
Unit 7. U.S. Sugar/Imperial Sugar

Supply-Side Switching

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Supply-Side Switching

Special case: Supply-side switching

■ Introduction

- In a footnote, *Brown Shoe* suggested that “cross-elasticity of production facilities” may be an important factor in defining markets¹
 - But because the lower court made only limited findings on the feasibility of interchanging equipment in the production of different types of shoes, the Court did not explore it
 - Supply-side switching is often called supply-side substitutability
- Supply-side switching can constrain prices by encouraging producers to shift into the production of a higher margin product and thereby compete the price of that product down
 - The usual exercise of market power is manifested in a reduction of output, which results in an increase in price.
 - However, when a price increase induces new firms to enter the market, aggregate supply increases over what it would have been otherwise, which in turn may mitigate or eliminate the original price increase.
 - Supply-side responses, therefore, can be as critical to the analysis of price-constraining forces as demand-side responses.

¹ *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 n.42 (1962).

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■ Introduction

- Many courts have used supply-side switching as a factor in market definition¹
 - Since 1982, the Merger Guidelines have used only demand-side substitution to define markets
 - The Merger Guidelines account for supply-side switching when identifying firms and their market shares in the relevant market and *not* as part of market definition

¹ Besides *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 n.42 (1962), see, for example, *Twin City Sportservice, Inc. v. Charles O'Finley & Co., Inc.*, 512 F.2d 1264, 1271 (9th Cir. 1975) (“While the majority of the decided cases in which the rule of reasonable interchangeability is employed deal with the ‘use’ side of the market, the courts have not been unaware of the importance of substitutability on the ‘production’ side as well.”); *FTC v. Meta Platforms Inc.*, No. 5:22-CV-04325-EJD, 2023 WL 2346238, at*13 (N.D. Cal. Feb. 3, 2023) (“Although relevant markets are generally defined by demand-side substitutability, supply-side substitution also informs whether alternative products may be counted in the relevant market.”).

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■ The Merger Guidelines approach¹

- Market definition under the Merger Guidelines is determined solely by demand-side considerations
- *Query:* How is the analysis conducted when two products that are not demand-side substitutes are manufactured on the same production equipment (perhaps with some minor modifications or retooling) and firms can rapidly switch their mix of production from one product to the other in response to small changes in relative prices?
 - For example, multiple grades of paper can and are produced on the same paper-making machines. Customers may not regard the different grades of paper substitutable for one another, but paper mills continuously change their production mix among the different grades in response to changes in relative prices
 - Are all grades of paper made on the same machine in the same relevant product market? If not, how do the Merger Guidelines take into account the clear competitive effects created by this supply-side competition?
- *Answer*
 - The Merger Guidelines do *not* include products that are not demand-side substitutes in the same relevant market even if the products exhibit a high degree of supply-side switching
 - Instead, the Merger Guidelines will consider the firm making the supply-side substitute a participant in the relevant market and will assign it a share based on the level of production the firm would make of the relevant product in the event of a SSNIP

¹ See 2010 DOJ/FTC Horizontal Merger Guidelines §§ 5.1-5.2.

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■ The Merger Guidelines approach—Example¹

- Pencil-making firms can make both No. 2 pencils (the common type) and No. 4 pencils (used by architects in architectural drawings) on the same machine by just changing the mixture of graphite that goes into pencil's lead core. Changing the production mix on a given machine involves relatively low switching costs. No. 2 and No. 4 pencils are not demand-side substitutes.
- Ace Pencil and Benny Pencil, currently the only two manufacturers of No. 4 pencils, have announced their merger
- Using the demand-side considerations of the Merger Guidelines, the relevant product market in which to analyze the merger is No. 4 pencils
- The following chart gives the premerger production levels of No. 2 and No. 4 pencils:

	Current Production	
	No. 2	No. 4
Ace	3000	300
Benny	4000	200
Cavalier	7000	
Delta	6000	
Enterprise	3000	
Funny	5000	
Gabriel	5000	

¹ Thanks to Professor Salop for this example. I have modified it slightly.

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■ The Merger Guidelines approach—Example (con't)

□ Additional facts

- Enterprise has a 5-year contract to supply No. 2 pencils to the American Accountants Association) that will use all of its capacity.
- Each of the other four third-party manufacturers of No. 2 would each shift 10% of their production to No. 4 pencils in the event of a 5% SSNIP in No. 4 pencils

□ Under the Merger Guidelines, what are the firms in the No. 4 pencil market and what are their respective market shares?

	Current Production		Post-SSNIP No. 4		
	No. 2	No. 4	Production	Shares	HHI
Ace	3000	300	300	10.71%	115
Benny	4000	200	200	7.14%	51
Cavalier	7000		700	25.00%	625
Delta	6000		600	21.43%	459
Enterprise	3000				
Funny	5000		500	17.86%	319
Gabriel	5000		500	17.86%	319
			2800	100.00%	1569
			Delta		153
			Post-merger HHI		1722

Notes: In the event of a 5% SSNIP in No. 4 pencils—

1. The merging firms are not assigned any additional production since the Guidelines anticipate that they would contract production of No. 4 pencils and not expand it.
2. Cavalier, Delta, Funny, and Gabriel would each shift 10% of their production of No. 2 pencils into the production of No. 4 pencils (facts in the hypothetical).
3. Enterprise would not shift production into No. 4 pencils since all of its capacity is committed under contract to the production of No. 2 pencils for the next five years.

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- The Merger Guidelines approach—Example
 - So although current production indicates that the Ace/Benny merger is a merger to monopoly in the relevant market, under the Merger Guidelines supply-side considerations make the merger a 6-to-5 transaction in a moderately concentrated market with a relatively small delta. If we take the numbers as given, the deal is unlikely to create any antitrust problem.

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■ The judicial approach

- Courts have not fully adopted the Merger Guidelines approach
- Although the question has not arisen frequently, modern courts are split on whether to include supply-side switching as a factor in market definition
 - Some courts follow the Merger Guidelines approach
 - Or at least hold that defining the boundaries of relevant markets using demand-side considerations only and using supply-side to determine the participants in the market and their respective markets shares is an acceptable legal alternative¹
 - Other courts allow supply-side considerations to be taken into account when defining the boundaries of the relevant market²
 - *Brown Shoe* suggested that supply-side switching should be considered in defining a relevant market³

¹ See *United States v. Bazaarvoice, Inc.*, No. 13-CV-00133-WHO, 2014 WL 203966, at *31-*32, *37, *67 (N.D. Cal. Jan. 8, 2014).

² *IFTC v. Lab. Corp. of Am.*, No. SACV 10-1873 AG MLGX, 2011 WL 3100372, at *17 (C.D. Cal. Feb. 22, 2011) (“Courts place products in the same product market where there is either effective demand-side substitution or effective supply-side substitution.”).

³ See *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962) (including “unique production facilities” as a practical indicium of market definition).

Special case: Supply-side switching

■ The judicial approach

□ The economic criticism

- When courts take supply-side considerations into account in defining the boundaries of the market, they include 100% of the production of the supply-side substitute in the relevant market. This can lead to lead to seriously incorrect inferences.

■ Example:

- Use the same pencil hypothetical, but make the current production levels of No. 2 and No. 4 pencils somewhat less lopsided by reducing current production of No. 2 pencils

	Current Production		Merger Guidelines approach			Judicial full consideration		
			Post-SSNIP No. 4			Post-SSNIP No. 4		
	No. 2	No. 4	Production	Shares	HHI	Production	Shares	HHI
Ace	300	300	300	41.10%	1689	600	17.14%	294
Benny	400	200	200	27.40%	751	600	17.14%	294
Cavalier	700		70	9.59%	92	700	20.00%	400
Delta	600		60	8.22%	68	600	17.14%	294
Enterprise	300							
Funny	500		50	6.85%	47	500	14.29%	204
Gabriel	500		50	6.85%	47	500	14.29%	204
	3300	500	730	100.00%	2646	3500	100.00%	1690
			Delta		2252			588
			Post-HHI		4898			2278

- Here, the Merger Guidelines approach indicates that the merger is 2-to-1 with a fringe and the HHI statistics indicate that the merger is strongly presumptive anticompetitive. When the full production of No. 2 pencils is added to that of No. 4 pencils under the judicial approach, the merger is 6-to-5 and the HHIs do not suggest a serious competitive problem.

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■ The judicial approach

□ The economic criticism (con't)

■ In practice, however, the problem is unlikely to arise frequently

- First, in most cases, supply-side switching is not a factor that arises, so courts usually do not have to deal with the issue
- Second, courts are increasingly sophisticated in the competitive analysis of mergers. Even if the production facilities of two products are identical and switching production between the two products is easy and can take place rapidly as a technical matter, the courts are likely to include the full production of the supply-side substitute in the relevant market only if the supply-side response to a SSNIP in the products of interest would “flood” the market and so defeat the profitability of the SSNIP.
 - This is what would have happened in the original pencil hypothetical. While the original production of No. 4 pencils was 500 units, a 5% SSNIP would have precipitated a supply-side response of adding 2300 units—more than four times the original level of production.
 - On the other hand, in the second version of the hypothetical, the supply-side response would have added only an additional 230 units. In this case, the court likely would have rejected the argument that the supply-side substitute should be included in the relevant market and instead examined whether entry of new firms or expansion of small incumbent firms already in the relevant market would be sufficient under an ease of entry/expansion/repositioning defense to prevent a postmerger price increase as part of the competitive effects analysis rather than market definition.

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■ Supply switching in practice

□ Production switching

- Courts look to high cross-elasticity of supply between two products resulting from an easy switching in their manufacture as an indication that they should be included in the same relevant product market, even if customers do not regard them as substitutes and would never switch between them
- The same production equipment, for example, with only a slight change in tooling, could easily be used to manufacture glass milk bottles and glass baby food jars, therefore supporting the inclusion of all glass food containers in the same relevant product market.

□ Barriers to switching

- To the extent that supply-side switching is considered, it is important to examine not only the ease of switching production but also the ability to sell the resulting product
- For some products, the lack of access to distribution channels, reputation, or post-sale service can be greater impediments to successful participation in the market than the need for sophisticated or capital-intensive production technology
- Such a lack of access can significantly dampen cross-elasticity of supply even when it is technologically easy to switch existing production equipment to manufacture the product under scrutiny

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- Supply switching in practice
 - Incentive to switch
 - In addition, for supply-side switching to be competitively meaningful, there must be an incentive for firms to switch their production mix in response to a price increase in the putative relevant market
 - If the manufacture and sale of products in the putative market are not profitable for firms outside the market that have the requisite production technology (taking into account any additional costs associated with distribution and sale even at the higher SSNIP-increased price), then those firms will not change their production mix in response to a price increase and should not be included in the market