
  - The theory fails if there is no reasonably likely postmerger pathway for the merger to proximately cause a Section 7 anticompetitive effect