

MERGER ANTITRUST LAW

LAW 1469
Georgetown University Law Center
Fall 2026

Tuesdays and Thursdays, 3:30 pm – 5:30 pm
Dale Collins
wdc30@georgetown.edu
www.appliedantitrust.com

CLASS 11 WRITTEN ASSIGNMENT—INSTRUCTOR’S ANSWER

Instructions

Submit by email by 3:30 pm on Tuesday, September 29
Send to wdc30@georgetown.edu
Subject line: Merger Antitrust Law: Assignment for Class 11

1. Consider digital-do-it-yourself (DDIY) tax products again, this time with some different (fictitious) data. Do H&R Block and TaxACT by themselves constitute a relevant product market under the 2023 Merger Guidelines for a 5 percent SSNIP? Do TurboTax, H&R Block, and TaxACT constitute a relevant product market for the same SSNIP? If the DOJ wants to challenge the merger, what market definition should it allege (all things considered) and why?

Here is the data the investigation revealed:

Prevailing conditions

	TT	H&R	TaxACT	(constant marginal costs)
Price	55	25	11	
%Margin	50%	40%	20%	
Marginal cost	27.5	15	8.8	
Quantity	1,131	624	855	
%SSNIP	5%	5%	5%	
%Actual loss	-10.00%	-12.50%	-25.00%	

Diversion ratios (for one-product SSNIPs)

From:	TT	To : H&R	TaxACT	Total Recapture
TT	x	30.0%	9.0%	39.0%
H&R Block	30.0%	x	26.8%	56.8%
TaxACT	25.0%	27.7%	x	52.7%

Answer

The market in this problem comprises differentiated products with varying prices, margins, and one-product SSNIP diversion ratios. This situation calls for a *one-product SSNIP recapture test*.

In answering this question, I will use two alternative approaches to the problem:

1. *The easy way*: First, determine if any two products pass the one-product SSNIP recapture test and, if so, apply the “superset theorem” to expand the market to include all three products.
2. *The “brute force” way*: Use brute force accounting for the candidate three-product market.

Alternative 1

Step 1. Evaluate H&R Block plus TaxACT as a relevant market. Since this is a two-product candidate market, we can use the following one-product SSNIP formula:

$$R_{cl}^i = \frac{\delta p_i}{\$m_{RAve}} = \frac{\$SSNIP_i}{\$m_{RAve}} = \frac{\$SSNIP_i}{\$m_j}$$

where R_{cl}^i is the critical one-product SSNIP recapture ratio, $\$SSNIP_i$ is the dollar SSNIP of Product i , and $\$m_{RAve}$ is the recapture share weighted margin of the products in the candidate market other than Product i . Since this is a two-product candidate market, there is only one “other” product, so that $\$m_{RAve} = \m_j . [This last step is something that you will want to remember.] Now

$$\begin{aligned}\$SSNIP_{H\&R} &= \%SSNIP \text{ times price} = (0.05)(25) = 1.25 \\ \$SSNIP_{TaxACT} &= \%SSNIP \text{ times price} = (0.05)(11) = 0.55 \\ \$m_{H\&R} &= \%margin \text{ times price} = (0.4)(25) = 10 \\ \$m_{TaxACT} &= \%margin \text{ times price} = (0.2)(11) = 2.2\end{aligned}$$

And so

$$\begin{aligned}R_{cl}^{H\&R} &= \frac{\delta p_{H\&R}}{\$m_{TaxACT}} = \frac{1.25}{2.2} = 0.568 = 56.8\% \\ R_{cl}^{TaxACT} &= \frac{\delta p_{TaxACT}}{\$m_{H\&R}} = \frac{0.55}{10} = 0.055 = 5.5\%\end{aligned}$$

A hypothetical monopolist could profitably increase the price of product i by a SSNIP if $R_i > R_{cl}^i$ for one of the merging firms.¹ From the tables, the actual recapture ratio for H&R Block is simply the diversion ratio from H&R Block to TaxACT, which is 26.8%. Since the actual recapture ratio is less than the critical recapture ratio of 56.8%, a one-product SSNIP test on H&R Block fails.

Likewise, the recapture ratio for TaxACT is the diversion ratio from TaxACT to H&R Block, which is 27.7%. Since the actual recapture ratio is greater than the critical recapture ratio of 5.5%, a hypothetical monopolist could profitably increase the price of TaxACT by 5%.

¹ The 2010 Merger Guidelines required at least one product subject to the SSNIP to be sold by a merging firm, and decisions including *IQVIA* quoted that formulation. The 2023 Merger Guidelines instead refer to a SSNIP or SSNIPT on ‘at least one product in the group,’ omitting the merging firm product requirement. *Tapestry* and *Henkel* treated the 2023 Guidelines as persuasive but nonbinding, but neither decision resolved whether the omission displaces the earlier case law formulation. Here, both products in the candidate market are sold by the merging firms, so the distinction is immaterial.

Since only one product needs to satisfy the one-product SSNIP test for the candidate market to satisfy the HMT, H&R Block plus TaxACT satisfies the HMT under the Merger Guidelines.

Step 2. Evaluate H&R Block plus TaxACT plus TurboTax as a relevant market. Apply the “superset theorem.” Recall that if one group of products satisfies the HMT with selective pricing, then any superset of products (i.e., any larger product grouping that contains the original group) also satisfies the HMT with selective pricing. Here, H&R Block and TaxACT pass the HMT under a one-product SSNIP test for TaxACT. *A fortiori*, the three-product market will also satisfy the one-product SSNIP test for TaxACT since the recapture of profits by H&R Block alone is sufficient to offset the loss in TaxACT even if there is no recapture of profits by TurboTax.

Step 3. Decide which market DOJ should allege. Both product groupings satisfy the HMT. The 2023 Merger Guidelines recognize that market definition need not produce a single market and that narrower, broader, and overlapping markets can each be relevant. All things considered, DOJ should allege the all-DDIY market as its principal market and may allege H&R Block plus TaxACT in the alternative. The all-DDIY market better reflects the commercial realities and the market accepted in the actual litigation. *See* United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 49-65 (D.D.C. 2011). Using the stated unit quantities, the all-DDIY shares are approximately 43.33% for TurboTax, 23.91% for H&R Block, and 32.76% for TaxACT. H&R Block and TaxACT therefore would have a combined share of 56.67%; the premerger HHI is approximately 3,522.5, the delta is approximately 1,566.4, and the postmerger HHI is approximately 5,088.9. DOJ thus sacrifices nothing material structurally by using the commercially recognizable all-DDIY market.

Alternative 2

We could also have used brute force accounting to calculate the gains from the increase in margin on the inframarginal sales, the loss from the marginal sales, and the profits recaptured by each of the other two products in the candidate market.

Candidate market: H&R Block + TaxACT + TurboTax

One-product SSNIP: Brute force

	SSNIP Product			
	H&R Block	TaxACT	TurboTax	
<i>Gain from inframarginal sales</i>				
q1	624	855	1,131	DATA FROM PROBLEM
$\Delta q1$	-78	-213.64	-113.09	Marginal sales = %Actual loss times q1
$q2 = q1 - \Delta q1$	546	641	1,018	Inframarginal sales
%SSNIP	5%	5%	5%	DATA FROM PROBLEM
\$SSNIP	1.25	0.55	2.75	%SSNIP times p1
Gain	682.5	352.5	2799	\$SSNIP times q2
<i>Loss from marginal sales</i>				
$\Delta q1$	-78.00	-213.64	-113.09	Already calculated
%margin	40%	20%	50%	DATA FROM PROBLEM
\$margin	10.00	2.20	27.50	%margin times p1
Loss	-780.00	-470.00	-3,110.00	\$margin times $\Delta q1$
Net gain on SSNIP product	-97.50	-117.50	-311.00	Gain on inframarginal sales minus loss on marginal sales
<i>Recapture from:</i>				
	H&R Block	TaxACT	TurboTax	
<i>Profit on recaptured sales to TaxACT</i>				
Diversion ratio	26.8%	x	9.0%	DATA FROM PROBLEM
Δq_{TaxACT}	20.90	x	10.18	Recaptured unit sales = Diversion ratio times $\Delta q1$
%margin (TaxACT)	20%	x	20%	DATA FROM PROBLEM
\$margin (TaxACT)	2.20	x	2.20	%margin times p_{TaxACT}
Gain on TaxACT	45.99	x	22.39	\$margin times recaptured unit sales
<i>Profit on recaptured sales To H&R Block</i>				
Diversion ratio	x	27.7%	30.0%	DATA FROM PROBLEM
Δq_{TaxACT}	x	59.18	33.93	Recaptured unit sales = Diversion ratio times $\Delta q1$
%margin (H&R)	x	40%	40%	DATA FROM PROBLEM
\$margin (H&R)	x	10	10	%margin times $p_{\text{H&R Block}}$
Gain on H&R Block	x	591.77	339.27	\$margin times recaptured unit sales
<i>Profit on recaptured sales To TurboTax</i>				
Diversion ratio	30.0%	25.0%	x	DATA FROM PROBLEM
$\Delta q_{\text{TurboTax}}$	-23.40	-53.41	x	Recaptured unit sales = Diversion ratio times $\Delta q1$
%margin (TurboTax)	50%	50%	x	DATA FROM PROBLEM
\$margin (TurboTax)	27.50	27.50	x	%margin times p_{TurboTax}
Gain on TurboTax	643.50	1,468.75	x	\$margin times recaptured unit sales
Total gain on recapture	689.49	2,060.52	361.66	
NET GAIN WITH RECAPTURE	591.99	1,943.02	50.66	
One-product SSNIP test	PASSES	PASSES		

The brute-force calculations confirm that H&R Block and TaxACT by themselves constitute a relevant product market. A 5 percent SSNIP on H&R Block would produce a net loss of \$97.50 on H&R Block sales and recaptured profits of only \$45.99 on TaxACT sales, for an overall loss of \$51.51. A 5 percent SSNIP on TaxACT, however, would produce a net loss of \$117.50 on TaxACT sales but recaptured profits of \$591.77 on H&R Block sales, for an overall gain of

\$474.53. Because a hypothetical monopolist need only be able to impose a profitable SSNIP on one product in the candidate group, H&R Block plus TaxACT satisfies the HMT.

TurboTax, H&R Block, and TaxACT also constitute a relevant product market. As the table shows, after accounting for profits recaptured by the other two products, a 5 percent SSNIP produces a net gain of \$591.99 when imposed on H&R Block, \$1,943.02 when imposed on TaxACT, and \$50.66 when imposed on TurboTax. The three-product candidate market therefore satisfies the HMT regardless of which product is selected for the SSNIP, although a profitable SSNIP on any one product would be sufficient.

Both candidate markets satisfy the HMT. All things considered, DOJ should allege the all-DDIY market as its principal market and may allege H&R Block plus TaxACT in the alternative. The all-DDIY market better reflects commercial realities and the market accepted in the actual litigation. It also produces a strong structural case: H&R Block and TaxACT have a combined share of approximately 56.67 percent, the premerger HHI is approximately 3,522, the increase is approximately 1,566, and the postmerger HHI is approximately 5,088. DOJ therefore sacrifices nothing material structurally by using the commercially recognizable all-DDIY market.

Assignment 2. Calls for a memorandum to a law firm partner.

Sonny Rollins, a litigation partner in the firm, is preparing for his first antitrust case. He has been reading the district court's opinion in *FTC v. IQVIA Holdings Inc.*, 710 F. Supp. 3d 329 (S.D.N.Y. 2024). In its complaint for a Section 13(b) preliminary injunction, the FTC alleged that IQVIA's proposed acquisition of DeepIntent would likely substantially lessen competition in the worldwide market for programmatic advertising to health care professionals (HCPs).

Programmatic advertising is an automated way of presenting targeted advertising, in the form of website-based ads, to a specific cohort—in this instance, doctors, nurses, and other health practitioners. The FTC's alleged market included three primary products—DeepIntent, Lasso (IQVIA's product), and PulsePoint (a third-party competitor's product)—along with some much smaller competitors. While the merging parties agreed that the geographic market was worldwide, they argued that the product market should be expanded to include other forms of advertising, such as social media and digital advertising on medical websites such as WebMD.

In addition to the *Brown Shoe* factors, the district court found support for the FTC's alleged market in a "critical loss analysis" performed by Dr. Kostis Hatzitaskos, the FTC's economic expert. Mr. Rollins is not familiar with critical loss analysis and has questions about the court's following explanation:

[C]ritical loss analysis asks how many customers the hypothetical monopolist would have to lose to alternatives outside the market for the price increase to be unprofitable. [S]ee also *FTC v. Swedish Match*, 131 F. Supp. 2d 151, 160 (DDC 2000) (describing critical loss as "the largest amount of sales that a monopolist can lose before a price increase becomes unprofitable"). Dr. Hatzitaskos estimated that a 5% price increase for DeepIntent would result in a critical loss of 10.6%, meaning that the hypothetical monopolist would need to regain 10.6% of the customers switching away from DeepIntent. He also estimated that a 10% price increase for DeepIntent would result in a critical loss of 21.2%. For both calculations, he relied on a margin estimate of 47.3% for DeepIntent.

Dr. Hatzitaskos then compared the critical loss figures to an estimate of the aggregate diversion ratio. “The aggregate diversion ratio for any given product represents the proportion of lost sales that are recaptured by all other firms in the proposed market as the result of a price increase.” *H&R Block*, 833 F. Supp. 2d at 63. These sales remain within the proposed market and thus are not lost to the hypothetical monopolist. If the aggregate diversion ratio to products within the proposed market exceeds the critical loss threshold, then a price increase would be profitable for the hypothetical monopolist. *H&R Block*, 833 F. Supp. 2d at 63.

Here, Dr. Hatzitaskos used 79.4% as an estimate of the aggregate diversion ratio. That figure was based on his analysis of actual customer choices, which relied on DeepIntent’s internal “win/loss data” and campaign data from Lasso and PulsePoint. He found that 79.4% of customers who considered but did not choose DeepIntent ended up choosing Lasso or PulsePoint. Dr. Hatzitaskos characterized this figure as a conservative estimate of the aggregate diversion ratio because the hypothetical monopolist would control all providers of HCP programmatic advertising in the candidate market rather than just those three firms.

To reiterate, the ultimate test is whether the aggregate diversion ratio is higher than the critical loss; if it is, then the candidate market passes the HMT. [S]ee also *H&R Block*, 833 F. Supp. 2d at 63. The aggregate diversion ratio was 79.4%, while the critical loss was either 10.6% (based on a 5% price increase) or 21.2% (based on a 10% price increase). In both cases, then, the aggregate diversion ratio exceeded the critical loss by a wide margin and thus the HMT was satisfied.

IQVIA, 710 F. Supp. 3d at 370-71 (record citations omitted).

Mr. Rollins would like you to prepare a memorandum explaining this passage. He asks you to be sure to address the following questions: What is a “hypothetical monopolist” and what is its role in defining markets? What is “critical loss analysis” and why is it relevant to defining markets in antitrust cases? Why is Dr. Hatzitaskos using a 5% and 10% price increase? What is “critical loss” and how did Dr. Hatzitaskos derive his critical loss numbers? What is the 47.3% “margin estimate” for DeepIntent, how did Dr. Hatzitaskos use it in the analysis, and where did Dr. Hatzitaskos get the number? What is an “aggregate diversion ratio” and why did Dr. Hatzitaskos use 79.4% as the estimate of the aggregate diversion ratio for DeepIntent? What is the significance of the finding that the aggregate diversion ratio was greater than the critical loss? Finally, are there any hidden assumptions in Dr. Hatzitaskos’ analysis that may limit its generality?²

² Dr. Mark Israel, the defendants’ economic expert (who we shall see in other cases later in the course), challenged the Hatzitaskos critical loss analysis. See *IQVIA*, 710 F. Supp. 3d at 371-72. You may prepare your memorandum without examining Israel’s criticisms, but take a look at them if you like and take them into account if you wish.

INSTRUCTOR'S ANSWER TO ASSIGNMENT 2

PRIVILEGED AND CONFIDENTIAL
ATTORNEY OPINION WORK PRODUCT¹

ABLE & BAKER LLP

INSTRUCTOR'S ANSWER

To: Sonny Rollins
From: Dale Collins

The Hypothetical Monopolist Test in IQVIA²

You have asked me to analyze the court's use of the hypothetical monopolist test (HMT) based on the testimony of Dr. Kostis Hatzitaskos, the FTC's economic expert in the case.

In its complaint for a Section 13(b) preliminary injunction, the FTC alleged that IQVIA's proposed acquisition of DeepIntent would likely substantially lessen competition in the worldwide market for programmatic advertising to health care professionals (HCPs) in violation of Section 7 of the Clayton Act. Programmatic advertising is an automated way of presenting targeted advertising, in the form of website-based ads, to a specific cohort—in this instance, doctors, nurses, and other health practitioners. The FTC's alleged market included three primary products—DeepIntent, Lasso (IQVIA's product), and PulsePoint (a third-party competitor's product)—along with some much smaller competitors. While the merging parties agreed that the

¹ **Note to students:** This memorandum is not marked as an attorney-client communication. It analyzes public legal authorities, contains no client confidences, and the hypothetical does not state that it was prepared for the purpose of providing legal advice to a client. Merely sharing the memorandum with a client would not necessarily make it privileged. *See Tax Analysts v. IRS*, 117 F.3d 607, 618 (D.C. Cir. 1997).

The memorandum, however, may qualify as work product if it was prepared because of a sufficiently concrete prospect of litigation. Because Mr. Rollins is preparing for an antitrust case, the memorandum is arguably prepared "in anticipation of litigation." The relevant question is whether it was prepared because of the anticipated litigation and would not have been prepared in substantially similar form absent that prospect. *See United States v. Adlman*, 134 F.3d 1194, 1195, 1202 (2d Cir. 1998) (*Adlman II*). If that threshold is satisfied, the memorandum's analysis of the authorities bearing on the anticipated litigation would likely constitute opinion work product because it reveals an attorney's conclusions, opinions, and legal theories concerning the litigation. Even if the memorandum also were intended to assist in advising a client, that dual purpose would not necessarily defeat work-product protection. *See id.* at 1195. Because the memorandum is at least arguably opinion work product, the better practice is to mark it as attorney work product and be prepared to establish the basis for that designation if a dispute later arises.

Opinion work product receives heightened, often described as nearly absolute, protection from discovery. *See Hickman v. Taylor*, 329 U.S. 495, 510 (1947) ("Not even the most liberal of discovery theories can justify unwarranted inquiries into the files and mental impressions of an attorney."); *Upjohn Co. v. United States*, 449 U.S. 383, 401-02 (1981) ("As Rule 26 and Hickman make clear, such work product cannot be disclosed simply on a showing of substantial need . . . [A] far stronger showing of necessity and unavailability by other means would be required than is needed to justify ordinary work product."); Fed. R. Civ. P. 26(b)(3)(B) ("If the court orders discovery of those materials [prepared in anticipation of litigation], it must protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of a party's attorney or other representative concerning the litigation.").

² *FTC v. IQVIA Holdings Inc.*, 710 F. Supp. 3d 329 (S.D.N.Y. 2024).

geographic market was worldwide, they argued that the product market should be expanded to include other forms of advertising, such as social media and digital advertising on medical websites such as WebMD.

Hypothetical monopolist test. In addition to the *Brown Shoe* factors, the district court found support for the FTC’s alleged market in a “critical loss analysis” performed by Dr. Hatzitaskos. Critical loss is a particular implementation of the hypothetical monopolist test. The HMT was introduced by the Merger Guidelines in 1982 and has been adopted in one form or another by the courts. The following passage from the 2010 Merger Guidelines, which the *IQVIA* court quoted, explains the test:

The hypothetical monopolist test requires that a product market contain enough substitute products so that it could be subject to post-merger exercise of market power significantly exceeding that existing absent the merger. Specifically, the test requires that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products (“hypothetical monopolist”) *likely would impose at least a small but significant and non-transitory increase in price (“SSNIP”) on at least one product in the market, including at least one product sold by one of the merging firms.*³

The idea is that if a hypothetical monopolist controlling all products in a candidate market could not profitably increase the price by a small but significant amount, then the candidate market does not include all of the substitute products that effectively constrain prices. In this case, the market definition needs to be expanded to include additional substitute products until the hypothetical monopolist can profitably increase price. This is important because a properly defined market reflects the boundaries within which market power can be exercised. Once the market is properly defined, the analysis can turn to whether the merger is likely to create or facilitate the exercise of market power in that market.

The Merger Guidelines and the courts commonly use a SSNIP of 5% of the prevailing premerger price, although some cases use 10%. Dr. Hatzitaskos used both.⁴ The 2023 Merger Guidelines superseded the 2010 Guidelines and broadened the HMT to encompass a worsening of nonprice terms (a SSNIPT).⁵ Courts applying the 2023 Guidelines, including *Tapestry* and *Henkel*, have

³ *IQVIA*, 710 F. Supp. 3d at 368-69 (quoting U.S. Dep’t of Justice & Fed. Trade Comm’n, Horizontal Merger Guidelines § 4.1.1 (rev. Aug. 19, 2010)). The 2023 Merger Guidelines permit a selective price increase on “at least one product in the group” and do not expressly require that the tested product be sold by a merging firm. U.S. Dep’t of Justice & Fed. Trade Comm’n, Merger Guidelines § 4.3.A (rev. Dec. 18, 2023). Since *IQVIA*, courts have treated the 2023 Guidelines as persuasive but nonbinding. See *FTC v. Tapestry, Inc.*, 755 F. Supp. 3d 386, 412 n.3, 414 (S.D.N.Y. 2024); *FTC v. Henkel AG & Co. KGaA*, No. 25 Civ. 10371 (KPF), 2026 WL 2676755, at *19-20 & n.14 (S.D.N.Y. Sept. 11, 2026).

⁴ See U.S. Dep’t of Justice & Fed. Trade Comm’n, Merger Guidelines § 4.3.B (rev. Dec. 18, 2023); *IQVIA*, 710 F. Supp. 3d at 373 (noting that SSNIPs are “typically of five or ten percent”); *Wilhelmsen*, 341 F. Supp. 3d at 57 (noting that FTC’s expert used several SSNIPs, “including a SSNIP of 10% (in addition to the typical 5%)”); *FTC v. Tronox Ltd.*, 332 F. Supp. 3d 187, 204 (D.D.C. 2018) (relying on the analysis of the FTC’s expert, who used a 10% SSNIP); *Aetna*, 240 F. Supp. 3d at 20 (noting that SSNIPs are “typically of five or ten percent”); *United States v. Bazaarvoice, Inc.*, No. 13-CV-00133-WHO, 2014 WL 203966, at *28 (N.D. Cal. Jan. 8, 2014) (noting SSNIPs are of “five to 10 percent”); *H & R Block*, 833 F. Supp. 2d at 57 (“the typical five to ten percent price increase of the SSNIP test”).

⁵ The 2023 Merger Guidelines revisions also change the HMT by expanding the test to include a “worsening of terms” of trade (SSNIPT) and not just an increase in price (SSNIP). See U.S. Dep’t of Justice & Fed. Trade

treated them as persuasive but nonbinding. *Henkel* expressly relied on Section 4.3.A's HMT/SSNIP framework. Neither decision, however, resolved whether the 2023 Guidelines' omission of the 2010 requirement tying the tested product to a merging firm displaces the earlier formulation as a matter of judicial precedent.⁶

Critical loss test. One implementation of the HMT is a critical loss test using a uniform SSNIP for all products in the candidate market. A uniform SSNIP is especially natural for homogeneous products or when the available evidence supports only a market-wide price increase, but it also may be used for differentiated products. The defining feature is that the same percentage SSNIP is applied to every product in the candidate market.

Critical loss analysis determines the profitability of a price increase in a candidate market by comparing two factors:

- (1) the gross incremental profit gained on units that the hypothetical monopolist continues to sell at the higher price (the *inframarginal sales*) and
- (2) the gross incremental profit lost from units no longer sold due to the price increase (the *marginal sales*).

As the magnitude of the price increase grows, the hypothetical monopolist earns more on each retained unit but retains fewer units, while it loses the margins on more units. Whether the price increase is profitable depends on the net of those effects.

The critical loss for a uniform SSNIP in a candidate market is the largest number of marginal unit sales the hypothetical monopolist can lose before the price increase turns unprofitable. If the actual loss of marginal sales for a given SSNIP is less than the critical loss for that SSNIP, then SSNIP is profitable and the candidate market satisfies the HMT. If the actual loss of marginal sales for a given SSNIP is greater than the critical loss for that SSNIP, then the SSNIP is unprofitable and the candidate market fails the HMT.

Formulas exist to calculate the critical loss for a given SSNIP. For a candidate market with a uniform percentage SSNIP δ and a uniform percentage margin of m , the percentage critical loss %CL is:

$$\%CL = \frac{\delta}{\delta + m}$$

For example, the percentage critical loss for a product grouping with a uniform SSNIP (δ) of 5% and a uniform margin (m) of 30% is:

$$\%CL = \frac{\delta}{\delta + m} = \frac{5\%}{5\% + 30\%} = 14.3\%$$

Comm'n, Merger Guidelines § 4.3.A (rev. Dec. 18, 2023). Although the expansion may aid qualitative HMT analysis by incorporating nonprice effects, it is unlikely to be useful in quantitative implementations without clear, objective metrics for deteriorations in terms of trade.

⁶ *Henkel* expressly relied on Section 4.3.A's HMT/SSNIP framework but did not decide whether the omission of the merging firm product requirement supersedes the earlier formulation as a matter of judicial precedent. The distinction is immaterial here because Dr. Hatzitaskos applied the SSNIP to DeepIntent's product. *Henkel*, 2026 WL 2676755, at *19-20.

In this example, if the actual loss is 8%, the actual loss is less than the critical loss and the candidate market satisfies the HMT. If the actual loss is 35%, the actual loss exceeds the critical loss and the candidate market fails the HMT. Note that the higher the actual loss, the less likely the candidate market will satisfy the HMT.

Aggregate diversion ratio test. Another implementation of the HMT is an aggregate diversion ratio or recapture test for a selective SSNIP that applies to some but not all products in the candidate market.⁷ Typically, only one product is subject to the SSNIP. A one-product test is especially useful in markets with differentiated, separately priced products, although a differentiated products market also may be tested with a uniform SSNIP. The aggregate diversion ratio test determines the profitability of a price increase by comparing three factors:

- (1) the gross incremental profit gained on those units subject to the SSNIP that the hypothetical monopolist continues to sell at the higher price (the *inframarginal sales*),
- (2) the gross incremental profit lost from those units subject to the SSNIP no longer sold due to the price increase (the *marginal sales*), and
- (3) the gross incremental profit gained by the recapture of the lost marginal units that divert to products in the candidate market not subject to the SSNIP and hence charge their pre-SSNIP price.

The aggregate diversion ratio test, like the critical loss test, determines whether a price increase is profitable and, hence satisfies the HMT, by summing the gross incremental profits and losses resulting from the SSNIP. Here, however, there are *two* sources of incremental profit gain—one from the retained inframarginal sales of the product subject to the SSNIP and the other from the recapture of some portion of the lost marginal sales of the product subject to the SSNIP by other products in the candidate market not subject to the SSNIP. Notably, this extra source of incremental profit gain from recaptured marginal sales tends to make relevant markets under the aggregate diversion ratio test smaller than markets under a uniform critical loss test.

This test aligns with the new theory of unilateral effects introduced in the 1992 Horizontal Merger Guidelines. The theory posits that an increase in the price of only one product of a merging firm, resulting from the merger and without any offsetting procompetitive benefits, constitutes an anticompetitive effect under Section 7. The aggregate diversion ratio test provided a method for defining relevant markets consistent with this new theory.

Formulas exist to calculate the critical aggregate diversion ratio or recapture rate for a SSNIP applied to a single product within the candidate market. For a candidate market with a SSNIP δ applied only to product 1, the critical aggregate diversion ratio, $R_{Critical}$, is:

$$R_{Critical}^1 = \frac{\delta p_1}{\$m_{RAve}} = \frac{\$SSNIP_1}{\$m_{RAve}},$$

where $\$m_{RAve}$ is the recapture share-weighted average of the products in the candidate market not subject to the SSNIP. When all products in the candidate market have the same pre-SSNIP prices p and percentage margin m and one product is subject to a SSNIP of δ , the test simplifies to:

⁷ Although “aggregate diversion ratio test” is commonly used, a more descriptive term is a “one-product SSNIP recapture test.”

$$R_{Critical} = \frac{\delta}{m}.$$

For example, the critical aggregate diversion ratio for a candidate market with a selective SSNIP (δ) of 5% applied only to product 1 and a uniform margin (m) of 25% is:⁸

$$R_{Critical} = \frac{\delta}{m} = \frac{5\%}{25\%} = 20\%.$$

In this example, if the actual recapture rate is 40%—that is, if 40% of the lost marginal sales of product 1 are recaptured by other firms in the candidate market—the candidate market satisfies the HMT. If the actual recapture rate is only 14%, the candidate market fails the HMT.

Application in IQVIA. The FTC’s alleged worldwide market for programmatic advertising to health care professionals contains differentiated products, so a one-product SSNIP recapture test is an appropriate HMT method. The opinion does not reproduce Dr. Hatzitaskos’s arithmetic, but the reported figures indicate a δ/m -type critical recapture calculation: $5\% \div 47.3\%$ is approximately 10.6%, and $10\% \div 47.3\%$ is approximately 21.1%. The court’s reported 21.2% figure likely reflects use of an unrounded underlying margin. These calculations establish that he used DeepIntent’s margin in a δ/m -type critical recapture calculation. They do not establish that every product in the candidate market had the same price or percentage margin.

$$R_{Critical(5\%)} = \frac{\delta}{m} = \frac{5\%}{47.3\%} = 10.6\%$$

$$R_{Critical(10\%)} = \frac{\delta}{m} = \frac{10\%}{47.3\%} = 21.1\%.$$

The opinion calls 10.6% and 21.2% “critical loss” figures. Analytically, however, they function as critical aggregate diversion or recapture rates because the court compares them with the 79.4% share of lost DeepIntent sales recaptured by products inside the candidate market. They should not be confused with the conventional percentage critical loss for a uniform SSNIP, $\delta/(\delta + m)$. With a 47.3% margin, the conventional uniform SSNIP percentage critical losses would be 9.56% for a 5% SSNIP and 17.45% for a 10% SSNIP.

The 47.3% came from margin calculations in Dr. Hatzitaskos’s expert report, but the opinion does not reproduce the underlying arithmetic. Dr. Israel objected that the approximately 50% margin included data and media costs but omitted the costs of operating the platform. Dr. Hatzitaskos responded that his measure captured the incremental costs of running an additional HCP advertising campaign and was consistent with Lasso’s campaign data. The court credited that explanation. The relevant economic margin was therefore a contribution or incremental margin, not an accounting margin.

Dr. Hatzitaskos compared the critical recapture rates with an estimated actual aggregate diversion ratio for DeepIntent. DeepIntent’s win/loss data indicated that 79.4% of customers who considered but did not choose DeepIntent selected Lasso or PulsePoint. But win/loss choices

⁸ This shortcut is not universal. In Assignment 1, it is exact because the stated percentage actual loss for each SSNIP product equals that product’s dollar SSNIP divided by its dollar margin. When the actual loss relationship differs, use brute-force accounting rather than δ/m as a standalone profitability test.

need not result from a small change in relative price, and the data covered DeepIntent RFPs rather than every possible shift to social media or other alternatives. Customers also could use several advertising platforms at once; treating a matched win as 100% diversion may overstate dollar diversion. Dr. Israel illustrated the point with a \$600,000 opportunity for which Lasso allegedly received only \$12,000, although the win/loss method treated the observation as a match. Campaign sizes also differed, so a customer-count diversion rate need not equal a dollar diversion rate. Finally, the result depends on measuring the economically relevant incremental margin. The court nevertheless credited Dr. Hatzitaskos's analysis, and the large gap between 79.4% and the 10.6% or 21.2% thresholds made the conclusion robust to substantial adjustment. Moreover, Dr. Hatzitaskos reran the HMT using Dr. Israel's estimates of both DeepIntent's margin and the aggregate diversion ratio, and the test still was satisfied for a candidate market limited to DeepIntent, Lasso, and PulsePoint. The court found that result compelling. These qualifications limit the method's generality; they do not change the court's result in *IQVIA*.⁹

Dr. Hatzitaskos's HMT analysis in *IQVIA* demonstrates how quantitative economic evidence can corroborate a market definition supported by qualitative evidence. The court credited a one-product critical recapture analysis in which the estimated actual aggregate diversion ratio of 79.4% substantially exceeded the critical recapture rates of 10.6% and 21.2%. The wide margin helped answer the defendants' methodological objections to using win/loss data as a proxy for price-sensitive diversion. The court treated the HMT evidence as quantitative confirmation of the commercial evidence that HCP programmatic advertising constituted a relevant market.

Please let me know if you have any questions or would like to discuss this matter further.

⁹ Win/loss data also can overstate diversion outside the candidate market, making the market appear broader than a more accurate test would indicate. Because using win/loss data to estimate aggregate diversion may bias the inferred market in either direction, a court in a closer case should evaluate the direction and magnitude of the likely error and may discount the analysis against the proponent of the test.