

Lecture 8: Mergers and Multiproduct Firms¹

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April 16, 2026

¹The lecture is based on [Belleflamme and Peitz, 2015] Chapter 16(Strategic Incumbents and Entry).

Applications

We know how firms calculate prices and how to estimate consumers demand. Now, we put the two things together.

Some applications of the framework we have studied.

- ▶ Multiproduct Firms (Product line pricing)
- ▶ Mergers: Unilateral and Coordinated Effects
- ▶ Collusion (more later)

Multiproduct Firms



Source: Business Insider

Multiproduct Firms

Multiproduct Firms

Mergers

Horizontal Mergers

Merger Policy

Merger Case Study BV

Horizontal Merger Case

Vertical Merger Case



Source: insider.com

Multiproduct Firms

Just *six* companies own over *forty* fashion brands.



GIVENCHY

KENZO

Berluti

LOEWE.

CÉLINE

LOUIS VUITTON

Dior



sergio rossi



Briotti

BALENCIAGA

ALEXANDER
MCQUEEN

SAINT LAURENT
PARIS

BOTTEGA VENETA

GUCCI



NET-A-PORTER.COM

LANCEL



LONDON
SHANGHAI TANG

ALAÏA
PARIS

Chloé

RICHEMONT



CAROLINA HERRERA

paco rabanne

Jean Paul
GAULTIER

NINA RICCI
PARIS

ZAGLIANI

JIMMY CHOO

BELSTAFF
ENGLAND



DIESSEL

VIKTOR@ROLF

MARNI

Naison Martin Margiela
PARIS



Source: insider.com

Multiproduct Firms

Most firms produce more than one product

- ▶ Firms maximize joint profits from all their products.
- ▶ When product demands are *interrelated*, firms *internalize* the effects of sales of one product on the other products.
- ▶ When Volkswagen chooses the price of its cars, it takes into account the consumers that may buy an Audi (also owned by Volkswagen) for a higher price.
- ▶ We use same framework for mergers, collusion.

Example

Two firms, two products. Suppose $c_1 = c_2 = c = 1$,
 $a = b = 1$

$$q_1 = a - p_1 + 0.5p_2$$

$$q_2 = b + 0.5p_1 - p_2$$

Single product firms

$$p_1 = (8a + 2b + 10c)/15 = 4/3$$

$$p_2 = (8b + 2a + 10c)/15 = 4/3$$

Two firms merge to a monopoly. Now, multiproduct firm:

$$p_1 = (2a + b + 1.5c)/3 = 4.5/3$$

$$p_2 = (2b + a + 1.5c)/3 = 4.5/3$$

Prices (and profits) are higher! Products are substitutes:
 increasing the price of one product, increases the demand
 for the other.

Multiproduct Firm's Problem

Suppose there are 3 products (e.g., car brands), A, B, C . Firm 1 manufactures A and B (Think Volkswagen AG (Volkswagen, Audi) and Ford.)

$$\begin{aligned}\pi_1 &= \pi_A + \pi_B - F_1 \\ &= (p_A - c_A)q_A(p_A, p_B, p_C) + (p_B - c_B)q_B(p_A, p_B, p_C) - F_1\end{aligned}$$

Now, firm maximizes profits with respect to products A and B : Two first order conditions.

$$\max_{p_A, p_B} \pi_A + \pi_B - F_1$$

Multiproduct Firm's Problem (2)

$$\text{FOC}_A: (p_A - c_A)q'_A(\cdot) + q_A(\cdot) + (p_B - c_B)\frac{\partial q_B(\cdot)}{\partial p_A} = 0$$

$$\text{FOC}_B: (p_B - c_B)q'_B(\cdot) + q_B(\cdot) + (p_A - c_A)\frac{\partial q_A(\cdot)}{\partial p_B} = 0$$

Notice the extra term in the right: cross-product profit internalization.

Rearranging,

$$\text{FOC}_A: (p_A - c_A)q'_A(\cdot) + (p_B - c_B)\frac{\partial q_B(\cdot)}{\partial p_A} = -q_A(\cdot)$$

$$\text{FOC}_B: (p_A - c_A)\frac{\partial q_A(\cdot)}{\partial p_B} + (p_B - c_B)q'_B(\cdot) = -q_B(\cdot)$$

Multiproduct Firm's Problem (3)

Solving the system of equations,

$$p_A - c_A = \frac{1}{q'_A(\cdot)q'_B(\cdot) - \frac{\partial q_B(\cdot)}{\partial p_A} \frac{\partial q_A(\cdot)}{\partial p_B}} \left(q_B(\cdot) \frac{\partial q_B(\cdot)}{\partial p_A} - q_A(\cdot)q'_B(\cdot) \right)$$

$$p_B - c_B = \frac{1}{q'_A(\cdot)q'_B(\cdot) - \frac{\partial q_B(\cdot)}{\partial p_A} \frac{\partial q_A(\cdot)}{\partial p_B}} \left(q_A(\cdot) \frac{\partial q_A(\cdot)}{\partial p_B} - q_B(\cdot)q'_A(\cdot) \right)$$

Takeaway: we can solve for markups (and prices—sometimes only numerically) in each product.

Q: What is $\frac{\partial q_A(\cdot)}{\partial p_B}$?

Martynova, Marina, and Luc Renneboog. *"Mergers and acquisitions in Europe."* Advances in corporate finance and asset pricing (2006): 13-75.

Case 15.1 Mergers and acquisitions in Europe⁴⁰

According to the Thomson Financial Securities Data, 87 804 mergers and acquisitions (M&As, for short) were recorded for Europe in the period 1993–2001. In monetary terms, the total value of these deals adds up to US\$ 5.6 trillion.^a This nine-year period has been called the ‘fifth merger wave’ in Europe. The fourth wave took place between 1983 and 1989. In comparison, the fifth wave is more than eight times as large (in number of deals and in total value) as the fourth wave. The impressive growth of M&A activity can be explained by the challenges brought about by the development of the single European market and the introduction of the Euro in the 1990s, a period characterized by deregulation in various industries and increased regional competition. This drove mostly domestically oriented firms to resort to mergers as a survival strategy. Moreover, the introduction of the Euro eliminated all currency risks within the Eurozone, which reduced the home bias of investors. Indeed, one third of the intra-European M&As of the period 1993–2001 were cross-border deals.

Horizontal Mergers

Simplest view: two products that were manufactured by separate firms are now manufactured by the same firm.

- ▶ Firms will want to merge to earn more profits.
- ▶ Synergies and efficiencies may lower costs
- ▶ Key question: will prices increase?
- ▶ We can use the same framework as before to compare profits, prices
- ▶ Even intuitively, profits will be higher after the merger.

Merger Motivations

1. Market Power

- ▶ Horizontal mergers: take out competitor
- ▶ Vertical mergers: foreclosure of competitors, market power extension
- ▶ The focus of U.S. merger policy: prevent monopoly, make oligopoly coordination more difficult.

Merger Motivations

2. Efficiencies

- ▶ “Synergies” in costs (econ of scale, scope?)
- ▶ Align management incentives with shareholder interests
- ▶ Improve access to internal capital
- ▶ Replace inferior/inefficient management

Economists' focus: 1 and 2

Merger Motivations

3. Financial/Pecuniary Gains

- ▶ Tax advantages to combination
- ▶ Diversify to reduce bankruptcy costs
- ▶ Contract abrogation (especially labor)

4. Information Asymmetry: undervalued target

Merger Motivations

5. Management objectives/self-interest

- ▶ Managerial aggrandisement
- ▶ Increase compensation (function of size), power, control
- ▶ “Winner’s curse”.

Ross, Thomas W., and Ralph A. Winter. "The efficiency defense in merger law: Economic foundations and recent Canadian developments." *Antitrust LJ* 72 (2004): 471.

Case 15.2 The 'efficiency defence' in the Superior Propane case⁴³

In 1998, *Superior Propane Inc.* and *ICG Propane Inc.* were the two largest distributors of propane in Canada. When the two companies announced their intention to merge, Canada's Commissioner of Competition (who is the head of the Competition Bureau) immediately filed an application before the Competition Tribunal seeking an order to dissolve the merger. The Commissioner indeed argued that the merger would substantially lessen competition in 66 of 74 local markets for the supply of propane. In 16 markets the merged entity would even have a pure monopoly or near monopoly (with a market share ranging from 97% to 100%). The Tribunal accepted the Commissioner's argument and concluded that the merger substantially lessened competition. Using econometric estimates of industry cost and demand functions, the deadweight loss resulting from reduced competition was estimated at C\$6 million per year over a ten-year horizon. On the other hand, the Tribunal also accepted evidence for cost efficiencies of C\$29 million per year over the same horizon. Hence, applying the total surplus criterion, the Tribunal decided that the merger should be permitted. Note, however, that the Court of Appeal rejected the unqualified application of the total surplus standard, requiring instead that a larger weight be placed on consumer surplus.

US Merger Policy

DOJ/FTC Horizontal Merger Guidelines (rev 2010)

... mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise. For simplicity of exposition, these Guidelines generally refer to all of these effects as enhancing market power. A merger enhances market power if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives. In evaluating how a merger will likely change a firm's behavior, the Agencies focus primarily on how the merger affects conduct that would be most profitable for the firm. (DOJ, Merger Guidelines, 2010, p. 2)

Unilateral effects: Arise from eliminating competition between partners

Coordinated effects: Change behavior of other firms in market (e.g., tacit collusion)

US Merger Guidelines (2010)

Multiproduct
Firms

Mergers

Horizontal Mergers

Merger Policy

Merger Case Study BV

Horizontal Merger Case

Vertical Merger Case

While the 2010 merger guidelines de-emphasize the role of market definition and simple concentration measures, market concentration continues to play a role in merger policy, particularly for homogeneous products in defining likely DoJ/FTC response to proposed mergers.

$HHI < 1500$

$1500 < HHI < 2500$

$2500 < HHI$

Unconcentrated

Moderately concentrated

Concentrated

Challenge unlikely

Challenge possible

Challenge likely

2010 Guidelines emphasize unilateral effects over coordinated effects, except where there is concern a firm may be buying a “maverick”

Common Ownership Hypothesis

Who are these common owners?



<u>JP Morgan Chase</u>	%	<u>Bank of America</u>	%	<u>Citigroup</u>	%
BlackRock	6.4	Berkshire Hathaway*	6.9	BlackRock	6.1
Vanguard	4.7	BlackRock	5.3	Vanguard	4.4
State Street	4.5	Vanguard	4.5	State Street	4.2
Fidelity	2.7	State Street	4.3	Fidelity	3.6
Wellington	2.5	Fidelity	2.1	Capital World Investors	2.4
<u>Wells Fargo</u>	%	<u>US Bancorp</u>	%	<u>PNC Bank</u>	%
Berkshire Hathaway	8.8	BlackRock	7.4	Wellington	8.0
BlackRock	5.4	Vanguard	4.5	BlackRock	4.7
Vanguard	4.5	Fidelity	4.4	Vanguard	4.6
State Street	4.0	State Street	4.4	State Street	4.6
Fidelity	3.5	Berkshire Hathaway	4.3	Barrow Hanley	4.0

* Warrants without voting rights.

Source: https://cgcc.global/wp-content/uploads/2017/06/1-1-presentation_GCCG_MIREIA_GINE.pdf

Mergers: Case Study BV

Bjornerstedt, Jonas, and Frank Verboven. "Does merger simulation work? Evidence from the Swedish analgesics market." *American Economic Journal: Applied Economics* 8.3 (2016): 125-64.

Mergers: Case Study BV

- ▶ Study merger between AstraZeneca Tica (AZT) and GlaxoSmithKline (GSK) in the Swedish market for over-the counter analgesics.
- ▶ Which are bigger: Efficiencies or unilateral effects?
- ▶ AZT and GSK were the only companies in the paracetamol market.
- ▶ Two approaches. Post merger prices through merger simulation, studied actual prices.
- ▶ We can use the same framework as before to compare profits, prices
- ▶ Even intuitively, profits will be higher after the merger.

Mergers: Case Study BV

Table 1: Market shares in 2008, by form and active substance

Form	Paracetamol	Ibuprofen	ASA	Total
Tablet	36.1	29.0	2.6	67.7
Fizzy tablet	6.0		26.3	32.3
Total	42.1	29.0	28.9	100

Note: This table shows the market shares of the main administrative forms and active substances, according to the total value of sales in 2008. Paracetamol is known as acetaminophen in the U.S.

Source: Björnerstedt and Verboven (2014)

Mergers: Case Study BV

Table 2: Market shares in 2008, by brand and active substance

Firm	Brand	Paracet.	Ibupr.	ASA	Total
AZT	Alvedon	29.3			31.5
	Reliv	2.2			
GSK	Panodil	10.6			10.6
McNeil	Ipren		19.1		44.7
	Treo			22.5	
	Magnecyl			3.1	
Nycomed	Ibumetin		9.2		9.2
Meda	Alindrin		0.7		3.6
	Albyl			0.2	
	Bamyl			2.7	
Bayer	Aspirin			0.4	0.4
	Alka-seltzer			0.0	
Total		42.1	29.0	28.9	100

Note: This table shows the market shares of the main firms and brands and active substances, according to the total value of sales in 2008. Paracetamol is known as acetaminophen in the U.S.

Source: Björnerstedt and Verboven (2014)

Mergers: Case Study BV

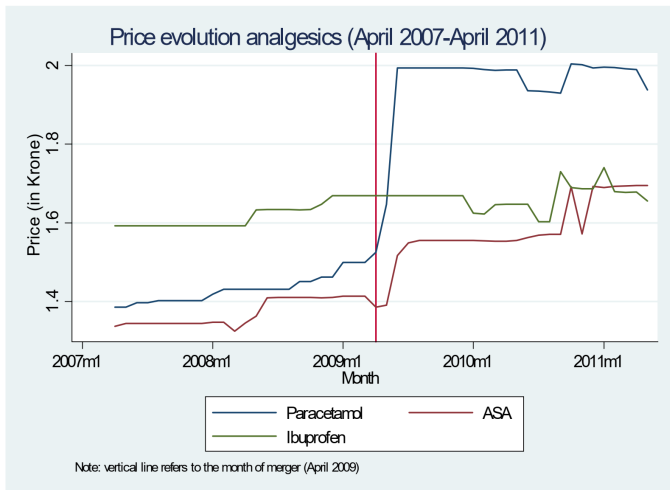


Figure 1: Price evolution analgesics (April 2007 - April 2011)

Source: Björnerstedt and Verboven (2014)

Mergers: Case Study BV

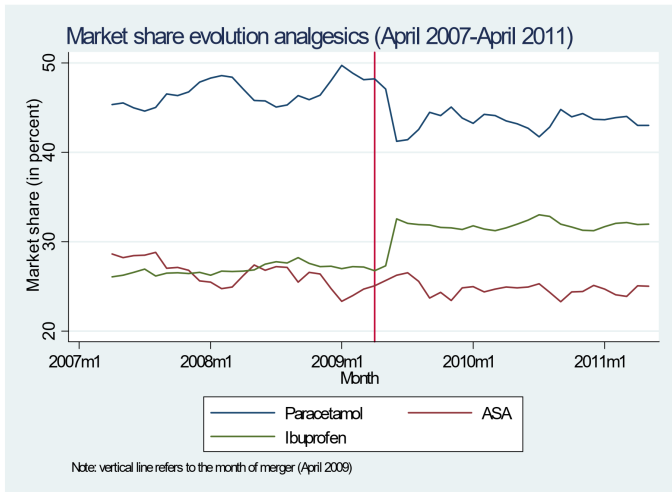


Figure 2: Market share evolution analgesics (April 2007 - April 2011)

Source: Björnerstedt and Verboven (2014)

Mergers: Case Study BV

Table 6: Predicted price and market share effects in the preferred model

	Price effects		Market share effects	
	Bertrand	Partial coord.	Bertrand	Partial coord.
	Predictions at the level of the active substance			
Paracetamol	+34.1%	+28.0%	-7.1%	-5.4%
Ibuprofen	+0.7%	+4.1%	+3.7%	+2.7%
ASA	+0.8%	+3.0%	+3.3%	+2.7%
	Predictions at the level of the firm			
AZT	+21.3%	+19.5%	-3.4%	-2.7%
GSK	+59.8%	+45.1%	-3.7%	-2.7%
Nycomed	+0.6%	+4.0%	+1.3%	+0.9%
Meda (Ellem)	+0.1%	+2.7%	+0.6%	+0.5%
McNeil	+1.7%	+4.1%	+5.1%	+3.9%
Bayer	+0.1%	+2.5%	+0.1%	+0.1%

Source: Björnerstedt and Verboven (2014)

Mergers: Case Study

MW

Miller, Nathan H., and Matthew C. Weinberg.
"Understanding the price effects of the MillerCoors joint
venture." *Econometrica* 85.6 (2017): 1763-1791.

Mergers: Case Study

MW

- ▶ Study merger between Miller and Coors

We study the economic effects of MillerCoors, a joint venture of SABMiller PLC and Molson Coors Brewing that combined the operations of these brewers in the United States. The joint venture underwent antitrust review as a merger between the second and third largest firms in the U.S. brewing industry. It was approved June 5, 2008 by the DOJ on the basis that merger-specific cost reductions would likely outweigh any anticompetitive effects.

Lecture 8: Merger

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Multiproduct Firms

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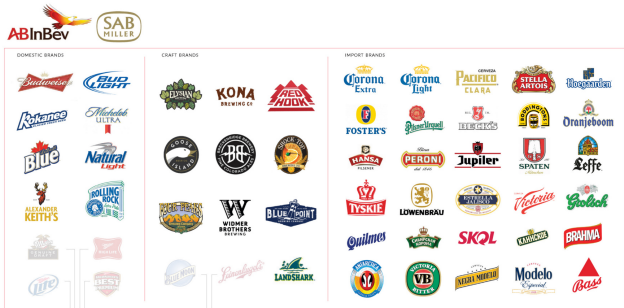
Horizontal Merger Case

Vertical Merger Case

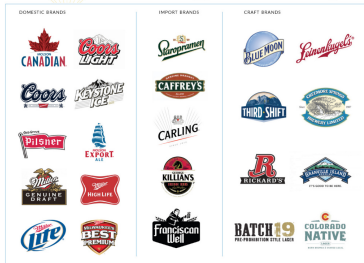


The merger between AB InBev and SABMiller is the largest beer deal in history, valued at \$107 billion.

Once the dust settles, most global beer brands will be owned by just a few big conglomerates.



MOLSON-Coors



For antitrust reasons, some or all of these brands are expected to be sold to the Molson-Coors as a result of the merger.

HEINEKEN



DIAGEO



As of 2016. Source: www.visualcapitalist.com



Mergers: Case Study

MW

- ▶ **Miller and Coors merge** in the US-. Prices of MillerCoors went up.
- ▶ However, the price of other **competitors (ABI–Budweisser)** also went up
- ▶ Why? Cross elasticities or Collusion? (**Unilateral or coordinated effects?**)
- ▶ Approach: Simulate merger and compare results with actual prices.

Mergers: Case Study

MW

TABLE I
REVENUE SHARES AND HHI^a

Year	ABI	MillerCoors	Miller	Coors	Modelo	Heineken	Total	HHI
2001	0.37	–	0.20	0.12	0.08	0.04	0.81	2,043
2003	0.39	–	0.19	0.11	0.08	0.05	0.82	2,092
2005	0.36	–	0.19	0.11	0.09	0.05	0.79	1,907
2007	0.35	–	0.18	0.11	0.10	0.06	0.80	1,853
2009	0.37	0.29	–	–	0.09	0.05	0.80	2,350
2011	0.35	0.28	–	–	0.09	0.07	0.79	2,162

^aThis table provides revenue shares and the HHI over 2001–2011. Firm-specific revenue shares are provided for ABI, Miller, Coors, Modelo, and Heineken. The total across these firms is also provided. The HHI is scaled from 0 to 10,000. The revenue shares incorporate changes in brand ownership during the sample period, including the merger of Anheuser-Busch (AB) and InBev to form ABI, which closed in November 2008, and Heineken's acquisition of the FEMSA brands in April 2010. All statistics are based on supermarket sales recorded in IRI scanner data.

Source: Miller and Weinberg (2017)

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Mergers: Case Study

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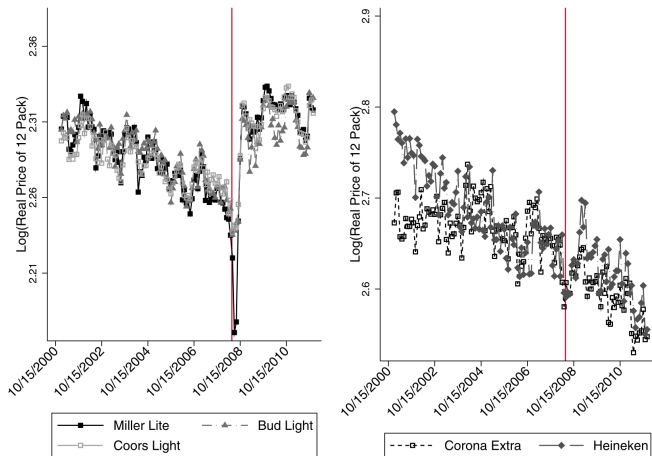


FIGURE 1.—Average retail prices of flagship brand 12 packs. *Notes:* This figure plots the average prices of a 12 pack over 2001–2011, separately for Bud Light, Miller Lite, Coors Light, Corona Extra, and Heineken. The vertical axis is the natural log of the price in real 2010 dollars. The vertical bar drawn at June 2008 signifies the consummation of the Miller–Coors merger.

Mergers: Case Study

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Firms

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TABLE V
MEAN ELASTICITIES FOR 12-PACK PRODUCTS FROM SPECIFICATION RCNL-1^a

Brand/Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	<i>Product-Specific Own and Cross-Elasticities</i>												
(1) Bud Light	-4.389	0.160	0.019	0.182	0.235	0.101	0.146	0.047	0.040	0.130	0.046	0.072	0.196
(2) Budweiser	0.323	-4.272	0.019	0.166	0.258	0.103	0.166	0.047	0.039	0.121	0.043	0.068	0.183
(3) Coors	0.316	0.154	-4.371	0.163	0.259	0.102	0.167	0.046	0.038	0.119	0.042	0.066	0.180
(4) Coors Light	0.351	0.160	0.019	-4.628	0.230	0.100	0.142	0.047	0.041	0.132	0.047	0.073	0.199
(5) Corona Extra	0.279	0.147	0.018	0.137	-5.178	0.108	0.203	0.047	0.035	0.104	0.035	0.061	0.158
(6) Corona Light	0.302	0.151	0.018	0.153	0.279	-5.795	0.183	0.048	0.037	0.113	0.039	0.065	0.171
(7) Heineken	0.269	0.145	0.018	0.131	0.311	0.108	-5.147	0.047	0.035	0.101	0.034	0.059	0.153
(8) Heineken Light	0.240	0.112	0.014	0.124	0.210	0.086	0.138	-5.900	0.026	0.089	0.028	0.051	0.135
(9) Michelob	0.301	0.140	0.015	0.146	0.208	0.089	0.135	-0.042	-4.970	0.116	0.036	0.061	0.175
(10) Michelob Light	0.345	0.159	0.019	0.181	0.235	0.101	0.146	0.047	0.041	-5.071	0.046	0.072	0.196
(11) Miller Gen. Draft	0.346	0.159	0.019	0.182	0.235	0.101	0.146	0.047	0.040	0.130	-4.696	0.072	0.196
(12) Miller High Life	0.338	0.159	0.019	0.177	0.242	0.102	0.153	0.047	0.040	0.127	0.045	-3.495	0.191
(13) Miller Lite	0.344	0.159	0.019	0.180	0.237	0.101	0.148	0.047	0.040	0.129	0.046	0.071	-4.517
(14) Outside Good	0.016	0.007	0.001	0.009	0.011	0.005	0.006	0.002	0.002	0.006	0.002	0.003	0.009
	<i>Cross-Elasticities by Category</i>												
6 Packs	0.307	0.152	0.018	0.155	0.275	0.104	0.180	0.047	0.038	0.115	0.039	0.065	0.174
12 Packs	0.320	0.154	0.019	0.163	0.250	0.102	0.161	0.047	0.039	0.121	0.042	0.068	0.183
24 Packs	0.356	0.160	0.019	0.189	0.222	0.099	0.136	0.047	0.041	0.134	0.048	0.073	0.201
Domestic	0.349	0.160	0.019	0.184	0.229	0.100	0.142	0.047	0.040	0.131	0.047	0.072	0.197
Imported	0.279	0.147	0.018	0.138	0.301	0.108	0.200	0.047	0.035	0.104	0.035	0.061	0.158

^aThis table provides the mean elasticities of demand for 12 packs based on the RCNL-1 specification (column (ii) of Table IV). The cell in row i and column j is the percentage change in the quantity of product i with respect to the price of product j . Means are calculated across year-month-region combinations. The category cross-elasticities are the percentage change in the combined shares of products in the category due to a 1 percent change in the price of the product in question. Letting the category be defined by the set B , we calculate $(\sum_{j \in B, j \neq k} \frac{\partial q_i^j}{\partial p_k}) / \sum_{j \in B, j \neq k} \frac{\partial q_i^j}{\partial p_j}$. The categories exclude the product in question. Thus, for example, the table shows that a 1 percent change in the price of a Bud Light 12 pack increases the sales of other 12 packs by 0.320 percent.

Source: Miller and Weinberg (2017)

Mergers: Case Study

MW

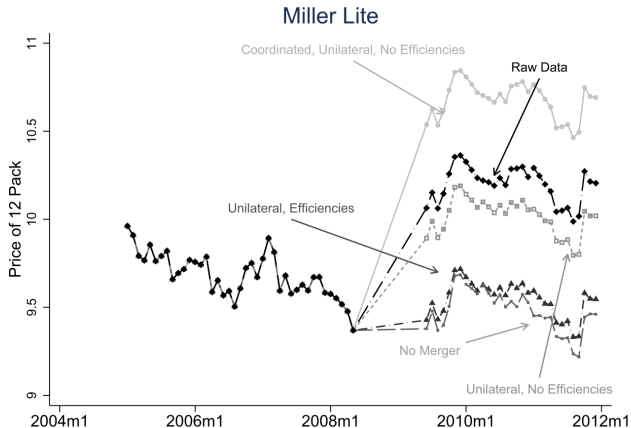


FIGURE 4.—Counterfactuals prices for Miller Lite. *Notes:* This figure plots the average retail prices of Miller Lite 12 packs in the raw data and under four different counterfactual scenarios. Each dot represents the average prices across the 39 regions.

Mergers: Case Study

MW

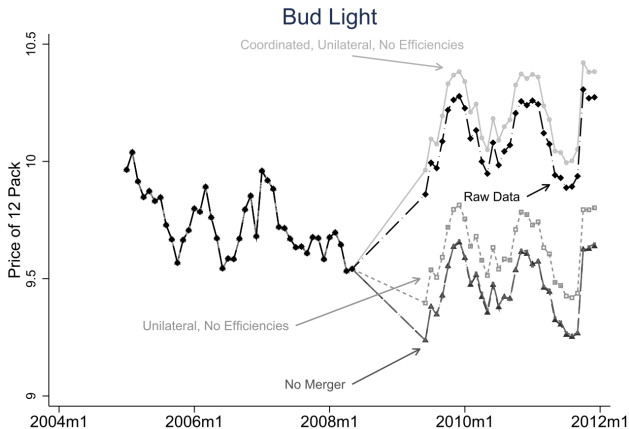


FIGURE 5.—Counterfactuals prices for Bud Light. *Notes:* This figure plots the average retail prices of Light 12 packs in the raw data and under three different counterfactual scenarios. Each dot represents average prices across the 39 regions.

Additional readings for merger simulation

Various models have been used (Cournot, Bertrand, auctions, etc.) to study mergers in various industries.

- ▶ [Werden and Froeb, 2006] simulate hypothetical mergers of Japanese long-distance carriers using a logit model that incorporates brand characteristics.
- ▶ [Nevo, 2000] estimates a random coefficients model to study the effects of mergers in the US ready-to-eat cereal industry.
- ▶ [Werden and Froeb, 2002] simulate the proposed merger of two brewers in Sweden.
- ▶ [Pinkse and Slade, 2004] also study mergers in the brewing industry, using a distance metric approach.
- ▶ [Froeb et al., 2003] simulate the merger of parking lots using a logit model. The following two cases consider applications of the nested logit, the first concerning mobile telephony and the second concerning truck manufacturing.

Nestle-Perrier merger I

In EU, the first case of application of the concept of collective dominance is the Nestle-Perrier merger.

- ▶ In 1992, Nestle, a French bottled-water market with its brand Vittel and Hepar, notified the European Commission(EC) of its intention to acquire Perrier. At that time, the market had an annual volume of 5.25 billion litres and consisted of three major firms: Perrier, BSN and Nestle, with respective market shares of 36%, 23% and 17%. The remaining 24% were left to a very fragmented competitive fringe.

Nestle-Perrier merger II

- ▶ As a consequence, the two merging firms agreed to sell Volvic (a major mineral source of Perrier) to BSN. As Volvic's share of the market was 15%, they argued that the post-merger market would become a balanced duopoly, with two entities ('Nestle' + Perrier – Volvic' and 'BSN + Volvic') having a market share of 38% each.
- ▶ Yet, the EC rejected the modified merger again invoking, this time, coordinated effects: At the same time, the market had an annual volume of 5.25 billion litres and consisted of three major firms: Perrier, BSN and Nestle.

Nestle-Perrier merger

III

- ▶ The EC judged that the potential for collusion was very high for 1. two main players would be of similar size (symmetric) 2. monitoring each others' prices was relatively easy. 3. the demand for water was relatively price inelastic. 4. high barrier to entry. The first merger proposition appeared as less objectionable.

Danfoss & Eaton

- ▶ In June 2021, SAMR imposed structural conditions on Danfoss's acquisition of Eaton's hydraulic business.
- ▶ SAMR concluded that the proposed transaction would increase the concentration in China's orbital motor market given that, among other considerations,
 - ▶ (1) the parties are the two largest players in the market with a combined market share of 50% to 55%, such that the combined entity would have a dominant position in the market;
 - ▶ (2) the parties are each other's closest competitor and the proposed transaction would remove competitive restraints; and
 - ▶ (3) the proposed transaction would raise market entry barriers given the parties' existing advantages (e.g. reputation).
- ▶ To resolve these competition concerns, Danfoss agreed to divest its orbital motor business in China.

Cisco & Acacia I

- ▶ In January 2021, SAMR imposed behavioural conditions on Cisco's proposed acquisition of Acacia. SAMR found competition concerns resulting from the vertical relationship between the parties, namely Acacia being in the upstream global market for coherent digital signal processors ("DSP") and Cisco being in the downstream Chinese market for optical transmission systems.
- ▶ To remedy these concerns, the parties offered a number of commitments, to which SAMR agreed, including the following:
 - ▶ (1) to continue performing all existing contracts;
 - ▶ (2) to continue supplying coherent DSP to Chinese customers on fair, reasonable and non-discriminatory ("FRAND") terms; and

Cisco & Acacia II

- ▶ (3) not to bundle, tie, or impose unreasonable conditions in the supply of coherent DSP.

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