

## MERGER ANTITRUST LAW

LAWJ/G-1469-05  
Georgetown University Law Center  
Fall 2018

Tuesdays and Thursdays, 3:30-4:55 pm  
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### CLASS 20 WRITTEN ASSIGNMENT

#### Instructions

Submit by email by 3:30 pm on Tuesday, November 8  
Send to [dale.collins@shearman.com](mailto:dale.collins@shearman.com)  
Subject line: Merger Antitrust Law: Assignment for Class 20

#### Assignment

Write up your approach to the problem, then do the hypothetical monopolist test. Do NOT spend more than 30 minutes on this assignment. If you do not complete it, give me what you have at the end of 30 minutes. I am more interested in the approach than in the arithmetic.

Ace and CorelDraw, two computer illustrations applications, have agreed to merge. There are a large number of drawing programs with differing degrees of functionality and different prices. Sophisticated programs, such as Adobe Illustrator, are used largely by professional graphics artists for complicated illustrations and cost at least \$500 per seat.<sup>1</sup> Intermediate programs, such as Ace, CorelDRAW, and Sketch, span a wide range of functionality and price. Finally, many programs have a much lower degree of functionality and are available for free. The following chart gives for each of the programs their price, the number of users or seats, and revenues:

	Price	Seats	Revenues
Illustrator	500	500	250,000
Freehand	325	230	74,750
Ace	225	600	135,000
CorelDRAW	129	525	67,725
Sketch	99	474	46,926
Designer	50	2500	125,000
Inkscape	0	2400	0
Gravit	0	2000	0

Each paid program has a percentage margin of 60%.

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<sup>1</sup> Seat licenses are a common way to price professional programs. A “seat” is a computer in the company, so if the company wants 50 computers with the program, it has to buy 50 “seat” licenses. Any number of people in the company can use a computer with the licensed program.

The following table gives the actual percentage loss in units for a SSNIP of 5% to the program in question and the unit diversion ratios to the other products. The prices of all other programs are held constant.

	%Loss	%Unit Diversions							
	SSNIP	Illustrator	Freehand	Ace	CorelDRAW	Sketch	Designer	Inkscape	Gravit
Illustrator	9%	—	40%	40%	10%	10%			
Freehand	8%	20%	—	60%	10%	10%			
Ace	12%		40%	—	40%	20%			
CorelDRAW	40%			30%	—	50%	20%		
Sketch	30%			10%	50%	—	40%		
Designer	30%				10%	40%	—	30%	20%
Inkscape	50%					20%	60%	—	20%
Gravit	50%					0%	40%	60%	—

So if the price of the Ace program is increased by 5%, it would lose 12% of its unit sales. Of the lost sales, 40% will go to Freehand, 40% to CorelDRAW, and 20% to Sketch.

If two programs are contained in the same candidate market and the price of all products in the candidate market are increased by the same SSNIP, there will be no diversion between the two products. The diversion to products outside of the candidate market, however, will remain the same. So, for example, if Illustrator and Freehand are the only two products in candidate market, there will be no diversion from Illustrator to Freehand but diversion will still occur from Illustrator to Ace, CorelDRAW, and Sketch. The %loss of Illustrator unit sales will decrease from 9% to 5.4 percent ( $=9\% \times (1-40\%)$ ) given that there will no longer be any diversion to Freehand. The percentage diversions to Ace, CorelDRAW, and Sketch will remain proportional. The new diversion ratio to CorelDRAW, for example, will be 16.7% ( $= 10\%/(1-40\%)$ ). If Illustrator, Freehand, and Ace were the candidate market, then there would be no diversion from Illustrator to either Freehand or Ace, and the total %loss of Illustrator sales would be 1.8% ( $= 9\% \times (1-40\% - 40\%)$ ). The adjusted diversion ratio from Illustrator to CorelDRAW would be 50% ( $= 10\%/(1 - 40\% - 40\%)$ ).

The relevant geographic market for these programs is national. What is the relevant product market under the Merger Guidelines for the purpose of analyzing the Ace/CorelDRAW?