Class 21

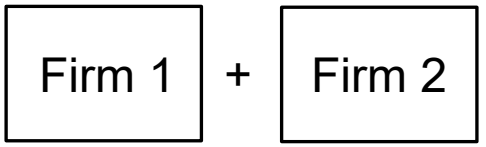
12. Vertical Mergers

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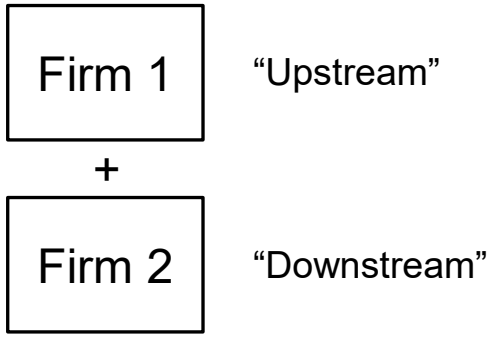
November 5, 2026

Transaction types

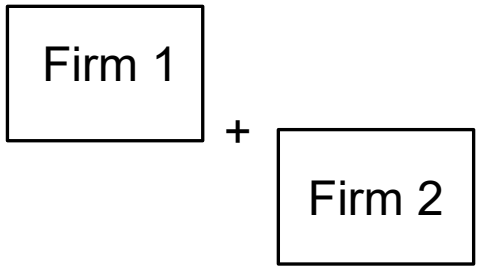
1. Horizontal transactions:
   - Combine two competitors
   - Sell *substitute* products



2. Vertical transactions:
   - Combine two firms at adjacent levels in the chain of manufacture and distribution
   - May be extended to two firms that sell—
     - *Complementary* products, *or*
     - Products in the chain of manufacture or distribution but not adjacent to one another



3. Conglomerate transactions
   - Mergers that are neither horizontal nor vertical

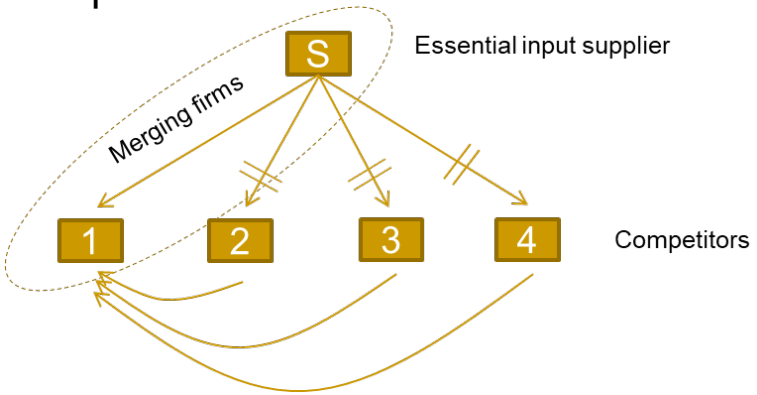


Vertical theories of harm: The roadmap

1. Unilateral exclusionary effects
   a. “Input foreclosure”
   b. “Output foreclosure”
   c. Creating the need for two-level entry
2. Coordinated effects
   a. Elimination of a disruptive buyer
   b. Elimination/disciplining of new disruptive competition
   c. Facilitation of tacit coordination through greater firm homogeneity
   d. Anticompetitive information conduits

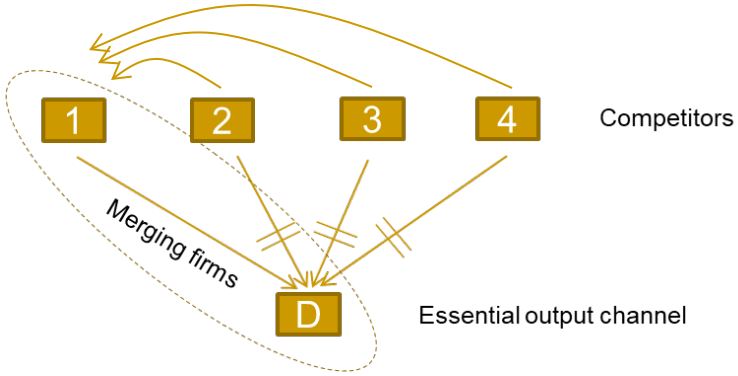
Unilateral exclusionary effects

- Two types of foreclosure
  1. "Input foreclosure"



Premerger: S deals with all downstream firms
Postmerger: Combined firm causes S to foreclose Firms 2, 3, and 4

  2. "Output foreclosure"



Premerger: D deals with all upstream firms
Postmerger: Combined firm causes D to foreclose dealing with Firms 2, 3, and 4

In identifying the type of foreclosure, look to who is being foreclosed, not who is doing the foreclosing

Unilateral exclusionary effects

- Two variations of foreclosure theories
  1. The combined firm could refuse to deal with its competitors ("true foreclosure")
  2. The combined firm raises the price to its competitors rather than foreclosing them altogether ("raising rivals' costs" or "RRC")
- Modern practice
  - "True foreclosure" is rarely observed in business practice
  - "Raising rivals' costs" is the primary theory today applied to vertical mergers

NB: It does not matter if the acquiring firm is the upstream or downstream firm in a vertical merger. Antitrust law assumes that the combined firm will maximize its profits.

Unilateral exclusionary effects

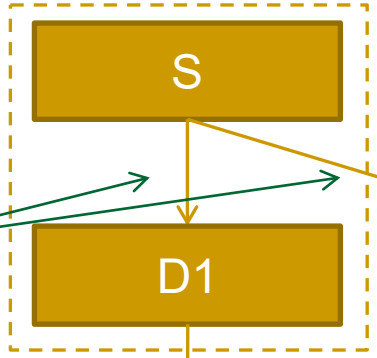
- Foreclosure: Ability and incentive
  1. The *ability* of the merged firm to act anticompetitively depends on whether the merged firm can competitively disadvantage its rivals by withholding its products
     - If targeted rivals can substitute suitable products at premerger prices and thereby protect themselves, the merged firm has no ability to reduce competition in the relevant market by foreclosing rivals
  2. The *incentive* of the merged firm to act anticompetitively depends on—
     1. The residual elasticity of demand of the targeted rivals (which determines their loss of sales)
     2. The merged firm's profit gain on inframarginal sales to targeted rivals due to the price increase
     3. The merged firm's profit loss on marginal sales to targeted rivals due to the price increase
     4. The merged firm's recapture rate of its rivals' lost marginal resales of the merged firm's product
     5. The upstream and newly internalized downstream margins on recaptured sales

Sometimes called "vertical arithmetic"

Remember: The supplier already counts upstream profits on sales diverted to other customers it supplies. The merger adds the downstream margin on sales diverted to the acquired firm.

Unilateral exclusionary effects

- Foreclosure: The vertical arithmetic



1. Say S raises price to D2 (RRC)

2. D2 passes on some of the price increase to its customers

3. Some customers leave D2 for other third-party suppliers
→ S *loses its margin on the resulting lost marginal sales by D2*
→ *S gains on the increased margin of the inframarginal sales to D2*

4. Other D2 customers switch to D1 as D2's price rises relative to D1's price

5. S already earns its upstream margin on sales diverted to D1

6. The merger adds D1's downstream margin

Postmerger, the newly internalized D1 margin makes a price increase to D2 more attractive. S's upstream profit on sales diverted to D1 exists before the merger. This is the vertical analogue to horizontal recapture unilateral effects.

Unilateral exclusionary effects

- RRC numerical example: The setup
  - M supplies battery packs to lamp makers R1 and R2, one pack per lamp
  - M acquires R1 and considers increasing its wholesale price to R2
  - R2 expected to pass on some or all of any cost increase, causing it to lose sales

Data for the specified price increase	Value
M's marginal cost per battery pack	$9
Wholesale price to R1 and R2 before the increase (→ $6 gross margin)	$15
R1's other incremental cost per lamp, excluding the battery pack	$15
R1's retail price per lamp (→ $10 margin)	$40
Proposed wholesale price to R2 (→ $2 price increase)	$17
R2 purchases before / after the increase	300 / 180
Diversion of R2's lost sales to R1	25%

  - Further:
    - Assume R1's retail price and other unit costs remain fixed and that capacity is sufficient to handle any diverted sales
    - The remaining lost sales leave M's supply chain
    - Use the same quantity forecast before and after the merger

Unilateral exclusionary effects

- RRC numerical example: The profit comparison
  - M's upstream margin = $15 − $9 = $6
  - R1 downstream margin = $40 − $15 − $15 = $10
  - R2 originally buys 300 units from M
  - R2 loses 120 sales; 25% × 120 = 30 sales divert to R1

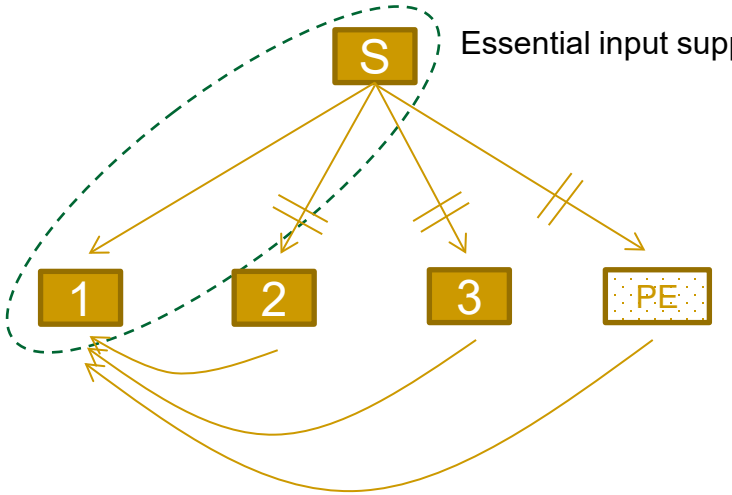
Source of profit change	Calculation	Premerger	Postmerger
Incremental margin on retained R2 sales	180 × $2	+$360	+$360
Lost upstream profit on R2 sales	120 × $6	−$720	−$720
Upstream profit on diverted sales units[1]	30 × $6	+$180	+$180
Newly internalized R1 downstream profit	30 × $10	—	+$300
Total incremental profit		**−$180**	**+$120**

  - The specified increase is unprofitable before the merger but profitable postmerger
  - NB: The newly internalized gain is 30 × $10 = $300
    - M already earns the upstream margin on diverted R1 sales before the merger
    - Be careful not to double count! Upstream diverted sales wash

[1] Sold by R2 premerger and recaptured by R1 postmerger

Unilateral exclusionary effects

- *Separate theory*: Creating the need for two-level entry



If the merged firm refuses to sell to potential entrant PE or sells to it only at competitively disadvantageous prices, PE must enter at both the S and D levels

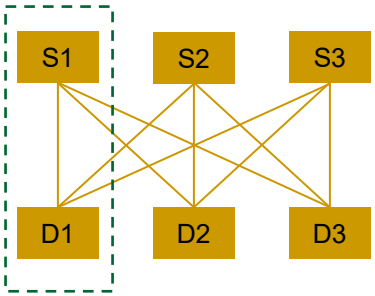
  - The concern is the loss of entry that would constrain incumbents or otherwise increase competition in the future
    - If adequate independent inputs or distribution are unavailable, entry at two levels may require more investment and take longer
    - Recognized as a theory of anticompetitive harm in the 1982 Merger Guidelines, the 2020 Vertical Merger Guidelines, and the 2023 Merger Guidelines[1]

[1] The FTC withdrew from the 2020 VMGs on September 15, 2021, as one of the first actions after the Democrat-appointed commissioners obtained a majority under Chair Lina Khan. *See* News Release, Fed. Trade Comm'n, *Federal Trade Commission Withdraws Vertical Merger Guidelines and Commentary* (Sept. 15, 2021). The 2023 Merger Guidelines, which address vertical and conglomerate mergers as well as horizontal mergers, recognize this theory of harm in Guideline 5.

Coordinated effects

1. Elimination of a disruptive buyer

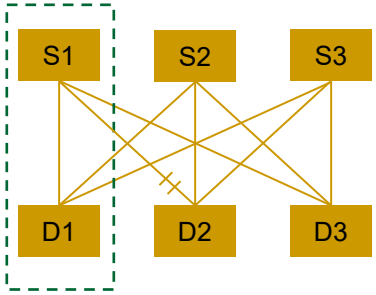
D1 is a disruptive buyer



Acquisition by S1 eliminates D1's "disruptiveness" to coordination among suppliers to charge supercompetitive prices to distributors

2. Elimination/disciplining of new disruptive competition

D2 is a disruptive competitor

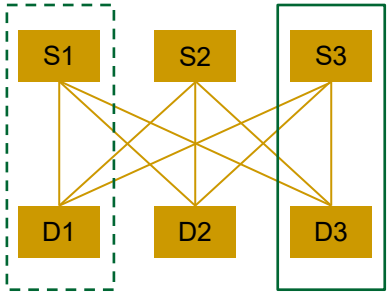


Acquisition by D1 of S1 disciplines D2's "disruptiveness" to coordination among distributors by foreclosing S1 sales to D2

Coordinated effects

3. Facilitation of tacit coordination through greater firm homogeneity

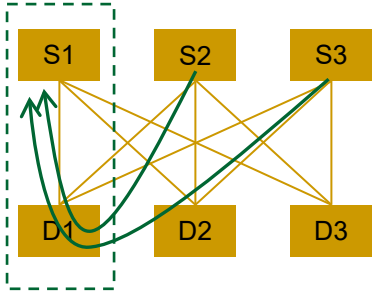
S3/D3 are vertically integrated premerger



Acquisition by S1 of D1 better aligns the incentives of the firms to engage in coordinated interaction

- NB: This theory was not included in the 2020 Vertical Merger Guidelines

4. Anticompetitive information conduits



Acquisition by S1 of D1 permits S1 to learn competitively sensitive information D1 obtains from S2 and S3[1]

[1] D1 also could be used to pass information from S1 to S2 and S3 (making the communications bilateral).

Vertical theories of harm

- Some observations
  - In modern antitrust law, theories of anticompetitive harm in vertical mergers (as in horizontal mergers) should focus on harm to competition in the market and not on harm to competitors
  - As with all Section 7 cases, the anticompetitive effect must be located in a relevant market
    - Determined by the usual Brown Shoe and HMT tests; a profitable strategy still requires proof of likely substantial competitive harm

ELIMINATION OF DOUBLE MARGINALIZATION

Efficiencies in vertical mergers

- Elimination of double marginalization
  - A potential benefit of vertical integration: lower retail prices and greater output
- The idea
  - A manufacturer and a retailer each exercise pricing discretion
    - The retailer treats the wholesale payment, including the upstream markup, as an incremental cost
    - Its pricing decision does not internalize the upstream profit generated by an additional retail sale
    - Both must mark up; if only one does, there is no double markup to eliminate
  - Integration brings those profits into a joint pricing decision
    - The incentive changes even when production and distribution costs do not
  - The simple model below has one manufacturer selling only to one retailer
    - When the supplier also serves competing retailers, lost upstream profits can limit EDM (cannibalized sales; slide 30)

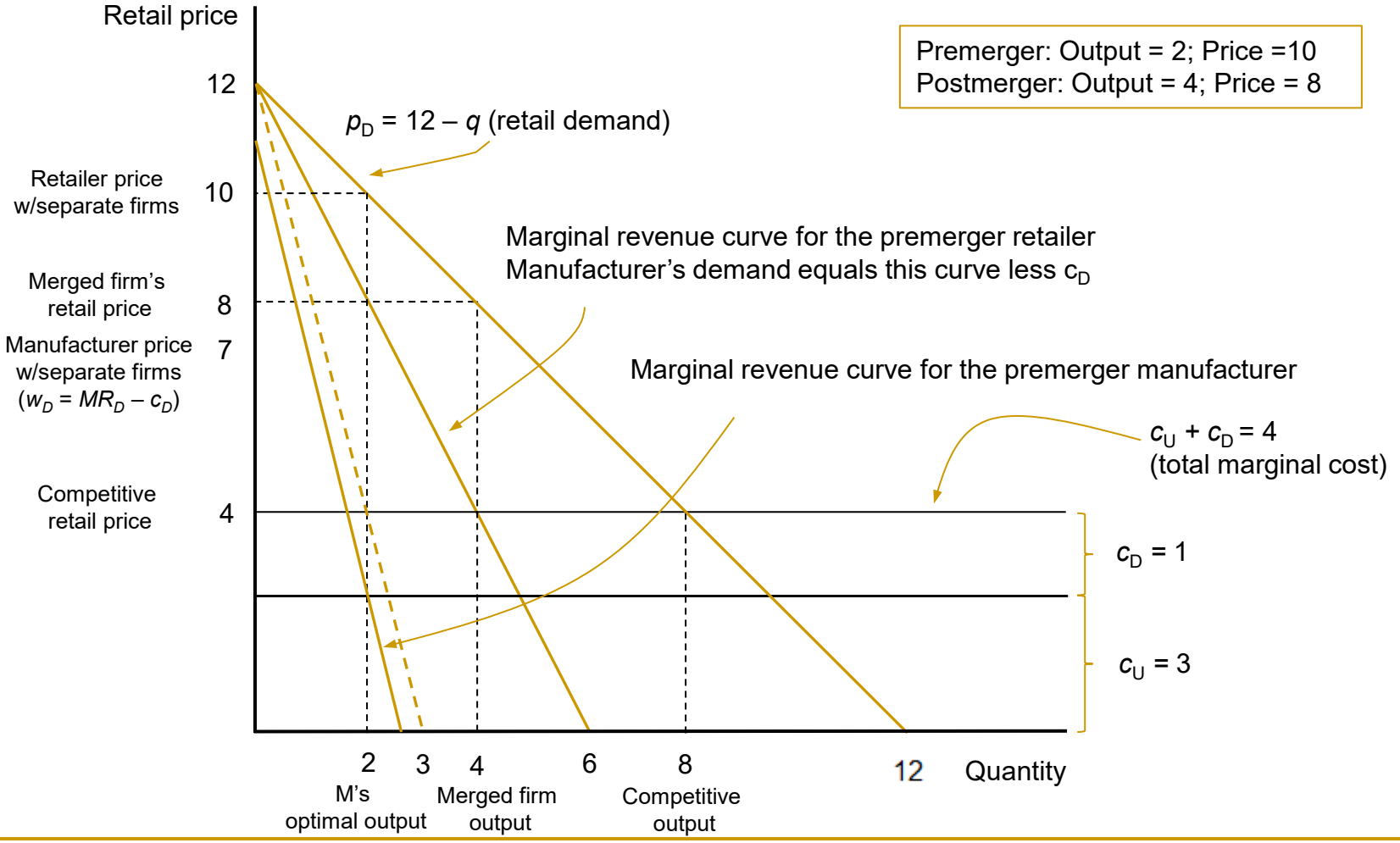
NB: The consumer benefit depends on opportunity cost and pass-through—EDM need not outweigh RRC

Efficiencies in vertical mergers

- Elimination of double marginalization: The model
  - Consider a simple model in which:
    - There is only one manufacturer, which sells to only one retailer
    - There is a one-to-one correspondence between input purchases and retail sales; the manufacturer faces demand derived from the retailer's pricing response
    - The manufacturer has constant marginal costs c_U
    - The retailer has constant marginal costs c_D (which for simplicity may be zero) in addition to the price w_D it pays the manufacturer
    - Retailer's total marginal cost: $w_D + c_D$
  - The manufacturer recognizes the incentive of the retailer to mark up its price and takes that into account in determining its own price and output
  - The retailer raises price above the competitive level so that its marginal revenue equals its marginal cost
  - *Key insight*: The retailer's marginal revenue curve is the demand curve for the manufacturer (adjusted for the retailer's other marginal costs)
    - Let MR_D denote the retailer's marginal revenue
    - The retailer is willing to purchase from the manufacturer up to the point where the retailer's total marginal cost equals its marginal revenue, that is, where $w_D + c_D = MR_D$
    - Rearranging, $w_D = MR_D - c_D$, which is the demand function for the manufacturer

Efficiencies in vertical mergers

- Elimination of double marginalization: The model



Efficiencies in vertical mergers

All additional sales are new purchases

- EDM: Clock example (Class 22 note)

Premerger

Manufacturer
Marginal cost: $8
Price to the retailer: $20
Margin: $20 − $8 = $12
Unit sales: 300 a month

Sells at $20

Retailer
Other marginal cost: $4
Total marginal cost: $20 + $4 = $24
Retail price: $30
Margin: $30 − $24 = $6
Unit sales: 300 a month

Sells at $30

Customers
Sales response: 50 per $1

	Postmerger
Prices	
Price to the retailer	$8 (transfer price)
Retailer's marginal cost	$8 + $4 = $12
Retail price	$30 − $12/2 = $24
Unit sales (per month)	
Added unit sales (Δq)	50 × $6 = 300
Unit sales	300 + 300 = 600
Profits (per month)	
Manufacturer	$0
Retailer	($6 + $6) × 600 = $7,200
Combined	($6 + $6) × 600 = $7,200

	Premerger	Postmerger	Change
Price to the retailer	$20	$8	−$12
Retail price	$30	$24	−$6
Unit sales per month	300	600	+300
Combined profit per month	$5,400	$7,200	+$1,800

Assumptions: Linear residual demand and constant marginal costs. The retailer's $30 starting price is its best price ($6 = 300/50). All additional sales are new purchases, none taken from rival retailers the manufacturer supplies (slide 30 relaxes this).

Efficiencies in vertical mergers

All additional sales are new purchases

- EDM: Why $24, and who gains

Merged firm's profit at each price (cost $12 a clock)

Retail price	Clocks sold per month	Margin (price − $12)	Monthly profit
$30	300	$18	$5,400
$28	400	$16	$6,400
$26	500	$14	$7,000
$24	**600**	**$12**	**$7,200**
$22	700	$10	$7,000
$20	800	$8	$6,400

Why it stops at $24. Cutting from $26 to $24 adds 100 clocks at a $12 margin (+$1,200) but gives up $2 on the 500 clocks already selling (−$1,000): profit rises $200. Cutting from $24 to $22 adds 100 clocks at $10 (+$1,000) but gives up $2 on 600 clocks (−$1,200): profit falls $200.

Where the gains come from (per month)

	Merged firm	Customers	Total
300 existing clocks	−$1,800	+$1,800	$0
300 added clocks	+$3,600	+$900	+$4,500
Total	**+$1,800**	**+$2,700**	**+$4,500**

A transfer and a real gain. The merger saves no resources. On existing sales, the $6 price cut only moves $1,800 from the firm to customers. The net gain of $4,500 comes from the added output: customers value those 300 clocks more than the $12 each costs to make and sell.

The $900. The 300 new buyers would pay between $24 and $30 for a clock, so at $24 each gains $3 on average: 300 × $3 = $900.

NB: Measuring the price reduction on existing purchases gives $1,800, a transfer from the firm; including the $900 on additional purchases, part of the real gain, gives $2,700. Some commentators call EDM only a "pecuniary" economy because it saves no resources (Kwoka & Slade 2020).

Assumptions: Linear residual demand and constant marginal costs. The retailer's $30 starting price is its best price ($6 = 300/50). All additional sales are new purchases, none taken from rival retailers the manufacturer supplies (slide 30 relaxes this).

Efficiencies in vertical mergers

All additional sales are new purchases

- EDM: Notation and three rules

Notation (as in the RRC slides): U is the manufacturer, D the retailer, and R a rival retailer.

Symbol	Meaning	Slide 23	Clock
c_U	Manufacturer's marginal cost	$3	$8
w_D	Manufacturer's price to the retailer	$7	$20
$m_U = w_D - c_U$	Manufacturer's margin	$4	$12
c_D	Retailer's other marginal cost	$1	$4
$w_D + c_D$	Retailer's total marginal cost	$8	$24
p_D	Retail price	$10	$30
$m_D = p_D - w_D - c_D$	Retailer's margin	$2	$6
q_0	Retailer's unit sales before the merger	2	300
k_D	Added unit sales for each $1 cut in the retail price	1	50
a	Retail price at which the retailer's unit sales would fall to zero	$12	$36

Three rules (linear demand, constant marginal costs), each matching the graph on slide 23 and the clock example:

1. The merger removes the manufacturer's margin: the retailer's cost $w_D + c_D$ falls by m_U to $c_U + c_D$ (slide 23: $8 → $4; clock: $24 → $12).
2. The retail price falls by half of that reduction (50% pass-through). The retailer's best price is halfway between its marginal cost and a: $p_D = (a + w_D + c_D)/2$ (slide 23: $10 → $8; clock: $30 → $24).
3. Unit sales rise by k_D × the price cut (slide 23: 2 → 4; clock: 300 → 600).

Other demand shapes can give pass-through above or below 50%, changing the 1/2 in the formulas (Class 22 note, appendix).

NB: The merger saves no resources, and the merged firm still exercises market power. Combined profit rises from $12 to $16 (clock: from $5,400 to $7,200).

Efficiencies in vertical mergers

All additional sales are new purchases

- EDM: The results at a glance

	Premerger	Postmerger	Change	Clock example (Class 22 note)
Retailer's marginal cost	$w_D + c_D$	$c_U + c_D$	$-m_U$	\$24 → \$12 (−\$12)
Retail price	p_D	$p_D - m_U/2$	$-m_U/2$	\$30 → \$24 (−\$6)
Unit sales	q_0	$q_0 + \Delta q$	$\Delta q = k_D \times m_U/2$	300 → 600 (+300)
Combined profit	$(m_U + m_D) \times q_0$	$(m_D + m_U/2) \times (q_0 + \Delta q)$	$(m_U/2) \times \Delta q^*$	\$5,400 → \$7,200 (+\$1,800)
Savings to existing customers	—	—	$q_0 \times m_U/2$	\$1,800
Gain to new customers	—	—	$\Delta q \times m_U/4$	\$900

*The worksheet (next slide) gives $(m_D + m_U/2) \times \Delta q - q_0 \times m_U/2$. Because the retailer starts at its best price, $m_D \times \Delta q = q_0 \times m_U/2$, so the gain is simply the price cut times the added unit sales.

Analyzing a hypothetical in four steps (under the assumptions of these slides)

1. Find the manufacturer's margin m_U, the retailer's unit sales q_0, and its sales response k_D. (Clock: \$12, 300, and 50.)
2. Price cut = $m_U/2$. (Clock: \$12/2 = \$6.)
3. Added unit sales = k_D × price cut. (Clock: 50 × \$6 = 300.)
4. Profit gain = price cut × added unit sales; existing customers save q_0 × price cut. (Clock: \$1,800 each. They match only because output doubles, as it does when both firms start at their best prices.)

With cannibalized sales (slides 30–33), step 2 becomes $(1 - s_C) \times m_U/2$, and steps 3 and 4 are unchanged. At 50%: a \$3 price cut, 150 added unit sales, a \$450 profit gain, and \$900 in savings to existing customers.

Assumptions: Linear residual demand and constant marginal costs. The retailer's starting price is its best price ($m_D = q_0/k_D$). All additional sales are new purchases, none taken from rival retailers the manufacturer supplies (slide 30 relaxes this).

Efficiencies in vertical mergers

All additional sales are new purchases

- EDM: Worksheet (general formulas)

	Premerger	Postmerger
Manufacturer		
Marginal cost (c_U)	c_U	c_U
Price to the retailer (w_D)	w_D	c_U (transfer price)
Margin (m_U)	$m_U = w_D - c_U$	0
Unit sales	q_0	$q_0 + \Delta q$
Retailer		
Other marginal cost (c_D)	c_D	c_D
Total marginal cost	$w_D + c_D$	$c_U + c_D$
Retail price (p_D)	p_D	$p_D - m_U/2$
Margin (m_D)	$m_D = p_D - w_D - c_D$	$m_D + m_U/2$
Added unit sales (Δq)	—	$k_D \times m_U/2$
Unit sales	q_0	$q_0 + \Delta q$
Profits		
Manufacturer	$m_U \times q_0$	0
Retailer	$m_D \times q_0$	$(m_D + m_U/2) \times (q_0 + \Delta q)$
Combined	$(m_U + m_D) \times q_0$	$(m_D + m_U/2) \times (q_0 + \Delta q)$
EDM profit gain	—	$(m_D + m_U/2) \times \Delta q - q_0 \times m_U/2$
Customers		
Savings to existing customers	—	$q_0 \times m_U/2$
Gain to new customers	—	$\Delta q \times m_U/4$
Total gain to customers	—	$(2q_0 + \Delta q) \times m_U/4$

Reading the last rows. EDM profit gain = margin on the added sales minus the price cut on existing sales. Existing customers save the full cut; new customers gain half of it on average, since each values the product between the old and new prices.

Assumptions: Linear residual demand and constant marginal costs. The retailer's starting price is its best price ($m_D = q_0/k_D$). All additional sales are new purchases, none taken from rival retailers the manufacturer supplies (slide 30 relaxes this).

Efficiencies in vertical mergers

All additional sales are new purchases

- EDM: Premerger and postmerger values (general formulas)

Premerger

Manufacturer
Marginal cost: c_U
Price to the retailer: w_D
Margin: $m_U = w_D - c_U$
Unit sales: q_0

Sells at w_D

Retailer
Other marginal cost: c_D
Total marginal cost: $w_D + c_D$
Retail price: p_D
Margin: $m_D = p_D - w_D - c_D$
Unit sales: q_0

Sells at p_D

Customers
Sales response: k_D per \$1

	Postmerger
Prices	
Price to the retailer	c_U (transfer price)
Retailer's marginal cost	$c_U + c_D$
Retail price	$p_D - m_U/2$
Unit sales	
Added unit sales (Δq)	$k_D \times m_U/2$
Unit sales	$q_0 + \Delta q$
Profits	
Manufacturer	0
Retailer	$(m_D + m_U/2) \times (q_0 + \Delta q)$
Combined	$(m_D + m_U/2) \times (q_0 + \Delta q)$

With the transfer price set at c_U, the manufacturing division records no profit, and all of the merged firm's profit appears in the retail division.

Assumptions: Linear residual demand and constant marginal costs. The retailer's starting price is its best price ($m_D = q_0/k_D$). All additional sales are new purchases, none taken from rival retailers the manufacturer supplies (slide 30 relaxes this).

Efficiencies in vertical mergers

Some additional sales are cannibalized

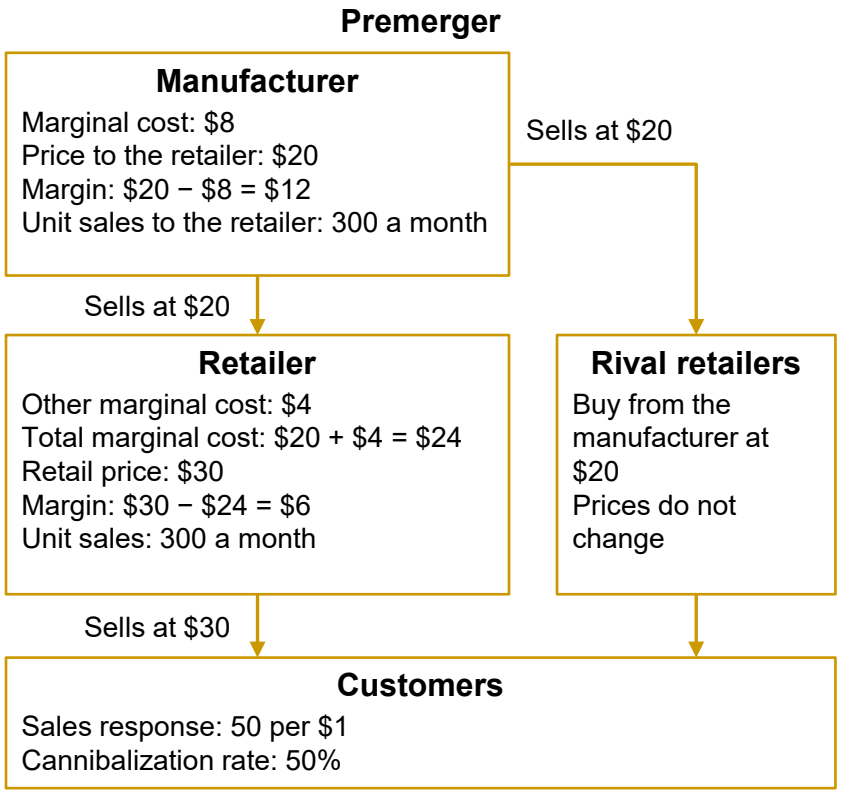
- EDM: How cannibalized sales change the analysis
  - **Cannibalized sales:** added retail sales that come from rival retailers the manufacturer supplies. The **cannibalization rate** s_C is their share of the retailer's added sales.
  - **Before the merger,** the retailer ignores them: a sale it takes from a rival costs the manufacturer its margin, not the retailer.
  - **After the merger,** each cannibalized sale costs the merged firm the manufacturer's margin m_U: an opportunity cost of cutting the price.
  - **Net cost reduction.** The merger removes the m_U markup, but the opportunity cost adds back $s_C \times m_U$ per added sale. The effective input cost is $c_U + s_C \times m_U$, so the merged firm prices as if each unit cost $c_U + s_C \times m_U + c_D$: a net reduction of $(1 - s_C) \times m_U$.
  - **Effects.** The price falls by $(1 - s_C) \times m_U/2$, added sales and customer savings shrink in proportion, and the profit gain shrinks with $(1 - s_C)^2$. In this example, at 100% there is no EDM.
  - **Rivals.** Sales taken from rivals the manufacturer does not supply cost the merged firm nothing. Rivals' lost sales are not themselves a Section 7 harm.
  - **Evidence.** The cannibalization rate must be estimated: switching data, customer surveys, win/loss records, and company documents.

Assumptions: Linear residual demand and constant marginal costs. Starting prices are given; the retailer's is its best price ($m_D = q_0/k_D$). Rivals pay $w_R = w_D$ (the same margin m_U on every unit) and hold their prices; s_C is constant over the range.

Efficiencies in vertical mergers

Some additional sales are cannibalized

- EDM: Clock example with cannibalized sales



	Postmerger
Prices	
Effective input cost	$8 + 50% × $12 = $14
Cost used to set price	$14 + $4 = $18
Retail price	$30 − 50% × $12/2 = $27
Unit sales (per month)	
Added unit sales (Δq)	50 × $3 = 150
Retailer's unit sales	300 + 150 = 450
Cannibalized units	50% × 150 = 75
Profits (per month)	
Retail division	($27 − $12) × 450 = $6,750
Lost margin on rivals' sales	−75 × $12 = −$900
Change in combined profit	$6,750 − $900 − $5,400 = +$450

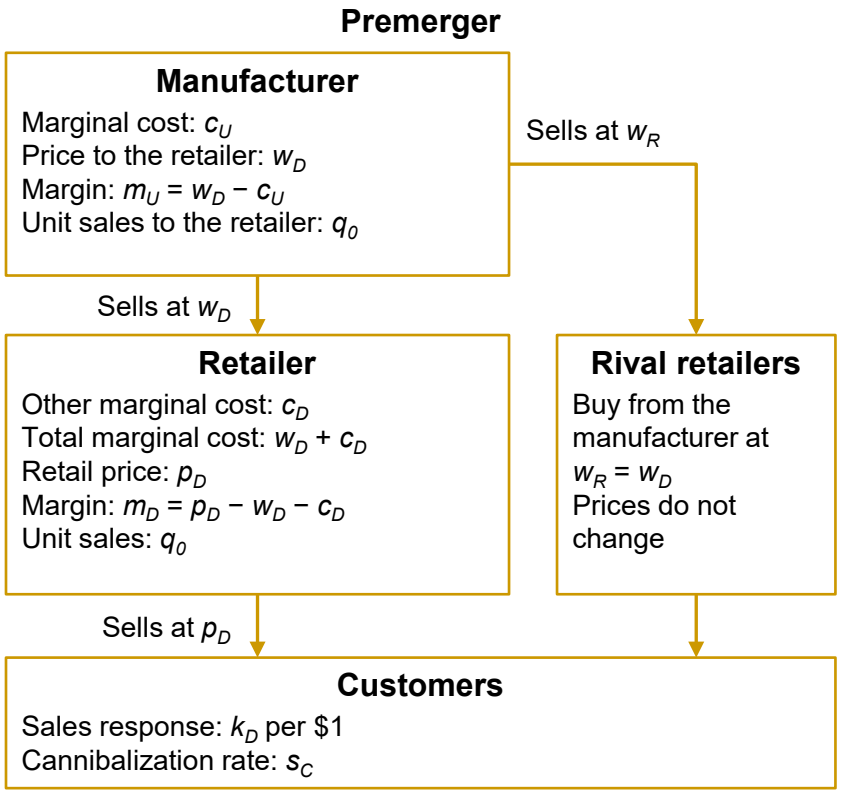
Two different costs. Making and retailing a clock still costs $12. Each added retail sale also costs an expected $6 of upstream profit on sales lost by rival retailers (50% × $12), so the firm uses $18 to set its price. To compute profit, subtract the $12, then subtract the lost upstream profit separately ($900). Subtracting $18 as well would count the opportunity cost twice.

Assumptions: Linear residual demand and constant marginal costs. The retailer's $30 is its best price ($6 = 300/50). Rivals pay $20 (a $12 margin on every unit) and hold their prices; the 50% rate holds over the whole range.

Efficiencies in vertical mergers

Some additional sales are cannibalized

- EDM: Premerger and postmerger values (general formulas)



	Postmerger
Prices	
Effective input cost	$c_U + s_C \times m_U$
Cost used to set price	$c_U + s_C \times m_U + c_D$
Retail price	$p_D - (1 - s_C) \times m_U/2$
Unit sales	
Added unit sales (Δq)	$k_D \times (1 - s_C) \times m_U/2$
Retailer's unit sales	$q_0 + \Delta q$
Cannibalized units	$s_C \times \Delta q$
Profits	
Retail division	$(m_D + (1 + s_C) \times m_U/2) \times (q_0 + \Delta q)$
Lost margin on rivals' sales	$-s_C \times \Delta q \times m_U$
Change in combined profit	$(m_D + (1 - s_C) \times m_U/2) \times \Delta q$ $- q_0 \times (1 - s_C) \times m_U/2$

Assumptions: Linear residual demand and constant marginal costs. Starting prices are given; the retailer's is its best price ($m_D = q_0/k_D$). Rivals pay $w_R = w_D$ (the same margin m_U on every unit) and hold their prices; s_C is constant over the range.

Efficiencies in vertical mergers

Some additional sales are cannibalized

- EDM: Clock example at cannibalization rates of 0% to 100%

Cannibalization rate	Effective input cost	Retail price	Price cut	Added unit sales	Change in combined profit	Savings to existing customers
0%	$8	$24.00	$6.00	300	+$1,800	$1,800
25%	$11	$25.50	$4.50	225	+$1,012.50	$1,350
50%	**$14**	**$27.00**	**$3.00**	**150**	**+$450**	**$900**
75%	$17	$28.50	$1.50	75	+$112.50	$450
100%	$20	$30.00	$0	0	$0	$0

Price cut, added sales, and customer savings. The merger removes only $(1 - s_C)$ of the manufacturer's $12 markup, so all three shrink in proportion.

Profit gain. It shrinks faster, with the square of $(1 - s_C)$, because the price cut and the added sales both shrink. At 50%, the gain is one-quarter of the $1,800 with no cannibalization.

No EDM at 100% (in this example). If every added sale would otherwise have been made through a rival the manufacturer supplies, the lost margin offsets the removed markup entirely.

Assumptions: Linear residual demand and constant marginal costs. The retailer's $30 starting price is its best price. Rivals pay $20 (a $12 margin on every unit) and hold their prices; each rate holds over the whole range, and other added sales are new purchases.

Efficiencies in vertical mergers

- EDM by contract: Two-part tariffs
  - A **two-part tariff** combines a per-unit price with a fixed fee that does not depend on how many units the retailer buys. In this example, setting the per-unit price equal to the manufacturer's marginal cost, cU, eliminates double marginalization.
  - The retailer's marginal cost falls to cU + cD, the merged firm's cost, so the retailer charges the merged firm's price. The fee does not affect pricing; it divides the joint profit. The manufacturer earns nothing per unit: all of its profit is the fee.

Clock example (per month): all additional sales are new purchases	**Separate firms, $20 per clock**	**Two-part tariff, $8 + $4,500 fee**	**Merged firm**
Price per clock charged to the retailer	$20	$8	$8 (internal)
Fixed monthly fee	—	$4,500	—
Retailer's cost per clock	$24	$12	$12
Retail price	$30	$24	$24
Clocks sold	300	600	600
Manufacturer's profit	$3,600	$4,500	$0
Retailer's profit	$1,800	$2,700	$7,200
Combined profit	$5,400	$7,200	$7,200
Gain to customers	—	$2,700	$2,700

NB: Any fee strictly between $3,600 and $5,400 a month leaves both firms better off than the $20 per-clock price; at either end, one firm is indifferent. Where the fee falls depends on bargaining; it does not change the retail price.

Efficiencies in vertical mergers

- EDM by contract: When it works and why it matters
  - The contractual fix works only if three conditions hold:
    1. The per-unit price equals the manufacturer's marginal cost or, with cannibalized sales, its effective cost cU + sC × mU. With no cannibalization, $14 a clock plus a fee would leave the retailer's cost at $18 and its price at $27. A merger could remove the remaining $6 markup, but that benefit would be merger-specific only if a practical contractual alternative could not achieve it. At 50% cannibalization, $14 is the effective cost, so a merger would have nothing left to remove.
    2. The fee is fixed over the sales that matter. A fee that rises with volume works like a per-unit charge. Volume limits are fine if current sales, and the sales after the price cut, stay within them.
    3. The arrangement would continue without the merger. Ask whether the efficient contract would likely continue or be renewed absent the merger. If not, a merger that prevents a return to a per-unit markup can claim some EDM benefit.

Efficiencies in vertical mergers

- EDM by contract: When it works and why it matters
  - Merger specificity
    - If the firms already have such a contract, the merger has no EDM to eliminate.
    - If they do not, the question is whether they could; the merging parties must show why a contract would not work (2023 Merger Guidelines § 2.5 n.31).
    - Other contracts can also do the job, such as a maximum resale price or a minimum quantity (quantity forcing).
  - Rivals
    - A two-part tariff with one retailer does nothing for rivals still paying a per-unit markup.
    - Common ownership does not itself eliminate the markup charged to unaffiliated rivals, and it may give the merged firm an incentive to raise the rivals' price (raising rivals' costs).

Efficiencies in vertical mergers

- EDM: The legal tests
  - *EDM is an efficiency claim*. The merging parties must show that it is (2023 Merger Guidelines § 3.3):
    - verifiable: supported by reliable evidence, rather than unsupported management predictions;
    - merger-specific: not achievable by a contract such as a two-part tariff;
    - passed on: the cost reduction will lead to lower customer prices than would otherwise prevail. The prediction must account for how the merged firm makes pricing decisions, including opportunity costs from cannibalized sales; and
    - measured net of cannibalized sales: only (1 − sC) × mU of the markup is removed.
  - *How the benefit is measured*. Measuring the price reduction on existing purchases gives the clock example's $1,800; including the benefit from additional purchases gives $2,700. Courts—and, to my knowledge, the agencies—do not attempt to account for the gain on additional purchases. A compelling showing might persuade the agencies to credit it, but I am not aware of any precedent for doing so.

Efficiencies in vertical mergers

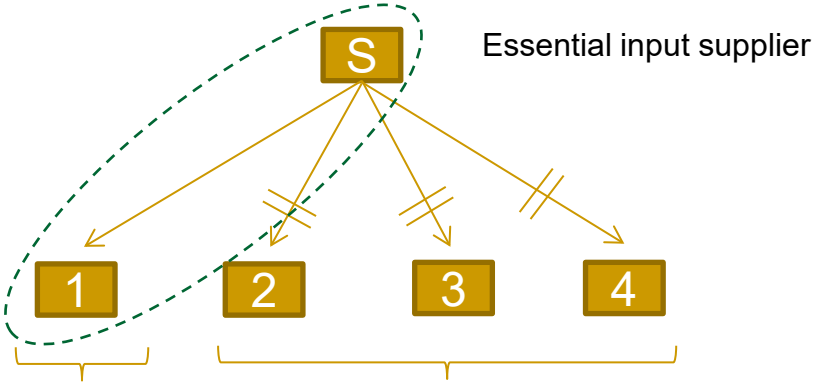
- EDM: The legal tests
  - *Burden*. The Guidelines and Illumina put the burden of substantiating efficiencies, including EDM, on the merging parties. AT&T does not establish a different rule: there the government's own expert included EDM
  - *Defense versus deal rationale*. Even if not credited as a defense, EDM raises the merged firm's profit and supports the business rationale for the deal
  - *Weighing*. Any EDM benefit must be weighed against raising rivals' costs and other harms

Efficiencies in vertical mergers

- Query:

  How should the consumer welfare standard be applied if some customers in the relevant market benefit from the merger while other customers are harmed?

  - When both RRC and efficiencies result from vertical merger, the merged firm's customers may receive lower prices while customers of rivals are charged higher prices



  - *AT&T/Time* Warner illustrates the comparison
    - *DOJ:* Compared predicted consumer price increases from RRC with consumer savings from EDM
    - *Court:* Rejected the predicted harm on the evidence; did not establish a general netting rule

Efficiencies in vertical mergers

- EDM: The cases and the evidence
  - *Illumina/Grail.* The Fifth Circuit upheld the FTC's rejection of Illumina's EDM claim: Illumina offered only an "illustrative" model, and the information needed to prove efficiencies is largely in the merging firms' hands. Illumina, Inc. v. FTC, 88 F.4th 1036 (5th Cir. 2023).
  - *AT&T/Time Warner*. The government's expert built EDM into his estimate of net consumer price effects, and the government conceded about $352 million a year in EDM cost savings to AT&T (not to consumers). The courts never weighed harms against savings: the government failed to show that the merger would likely raise rivals' costs or consumer prices at all, so the district court's description of the savings was harmless error. United States v. AT&T Inc., 310 F. Supp. 3d 161 (D.D.C. 2018), *aff'd*, 916 F.3d 1029 (D.C. Cir. 2019).
  - *Evidence on passing on*. Common ownership does not guarantee joint pricing. In their study of multichannel television, Crawford and coauthors estimated that the divisions of integrated firms took into account about 79¢ of each dollar of profit earned by their affiliated divisions. This measures recognition of affiliated profits, not the share of a cost reduction passed through to customers. Gregory S. Crawford et al., 86 Econometrica 891 (2018).
  - *The lesson*. EDM can enter as part of the government's own price-effects analysis or as the parties' efficiency defense. Either way, it must rest on evidence about how the merged firm will actually price.

Efficiencies in vertical mergers

- EDM: A checklist for analyzing a claim

1. Set up

Identify the supplier, the downstream firm, and the supplier's margin m_U: the most the merger can remove.

Check the starting point: the retailer at its best price before the merger. With linear demand, $m_D = q_0/k_D$.

Find the sales response k_D.

2. Is there EDM to claim?

Two markups? Nothing to remove if the downstream firm has no markup or the supplier already sells at cost.

Contract? Only what a two-part tariff or other contract could not remove is merger-specific (slides 34–35).

True-cost pricing? Managers paid on divisional profit may keep the old transfer price.

Cannibalized sales? The net markup removed is $(1 - s_C) \times m_U$ (slides 30–33).

3. Effects (in this model)

Price cut = half the net markup removed.

Added unit sales = k_D × price cut.

Savings to existing customers = q_0 × price cut.

Profit gain = price cut × added unit sales.

4. Test and weigh

Every input is a question of evidence: margins, sales response, pass-through, cannibalization rate, contracts, internal pricing.

The parties must show the efficiency is verifiable, merger-specific, and passed on; the benefit is usually measured on existing purchases.

Weigh any benefit against raising rivals' costs (Class 23).

Vertical theories of harm

- Vertical mergers in the Supreme Court
  - Decided three cases since 1950
    1. United States v. E.I. du Pont de Nemours & Co., 353 U.S. 586 (1957)
       - Requiring du Pont to divest its 23% ownership interest in General Motors for vertical foreclosure
       - *Output foreclosure*: du Pont's ownership in GM anticompetitively disadvantaged du Pont's fabrics and finishes competitors from selling to GM
    2. Brown Shoe Co. v. United States, 370 U.S. 294 (1962)
       - Requiring the #4 shoe manufacturer/#3 shoe retailer to divest the #12 shoe manufacturer/#8 shoe retailer for vertical foreclosure
       - *Reciprocal output/input foreclosure*
    3. Ford Motor Co. v. United States, 405 U.S. 562 (1972)
       - Finding Ford's acquisition of spark plug manufacturer Autolite would raise barriers to entry in the spark plug market
       - Requiring Ford to divest the Autolite name and its only spark plug factory, and prohibiting Ford from manufacturing spark plugs for 10 years
       - Ford did not manufacture spark plugs prior to the acquisition but rather acquired them from independent companies such as Autolite
       - *Output foreclosure: Ford's ownership* in Autolite anticompetitively disadvantaged Autolite's sparkplug competitors from selling to Ford

These cases remain foundational, but provide limited guidance for modern analysis of incentives and competitive effects

Vertical theories of harm

- Modern enforcement practice
  - Historically, agencies often viewed vertical mergers as efficiency-enhancing and rarely sought to block them; some cases nevertheless required divestitures
  - Instead, the agencies accepted behavioral remedies
    - Non-discriminatory access undertakings
    - Undertakings to maintain open systems to enable interoperability
    - Firewalls to protect against sharing confidential information of competitors
  - AT&T/Time Warner
    - Enforcement practice changed on November 20, 2017, when the DOJ sued to block AT&T (a subscription TV distributor) from acquiring Time Warner (a content creator/network assembler)
    - The DOJ rejected proposed behavioral protections modeled on Comcast/NBCUniversal and sought to block the merger; the court denied an injunction

The shift in enforcement policy did not make conduct relief legally unavailable. Later cases have involved both supply commitments and structural relief.

The 2023 Merger Guidelines

- Guideline 5: Limiting rivals' access
  - Ability and incentive to limit access to inputs, services, or routes to market
    - Importance of the input or outlet and the adequacy of alternatives
    - Access to competitively sensitive information; deterrence of entry or investment
- Guideline 6: Entrenching or extending a dominant position
  - Whether the merger reinforces dominance or weakens competitive constraints
    - Including restrictions on rivals' access and the acquisition of competitive threats
- Application
  - Connect the mechanism to likely harm to competition in a relevant market
  - Agency enforcement frameworks, not independent presumptions binding on courts

Ford/Autolite



Ford/Autolite

- The parties
  - Ford
    - Nation's second largest manufacturer of passenger cars and trucks
    - Sales: 2 million units (28% share of cars)
    - Revenues: Over $5 billion
  - Autolite
    - One of the nation's largest non-integrated auto parts manufacturer
    - Manufactured a full line of automotive electrical products
      - Including batteries, generators, spark plugs, electrical motors, instruments, and ignition systems
    - Supplied—
      - Original Equipment Manufacturers (OEMs)
      - Aftermarket

Ford/Autolite

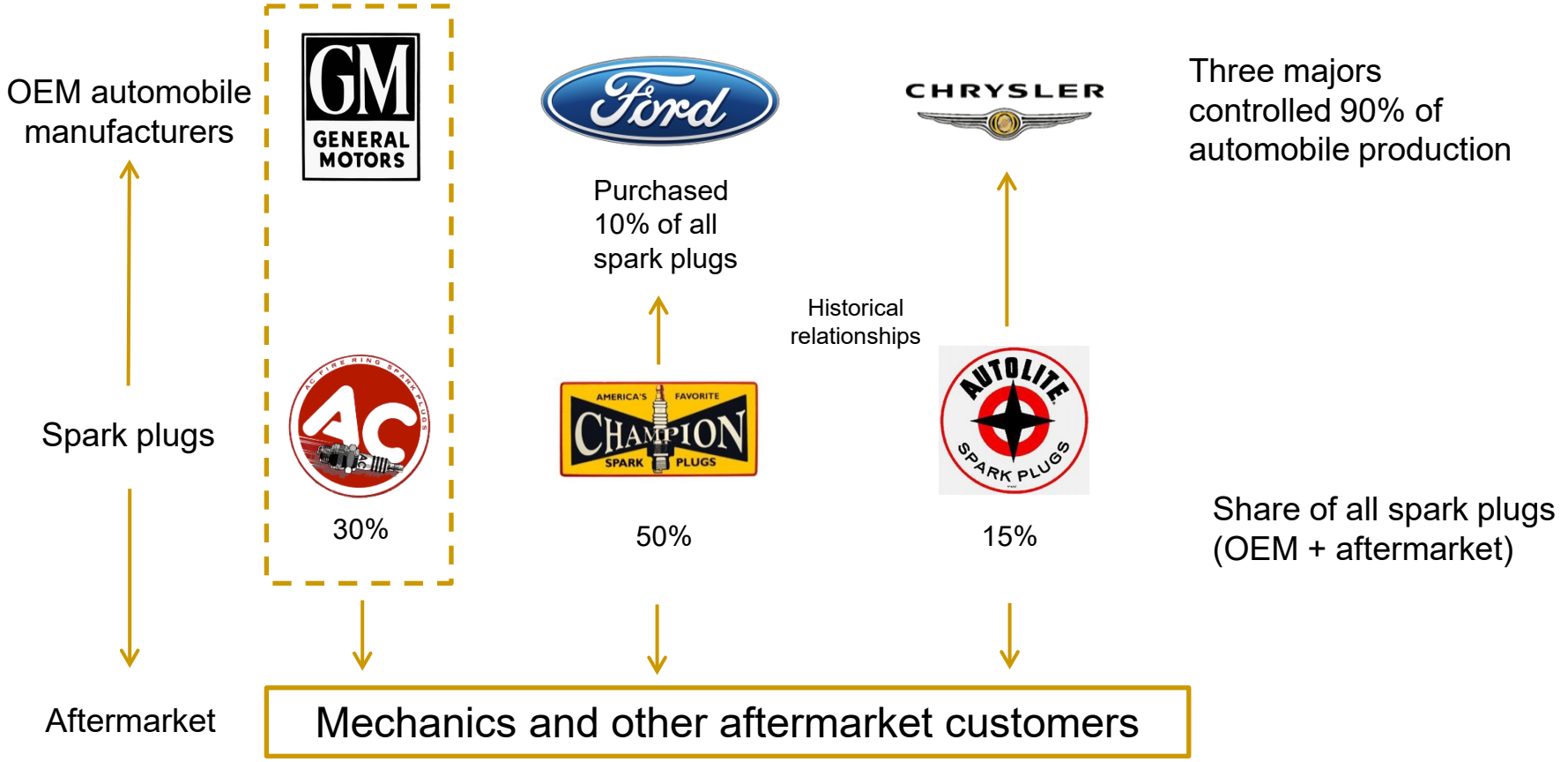
- The deal
  - On April 12, 1961, Ford Motor Company acquired selected assets of the Electric Autolite Company for $28 million
    - Autolite's spark-plug plant in Fostoria, Ohio
    - Autolite trade name
    - One of Autolite's six operating battery installations
    - Limited distribution rights
  - Scope and limitation
    - Acquisition gave Ford partial vertical integration into spark-plug production
    - Fostoria's capacity was insufficient to meet all Ford OEM needs
      - Ford therefore continued to source from Champion and other suppliers
    - Nonetheless, the deal gave Ford the capacity and incentive to internalize a substantial share of its spark-plug needs—representing up to about 10% of total industry demand—reducing independent suppliers' accessible sales base.
  - Strategic motivation
    - Reduce dependence on outside suppliers, especially Champion
    - Capture aftermarket margins under the Autolite brand
    - Align with GM's AC integration and Chrysler's prior Autolite sourcing relationship

Ford/Autolite

- Spark plug economics
  - Spark plugs have to be replaced about five times in the life of a car
  - The OEM market
    - Each OEM contracted to purchase spark plugs from an exclusive supplier
    - Non-integrated spark plug manufacturers bid for exclusive OEM contracts, selling to OEMs below cost
  - The aftermarket
    - Aftermarket plug was the same brand as the OEM product and mechanics tended to replace spark plugs with the OEM brand
    - Spark plug manufacturers charged higher prices in the aftermarket to recover their losses in the OEM market and make profits
      - NB: Spark plugs were replaced as part of the car's tune-up and comprised only a small fraction of the tune-up service fee → customer demand for spark plug was relatively inelastic, permitting an oligopolistic equilibrium with high margins

Ford/Autolite

- The spark plug landscape premerger



Ford/Autolite

- District Court
  - Complaint filed November 27, 1961
  - Final judgment rendered on December 18, 1970, finding a Section 7 violation and ordering relief
    - No manufacture of spark plugs for 10 years
    - Divest Autolite plant and name
    - Purchase one-half of its spark plug requirements from the divested plant for 5 years
    - Enjoined from using its own trade names on spark plugs for 5 years

Ford/Autolite

- Supreme Court
  - Affirmed: March 29, 1972
  - *Theory 1*: Potential competition, foreclosure, and entry barriers
    1. The acquisition eliminated Ford as an actual and perceived potential entrant into the manufacture of spark plugs:

> An interested firm on the outside has a twofold significance. It may someday go in and set the stage for noticeable deconcentration. While it merely stays near the edge, it is a deterrent to current competitors. This was Ford uniquely, as both a prime candidate to manufacture and the major customer of the dominant member of the oligopoly. Given the chance that Autolite would have been doomed to oblivion by defendant's grass-roots entry, which also would have destroyed Ford's soothing influence over replacement prices, Ford may well have been more useful as a potential than it would have been as a real producer, regardless how it began fabrication.[1]

    2. *Theory 2*: The acquisition foreclosed Ford as a purchaser of about 10% of total industry output of spark plugs (output foreclosure)

[1] Ford Motor Co. v. United States, 405 U.S. 562, 567-68 (1972) (quoting the district court) (internal citation omitted).

Ford/Autolite

- Supreme Court
  - Three theories (con't)
    3. *Theory 3*: Ford's entry had the effect of raising barriers to entry into the spark plug market, further reducing the chances of future deconcentration of that market:

> In short, Ford's entry into the spark plug market by means of the acquisition of the factory in Fostoria and the trade name "Autolite'" had the effect of raising the barriers to entry in to that market as well as removing one of the existing restraints upon the actions of those in the business of manufacturing spark plugs.
>
> It will also be noted that the number of competitors in the spark plug manufacturing industry closely parallels the number of competitors in the automobile manufacturing industry and the barriers to entry into the auto industry are virtually insurmountable at present and will remain so for the foreseeable future. Ford's acquisition of the Autolite assets, particularly when viewed in the context of the original equipment (OE) tie and of GM's ownership of AC, has the result of transmitting the rigidity of the oligopolistic structure of the automobile industry to the spark plug industry, thus reducing the chances of future deconcentration of the spark plug market by forces at work within that market.[1]

- *Theory 4*: The Court could have added a fourth theory: The acquisition facilitated oligopolistic coordination in the aftermarket sale of sparkplugs
  - This is suggested in the second paragraph of the quote above, although the Court focused more on raising barriers to entry and thereby reducing the prospect of future deconcentration

[1] Ford Motor Co. v. United States, 405 U.S. 562, 568 (1972) (quoting the district court).

Ford/Autolite: Comparing approaches

1. Ford seen as both actual and perceived spark plug potential entrant
   - The 1972 approach: Focused on market structure
     - Emphasized structure, potential entry, and Section 7's incipiency policy
     - Relied on Ford's position as a potential entrant and major buyer, without the detailed incentive and effects analysis used today
   - The modern approach: Focuses on ability, incentive, and competitive effects
     - Actual potential competition: Looks to—
       - *Noncompetitiveness*: A market operating noncompetitively, with room for competitive improvement
       - *Uniqueness*: Ford's relative uniqueness in its ability and incentive to enter
       - *Ability*: Available, feasible means of entry de novo or through a toehold acquisition
       - *Likelihood of entry*: A reasonable likelihood of entry in the near future absent the acquisition
       - *Procompetitive effect:* A reasonable probability that entry, if it occurred, would substantially improve competition
     - Perceived potential competition: Looks to—
       - *Noncompetitiveness*: A market in which the perceived threat of entry can constrain incumbents' market power
       - *Uniqueness*: Incumbents' perception of Ford as relatively unique in its ability and incentive to enter
       - *Perception*: Incumbents' perception of Ford as a likely potential entrant
       - *Incumbent reaction*: More competitive prices, quality, or other terms in response to Ford's perceived entry threat
       - *Anticompetitive effect:* Removal or weakening of that constraint by the acquisition, making a substantial lessening of competition reasonably probable

Ford/Autolite: Comparing approaches

2. *Output foreclosure*: The acquisition foreclosed Ford as a purchaser of about 10% of total industry output of spark plugs
   - The 1972 approach: Focused on market structure
     - Emphasized the loss of Ford as an independent buyer accounting for about 10% of total spark plug demand, despite only partial integration
     - Suggests that foreclosure of a significant share of demand is a significant factor in establishing a Section 7 violation—but did not set a threshold
   - The modern approach:
     - Assesses RRC in addition to complete foreclosure
     - Focuses on ability, incentive, and competitive effects
     - Ability to foreclose/raise rivals' costs
       - Does the merged firm control an input or customer channel sufficiently important that it could disadvantage rivals?
     - Incentive to foreclose/raise rivals' costs
       - Would doing so be profitable, given lost sales, recapture, and downstream margins?
     - Competitive effect of foreclosure/raise rivals' costs
       - Would the conduct substantially lessen competition by reducing rivals' ability or incentive to compete, leading to higher prices, lower quality, or slower innovation?

Ford/Autolite: Comparing approaches

3. *Raises "barriers to entry"*: Ford's entry had the effect of raising barriers to entry into the spark plug market, further reducing the chances of future deconcentration of that market
   - The idea here is that, with the merger, Ford will shift some of its demand for OEM spark plugs from the merchant market to captive supply, which reduces market demand, and so makes entry by new firms less attractive
   - The incremental reduction in merchant market demand was significant to the Court because GM was already vertically integrated with AC
   - The 1972 approach
     - The Court found that Ford's acquisition of Autolite would result in cognizable Section 7 harm by internalizing a large OEM buyer's demand, thereby reducing demand for third-party suppliers and with it the prospects for deconcentration
   - The modern approach
     - Reduced merchant demand alone does not establish harm; assess effects on entry, rivals' ability to compete, and market outcomes

NB: In finding the acquisition violated Section 7, the Court looked at the totality of the competitive effect from the three theories and did not find that any one theory was sufficient to sustain a Section 7 violation

Coca-Cola/Coca-Cola Enterprises



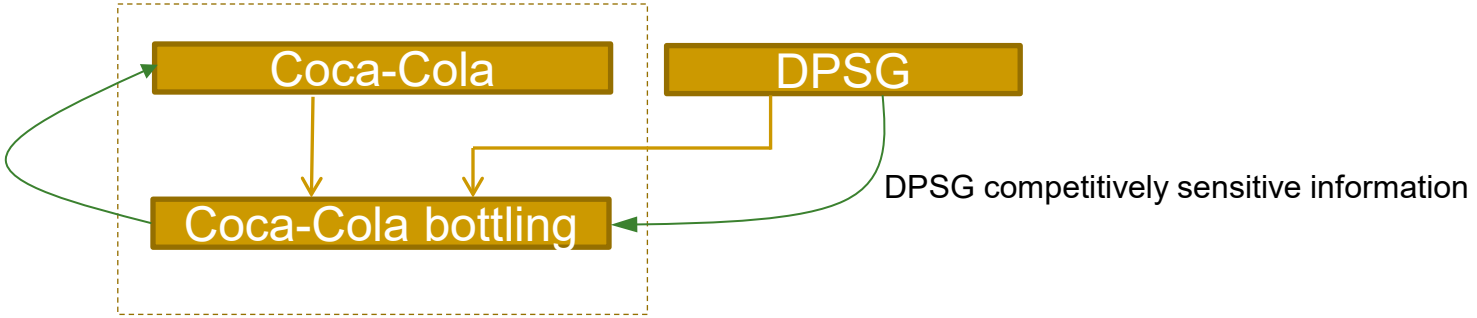
Coca-Cola Enterprises

Coca-Cola/Coca-Cola Enterprises (2010)

- Transactions
  - Coca-Cola to acquire CCE's North American operations for over $12.3 billion
  - Separately, Coca-Cola paid Dr Pepper Snapple Group (DPSG) $715 million to distribute DPSG brands (including Dr Pepper and Canada Dry) in specific geographic areas
- Parties
  - Coca-Cola: The largest manufacturer of soft drink concentrate and carbonated soft drinks
  - CCE: Coca-Cola's largest independently owned North American bottler
  - DPSG: The third largest soft drink competitor after Coca-Cola and PepsiCo
- Soft drink bottling
  - Soft drink shares: Coca-Cola (40%), PepsiCo (30%), DPSG (17%)
  - Soft drink concentrate manufacturers license bottlers to produce, bottle/can, and distribute the manufacturer's soft drinks in a prescribed geographic area
  - CCE
    - Accounted for 75% of Coca-Cola's U.S. sales of bottled and canned soft drinks
    - Accounted for 14% of DPSG's U.S. sales of bottled and canned soft drinks

Coca-Cola/Coca-Cola Enterprises (2010)

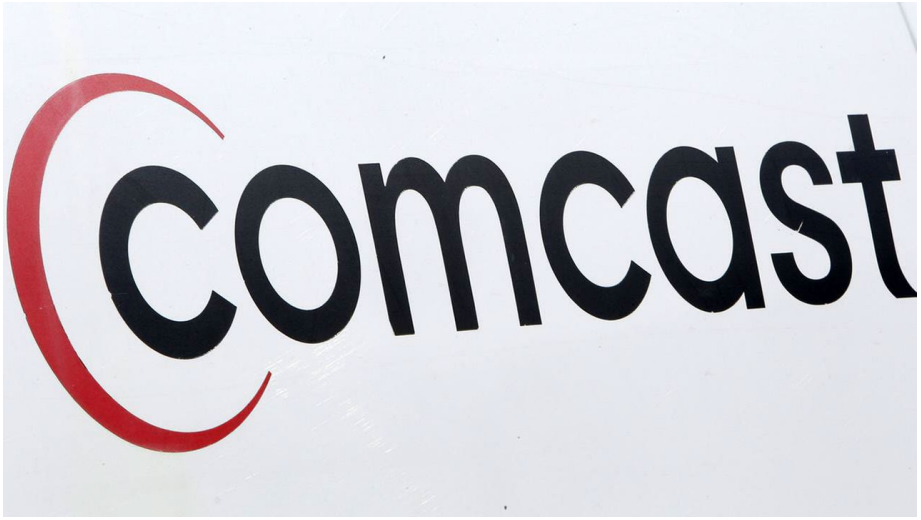
- FTC allegations
  - Concentrate manufacturers need to provide their bottlers with advance confidential information (CSI) regarding their advertising, marketing, and promotion strategies and their new product introductions
  - The DPSG distribution agreement with Coca-Cola did not provide adequate safeguards against access by Coca-Cola's competitive operations to DPSG's CSI obtained by Coca-Cola's bottling operations
  - Likely to result in:
    - Elimination of direct competition between Coca-Cola and DPSG
    - Increase in the probability that Coca-Cola could unilaterally exercise market power or influence and control DPSG's prices
    - Increase in the probability of coordinated interaction



Coca-Cola/Coca-Cola Enterprises (2010)

- Investigation settled by consent order; no adjudicated finding of liability
  - Firewall
    - Coca-Cola to set up a “firewall” to ensure that its ownership of the bottling company does not give certain Coca-Cola employees access to commercially sensitive confidential Dr Pepper Snapple marketing information and brand plans
  - Shareable information
    - CCE can only share DPSG information related to bottler functions and then only with Coca Cola Bottling Operations Personnel or approved “Additional Firewalled” personnel
      - Each person must sign a nondisclosure agreement (NDA)
  - Monitor
  - Consent order term: 20 years

Comcast/NBCUniversal



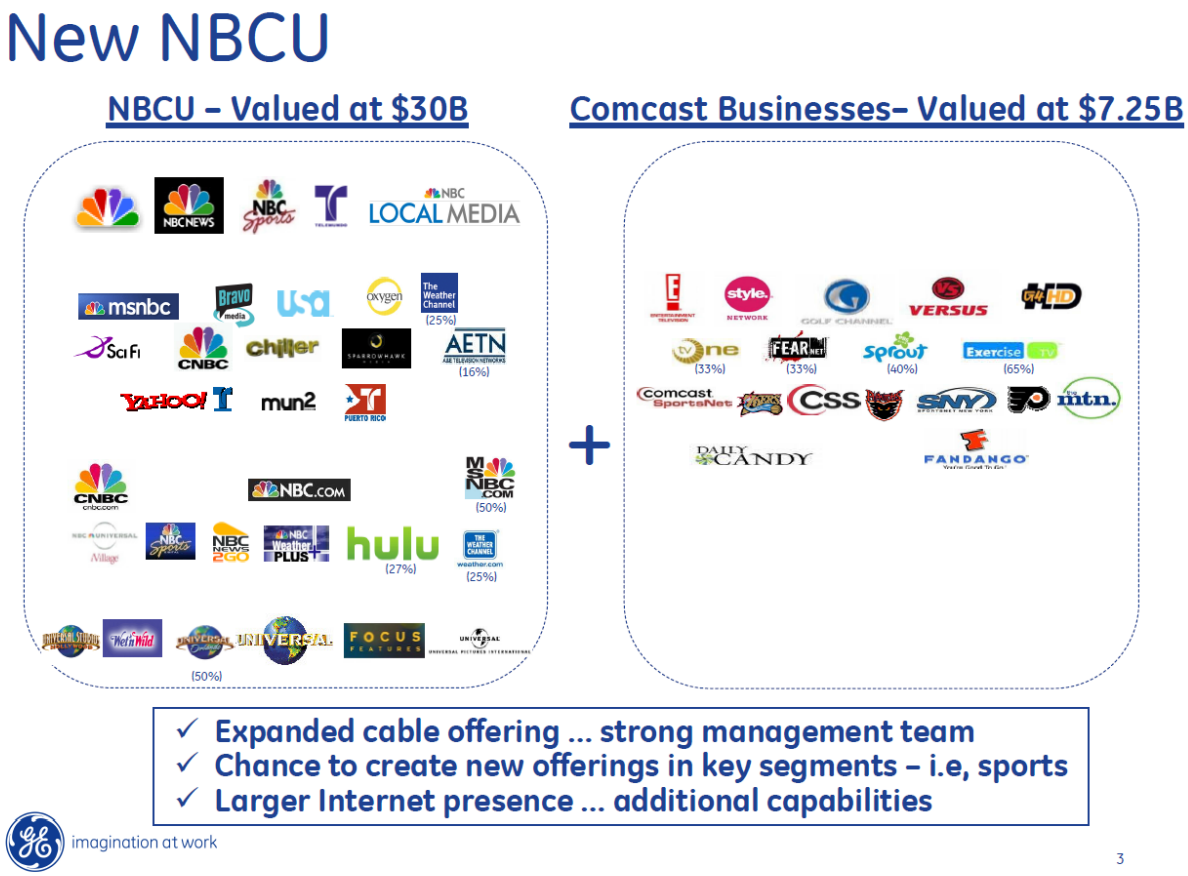


Comcast/NBCUniversal

- The deal
  - Comcast to buy a controlling interest in NBCUniversal from GE for contribution of assets + cash
    - Announced December 3, 2009
  - To form a 51%/49% joint venture between Comcast and GE (NBCUniversal LLC) to be run by Comcast

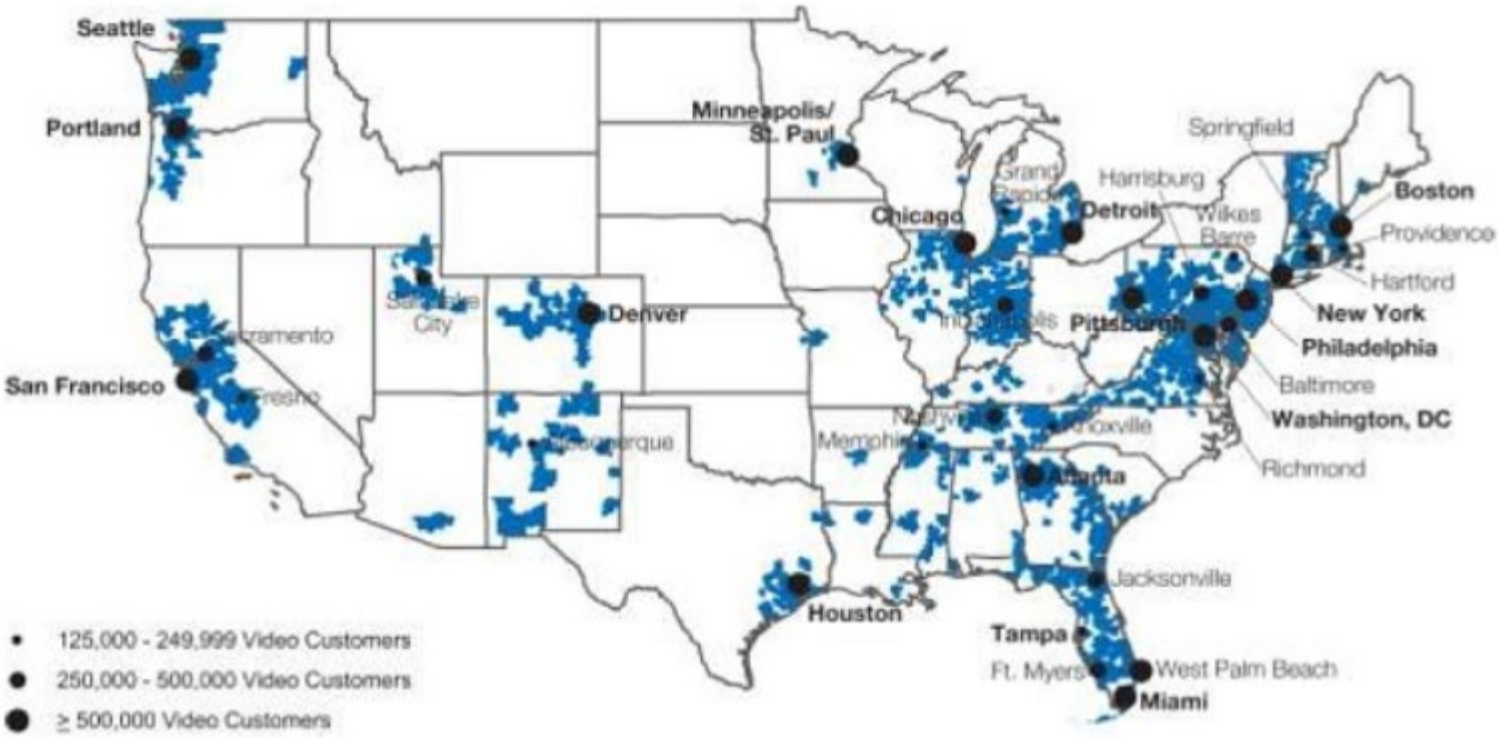
Comcast/NBCUniversal

- Contributions to the new NBCU joint venture

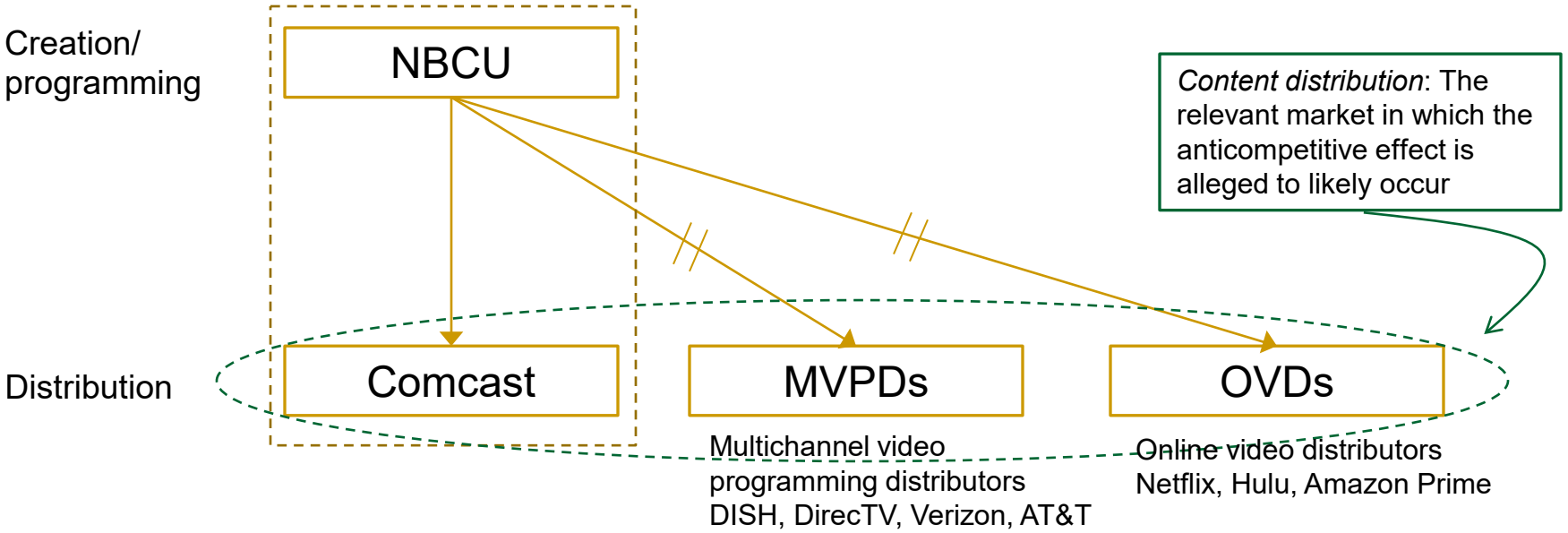


Comcast/NBCUniversal

- Comcast cable service areas (2014)



Comcast/NBCUniversal



- Premerger
  - NBCU has an incentive to deal with all content distributors
- Postmerger
  - Combined company has an incentive to withhold (or, more likely, increase the prices of) NBCU content to Comcast distribution competitors in Comcast service areas
    - NBCU-produced essential content
    - Local content produced by NBC's 10 O&O TV stations

"Related products" (in VMG terms)

Comcast/NBCUniversal

- DOJ vertical concerns
  1. JV gives Comcast control over NBCU's video programming
     - Comcast could limit competition with its cable systems by refusing to license (or, more likely, license at higher prices) NBC's essential programming content to—
       - Multichannel Video Programming Distributors (MVPDs),[1] and
       - Online Video Programming Distributors (OVDs)[2]
  2. JV gives Comcast control of NBC's 10 O&O TV stations and their local content
     - Comcast could raise fees for retransmission consent for the NBC O&Os or effectively deny this content to certain video distribution competitors of Comcast cable systems
- DOJ horizontal concern
  3. JV gives Comcast control over NBCU's 32% interest in Hulu[3]
     - Comcast could use its rights to impede Hulu's development as a OVD competitor

[1] Includes cable overbuilders (primarily RSN), direct broadcast satellite services (DirecTV and EchoStar DISH), and telephone companies (e.g., Verizon Fios).
[2] Includes "over the top" (OTT) services delivered over the Internet but not through a cable system set-top box.
[3] Premerger, Hulu was a joint venture among Fox, NBCU, Disney, and Providence Equity Partners.

Comcast/NBCUniversal

- Source of the threatened vertical anticompetitive harm:

The power to refuse to license highly consumer-valued content to programming and distribution rivals for which the rivals have no adequate substitutes

- *Solution*: Eliminate market power otherwise created by the vertical arrangement by providing for—
  - Mandatory licensing of content
  - Arbitration over pricing disputes

Comcast/NBCUniversal

- DOJ consent decree[1]
  1. Traditional competitors
     - Coordinated with the FCC—FCC order requires the JV to license NBCU content to Comcast's cable, satellite, and telephone company competitors
     - Not included in DOJ consent decree as redundant
  2. Online video distributor competitors
     a. Must make available the same package of broadcast and cable channels that JV sells to traditional video programming distributors
     b. Must offer broadcast, cable, and film content similar to, or better than, the distributor receives from JV's programming peers
        - NBC's broadcast competitors: ABC, CBS, Fox
        - Largest cable programmers: News Corp., Time Warner, Viacom, and Walt Disney
        - Largest video production studios: News Corp., Sony, Time Warner, Viacom, Walt Disney
     c. Requires commercial arbitration if parties cannot reach an agreement on license terms
     d. Prevents restrictive licensing practices and retaliation
     e. Prohibits Comcast from unreasonably discriminating in the transmission of an OVD's lawful traffic over Comcast ISP

[1] DOJ action joined by five state attorneys general: California, Florida, Missouri, Texas and Washington.

Comcast/NBCUniversal

- DOJ consent decree
  3. Hulu
     - Requires Comcast to relinquish voting and other governance rights in Hulu
     - Precludes Comcast from receiving confidential or competitively sensitive information about Hulu's operations
     - BUT allowed Comcast to retain NBCU's equity interest in Hulu