

MERGER ANTITRUST LAW

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Georgetown University Law Center
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Tuesdays and Thursdays, 3:30-4:55 pm
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CLASS 18 WRITTEN ASSIGNMENT—INSTRUCTOR’S ANSWER

Instructions

Submit by email by 3:30 pm on Tuesday, October 30
Send to dale.collins@shearman.com
Subject line: Merger Antitrust Law: Assignment for Class 18

Assignment

Calls for a memorandum.

You are an attorney at the FTC and your group is reviewing Coca-Cola’s pending acquisition of Fresh OJ. Coca-Cola is the owner of the Simply Orange and Minute Maid brands and the second largest producer of ready-to-serve orange juice behind Tropicana. Fresh OJ, which only produces ready-to-serve orange juice, is the number three national brand of ready-to-serve orange juice. Melissa Brown, your section chief, has asked you to prepare a short memorandum analyzing whether the FTC can make out a prima facie case in court that the merger, if consummated, would violate Section 7. In particular, Ms. Brown wants your analysis of the dimensions of the relevant market and whether the evidence is sufficient to allow the court to conclude (in the absence of any defenses) that the merger is likely to result in an anticompetitive effect in the relevant market.¹

Ready-to-serve juices are juices in liquid form that may be served directly from the bottle. The juice business consists primarily of ready-to-serve orange juice and ready-to-serve apple juice; other ready-to-serve juices are trivial in size in comparison and have not played a role in the investigation. Similarly, the same is true for concentrated frozen fruit juices of all types, which also have played no role in the investigation. As a result, the investigation has focused exclusively on ready-to-serve orange juice and ready-to-serve apple juice. For convenience, we will refer to ready-to-serve fruit juices simply as fruit juices.

The investigation revealed the following industry structure:

¹ The margining parties are scheduled to present their defenses on the downward pricing pressures the merged firm will face on Tuesday of next week. You may anticipate that you will be asked to evaluate those defenses after the defense presentation.

Orange Juice				Apple juice			
	Revenues (\$millions)	Production (million gal.)	Share		Revenues (\$millions)	Production (million gal.)	Share
Tropicana	1457	291	45.0%	Mott's	400	67	36.4%
Coca-Cola	680	136	21.0%	Minute Maid	150	25	13.6%
Fresh OJ	680	136	21.0%	Nestle	80	13	7.3%
OJ Natural	230	46	7.1%	Tropicana	70	12	6.4%
Others (6)	191	38	5.9%	Others (10)	400	67	36.4%
	3238	648	100.0%		1100	183	100.0%

Orange juice has an acidic taste and is consumed largely by adults and older children. Given the acidic taste, babies do not like orange juice. Apple juice, on the other hand, has a sweet taste and is the juice drink of choice for babies. Apple juice only has a small following among adults. All of the name brands of orange juice and apple juice listed in the above table are sold nationally by their respective manufacturers, although some of the “others” in each case are large regional producers.

The investigation revealed that the fruit juice business is undergoing shifting demand. Although fruit juices were once widely regarded as “healthy” drinks, a barrage of news reports in recent years that fruit juice has little nutritional or health value and instead is simply a tasty high-calorie drink has caused the demand for fruit juice to drop by 5% over each of the last three years for both orange juice and apple juice. The demand for these juices is expected to continue to fall at a similar rate into the foreseeable future. As a result of the reduction in demand, the industry today is operating at only about 71% capacity. The marginal cost of production for orange juice and apple juice is \$3.00 and \$3.60 per gallon, respectively.

Manufacturers sell orange juice and apple juice for \$5.00 and \$6.00 per gallon, respectively, throughout the country regardless of the size of the bottle in which they are packaged. These prices have remained stable over the last three years. The economic analysis undertaken by the FTC staff economists shows that the own-elasticity for orange juice today is -1.1 (which implies that a 5% price increase across all orange juice products will cause about 55 out of 1000 customers to switch away from orange juice), and that the own-elasticity of apple juice is -1.4.

For the most part, orange juice and apple juice are produced in different plants using different production technologies, and there is no production substitution between them. The exception is Mott's, which has a “swing” plant that would allow it to switch to producing orange juice very quickly and without any material switching costs. Although Mott's could swing 100% of its capacity to producing orange juice, it has a great brand name in apple juice and needs to protect that position. As a result, if the price of orange juice was to increase by 5% while the price of apple juice stayed constant, Mott's, which is currently producing at capacity, would switch only 20% of its production capacity to the production of orange juice.

Note 1: You may assume that Ms. Brown is familiar with the facts, so that you do not need to include a statement of facts in the memorandum. Just cite to the facts as you do the analysis.

Note 2: All demand is linear in all prices and quantities of interest.

INSTRUCTOR'S ANSWER

To: Melissa Brown, Assistant Director

From: Dale Collins

Coca-Cola/Fresh OJ: The Prima Facie Case

You have asked me to analyze whether the FTC can make out a prima facie case of anticompetitive effect in court against Coca-Cola's pending acquisition of Fresh OJ. In particular, you have asked that I analyze the dimensions of the relevant market and whether the evidence is sufficient to allow the court to conclude (in the absence of any defenses) that the merger is likely to result in an anticompetitive effect in the relevant market.

I will analyze the prima facie case in four sections:

1. The relevant product market
2. The relevant geographic market
3. Market shares, concentration, and the *PNB* presumption
4. Additional evidence supporting the prima facie case

1. The relevant product market

The relevant product market in this case is ready-to-serve orange juice.

First, orange juice satisfies the *Brown Shoe* "outer boundaries" test. One brand of orange juice is likely to have a much higher cross-elasticity of demand with another brand of orange juice than with any brand of apple juice given the differences in consumption patterns between the two products. While both orange juice and apple juice are considered by many to be "healthy" drinks, orange juice has a much more acidic taste and is consumed largely by adults and older children. Given the acidic taste, babies do not like orange juice. Apple juice, on the other hand, has a sweet taste and is the drink of choice for babies. Apple juice has only a small following among adults. The own-price elasticity for orange juice is -1.1, with 55 out of 1000 customers switching away from orange juice in response to a 5% increase in price. Even if 100% of the diversion was to apple juice (as opposed to apple juice along with other products), the cross-elasticity of orange juice with apple juice would be relatively low at -1.1 (assuming customers switched gallon for gallon).

The *Brown Shoe* "practical indicia" further support orange juice as a relevant market. In addition to the product's "peculiar characteristics and uses" given its consumption patterns, orange juice largely requires unique production facilities and has unique production technology. Although Mott's, which currently produces no orange juice, has the ability to switch from apple juice to orange juice production quickly and without significant switching costs (making it an uncommitted or "rapid" entrant under the Merger Guidelines), Mott's capacity of 80 million gallons is equal to a little more than 2.1% (=13/648) of current orange juice production. Consequently, 100% of orange juice is produced today on unique production facilities, and even

if Mott's were to switch its entire capacity to producing orange juice over 90% of orange juice production would still be on unique production facilities.¹ Finally, the prices of orange juice (\$5.00/gallon) and apple juice (\$6.00/gallon) differ by 20%. This, together with their low cross-elasticity of demand, indicates that they could support different prices under different demand conditions.

Second, orange juice satisfies the hypothetical monopolist test. Here, the manufacturer's price for orange juice across all brands is \$5.00/gallon and the marginal cost is \$3.00, for a gross margin of \$2.00 and a percentage gross margin of 40%. If the hypothetical monopolist loses 55 out of every 1000 gallons sold with a 5% price increase (\$0.25), its gross gain on its retained sales would be $\$0.25 \times (1000 - 55) = \236.25 and its gross loss of the diverted sales would be $55 \times \$2.00 = \110.00 . Since the gross gain is larger than the gross loss, a SSNIP of 5% would be profitable for a hypothetical monopolist of orange juice.

Alternative formulation: Orange juice satisfies the hypothetical monopolist test. The critical elasticity ϵ^* may be calculated from the product grouping's percentage gross margin (m) and the percentage SSNIP (δ):

$$|\epsilon^*| = \frac{1}{\delta + m} = \frac{1}{.05 + .40} = 2.22.$$

Since the absolute value of the actual own-price elasticity of demand (1.1) is less than the absolute value of the critical elasticity (2.22), a SSNIP of 5% would be profitable for the hypothetical monopolist.

2. The relevant geographic market

The relevant geographic market is the United States.

At least 94% of all orange juice is branded orange juice sold nationally at a uniform price throughout the country. Courts have held that where the companies in the relevant product market sell their products nationwide at uniform prices, the United States is a relevant geographic market. Moreover, using the hypothetical monopolist test, we know that a hypothetical monopolist could profitably raise prices by 5% across all products across the country. (The math is the same here as in the relevant product market analysis.) This confirms that the relevant geographic market is the United States. Although smaller relevant markets may exist within this broader market, if the transaction violates Section 7 in the broader relevant geographic market, it is unnecessary to explore any smaller markets.

¹ If Mott's added its 67 million gallons of production to the existing 648 million gallons of orange juice, total orange juice production would be 715 million gallons. Mott's would account for about 9.3% of this expanded production (67/715), so about 90.7% of orange juice would be produced on unique facilities.

3. Market shares, concentration, and the *PNB* presumption

Given that the evidence establishes that orange juice sold in the United States is a proper relevant market in which to analyze the transaction, we next need to identify the participants in the market and their respective market shares. The participants in the market include the incumbent firms at their current production levels plus any “uncommitted” entrants, which would be credited with the production level they would have if the relative prices in the relevant market increased by a SSNIP (here, 5%). Mott’s is an uncommitted entrant that would switch 20% of its ~~60-67~~ million gallons of production capacity, or ~~42~~13 million gallons, to orange juice if the price of orange juice were to increase by 5%. The following table gives the resulting market participants and market shares under the Merger Guidelines:

Orange Juice			
	Production (million gal.)	Share	HHI
Tropicana	291	44.1%	1944
Coca-Cola (Simply Orange, Minute Maid)	136	20.6%	423
Fresh OJ	136	20.6%	423
OJ Natural	46	7.0%	48
Others (6)	38	5.8%	33
Mott’s (uncommitted entrant)	13	2.0%	4
	661	100.0%	2877
Delta (2+3)			847
Post			3723
Combined market share		41.2%	

Here, the transaction involves the number 2 firm with a 20.6% revenue share combining with the number 3 firm with a 20.3% revenue share to create a combined firm with a revenue share of 41.2%.² The post-merger HHI is 3719, which is highly concentrated under the 2010 Horizontal Merger Guidelines. The change in the HHI (delta) created by the transaction is 847. Ignoring fringe firms, the transaction is a 3-to-2 merger. These numbers are sufficient to predicate the *PNB* presumption under the case law. Moreover, under the Horizontal Merger Guidelines, mergers in markets with a post-merger HHI above 2500 and a delta of 200 or more, as is the case here, “will be presumed to be likely to enhance market power. The presumption may be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power.” The market share of the combined firm and the increase in market concentration are sufficient to invoke the *PNB* presumption under judicial precedent and the Merger Guidelines and so establish a prima facie case of the requisite anticompetitive effect under Section 7.

² In this case, it would be equally appropriate—and perhaps more traditional—to calculate shares using production units (gallons). Since the price per gallon is constant across manufacturers, the share results will be the same. Generally, revenues are used when the product is differentiated and sells at different prices, and production is used when products are homogeneous and sell at the same price.

4. Additional evidence supporting the prima facie case

Unilateral effects. First, the transaction threatens competition in the national orange juice market under the unilateral effects theory. Although the orange juice manufacturers each charge \$5.00/gallon for their product, the products are differentiated through brand names and reputation, and they could charge different prices. Under the Merger Guidelines, the incentive and ability of the merged firm to raise prices can be assessed by looking at the gross upward pricing pressure the merger creates. Gross upward pricing pressure is measured by multiplying the sales diversion ratio times the margin. Here, the evidence shows that each manufacturer's margin is 40%. The sales diversion ratios can be estimates based on market shares. Using this method of estimation, the diversion ratio from Coca-Cola to Fresh OJ is 25.9% (= Fresh OJ's share of 20.6%/(100-Coca-Cola's share of 20.6%). The diversion ratio from Fresh OJ to Coca-Cola is also 20.6%, since both firms have the same share. Multiplying these diversion ratios by the manufacturer's margin of 40%, the gross upward pressing pressure index (GUPPI) for both products is 10.4%. Given linear demand and symmetry in prices, costs, margins, and diversion ratios, the price increase in both products predicted by the GUPPI is:

$$\frac{\Delta p_1^*}{p_1} = \frac{\Delta p_2^*}{p_2} = \frac{GUPPI}{2(1-D)} = \frac{0.104}{2(1-0.259)} = 0.07 \text{ or } 7\%.$$

The incentive of the merged firm to raise the price of both Coca-Cola and Fresh OJ brands of orange juice by 7% makes out a unilateral effects theory.

Coordinated effects. Second, the transaction is likely to increase prices under the theory of coordinated effects. The market is already susceptible to oligopolistic coordination premerger:

1. Excluding the fringe firms, there are only three significant players in the market (Tropicana, Coca-Cola, and Fresh OJ), which collectively account for over 85% of the relevant market (including Mott's as an uncommitted entrant but still a fringe firm).
2. Prices have remained at \$5.00/gallon over the last three years despite a 15% decrease in demand, indicating significant tacit (if not express) coordination to reduce production in order to maintain prices.

The merger will increase the preexisting incentives and ability to engage in successful tacit collusion by removing the third largest firm as an independent decision maker in the market, leaving only two significant firms in the market (Tropicana and Coca-Cola, together comprising over 85% of postmerger production).

5. Conclusion

The evidence in the investigation establishes that the relevant market is orange juice sold in the United States. Within this relevant market, the *PNB* presumption applies to establish a

presumption of anticompetitive effect. The presumption is further strengthened by evidence showing that the merger is likely to be anticompetitive under both the unilateral effects and coordinated effects theory. This establishes a prima facies Section 7 case. The prima facie case does not require the staff to anticipate and rebut the merging parties' downward pricing pressure defenses.