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Aetna-Humana and Algorithmic Market Definition in the Guidelines

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The Department of Justice and Federal Trade Commission Horizontal Merger Guidelines outline the Agencies' enforcement policy on horizontal mergers.[1] The Guidelines play an important role during all phases of the merger review process, including litigation.[2] Because merger review is fact specific and because facts vary greatly across mergers, the Guidelines must be general enough to accommodate the nuances of a wide range of potential scenarios. This need to preserve generality can lead to ambiguities that can complicate counseling, merger review, and litigation.

We discuss here one such ambiguity in the Guidelines, concerning whether market definition must be strictly algorithmic or may instead be a more holistic process informed by both qualitative and quantitative evidence. The recent Aetna-Humana health insurance merger trial was the first since the 2010 revisions of the Guidelines to focus squarely on this ambiguity. A number of products were at issue in the trial, but the key question was whether the merger would reduce competition in the sale of Medicare Advantage plans to seniors eligible for Medicare. In what follows, we explore the market definition questions raised at trial and their implications for practitioners.

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Constructing a Candidate Market

In an effort to limit the potential for gerrymandering,[3] earlier versions of the Guidelines laid out an algorithmic approach to defining markets. For example, the 1992 Guidelines, as revised in 1997, described a product market definition process that would begin with a single product and add substitutes one at a time, in order of their closeness of substitution, until the collection of products passed the hypothetical monopolist test.[4] This algorithmic approach ensured that a market can-

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[1] U.S. Dep't of Justice & Federal Trade Comm'n, Horizontal Merger Guidelines (2010), http://ftc.gov/os/2010/08/100819hmg.pdf [hereinafter 2010 Guidelines].

[2] For example, the court in *Aetna* noted that "[a]lthough the Guidelines are not binding, the D.C. Circuit and other courts have looked to them for guidance in previous merger cases." United States v. Aetna Inc., 240 F. Supp. 3d 1, 11 n.7 (D.D.C. 2017) (citing FTC v. H.J. Heinz Co., 246 F.3d 708, 716 n.9 (D.C. Cir. 2001)); FTC v. Sysco Corp., 113 F. Supp. 3d 1, 38 (D.D.C. 2015).

[3] In this context, gerrymandering refers to defining a market whose boundaries exclude an important substitute or include an unimportant substitute, leading to erroneous conclusions about competitive effects.

[4] U.S. Dep't of Justice & Federal Trade Comm'n, Horizontal Merger Guidelines § 1.11 & n.9 (1992, rev. 1997), https://www.ftc.gov/sites/default/files/attachments/merger-review/hmg.pdf [hereinafter 1992 Guidelines] ("Specifically, the Agency will begin with each product (narrowly defined) produced or sold by each merging firm and ask what would happen if a hypothetical monopolist of that product imposed at least a 'small but significant and nontransitory' increase in price, but the terms of sale of all other products remained constant. If, in response to the price increase, the reduction in sales of the product would be large enough that a hypothetical monopolist would not find it profitable to impose such an increase in price, then the Agency will add to the product group the product that is the next best substitute for the merging firm's product. . . . Throughout the Guidelines, the term 'next best substitute' refers to the alternative which, if available in unlimited quantities at constant prices, would account for the greatest value of diversion of demand in response to a 'small but significant and nontransitory' price increase.").

not be gerrymandered to exclude a close substitute. If a market that begins with product A includes product C, and product B is a closer substitute for product A, then product B must also be in the market. Indeed, it will have been added before product C.

The 2010 Guidelines retain the use of the hypothetical monopolist test but do not contain a formal algorithm for constructing the group of products to be tested. Instead, they emphasize that there may be more than one valid relevant market and that market definition is a means to an end.

> The hypothetical monopolist test ensures that markets are not defined too narrowly, but it does not lead to a single relevant market. The Agencies may evaluate a merger in any relevant market satisfying the test, guided by the overarching principle that the purpose of defining the market and measuring market shares is to illuminate the evaluation of competitive effects.[5]

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The approach described in the 2010 Guidelines better reflects how product markets are defined in practice. Namely, the Agencies focus on testing candidate markets that constitute intuitive, natural groupings of products that are based upon documentary and other qualitative evidence and can be tested using available data. This is consistent with the *Brown Shoe* indicia that remain persuasive in litigation.[6] The key *Brown Shoe* indicia include "industry or public recognition" of the market, a "product's peculiar characteristics or uses," "distinct customers," and "specialized vendors."[7]

This approach, however, gives the Agencies discretion in constructing the products to be tested and thus creates a risk that an incorrect market definition will lead to incorrect conclusions about competitive effects. The 2010 Guidelines contain language to mitigate this risk. Unfortunately, this language, and related language that follows, admits multiple interpretations. The merging parties in *Aetna*, for example, read this language to suggest that the 2010 Guidelines prescribe a variant of the earlier algorithmic approach.

The language in question begins before Example 6 in the 2010 Guidelines and continues through the end of that example.

> When applying the hypothetical monopolist test to define a market around a product offered by one of the merging firms, if the market includes a second product, the Agencies will *normally* also include a third product if that third product is a closer substitute for the first product than is the second product.
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> . . . .
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> *Example 6:* In Example 5, suppose that half of the unit sales lost by Product A when it raises its price are diverted to Product C, which also has a price of $100, while one-third are diverted to Product B. Product C is a closer substitute for Product A than is Product B. Thus Product C will *normally* be included in the relevant market, even though Products A and B together satisfy the hypothetical monopolist test.[8]

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[5] 2010 Guidelines, *supra* note 1, § 4.1.1.

[6] *See, e.g.*, Petition for Review of a Decision of the Fed. Trade Comm'n, McWane, Inc. v. FTC, No. 14-11363 at 26 (11th Cir. Apr. 15, 2015) ("'Courts routinely rely on qualitative economic evidence to define relevant markets.' . . . Thus, for example, in *Polypore*, the Commission's market definition was affirmed by this Court on the basis of the *Brown Shoe* indicia, apparently without an econometric study." (citation omitted)); FTC v. Whole Foods Mkt., Inc., 548 F.3d 1028, 1039 (D.C. Cir. 2008) ("We look to the *Brown Shoe* indicia, among which the economic criteria are primary"); United States v. H&R Block, Inc., 833 F. Supp. 2d 36, 52 (D.D.C. 2011) ("When determining the relevant product market, courts often pay close attention to the defendants' ordinary course of business documents." (citations omitted)).

[7] Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

[8] 2010 Guidelines, *supra* note 1, § 4.1.1 (emphasis added).

Absent the word "normally," and read without further context, this language implies that any relevant market must be consistent with the algorithmic approach to market definition specified in earlier versions of the Guidelines. Specifically, a product cannot be included in a candidate market unless every other product that is a closer substitute is also included. Under this approach, one could rank every substitute by how close of a substitute it is to the focal merging party product. The only market definition question would then be how far down this list one would have to go to pass the hypothetical monopolist test.[9]

However, the Guidelines make clear by using the word "normally" twice that there are reasonable exceptions to such an algorithmic approach. This is consistent with the language quoted earlier, which notes that there are typically multiple valid relevant markets and that market definition is a means to assessing competitive effects.[10] What the Guidelines do not do is specify precisely when exceptions to the algorithmic approach are reasonable.

A clarification that is consistent with common practice would be that the starting point for candidate markets can be any natural and intuitive grouping of products that is consistent with the type of *Brown Shoe* indicia that courts and practitioners routinely consider. Following the algorithmic approach can instead lead to counterintuitive markets that look gerrymandered in comparison, particularly when data on closeness of substitution are incomplete.

Product Market Construction in the *Aetna-Humana* case

Consider the example of *Aetna*. At the heart of the market definition fight in that case was the question of which products must be included in the candidate market before performing the hypothetical monopolist test. Seniors who are eligible for Medicare have two broad options in how they get their Medicare coverage. Most seniors either purchase a privately operated Medicare Advantage plan (which the government subsidizes) or get their Medicare coverage directly from the government. The latter option is frequently referred to as Original Medicare. The evidence at trial established that seniors frequently supplement the coverage provided by Original Medicare with private insurance that limits their exposure to cost sharing for medical care and prescription drugs.[11]

In *Aetna*, the government[12] alleged a product market of Medicare Advantage plans in 362 separate counties. This product market excluded all Original Medicare coverage options. Their government economic expert, Aviv Nevo, tested this product market using several versions of the hypothetical monopolist test, all of which it passed. The government therefore concluded, in conjunction with other evidence, that Medicare Advantage plans were a relevant product in those 362 counties.[13]

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[9] Earlier versions of the Guidelines also contained an explicit smallest market prescription, so how far down the list one must go was also specified: one stopped as soon as the group of products was large enough to pass the hypothetical monopolist test. The 2010 Guidelines state that the Agencies usually use the smallest relevant market that satisfies the hypothetical monopolist test, without specifying when they might deviate from this approach.

[10] *See* 2010 Guidelines, *supra* note 1, § 4.1.1. This language directly follows Example 6, further softening reliance on an algorithmic approach.

[11] Medicare Advantage plans have built-in limits to out-of-pocket medical costs and typically include prescription drug coverage.

[12] The plaintiffs in *Aetna*, here collectively referred to as "the government," included the United States, the States of Delaware, Florida, Georgia, Illinois, Iowa, and Ohio, the Commonwealths of Pennsylvania and Virginia, and the District of Columbia.

[13] *Aetna*, 240 F. Supp. 3d at 21 ("The government's economist, Dr. Aviv Nevo, analyzed whether the proposed market for the sale of individual Medicare Advantage plans would satisfy the hypothetical monopolist test. . . . Because Medicare Advantage passed under all formulations of his hypothetical monopolist tests, Nevo concluded that individual Medicare Advantage plans constitute a relevant product market.").

The defendants countered that at least some Original Medicare coverage options should have been included in the candidate market. They argued that the government was improperly excluding Original Medicare coverage options. In short, the defense alleged that the government was gerrymandering the market by excluding close substitutes that the merging parties did not own while including more distant substitutes.[14]

The defendants in *Aetna* attempted to find support for their argument in the language of Example 6. They argued that some of the less popular Medicare Advantage plans that were included in the relevant product market were more distant substitutes than were the most popular Original Medicare coverage options. As such, they argued that at least some Original Medicare coverage options should also have been included in the market, making it immaterial that the government's proposed product market passed the hypothetical monopolist test.[15]

[T]he defense alleged that the government was gerrymandering the market by excluding close substitutes that the merging parties did not own while including more distant substitutes.

Proving this claim was difficult. Accurate data were available on the enrollment of Medicare Advantage plans at the county level but data on enrollment in Original Medicare coverage options were not, nor were switching data from Medicare Advantage plans to specific Original Medicare coverage options.[16] The defendants' economic expert, Jonathan Orszag, therefore relied upon an argument that diversion to the smallest Medicare Advantage plan in some counties was so close to zero that it must have been the case that diversion was higher to at least one Original Medicare coverage option. The defendants' argument can be summarized like this:

(1) Some Medicare Advantage plans have very low enrollment.

(2) Diversion from other Medicare Advantage plans to these plans must be low.

(3) There are Original Medicare coverage options with high enrollment.

(4) Thus, even though an enrollee in a Medicare Advantage plan is generally less likely to switch to Original Medicare than to another Medicare Advantage plan, the enrollee is still more likely to switch to the most popular Original Medicare coverage option than to switch to the least popular Medicare Advantage plan.

(5) Thus, a proposed market that includes the least popular Medicare Advantage plan but excludes the most popular Original Medicare coverage option violates Example 6.

This approach has three significant flaws. First, while logically sound, it is speculative, as the defendants did not actually identify a specific Original Medicare coverage option that proved that Example 6 had been violated.[17]

Second, it ignores the fact that a candidate market that excluded the smallest Medicare Advantage plans would likely have passed the hypothetical monopolist test in many counties. Plans with negligible market share are not generally material to market concentration or compet-

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[14] *Id.* at 18 ("As a result of this overlap, defendants believe that 'a Medicare Advantage plan's closest cousins are often one or more Original Medicare options instead of other Medicare Advantage plans. Excluding all Original Medicare options in order to create an MA-only market would ignore the ample overlap between the two types of plans.'"); Testimony of Jonathan Orszag at 3068:9–3069:10, United States v. Aetna Inc., No. 1:16-cv-01494 (D.D.C. Dec. 19, 2016) [hereinafter Orszag Testimony].

[15] *Aetna*, 240 F. Supp. 3d at 24 ("The crux of Orszag's argument is that, in response to a price increase on a particular Medicare Advantage plan, there are likely to be Original Medicare options that enjoy greater diversion than the plan's most distant Medicare Advantage substitute. . . . Applying what he calls the 'circle principle,' which he derives from 'Example 6' of the Guidelines, Orszag argues that any such Original Medicare options must be included in the product market. By ignoring the circle principle, defendants assert, Nevo has defined an overly narrow and conceptually flawed product market.").

[16] *Id.* at 26 n.19; Orszag Testimony, supra note 14, at 3070:7–13; Testimony of Jonathan Orszag at 3256:4–25, United States v. Aetna Inc., No. 1:16-cv-01494 (D.D.C. Dec. 20, 2016).

[17] As Judge Bates put it: "The problem was this more nuanced argument, however, is that it is almost entirely speculative. Orszag has not identified an Original Medicare product of the kind that he describes above . . . ." *Aetna*, 240 F. Supp. 3d at 26.

itive effects, and excluding them would not have affected the government's argument. But the qualitative and quantitative evidence showed that Medicare Advantage plans are a cohesive group of products, so a market definition that excluded them would have looked incomplete and less intuitive.[18]

Third, given the lack of county-level data on Original Medicare coverage option enrollment, the realistic product market options were either a Medicare Advantage market or a market that includes all Medicare Advantage plans and all Original Medicare coverage options. A market including all Original Medicare coverage options is clearly too broad given the qualitative evidence and the data on switching from Medicare Advantage to Original Medicare.[19] Such an omnibus market would serve to obscure rather than illuminate the merger's potential competitive effect: that there is valuable competition between Medicare Advantage plans offered by Aetna and Humana and that the merger would eliminate this competition.[20]

The court weighed both sets of arguments and found for the government, agreeing that Medicare Advantage plans in each of the alleged counties constituted a relevant product market. The opinion emphasizes the qualitative evidence that industry participants view Medicare Advantage plans as a natural grouping of products and the fact that such a grouping passed multiple hypothetical monopolist tests. As such, the judge appears to have used the approach suggested by the government—that it is reasonable to test a coherent group of products that shed light on competitive effects using the hypothetical monopolist test—and rejected the allegation of gerrymandering advanced by the defendants:

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> [D]efendants plainly believe that the lack of a complete set of diversion ratios undermines the government's ability to carry its burden on market definition.
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> The Court disagrees. If taken to its logical conclusion, defendants' position implies a purely econometric approach to market definition, requiring the government to calculate individual diversion ratios for all the products potentially in the market, rank them from highest to lowest, and, at some point, draw a line between those products that fall within the market and those products that fall outside. But that technical approach is not taken by the cases. Econometric evidence can be powerful evidence, but it is not the only evidence that courts consider in defining the relevant market. Indeed, the cases relied upon by both parties here have considered the *Brown Shoe* factors and ordinary course of business documents, in addition to econometric evidence, before reaching conclusions about the proper market definition.[21]

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[18] The opinion discusses, among other pieces of evidence, the fact that the two firms manage and price their Medicare Advantage products separately from their Medicare Supplement businesses, the dearth of company Medicare Advantage documents discussing competition from Original Medicare, the abundance of company Medicare Advantage documents discussing intense competition from other Medicare Advantage companies, and switching data that support the notion that Medicare Advantage plans attract distinct customers. *Id.* at 14–17.

[19] For example, the Kaiser Family Foundation estimated that more Medicare Advantage enrollees die in a given year than switch to Original Medicare. Testimony of Richard Frank at 113:18–114:10, United States v. Aetna Inc., No. 1:16-cv-01494 (D.D.C. Dec. 5, 2016).

[20] The defendants also did not show that alternative product markets would necessarily have led to lower levels of concentration. For example, if smaller Medicare Advantage plans were owned by third parties, a narrower market that excluded them may actually have increased concentration. Testimony of Aviv Nevo at 3568:9–3569:13, United States v. Aetna Inc., No. 1:16-cv-01494 (D.D.C. Dec. 21, 2016). Similarly, even if Original Medicare options had higher total enrollment than Medicare Advantage plans in a county, a broader market that included Original Medicare options may not have been less concentrated if Aetna and Humana had high enrollment in the Medigap and Part D plans in that county. Moreover, the government did not argue that there is no competitive interaction between Medicare Advantage plans and Original Medicare, and their market definition did not mean that they ignored the influence of Original Medicare. Their expert included competition from Original Medicare in his competitive effects analysis. *Aetna*, 240 F. Supp. 3d at 31; Testimony of Aviv Nevo at 1603:6–15, United States v. Aetna Inc., No. 1:16-cv-01494 (D.D.C. Dec. 12, 2016).

[21] *Aetna*, 240 F. Supp. 3d at 26.

The key takeaway is that a court has endorsed a product market that reflects business realities but may run afoul of the strict hypothetical monopolist test algorithm that appears in past versions of the Guidelines.

The key takeaway is that a court has endorsed a product market that reflects business realities but may run afoul of the strict hypothetical monopolist test algorithm that appears in past versions of the Guidelines. While the algorithmic approach is closely related to Example 6 in the present version of the Guidelines, a more holistic approach is consistent with specific language elsewhere in the Guidelines (see, e.g., Section 4.1.3) and, more generally, with the emphasis throughout the Guidelines on the primacy of competitive effects relative to market definition.

Conclusion

To block any proposed transaction that they believe to be anticompetitive, the Agencies must typically prevail at trial or be likely to do so. Trials therefore offer an opportunity to test the Guidelines as a coherent framework for merger analysis rather than just a summary of the Agencies' stated practices. This process can reveal ambiguities in the Guidelines if parties hold opposing views on what exactly the Guidelines prescribe.

In *Aetna*, Judge Bates ruled on one such ambiguity when he rejected the notion that market definition should proceed algorithmically based on total diversion alone. In doing so, he affirmed a more flexible view of market definition in which the products that make up a market are based on both qualitative and quantitative evidence. This approach is consistent with the more flexible Guidelines that were introduced in 2010, and with the move in those Guidelines away from market definition and a focus on competitive effects. ●