III. MARKET DEFINITION AND MARKET POWER

A. Overview

The idea of a "market," and the related concept of "market power," are among the most important foundations of all antitrust law and practice. Market definition is frequently a dispositive issue in antitrust investigations and litigations of all kinds, and many substantive rules of antitrust law turn on whether market power has been created, augmented, or entrenched. We met some economic fundamentals of markets in Chapter II: in this Chapter, we will turn in some detail to the legal dimensions of markets and market power.

What is a market?

An antitrust "market definition" is an effort to describe or map a competitive environment in which a business supplies or purchases a product or service. As you already know, antitrust law often requires a court or agency to determine whether a practice or transaction will affect competition. To do that, antitrust lawyers often find it helpful to form a rough or working understanding of which products and services will count as "in competition" with one another for the purposes of legal analysis. Market definition can be thought of as a way of drawing a line between those that are "in" and those that are "out" of the sphere of competition for the purposes of antitrust analysis. A market definition is thus a simplification, for analytical purposes, of what is usually a much messier economic reality.

The crucial dynamic underpinning market definition is the insight from microeconomics that one product or service will tend to exercise a competitive constraint on another to the extent that purchasers of the first product or service will regard it as a *substitute* for the second. If Product A is a substitute for Product B, then purchasers can turn (or threaten to turn) to Product A in response to a price increase in Product B, and this fact will tend to limit the ability of Product B's supplier to profitably increase prices.[169] Substitutability can be a complicated matter, as there may be many different substitutes for any given product or service, and different purchasers may regard different alternatives as closer or more distant substitutes for the original product or service, given their own needs and preferences.

We are all used to substituting one product or service for another in everyday life. For example, suppose that you went to the store to buy coffee and found it significantly more expensive than you had expected. In response, you might switch to a substitute by purchasing tea, decaffeinated coffee, or another kind of drink altogether. Or you might be willing to pay the significantly increased price for coffee. Others, of course, would make different choices in your shoes. The higher the price that the store asked for coffee, the more consumers would turn to other things instead: so the fewer units of coffee the store would sell.

This dynamic of substitution underpins a general principle that we saw in Chapter II: as the price of a product or service increases (or as its quality diminishes), different purchasers will substitute away at different price (or quality) levels, and may switch to a variety of products or services when they do. Suppliers accordingly understand that, if they increase their prices, fewer people will buy at the higher price. We saw in Chapter II that traditional microeconomics assumes that suppliers will try to find the pricing point at which these forces lead to the maximization of profits, and antitrust law likewise assumes that they will do so.

A Reminder of Some Technical Terms

As you will remember from Chapter II, those who will substitute more readily are called more "elastic" purchasers, and those who will be the first to substitute are called the "marginal" purchasers. By contrast, those who are willing to pay more than other purchasers for the original product or service before being driven away are more "inelastic"

[169] More precisely, substitutability is a one-directional question: the extent to which existing purchasers of Product A may regard Product B as a reasonable alternative for Product A need not be the same—indeed, is usually not the same—as the extent to which existing purchasers of Product B may regard Product A as a substitute for Product B. Can you think of real-world examples?

purchasers, and they constitute the "inframarginal" (*i.e.*, "below the margin") demand for the product or service. The extent to which a percentage change in the supplier's own price will cause a percentage change in demand for its product or service is the supplier's *own-price elasticity of demand*, and it reflects the willingness of purchasers to switch to substitutes in response to such a price increase. A high own-price elasticity of demand means that purchasers are willing and able to switch away to alternatives, suggesting that substitutes are generally pretty close at prevailing prices; a low own-price elasticity of demand indicates that purchasers are unwilling or unable to switch away, suggesting that substitutes are not particularly appealing at prevailing prices. Finally, the extent to which a percentage increase in the price of Product A leads to percentage increase in demand for Product B in particular is called the *cross-price elasticity of demand of B with respect to A,* or just the *cross-elasticity of demand of* B with respect to A. A higher cross-elasticity means that Product B is a closer substitute for Product A: for example, if many consumers would suddenly try to buy tea in response to a small price increase in coffee, but hardly anyone would switch to fruit juice, we can say that tea is a closer substitute for coffee than fruit juice is.

As a matter of economic theory, the universe of substitutes for a particular product or service may be very large if we include very distant substitutes. For example, if the price of coffee were to be significantly increased across the United States, there might be a resulting increase in demand—at least to some extent—for many other drinks, from closer substitutes like tea and energy drinks to more distant substitutes like fruit juices, sodas, and alcoholic drinks.

Antitrust *law* tends, at least for some purposes, to reduce this economic complexity to a more black-and-white legal question: whether a particular product or service is "in" or "out" of a relevant antitrust "market." Of course, there is no such thing in the world as a market: there are only degrees of substitutability from one product or service to another. But the purpose of antitrust market definition is to reduce the complexity of the real world to something that makes it easier for an agency or court to focus on the competitive constraints that matter, while ignoring the rest. Drawing bright lines like this around the most important substitutes makes it possible to speak about things like "market shares," "market concentration," and "the number of competitors in the market."

You may already have guessed that, although the idea of a "market" is a simplification, defining one in practice can be difficult. We can approach this exercise with the help of evidence of many kinds: thus, for example, we might have access to information about "natural experiments" in which a product actually became more expensive or harder to obtain, generating evidence about purchaser substitution in response. Or we might have access to ordinary-course analyses or other documents prepared by market participants, including purchasers and competitors, expressing views about substitution and the scope of competition. We might also be able to call market participants—the relevant suppliers, their competitors, their customers, and their suppliers—to testify, answering questions under oath about how things have worked in the past, or probably would work under certain hypothetical conditions. But not all this information may be available: and, when it is available, it may not all point to the same answer.

Two ways to define a market are particularly important in practice. One way is the "hypothetical monopolist test" and particularly the version of it known as the "SSNIP test" (a "SSNIP" is a "*small but significant non-transitory increase in price*"). This test is essentially a thought experiment. It involves starting with the product or service that we are focused on and adding substitutes one at a time, starting with the closest substitute, until a hypothetical monopolist of *all* included products would find it profitable to increase the price of at least one of those products or services by a significant amount (traditionally, 5–10%) for a non-transitory period of time (traditionally, at least a year). We do this in order to figure out how many of these products or services must come under common control before the supplier has gained the power to inflict economic harm on others. Of course, applying this test with any degree of confidence requires a good deal of information about what real purchasers will do in response to a price increase. It also assumes that everything is currently being supplied at the competitive price rather than a supracompetitive "monopoly" price (can you see why we would get a misleading answer if we tested the profitability of a price increase *above* the monopoly price?).[170]

[170] See the discussion of the "Cellophane fallacy" below, § III.B.(a). Clue: is a price increase above a monopoly price *ever* profitable?

Another way to define a market is through the appraisal of qualitative evidence about the relevant products or services, in an effort to identify the relevant similarities or differences that, in light of intuition and market practice, may affect whether different products or services are competing in the same market. As we shall see below, this less formal approach is often associated with the Supreme Court's *Brown Shoe* decision.[171]

In some cases (although not all), geography is a significant consideration in market definition. When transportation is cheap and fast, purchasers may be largely indifferent to the location of a supplier. But in other cases—including most obviously when transportation is expensive, slow, or impossible—purchasers may care about the location of their suppliers, such that a supplier of a particular product or service supplied in a distant location may be inferior, from the purchaser's perspective, to an otherwise-identical product or service that happens to be supplied closer to the purchaser. (In everyday life, we all experience some kinds of demand for which geography appears to matter. For example, if you woke up on a weekend morning and discovered you had run out of milk or cream for your coffee or tea, how far would you be willing to travel to buy more?).

When geography matters, a court or agency often refer to a "geographic market," tracing the outer contour of the market according to the geographic area in which products or services compete. Just like any other dimension of market definition, this is a simplification: suppliers outside the geographic market may in fact exert some constraint.

The Role of Market Definition in an Antitrust Case

A cautionary note! It is important to appreciate right from the outset that market definition is not a mechanical or abstract exercise in an antitrust analysis. You should not think of market definition as a robotic "first step" before identifying and analyzing a theory of harm. (This is a common mistake in law school antitrust exams!) Instead, the role of market definition—and which valid market definition is the "right" or "best" one for an individual case—depends on the nature of the individual theory or story of harm. Let's unpack that a little.

First: many courts have said that a formal market definition is not strictly required as a matter of law in every antitrust case. Liability under the Clayton Act—including Section 7, which governs merger cases, as well as Section 3, which governs certain vertical practices—probably *does* strictly require a market definition. The Clayton Act explicitly refers to a "line of commerce" (a term that is usually understood to mean "market") as the zone in which competition may be harmed, from which courts often infer an obligation to plead and prove a market.[172] But the text of neither Section 1 nor Section 2 of the Sherman Act refers to a market. And under Sections 1 and 2, courts often recognize, at least in theory, that both market (or monopoly) power and the harmful tendency of a challenged practice or transaction can be proved by "direct evidence" without a theoretically pristine market definition.[173]

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

[172] *See*, *e.g.*, United States v. Bertelsmann S.E., No. 21-2886, at *11 (D.D.C. Nov. 7, 2022) (indicating that market definition is a "necessary predicate" in a Section 7 case). *See generally*, *e.g.*, James Keyte & Kenneth B. Schwartz, *"Tally Ho!" UPP and the 2010 Horizontal Merger Guidelines*, 77 Antitrust L.J. 587, 594–99 (2011) (arguing that market definition is a statutory requirement under Section 7); Brown Shoe Co. v. United States, 370 U.S. 294, 324 (1962) ("The 'area of effective competition' must be determined by reference to a product market (the 'line of commerce') and a geographic market (the 'section of the country')"). *But see* Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 Yale LJ. 1996, 2015 (2018) ("The legislative history of Section 7 is not entirely clear on the issue, but more likely than not the two phrases ['line of commerce' and 'section of the country'] were never intended to have so precise a meaning. The phrase 'line of commerce' was in widespread use by both businesspeople and courts to describe a particular 'line' that a seller might sell, often including nonsubstitutable goods").

[173] *See*, *e.g.*, Ohio v. Am. Express Co., 138 S. Ct. 2274, 2285 n.7 (2018) ("Given that horizontal restraints involve agreements between competitors not to compete in some way, this Court [has] concluded [in such cases] that it did not need to precisely define the relevant market to conclude that these agreements were anticompetitive."); PLS.Com, LLC v. Nat'l Ass'n of Realtors, 32 F.4th 824, 838 (9th Cir. 2022) ("A plaintiff is not required to define a particular market for a per se claim, nor is it required to do so for a rule of reason claim based on evidence of the actual anticompetitive impact of the challenged practice[.]"); Republic Tobacco Co. v. N. Atl. Trading Co., 381 F.3d 717, 736 (7th Cir. 2004) ("[T]there are some circumstances where to establish a violation of antitrust laws it is unnecessary to prove that defendant wielded market power in a properly defined product and geographic market, and may rely instead on direct evidence of anticompetitive effects."); United States v. Microsoft Corp., 253 F.3d 34, 51–52 (D.C. Cir. 2001) (en banc) (confirming viability of direct proof of monopoly power under Section 2); Re/Max Int'l, Inc. v. Realty One, Inc., 173 F.3d 995, 1016 (6th Cir. 1999) (reaffirming viability of direct-effects evidence); In re Intuniv Antitrust Litig., 496 F. Supp. 3d 639, 658 (D. Mass. 2020) ("If the Plaintiffs have actual direct evidence of market power, they need not establish the relevant market."); In re Papa John's Emp. & Franchisee Emp. Antitrust Litig., Case No. 3:18-CV-00825-JHM, 2019 WL 5386484, at *9 (W.D. Ky. Oct. 21,

(There is some disagreement about how exactly this can be done.[174]) In addition, some practices are automatically—i.e., "*per se*"— illegal regardless of their effects, or can be presumed illegal under a "quick look" standard, without a plaintiff being strictly required to define a market at all.[175] We will meet these standards later.[176]

But theory and practice aren't always the same thing! Defining a relevant antitrust market is usually very important in practice, almost invariably expected by judges, and is often the central issue in antitrust investigations and litigations.[177] An effective antitrust case usually requires a fairly clean story about who is in the competitive cast of characters, and who is out, and why: and in many cases, that means a market definition.[178] More generally, agencies and (especially) courts derive practical advantages from working with the relatively clear "in or out" binary of market definition—which make it possible to calculate "market shares" and talk about the "number of market participants" rather than handle all the messy graduations of economic reality. And, as we will see in Chapter VIII, a market definition is a prerequisite for the application of the "structural presumption" thresholds in a merger case, which are a crucial element of many successful merger challenges. And some cases contain language arguably suggesting a stricter market definition requirement.[179] So: for these and other reasons, almost all antitrust cases involve considerable attention to—and often heated disputes over—the market in which competition takes place.

Second: the "right" or "best" market definition in an antitrust case is a function of the particular competitive concern, or theory of harm, that we are exploring. We are usually undertaking an antitrust analysis to figure out whether, say, coordinating with *these particular entities*, or excluding *these particular rivals*, or acquiring *this particular target*, may harm competition by creating, increasing, or entrenching market or monopoly power. The "right" candidate market is the one that best illuminates and tests that concern.

For example, suppose that a defendant operates one of three national chains of office-supply superstores, and that the defendant proposes to acquire one of the other two. When reviewing that merger, the evidence might support the conclusion that the relevant market should be limited to office-supply superstores (*e.g.*, because a hypothetical monopolist of office-supply superstores would be able to profitably implement a significant price increase). But now suppose that, instead of acquiring a rival superstore, the defendant had figured out a way, though exclusionary contracts with upstream suppliers, to cut off *non*-superstores' access to office supplies, thus excluding supermarket chains, mail-order channels, and other sellers as sources of competitive pressure. When analyzing that practice, evidence might support a valid market definition that includes not just superstores but also the victims of exclusion: indeed, cutting off the more distant rivals in this fashion might well increase the defendant's pricing power.[180] Importantly, both the narrower (superstores-only) and the broader (all sellers) markets might be technically valid.

So what does all this mean in practice? It means that antitrust lawyers *start* by identifying a particular theory or story of harm, and *then* define a market that will test that particular competitive concern. "Could this practice or

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2019) ("In [AmEx] , the Supreme Court indirectly stated that, when dealing with a horizontal restraint that has an adverse effect on competition, a plaintiff need not define the relevant market."); Rio Grande Royalty Co. v. Energy Transfer Partners, L.P., 786 F. Supp. 2d 1190, 1197 (S.D. Tex. 2009) ("A plaintiff, therefore, does not need to define a market if it can support its claim with direct evidence that the defendant controlled prices or excluded the competition.").

[174] For a lucid discussion, *see* Daniel A. Crane, *Market Power Without Market Definition*, 90 Notre Dame L. Rev. 31 (2014).

[175] *See*, *e.g.*, FTC v. Indiana Fed. of Dentists, 476 U.S. 447, 460–61 (1986).

[176] *See infra* Chapter IV.

[177] Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 Antitrust L.J. 129, 129, 131 (2007) (noting that "[t]hroughout the history of U.S. antitrust litigation, the outcome of more cases has surely turned on market definition than on any other substantive issue," while "market definition may not be required when market power or anticompetitive effect can be demonstrated directly through means other than inference from the number, size distribution, and other characteristics of firms").

[178] *See* Joshua A. Newberg, *The Narrative Construction of Antitrust*, 12 S. Cal. Interdisc. L.J. 181 (2003).

[179] *See*, *e.g.*, Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 457 (1993) (highlighting the language in Section 2 that refers to "any part of [interstate or international] trade or commerce," and suggesting that "it is beyond doubt that [monopolization] requires proof of market power in a relevant market"); Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp., 382 U.S. 172, 177 (1965) ("To establish [monopolization], it would then be necessary to appraise the exclusionary power of the illegal patent claim in terms of the relevant market for the product involved. Without a definition of that market there is no way to measure [the defendant's] ability to lessen or destroy competition.").

[180] For a helpful discussion, *see*, *e.g.*, David Glasner & Sean P. Sullivan, *The Logic of Market Definition*, 83 Antitrust L.J. 293, 312 (2020); *see generally* Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 Antitrust L.J. 129 (2007).

transaction lead to harm, given the availability of substitutes?" is usually the guiding concern. Some complex cases many involve multiple different practices or competitive concerns: and, as a result, multiple different market definitions may be appropriate. Turning all this into a crisp, clean story for a busy generalist judge can be hard. And that's the art of antitrust litigation!

Market definition is the subject of vigorous debate among scholars and commentators, in part because it is so important in litigation, and in part because it involves a simplification of a more complicated reality, with a resulting loss of information.[181] Indeed, some scholars have proposed abandoning the practice of market definition altogether. Louis Kaplow, for example, has prominently argued that the standard methods of market definition are incoherent or circular, and that courts should instead focus on the underlying economic realities.[182] Other scholars, by contrast, have proposed making market definition even *more* central in antitrust cases, including by adopting rules that make metrics like market share or market concentration more important, or even dispositive.[183]

As you read cases and scholarship on market definition, it is worth remembering that the foundation of all market definition, at least in principle, is the *actual* behavior—observed or predicted—of real market participants with real demand for products and services. This can lead to some results that may strike you as odd, and market definitions that may seem surprisingly broad or narrow. If real consumers or other purchasers do in fact care about some feature or dimension of a product or service, then that feature or dimension matters for competition and for antitrust analysis. This means that markets can be defined around preferences that may seem oddly specific or artificial from a distance: say, "luxury fountain pens," "premium and organic natural supermarkets," or "personal social networking."[184] Antitrust takes demand as it finds it, and at least on paper antitrust law takes no view on

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[181] *See*, *e.g.*, Robert Pitofsky, *New Definitions of Relevant Market and the Assault on Antitrust*, 90 Colum. L. Rev. 1805, 1807 (1990) ("Unfortunately, no aspect of antitrust enforcement has been handled nearly as badly as market definition. This failure has resulted part because of persistent and unreconciled conflicts of approach in important judicial opinions. It also reflects the fact that the critical issue in relevant market definition—(1) what products are sufficiently close substitutes to compete effectively in each other's market (definition "relevant product market"); (2) what firms are sufficiently proximate to others in spatial terms to compete effectively (definition of "relevant geographic market"); and (3) what substitute sources of supply can diverted promptly and economically to offer effective competition ("supply substitutability")—are all matters of degree that are extremely difficult to measure."); *see also* Christine S. Wilson & Keith Klovers, *Same Rule, Different Result: How the Narrowing of Product Markets Has Altered Substantive Antitrust Rules*, 84 Antitrust L.J. 55, 59 (2021) ("[O]f the 12 product markets defined in Section 7 cases decided by the Supreme Court, half have narrowed over time, with six product markets (used in 12 Supreme Court cases)—banking, beverage containers, energy, footwear, groceries, and spices—narrowing markedly. The remaining six product markets (used in seven Supreme Court cases)—automotive paint, beer, electrical conductor, natural gas, sodium chlorate, and spark plugs—have remained more or less the same. Remarkably, none of the 12 product markets has broadened since then.").

[182] Louis Kaplow, *Market Definition: Impossible and Counterproductive*, 79 Antitrust L.J. 361 (2013).

[183] Tim Wu, THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE (2018) 129.

[184] *See* United States v. Gillette Co., 828 F. Supp. 78, 82 (D.D.C. 1993) ("[P]laintiff has provided ample evidence that fountain pens in the $50 to $400 range effectively do not compete with fountain pens either below or above that range. Plaintiff therefore has met its Clayton Act burden. In contrast to fountain pens with SRPs below $50, the fountain pens here at issue afford their users (as well as those who merely put them in their breast pockets) image, prestige, and status. In accordance with this prestige, manufacturers, retailers, and purchasers of the pens recognize that there is a distinction between these pens, which several of plaintiff's affidavits suggest are priced at approximately $50 and up, and those pens which are priced below this threshold. The evidence suggests that, should the price of a fountain pen costing, for example, $60 be increased in a non-trivial, non-transitory fashion, consumers will nonetheless purchase the now-costlier pen rather than substitute a less expensive, less prestigious model. In other words, there is a low cross-elasticity of demand between these pens and those priced below $50. Similarly, fountain pens priced above $400 also are not interchangeable with pens costing less than $400. Again, there is a threshold beyond which the pens become mere collectors' items or 'jewelry' pieces, and the evidence suggests that consumers will not substitute the $400-and-up pens if prices were to be raised on premium fountain pens."); FTC v. Whole Foods Market, Inc., 548 F.3d 1028, 1037 (D.C. Cir. 2008) ("As the FTC presented its case, success turned on whether there exist core customers, committed to [premium natural and organic supermarkets], for whom one should consider PNOS a relevant market. . . . The district court's error of law led it to ignore FTC evidence that strongly suggested Whole Foods and Wild Oats compete for core consumers within a PNOS market, even if they also compete on individual products for marginal consumers in the broader market."); FTC v. Facebook, Inc., 560 F.Supp.3d 1, 17 (D.D.C. 2021) ("All Plaintiff must do at this stage is provide a plausible explanation as to why users would not switch, even if they technically could, from [personal social networking ("PSN")] services to other services if prompted by a price hike. . . . While the agency certainly could have provided more on that front, the fact that other services are not primarily used for the sort of personal sharing that is the hallmark of a PSN service seems a plausible reason why little switching would occur. Whether due to network effects or the norms around what sort of content is generally posted on different platforms, it is not a stretch to imagine that users are reluctant to share a highly personal milestone on LinkedIn or post a video of their child's first steps to YouTube.").

whether particular preferences are more or less desirable, or worth protecting, than others.[185] It is the real preferences of real consumers, and other market participants, that constitute the foundations of competition, and thus of antitrust itself. Keep this in mind as you read this Chapter!

What is market power?

The idea of market power—and its close cousin "monopoly power," which just means a large amount of market power[186]—is central to antitrust law. A good deal of antitrust analysis aims to determine whether a practice or transaction will create market power, or extend its magnitude or durability.

Unfortunately, it is not always easy to define market power. One of the simplest definitions of market power is the ability to set a profit-maximizing price above the level that would result from a perfectly competitive market. The larger the margin of price above marginal costs, the greater the holder's market power.[187] But it turns out that it would be hard to live with this definition in practice. For one thing, almost every business has some power in this sense. Competition among literally perfect substitutes is very rare in the real world: products are commonly differentiated from one another, and consumers often exhibit brand loyalty—for which they will pay—including when the underlying product or service is identical. As a result, many real-world businesses are able to turn a profit in excess of returns in a perfectly competitive market.[188] Indeed, as Dan Crane points out, "most markets could not function if prices were equated to marginal cost."[189] It also often turns out to be extremely difficult to calculate costs accurately, and to attribute fixed or common costs in a non-arbitrary way to sales of individual products and services, to allow such a margin to be measured with confidence.

Moreover, on this definition it is not obvious that the creation of market power is really a bad thing, even if everything else is held constant. Every software or music company, for example, charges prices far in excess of the marginal cost of supplying a new copy of the software, or a new copy (or stream) of a musical recording. In fact, market power in the sense of margin could represent something that we might think is desirable. A pure efficiency that reduces a business's costs may well have the effect of increasing the business's margin compared to what it was before, while also lowering its profit-maximizing price. But this is usually the kind of thing that we usually think antitrust law—and competition in general—is supposed to encourage, not penalize. Would we want a standard that sees a fall in costs and prices as a problem, simply because margin has increased?

A second common definition focuses on whether a business would increase its profits by *raising* its prices or reducing output.[190] In the most common formulation, market power is present if the business in question would increase its profits if it increased price by implementing a SSNIP (see above) of 5–10%. But the difficulty with this formulation is that it presupposes that the business has not already exercised whatever market power it holds: that is, that it is not currently pricing rationally, contrary to the basic assumption of all antitrust analysis that businesses act rationally to maximize their profits.[191] And if the business is already setting its profit-maximizing price—even if it is a strict monopolist setting a strict monopoly price—then further price increases will not, by definition, be

[185] Antitrust's general neutrality among preferences and markets raises some interesting questions—and opportunities for reasonable disagreement!—including about how antitrust treats products and services that some people consider undesirable or harmful (or even that are controlled or prohibited by law), or markets for products and services that might be described as necessary for human life or flourishing. Should antitrust law treat markets for illegal drugs, markets for headache tablets, and markets for lifesaving drugs identically? Should these forms of demand be equal in the eyes of antitrust analysis? Consider also that, while antitrust doctrine may be formally indifferent to the nature and "importance" of a particular market, antitrust *enforcers* may have views of their own about which markets should be prioritized for attention, or for enforcement action.

[186] You may be wondering what it really means to have a "large" amount of market power, how much is enough, and how we could measure it. This question is surprisingly complicated, and we will come back to it in Chapter VII.

[187] As we saw in Chapter II, a metric called the Lerner Index is defined (to summarize and simplify a bit) as margin over price. *See, e.g.*, Kenneth G. Elzinga & David E. Mills, *The Lerner Index of Monopoly Power: Origins and Uses*, 101 Am. Econ. Rev. 558 (2011)

[188] Benjamin Klein & John Shepard Wiley Jr., *Competitive Price Discrimination as an Antitrust Justification for Intellectual Property Refusals to Deal*, 70 Antitrust L.J. 599, 629 (2003) ("Once firms produce unique products, an individual firm's own-price elasticity of demand and profit-maximizing price relative to marginal cost does not tell us the extent of its antitrust market power, that is, its ability to restrict market output and raise market prices above the competitive level.").

[189] Daniel A. Crane, *Market Power without Market Definition,* 90 Notre Dame L. Rev. 31, 57 (2014).

[190] This is a common version. *See*, *e.g.*, Ohio v. Am. Express Co., 138 S. Ct. 2274, 2288 (2018) ("Market power is the ability to raise price profitably by restricting output.").

[191] *See supra* note 134 and accompanying text.

profitable. In the famous *DuPont* (or "*Cellophane*") case, which dealt with cellophane film and other flexible packaging material, the Supreme Court missed this important point, and failed to spot what many observers consider having been clear monopoly power, because the court found it implausible that DuPont would increase its prices even further.[192] In honor of this case, this error is known as the "*Cellophane* fallacy."

A third practical approach to market power—and one that is often seen in everyday usage—focuses on a firm's "share" of a defined market rather than its existing margins or whether it would be profitable to increase prices. For example, many courts have stated that a high share of a relevant market is a basis to infer market power, if the market is protected by high barriers to entry.[193]

This certainly sounds like it has simplicity going for it. But there are at least three practical problems with this approach. The first problem is that the considerable difficulties and uncertainties involved in defining a market in the first place are present here in full measure: our discussion of market share is only as good as our definition of the underlying relevant market. The second is that it is often not at all obvious how to calculate a market share, even after a market definition has been established: share of units sold or total services provided? Share of dollars? Share of sales? The 2010 Horizontal Merger Guidelines generally favor "actual or projected revenues."[194] What about digital services: share of number of users, or users active during a particular period? Of time spent? Of advertising revenue? Over what time period? What about markets that work through bidding or auctions? And so on.[195] The third problem is that market share is a historical measure, whereas market power analysis is intended to measure present and future power: the ability to inflict harm today or in the foreseeable future. After all, just because a business sold more units than its rivals in the last year, or two years, does not necessarily mean that business is likely to be a dominant presence in the future. In an extreme case, it might even have exited the market.[196]

A fourth definition of market power is satisfied when a supplier can affect *market-wide* output and price by adjusting its own output: if an output reduction would simply shift sales to others, there is no power, but if it would lead to a price increase throughout the relevant market, power is established.[197] This may be more promising, but it suffers from some difficulties we have already seen, including that it requires that we start with a market definition to which the analysis is highly sensitive. Moreover, it is not obvious how to apply this test to differentiated markets in which the prices of some, but not all, other suppliers will likely increase in response to an output reduction.

So, market power is difficult to pin down, beyond the general notion that it means a significant degree of pricing power. So too with monopoly power, which just means a very substantial degree of market power. (Thus, as Einer Elhauge once put it, monopoly power is defined "as requiring a substantial degree of a sort of power that is itself defined to exist only when substantial."[198]) In practice, monopoly power is a demanding bar, as we will see in Chapter VII.

Finally, it is worth noting that power over price need not only result from the dominance of a single supplier: it may also result from a lessening of competition in a market where the participants can sustain a tacit agreement to reduce competition among themselves. As we saw in Chapter II, dynamics of this kind are more likely if, among other things, the market is concentrated and transparent, such that the participants can monitor one another's compliance with the terms of the tacit agreement and punish deviations. However, as we will see below, antitrust

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[192] United States v. E.I. du Pont de Nemours & Co. ("Cellophane"), 351 U.S. 377 (1956).

[193] *See, e.g.*, *Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1438 (9th Cir. 1995) ("ARCO's market share of 44 percent is sufficient as a matter of law to support a finding of market power, if entry barriers are high and competitors are unable to expand their output in response to supracompetitive pricing.").

[194] Horizontal Merger Guidelines (2010) § 5.2.

[195] *See generally*, *e.g.*, Gregory J. Werden, *Assigning Market Shares*, 70 Antitrust L.J. 67, 67 (2002) (noting that "there always are choices to be made" in calculating market shares, and that "because market shares never come close to telling the whole market power story, the goal in assigning them should be merely to accurately and usefully indicate the relative sizes of competitors in the market").

[196] *See* United States v. General Dynamics Corp., 415 U.S. 486 (1974).

[197] *See, e.g.*, Thomas G. Krattenmaker, Robert H. Lande & Steven C. Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 Geo. L.J. 241, 249 (1987) ("[A] firm or group of firms may raise or maintain price above the competitive level directly by restraining its own output.").

[198] Einer Elhauge, *Defining Better Monopolization Standards*, 56 Stan. L. Rev. 253, 259 (2003).

doctrine does not generally allow the market power of an oligopolistic group to be imputed to any individual participant as a matter of law.

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The rest of this Chapter brings together cases and other materials that illustrate some different facets of these important topics. Section B examines the hypothetical monopolist test—a recurrent feature of market definition—as well as the qualitative analysis exemplified by the Supreme Court's *Brown Shoe* decision. Section C considers some special cases of market definition, including cluster, bundle, price discrimination, and platform markets. Section D examines geographic dimensions of market definition. Section E discusses market power, market share, and entry barriers, and Section F turns to oligopoly.

B. Foundations of Markets: The Hypothetical Monopolist Test and *Brown Shoe*

Market definition, as noted above, is in general terms an effort to identify the important competitive constraints that affect the supply of a particular product or service by offering a reasonable substitute for it. There are a variety of reasons we might do this in an antitrust case. We might do it in order to identify competitive relationships (including to figure out whether the parties to a merger or agreement are, or are not, in competition with one another); to populate the set of all competitors (so we can calculate statistics like market shares and market concentration levels); and/or to work out whether the relevant businesses have, or could obtain, market power through a particular practice or transaction. We might also define a market in order to apply certain rules of substantive antitrust law, like the general (if somewhat fuzzy) rule that, at least in merger cases, competitive harms in a particular market may only be justified by reference to competitive benefits in that same market (*i.e.*, courts may not rely on "out of market" benefits to justify a transaction).[199]

There are two main methodologies for defining a market in an antitrust case. Both are focused on identifying the set of products and services that are a sufficiently close substitute, from the perspective of purchasers, to exert competitive discipline. These are, respectively, the hypothetical monopolist test, and the qualitative assessment associated with *Brown Shoe*. As applied today, these are probably best thought of as alternative approaches for answering the same question: "what substitutes constrain the ability of a supplier, or set of suppliers, to exert market power?" The hypothetical monopolist test approaches this question by considering the profitability of a hypothetical price increase by a sole supplier of a candidate set of products or services; the *Brown Shoe* factors aim to illuminate the question by examining existing features of the market. Let's take a closer look at each.

1. The Hypothetical Monopolist Test

The hypothetical monopolist test ("HMT") is a common tool used by agencies and courts to define markets. It rests on the insight that, when two products or services are close substitutes, they will exhibit significant cross-price elasticity of demand. The core idea of the HMT is that the relevant market should include the products or services that, if brought under common control, would make a significant price increase (5–10%) profitable.[200] A seminal discussion of the HMT is found in Section 4 of the antitrust agencies' Horizontal Merger Guidelines.

Horizontal Merger Guidelines § 4

4. Product Market Definition

[199] This is the subject of a thoughtful literature. *See, e.g.*, Laura Alexander & Steven C. Salop, *Antitrust Worker Protections: Rejecting Multi-Market Balancing as a Justification for Anticompetitive Harms to Workers*, 90 U. Chi. L. Rev. 273 (2023); Steven C. Salop, Daniel Francis, Lauren Sillman & Michaela Spero, *Rebuilding Platform Antitrust: Moving On from Ohio v. American Express Co.*, 84 Antitrust L.J. 883 (2022); Gregory J. Werden, *Cross-Market Balancing of Competitive Effects: What Is The Law, and What Should It Be?* 43 J. Corp. L. 119 (2017); Daniel A. Crane, *Balancing Effects Across Markets*, 80 Antitrust L.J. 391 (2015).

[200] For a thoughtful discussion of the challenges and implications of applying the HMT in differentiated markets, *see* James Keyte, *Market Definition and Differentiated Products: The Need for a Workable Standard*, 68 Antitrust L.J. 697 (1995).

[1] When a product sold by one merging firm (Product A) competes against one or more products sold by the other merging firm, the Agencies define a relevant product market around Product A to evaluate the importance of that competition. Such a relevant product market consists of a group of substitute products including Product A. Multiple relevant product markets may thus be identified.

4.1.1 The Hypothetical Monopolist Test

[2] The Agencies employ the hypothetical monopolist test to evaluate whether groups of products in candidate markets are sufficiently broad to constitute relevant antitrust markets. The Agencies use the hypothetical monopolist test to identify a set of products that are reasonably interchangeable with a product sold by one of the merging firms.

[3] 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. For the purpose of analyzing this issue, the terms of sale of products outside the candidate market are held constant. The SSNIP is employed solely as a methodological tool for performing the hypothetical monopolist test; it is not a tolerance level for price increases resulting from a merger.

[4] Groups of products may satisfy the hypothetical monopolist test without including the full range of substitutes from which customers choose. The hypothetical monopolist test may identify a group of products as a relevant market even if customers would substitute significantly to products outside that group in response to a price increase.

> *Example 5:* Products A and B are being tested as a candidate market. Each sells for $100, has an incremental cost of $60, and sells 1200 units. For every dollar increase in the price of Product A, for any given price of Product B, Product A loses twenty units of sales to products outside the candidate market and ten units of sales to Product B, and likewise for Product B. Under these conditions, economic analysis shows that a hypothetical profit-maximizing monopolist controlling Products A and B would raise both of their prices by ten percent, to $110. Therefore, Products A and B satisfy the hypothetical monopolist test using a five percent SSNIP, and indeed for any SSNIP size up to ten percent. This is true even though two-thirds of the sales lost by one product when it raises its price are diverted to products outside the relevant market.

[5] 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. The third product is a closer substitute if, in response to a SSNIP on the first product, greater revenues are diverted to the third product than to the second product.

> *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.

[6] 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. Because the relative competitive significance of more distant substitutes is apt to be overstated by their share of sales, when the Agencies rely on market shares and concentration, they usually do so in the smallest relevant market satisfying the hypothetical monopolist test.

> *Example 7:* . . . [I]ncluding cars in [a] market will lead to misleadingly small market shares for motorcycle producers. Unless motorcycles fail the hypothetical monopolist test, the Agencies would not include cars in the market in analyzing [a] motorcycle merger.

4.1.2 Benchmark Prices and SSNIP Size

[7] The Agencies apply the SSNIP starting from prices that would likely prevail absent the merger. If prices are not likely to change absent the merger, these benchmark prices can reasonably be taken to be the prices prevailing prior to the merger. If prices are likely to change absent the merger, e.g., because of innovation or entry, the Agencies may use anticipated future prices as the benchmark for the test. If prices might fall absent the merger due to the breakdown of pre-merger coordination, the Agencies may use those lower prices as the benchmark for the test. In some cases, the techniques employed by the Agencies to implement the hypothetical monopolist test focus on the difference in incentives between pre-merger firms and the hypothetical monopolist and do not require specifying the benchmark prices.

[9] The SSNIP is intended to represent a "small but significant" increase in the prices charged by firms in the candidate market for the value they contribute to the products or services used by customers. This properly directs attention to the effects of price changes commensurate with those that might result from a significant lessening of competition caused by the merger. This methodology is used because normally it is possible to quantify "small but significant" adverse price effects on customers and analyze their likely reactions, not because price effects are more important than non-price effects.

[10] The Agencies most often use a SSNIP of five percent of the price paid by customers for the products or services to which the merging firms contribute value. However, what constitutes a "small but significant" increase in price, commensurate with a significant loss of competition caused by the merger, depends upon the nature of the industry and the merging firms' positions in it, and the Agencies may accordingly use a price increase that is larger or smaller than five percent. Where explicit or implicit prices for the firms' specific contribution to value can be identified with reasonable clarity, the Agencies may base the SSNIP on those prices. [. . .]

4.1.3 Implementing the Hypothetical Monopolist Test

[11] The hypothetical monopolist's incentive to raise prices depends both on the extent to which customers would likely substitute away from the products in the candidate market in response to such a price increase and on the profit margins earned on those products. The profit margin on incremental units is the difference between price and incremental cost on those units. The Agencies often estimate incremental costs, for example using merging parties' documents or data the merging parties use to make business decisions. Incremental cost is measured over the change in output that would be caused by the price increase under consideration.

[12] In considering customers' likely responses to higher prices, the Agencies take into account any reasonably available and reliable evidence, including, but not limited to:

- how customers have shifted purchases in the past in response to relative changes in price or other terms and conditions;
- information from buyers, including surveys, concerning how they would respond to price changes;
- the conduct of industry participants, notably:
    - sellers' business decisions or business documents indicating sellers' informed beliefs concerning how customers would substitute among products in response to relative changes in price;
    - industry participants' behavior in tracking and responding to price changes by some or all rivals;
- objective information about product characteristics and the costs and delays of switching products, especially switching from products in the candidate market to products outside the candidate market;
- the percentage of sales lost by one product in the candidate market, when its price alone rises, that is recaptured by other products in the candidate market, with a higher recapture percentage making a price increase more profitable for the hypothetical monopolist;
- evidence from other industry participants, such as sellers of complementary products;
- legal or regulatory requirements; and

- the influence of downstream competition faced by customers in their output markets.

* * *

As we noted above, a challenge with the application of the HMT in practice is the so-called *Cellophane* fallacy: the problem that arises when the HMT's hypothetical price increase is applied to a monopoly price, and not to the competitive price. Applying the price increase to an existing monopoly price will give a misleadingly broad market definition, because a price increase *on top* of the monopoly price would not be profitable, so the analyst will go looking for a broader market definition and miss the existing, fully exploited, monopoly. Can you see why this might be a particular practical problem in cases where the defendant is accused of maintaining an existing monopoly rather than trying to create a new one through conduct or a transaction?

In the following passage, we can see the Court running afoul of this very fallacy in the case that gave it its name.

United States v. E.I. du Pont de Nemours & Co. ("Cellophane")

351 U.S. 377 (1956)

Justice Reed.

[1] [W]here there are market alternatives that buyers may readily use for their purposes, illegal monopoly does not exist merely because the product said to be monopolized differs from others. If it were not so, only physically identical products would be a part of the market. To accept the Government's argument [that duPont holds monopoly power], we would have to conclude that the manufactures of plain as well as moisture-proof cellophane were monopolists, and so with films such as Pliofilm, foil, glassine, polyethylene, and Saran, for each of these wrapping materials is distinguishable. These were all exhibits in the case. New wrappings appear, generally similar to cellophane, is each a monopoly? What is called for is an appraisal of the "cross-elasticity" of demand in the trade. The varying circumstances of each case determine the result. In considering what is the relevant market for determining the control of price and competition, no more definite rule can be declared than that commodities reasonably interchangeable by consumers for the same purposes make up that part of the trade or commerce, monopolization of which may be illegal. [. . .]

[2] Cellophane differs from other flexible packaging materials. From some it differs more than from others. . . . It may be admitted that cellophane combines the desirable elements of transparency, strength and cheapness more definitely than any of the others. Comparative characteristics have been noted thus:

> Moisture-proof cellophane is highly transparent, tears readily but has high bursting strength, is highly impervious to moisture and gases, and is resistant to grease and oils. Heat sealable, printable, and adapted to use on wrapping machines, it makes an excellent packaging material for both display and protection of commodities. [. . .]

[3] But, despite cellophane's advantages it has to meet competition from other materials in every one of its uses. . . . Food products are the chief outlet, with cigarettes next. The Government makes no challenge to [a finding of fact] that cellophane furnishes less than 7% of wrappings for bakery products, 25% for candy, 32% for snacks, 35% for meats and poultry, 27% for crackers and biscuits, 47% for fresh produce, and 34% for frozen foods. Seventy-five to eighty percent of cigarettes are wrapped in cellophane. Thus, cellophane shares the packaging market with others. The overall result is that cellophane accounts for 17.9% of flexible wrapping materials, measured by the wrapping surface. [. . .]

[4] An element for consideration as to cross-elasticity of demand between products is the responsiveness of the sales of one product to price changes of the other. If a slight decrease in the price of cellophane causes a considerable number of customers of other flexible wrappings to switch to cellophane, it would be an indication that a high cross-elasticity of demand exists between them; that the products compete in the same market. The court below held that the great sensitivity of customers in the flexible packaging markets to price or quality changes prevented du Pont from possessing monopoly control over price. The record sustains these findings.

[5] We conclude that cellophane's interchangeability with the other materials mentioned suffices to make it a part of this flexible packaging material market.

[6] The Government stresses the fact that the variation in price between cellophane and other materials demonstrates they are noncompetitive. As these products are all flexible wrapping materials, it seems reasonable to consider, as was done at the trial, their comparative cost to the consumer in terms of square area. . . . Cellophane costs two or three times as much, surface measure, as its chief competitors for the flexible wrapping market, glassine and greaseproof papers. Other forms of cellulose wrappings and those from other chemical or mineral substances, with the exception of aluminum foil, are more expensive. The uses of these materials . . . are largely to wrap small packages for retail distribution. The wrapping is a relatively small proportion of the entire cost of the article. Different producers need different qualities in wrappings and their need may vary from time to time as their products undergo change. But the necessity for flexible wrappings is the central and unchanging demand. We cannot say that these differences in cost gave du Pont monopoly power over prices in view of the findings of fact on that subject. [. . .]

[7] The facts above considered dispose also of any contention that competitors have been excluded by du Pont from the packaging material market. That market has many producers and there is no proof du Pont ever has possessed power to exclude any of them from the rapidly expanding flexible packaging market. The Government apparently concedes as much, for it states that "lack of power to inhibit entry into this so-called market (*i.e.*, flexible packaging materials), comprising widely disparate products, is no indicium of absence of power to exclude competition in the manufacture and sale of cellophane." The record shows the multiplicity of competitors and the financial strength of some with individual assets running to the hundreds of millions. Indeed, the trial court found that du Pont could not exclude competitors even from the manufacture of cellophane, an immaterial matter if the market is flexible packaging material. Nor can we say that du Pont's profits, while liberal (according to the Government 15.9% net after taxes on the 1937–1947 average), demonstrate the existence of a monopoly without proof of lack of comparable profits during those years in other prosperous industries. Cellophane was a leader over 17%, in the flexible packaging materials market. There is no showing that du Pont's rate of return was greater or less than that of other producers of flexible packaging materials.

[8] The "market" which one must study to determine when a producer has monopoly power will vary with the part of commerce under consideration. The tests are constant. That market is composed of products that have reasonable interchangeability for the purposes for which they are produced—price, use and qualities considered. While the application of the tests remains uncertain, it seems to us that du Pont should not be found to monopolize cellophane when that product has the competition and interchangeability with other wrappings that this record shows. [. . .]

Chief Justice Warren, with whom Justice Black and Justice Douglas join, dissenting.

[9] This case, like many under the Sherman Act, turns upon the proper definition of the market. In defining the market in which du Pont's economic power is to be measured, the majority virtually emasculate s 2 of the Sherman Act. They admit that cellophane combines the desirable elements of transparency, strength and cheapness more definitely than any of' a host of other packaging materials. Yet they hold that all of those materials are so indistinguishable from cellophane as to warrant their inclusion in the market. We cannot agree that cellophane . . . is the selfsame product as glassine, greaseproof and vegetable parchment papers, waxed papers, sulphite papers, aluminum foil, cellulose acetate, and Pliofilm and other films.

[10] . . . [C]ellophane has a high bursting strength while glassine's is low; that cellophane's permeability to gases is lower than that of glassine; and that both its transparency and its resistance to grease and oils are greater than glassine's. Similarly, . . . waxed paper's bursting strength is less than cellophane's and that it is highly permeable to gases and offers no resistance whatsoever to grease and oils. With respect to the two other major products held to be close substitutes for cellophane, . . . aluminum foil is actually opaque and has a low bursting strength. And sulphite papers, in addition to being opaque, are highly permeable to both moisture and gases, have no resistance to grease and oils, have a lower bursting strength than cellophane, and are not even heat sealable. Indeed, the majority go further than placing cellophane in the same market with such products. They also include the transparent films, which are more expensive than cellophane. These bear even less resemblance to the lower priced packaging materials than does cellophane. . . .

[11] If the conduct of buyers indicated that glassine, waxed and sulphite papers and aluminum foil were actually the selfsame products as cellophane, the qualitative differences demonstrated by the comparison of physical properties . . . would not be conclusive. But the record provides convincing proof that businessmen did not so regard these products. During the period covered by the complaint (1923–1947) cellophane enjoyed phenomenal growth. Du Pont's 1924 production was 361,249 pounds, which sold for $1,306,662. Its 1947 production was 133,502,858 pounds, which sold for $55,339,626. Yet throughout this period the price of cellophane was far greater than that of glassine, waxed paper or sulphite paper. . . . [I]n 1929 cellophane's price was seven times that of glassine, in 1934, four times, and in 1949 still more than twice glassine's price. [The record] shows that cellophane had a similar price relation to waxed paper and that sulphite paper sold at even less than glassine and waxed paper. We cannot believe that buyers, practical businessmen, would have bought cellophane in increasing amounts over a quarter of a century if close substitutes were available at from one-seventh to one-half cellophane's price. That they did so is testimony to cellophane's distinctiveness.

[12] The inference yielded by the conduct of cellophane buyers is reinforced by the conduct of sellers other than du Pont. . . . Sylvania, the only other cellophane producer, absolutely and immediately followed every du Pont price change, even dating back its price list to the effective date of du Pont's change. Producers of glassine and waxed paper, on the other hand, displayed apparent indifference to du Pont's repeated and substantial price cuts. [Evidence] shows that from 1924 to 1932 du Pont dropped the price of plain cellophane 84%, while the price of glassine remained constant. And during the period 1933—1946 the prices for glassine and waxed paper actually increased in the face of a further 21% decline in the price of cellophane. If shifts of business due to price sensitivity had been substantial, glassine and waxed paper producers who wanted to stay in business would have been compelled by market forces to meet du Pont's price challenge just as Sylvania was. The majority correctly point out that:

> An element for consideration as to cross-elasticity of demand between products is the responsiveness of the sales of one product to price changes of the other. If a slight decrease in the price of cellophane causes a considerable number of customers of other flexible wrappings to switch to cellophane, it would be an indication that a high cross-elasticity of demand exists between them; that the products compete in the same market.

[13] Surely there was more than "a slight decrease in the price of cellophane" during the period covered by the complaint. That producers of glassine and waxed paper remained dominant in the flexible packaging materials market without meeting cellophane's tremendous price cuts convinces us that cellophane was not in effective competition with their products.

[19] Certainly du Pont itself shared our view. From the first, du Pont recognized that it need not concern itself with competition from other packaging materials. For example, when du Pont was contemplating entry into cellophane production, its Development Department reported that glassine "is so inferior that it belongs in an entirely different class and has hardly to be considered as a competitor of cellophane." This was still du Pont's view in 1950 when its survey of competitive prospects wholly omitted reference to glassine, waxed paper or sulphite paper and stated that "Competition for du Pont cellophane will come from competitive cellophane and from non-cellophane films made by us or by others."

[20] Du Pont's every action was directed toward maintaining dominance over cellophane. Its 1923 agreements with La Cellophane, the French concern which first produced commercial cellophane, gave du Pont exclusive North and Central American rights to cellophane's technology, manufacture and sale, and provided, without any limitation in time that all existing and future information pertaining to the cellophane process be considered "secret and confidential," and be held in an exclusive common pool. In its subsequent agreements with foreign licensees, du Pont was careful to preserve its continental market inviolate. In 1929, while it was still the sole domestic producer of cellophane, du Pont won its long struggle to raise the tariff from 25% to 60%, ad valorem, on cellophane imports, substantially foreclosing foreign competition. When Sylvania became the second American cellophane producer the following year and du Pont filed suit [against it] claiming infringement of its moistureproof patents, they settled the suit by entering into a cross-licensing agreement. Under this agreement du Pont obtained the right to exclude third persons from use of any patentable moistureproof invention made during the next 15 years by the sole other domestic cellophane producer, and, by a prohibitive royalty provision, it limited

Sylvania's moistureproof production to approximately 20% of the industry's moistureproof sales. The record shows that du Pont and Sylvania were aware that, by settling the infringement suit, they avoided the possibility that the courts might hold the patent claims invalid and thereby open cellophane manufacture to additional competition. If close substitutes for cellophane had been commercially available, du Pont, an enlightened enterprise, would not have gone to such lengths to control cellophane. [. . .]

[21] . . . The majority approach would apparently enable a monopolist of motion picture exhibition to avoid Sherman Act consequences by showing that motion pictures compete in substantial measure with legitimate theater, television, radio, sporting events and other forms of entertainment. Here, too, shifts of business undoubtedly accompany fluctuations in price and there are market alternatives that buyers may readily use for their purposes. . . . [T]he formula of "reasonable interchangeability," as applied by the majority, appears indistinguishable from the theory of "interindustry competition." The danger in it is that, as demonstrated in this case, it is perfectly compatible with a fully monopolized economy.

[22] The majority hold in effect that, because cellophane meets competition for many end uses, those buyers for other uses who need or want only cellophane are not entitled to the benefits of competition within the cellophane industry. . . . Furthermore, those buyers who have "reasonable alternatives" between cellophane and other products are also entitled to competition within the cellophane industry, for such competition may lead to lower prices and improved quality.

[23] The foregoing analysis of the record shows conclusively that cellophane is the relevant market. Since du Pont has the lion's share of that market, it must have monopoly power[.]

* * *

In brief, and as the dissent suggests, the Court's famous mistake in the quoted passage was to assume that, because duPont had increased its price as far as it was able—that is, to the point where purchasers were switching over to a variety of very different substitutes that had different qualities and were priced very differently—it could not be a monopolist. But what business does *not* increase its price as far as it profitably can? In the process, the Court ignored the evidence that DuPont enjoyed considerable freedom from anything like a close competitive constraint.

2. Brown Shoe Market Definition

The principal alternative methodology to the hypothetical monopolist test is the looser set of qualitative factors associated with the Supreme Court's decision in *Brown Shoe*. In that case, the Court articulated a set of factors which, like the HMT, could be used to help define the zone of reasonably substitutable products or services that would constrain the merged firm.

In the following extract, and in some other cases, the Court uses the term "submarket." Do not be led astray by this confusing term, which crops up from time to time but could probably be banned without doing any harm (and, thus, probably *should* be banned in the interests of clarity). It is best understood to simply mean "market."[201]

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[201] For a fuller explanation, the term "submarket" is sometimes used in an effort to deal with the following phenomenon. On some definitions, if a market A qualifies as a valid antitrust market, then any larger market including market A will also satisfy it. (This is because, in some formulations of the HMT, the test is satisfied if the hypothetical monopolist could profitably increase the price of *any one* included product or service. Once this test is satisfied, adding additional products or services to the market will result in a market definition that also satisfies the test.) As a result, courts sometimes acknowledge that a valid market definition may contain narrower markets that are themselves also valid, and use the term "submarket" to describe the narrower ones. The possibility of multiple valid markets creates some complexity, particularly in litigation (why do you think this is?), and contributes to the view that the correct market definition should be the *smallest* market that satisfies the HMT. *See*, *e.g.*, Horizontal Merger Guidelines § 1.11 ("The Agency generally will consider the relevant product market to be the smallest group of products that satisfies this test."). Of course, it may not be obvious how the "smallest" market should be identified.

Brown Shoe Co. v. United States

370 U.S. 294 (1962)

Chief Justice Warren.

[1] The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it. However, within this broad market, well-defined submarkets may exist which, in themselves, constitute product markets for antitrust purposes. The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors. Because s 7 of the Clayton Act prohibits any merger which may substantially lessen competition "in any line of commerce" . . . , it is necessary to examine the effects of a merger in each such economically significant submarket to determine if there is a reasonable probability that the merger will substantially lessen competition. If such a probability is found to exist, the merger is proscribed.

[2] Applying these considerations to the present case, we conclude that the record supports the District Court's finding that the relevant lines of commerce are men's, women's, and children's shoes. These product lines are recognized by the public; each line is manufactured in separate plants; each has characteristics peculiar to itself rendering it generally noncompetitive with the others; and each is, of course, directed toward a distinct class of customers.

[3] Appellant, however, contends that the District Court's definitions fail to recognize sufficiently "price/quality" and "age/sex" distinctions in shoes. Brown argues that the predominantly medium-priced shoes which it manufactures occupy a product market different from the predominantly low-priced shoes which Kinney sells. But agreement with that argument would be equivalent to holding that medium-priced shoes do not compete with low-priced shoes. We think the District Court properly found the facts to be otherwise. It would be unrealistic to accept Brown's contention that, for example, men's shoes selling below $8.99 are in a different product market from those selling above $9.00.

[4] This is not to say, however, that "price/quality" differences, where they exist, are unimportant in analyzing a merger; they may be of importance in determining the likely effect of a merger. But the boundaries of the relevant market must be drawn with sufficient breadth to include the competing products of each of the merging companies and to recognize competition where, in fact, competition exists. Thus we agree with the District Court that in this case a further division of product lines based on "price/quality" differences would be "unrealistic."

[5] Brown's contention that the District Court's product market definitions should have recognized further "age/sex" distinctions raises a different problem. Brown's sharpest criticism is directed at the District Court's finding that children's shoes constituted a single line of commerce. Brown argues, for example, that "a little boy does not wear a little girl's black patent leather pump" and that "(a) male baby cannot wear a growing boy's shoes." Thus Brown argues that "infants" and "babies" shoes, "misses' and children's" shoes and "youths" and "boys" shoes should each have been considered a separate line of commerce. Assuming, arguendo, that little boys' shoes, for example, do have sufficient peculiar characteristics to constitute one of the markets to be used in analyzing the effects of this merger, we do not think that in this case the District Court was required to employ finer "age/sex" distinctions then those recognized by its classifications of "men's," "women's," and "children's" shoes. Further division does not aid us in analyzing the effects of this merger. Brown manufactures about the same percentage of the Nation's children's shoes (5.8%) as it does of the Nation's youths' and boys' shoes (6.5%), of the Nation's misses' and children's shoes (6.0%) and of the Nation's infants' and babies' shoes (4.9%). Similarly, Kinney sells about the same percentage of the Nation's children's shoes (2%) as it does of the Nation's youths' and boys' shoes (3.1%), of the Nation's misses' and children's shoes (1.9%), and of the Nation's infants' and babies' shoes (1.5%). Appellant can point to no advantage it would enjoy were finer divisions than those chosen by the District Court employed. Brown manufactures significant, comparable quantities of virtually every type of nonrubber men's, women's, and children's shoes, and Kinney sells such quantities of virtually every type of men's, women's, and children's shoes. Thus, whether considered separately or together, the picture of this merger is the same. We, therefore, agree with

the District Court's conclusion that in the setting of this case to subdivide the shoe market further on the basis of "age/sex" distinctions would be "impractical" and "unwarranted."

* * *

In the following extract, the U.S. District Court for the District of Columbia applies a test of this kind to the FTC's alleged market for personal social networking ("PSN services" or just "PSN"), in which Facebook's main social networking service ("Facebook Blue") was active. For the purposes of a motion to dismiss—that is, accepting the complaint's factual allegations as true—the court held that the market definition passed muster, relying on the kind of qualitative information mentioned in *Brown Shoe* itself.

This extract is drawn from the first of two decisions that the district court rendered on a motion to dismiss in the *Facebook* litigation. Later in the same opinion, the court dismissed the complaint on other grounds with leave to amend; the FTC subsequently amended the complaint, and the court denied Facebook's motion to dismiss the amended complaint, allowing the case to proceed into discovery.[202]

FTC v. Facebook, Inc.

560 F. Supp. 3d 1 (D.D.C. 2021)

Judge Boasberg.

[1] The market-definition inquiry in this case is somewhat unusual because, unlike familiar consumer goods like tobacco or office supplies, there is no obvious or universally agreed-upon definition of just what a personal social networking service ["PSN"] is. As a result, to discharge its burden to define the relevant market, the FTC must do two things here. First, it must provide a definition of PSN services (which, obviously, would include at least Facebook Blue). Second, it must further explain whether and why other, non-PSN services available to the public either are or are not reasonably interchangeable substitutes with PSN services. Ultimately, that analysis should demonstrate that Facebook holds a dominant share of a market that includes such substitutes, if any.

[2] On the first point, the agency explains that PSN services are online services that enable and are used by people to maintain personal relationships and share experiences with friends, family, and other personal connections in a shared social space. Such services are allegedly defined, and distinguished, by their having three key elements. First, they are built on a social graph that maps the connections between users and their friends, family, and other personal connections. Second, they include features that many users regularly employ to interact with personal connections and share their personal experiences in a shared virtual social space, including in a one-to-many "broadcast" format. And third, they include features that allow users to find and connect with other users, to make it easier for each user to build and expand their set of personal connections. The social graph also supports this feature by informing the user which new connections might be available based on her existing network.

[3] Having defined PSN services, Plaintiff then alleges that there are in fact no other types of internet services that are adequate substitutes. It buttresses that conclusion by explaining why four different kinds of arguably comparable online services are not reasonably interchangeable with PSN services.

[4] First, specialized social networking services that focus on professional connections (e.g., LinkedIn) are not substitutes because they are designed for and used primarily by professionals for sharing professional content. They therefore would not be used, as PSN services are, to maintain personal relationships and share experiences with friends, family, and other personal connections. The same is true, alleges the FTC, for interest-based social-networking services such as Strava (which relates to physical exercise). The agency also pleads that PSN services are not reasonably interchangeable with services that allow for consuming and sharing video or audio content, such as YouTube, Spotify, Netflix, or Hulu. That is because users of such services mostly consume such content passively or share content created by others (rather than content they have created), and such sharing, where it occurs, is not to the user's network of personal connections but rather to a general and wide audience of unknown users. In such a setting, users do not usually communicate with friends, family, and other personal connections,

[202] The second motion-to-dismiss opinion can be found at FTC v. Facebook, Inc., 581 F. Supp. 3d. 34 (D.D.C. 2022).

which is the hallmark of a PSN service. Finally, Plaintiff explains that mobile messaging services cannot be substituted for PSN services because the former (i) lack a shared social space for interaction and (ii) do not employ a social graph to facilitate users' finding and friending other users they may know. Zuckerberg himself has colorfully explained one key difference in use that allegedly flows from these disparate features: a PSN service is the digital equivalent of a town square, whereas a mobile messaging service is the digital equivalent of a living room.

[5] According to the FTC, then, the relevant market here thus includes PSN services—such as Facebook Blue, Instagram, and Path—and no other kinds of services. [. . .]

[6] While there are certainly bones that one could pick with the FTC's market-definition allegations, the Court does not find them fatally devoid of meat. [. . .]

[7] Defendant maintains [that] the FTC has neglected to allege any facts regarding the cross-elasticity of demand between PSN services and potential substitutes for it. Cross-elasticity of demand is a measure of the degree to which the rise in the price of one good would tend to create a greater demand for other like goods. It is thus one measure of reasonable interchangeability. There is no authority, however, supporting Facebook's argument that Plaintiff must plead specific facts regarding the price or non-price terms under which PSN-service users would switch (if ever) to alternatives. Instead, at this stage the FTC may permissibly plead that certain factors of both the service at issue and its potential substitutes—e.g., their price, use, and qualities—render them not reasonably interchangeable in the eyes of users. That is what the agency has done here, albeit in a somewhat lean fashion.

[8] Defendant next directly takes aim at the FTC's allegation that users of PSN services would not switch, if prodded by a price increase or quality decrease in a PSN service, to other means of communicating and sharing with their personal connections that lack a "connection-finder" built on the user's social graph (the third leg of the agency's definition of a PSN). That is implausible, Facebook contends, because it is obvious that people also know how to connect and share with family and friends via many other technologies, such as email, messaging, photo-sharing, and video-chats. This argument asks the Court to engage in the sort of deeply fact-intensive inquiry that is improper at this stage. Although open to dispute, the agency's allegation that users view services with and without a social-graph-based connection-finder as fundamentally different and non-interchangeable is at least theoretically rational, and thus hardly facially unsustainable, or untenable on its face. This is therefore not one of the "relatively rare" cases of a glaring deficiency in the market-definition pleadings that renders dismissal at the 12(b)(6) stage appropriate.

[9] Facebook's final fruitless market-definition argument is that the Complaint impermissibly distinguishes PSN services from other possible substitutes based on their primary uses. The company asserts that the question is whether other services can perform the same functions as PSN services, not whether they are primarily used that way. That misstates the law. The analysis looks to both whether two products can be used for the same purpose, and, if so, whether and to what extent purchasers are willing to substitute one for the other. It is for this reason that pen-and-paper do-it-yourself tax prep and assisted tax prep could be outside the market for digital do-it-yourself tax-prep services despite both providing the same basic function[, United States v. H&R Block, Inc., 833 F. Supp. 2d 36, 54 (D.D.C. 2011)], and that Medicare Advantage plans and Original Medicare plans could constitute distinct product markets despite both being capable of providing healthcare insurance to seniors[, United States v. Aetna Inc., 240 F. Supp. 3d 1, 19, 41 (D.D.C. 2017)]. All Plaintiff must do at this stage is provide a plausible explanation as to why users would not switch, even if they technically could, from PSN services to other services if prompted by a price hike. While the agency certainly could have provided more on that front, the fact that other services are not primarily used for the sort of personal sharing that is the hallmark of a PSN service seems a plausible reason why little switching would occur. Whether due to network effects or the norms around what sort of content is generally posted on different platforms, it is not a stretch to imagine that users are reluctant to share a highly personal milestone on LinkedIn or post a video of their child's first steps to YouTube. [. . .]

[10] [T]he Court therefore finds that the Complaint's allegations do enough to make out a plausible market for PSN services[.]

* * *

3. Applying Market Definition Theory

In practice, courts commonly apply both the HMT and the *Brown Shoe* factors together when explaining their conclusions. When doing so, they often must sift through a range of evidence—including econometric and other expert economic evidence, testimony from market participants, and ordinary-course documents—in search of a market definition that best fits the mosaic of evidence and the nature of the competitive concerns at issue. And, as noted above, the market definition must fit the theory of harm too: courts are usually looking for a valid market definition that would capture the risk of harm that might result from *this particular* challenged practice or transaction.

In reaching a bottom-line view about the validity of a candidate market definition, courts often stress their concern to make sure that a market definition in an antitrust case reflects the underlying "commercial realities" of life in the relevant industry. In doing so, they often echo language in another part of the *Brown Shoe* opinion that: "Congress prescribed a pragmatic, factual approach to the definition of the relevant market and not a formal, legalistic one. The . . . market selected must, therefore, both correspond to the commercial realities of the industry and be economically significant."[203]

In some cases, a court's view about these "commercial realities" may lead it to favor lay testimony and documents over expert economic analysis.[204] Thus, for example, in *Swedish Match*—the FTC's successful challenge to the proposed acquisition of one smokeless tobacco supplier, National, by another, Swedish Match—the court held that loose leaf tobacco and moist snuff were not in the same market—but not because of the economic expert evidence!

> The economic evidence in this case . . . is not persuasive. . . . [The FTC's expert] conceded at the hearing that his inference [regarding] the industry-wide elasticity for loose leaf [tobacco] . . . is subjective, follows no objective methodology, and cannot be proven to any statistical significance. . . . [And] [t]he defendant's economics evidence is even less persuasive. . . . [The defendants' expert] issued several different reports, all of which presented new estimates of the elasticity of demand based on new economic models. . . .
>
> [But unlike] the economic analyses, additional evidence of price sensitivity has been presented in this case that is persuasive. The views of Swedish Match and National competitors, statements by loose leaf distributors, and internal documents of Swedish Match and National show that price-based substitution between loose leaf and moist snuff is generally lacking. Swedish Match competitors believe that there is no switching between loose leaf and moist snuff on the basis of price. . . .
>
> Swedish Match and National internal business documents confirm that pricing has little effect on loose leaf demand. . . . National's Chairman . . . stated in a deposition that loose leaf sales cannot be increased by cutting loose leaf prices. Likewise . . . [the] President of Pinkerton Tobacco from 1992 to 1997 and Chief Operating Officer of Swedish Match from 1997 to 1999, testified that Swedish Match could not materially increase loose leaf sales by cutting prices.[205]

But in other cases, a court may conclude that economic expert analysis evidence *is* indeed a reliable guide to those commercial realities—including realities that might not be clear even to a market participant.[206] After all, as the district court judge pointed out in upholding DOJ's challenge to the acquisition by Bazaarvoice (a provider of ecommerce rating and review platforms) of its main competitor PowerReviews, customers don't always have access to the evidence, including data and documents, that inform expert analysis (although the court was talking in that case about effects analysis rather than market definition):

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[203] Brown Shoe Co. v. United States, 370 U.S. 294, 336–37 (1962).

[204] *See, e.g.*, FTC v. Thomas Jefferson Univ., 505 F. Supp. 3d 522, 553 (E.D. Pa. 2020) ("[T]he Government relies on econometrics and insurer testimony to prove the propriety of its proposed Philadelphia Area market. But it has not shown that the market corresponds with commercial realities and it thus cannot pass the HMT.").

[205] FTC v. Swedish Match, 131 F. Supp. 2d 151, 161–62 (D.D.C. 2000).

[206] *See, e.g.*, FTC v. Advocate Health Care, No. 15 C 11473, 2017 WL 1022015, at *9–10 (N.D. Ill. Mar. 16, 2017) (expressly accepting expert analysis as a guide to "commercial realities").

> Bazaarvoice relied heavily on the fact that none of the more than 100 current, former and potential customers who testified in this case believed that the acquisition had harmed or would harm them. The Court finds that the customers were the most credible sources of information on their need for, use of and substitutability of social commerce products, as well as regarding their companies' past responses to price increases. *But customers generally do not engage in a specific analysis of the effects of a merger.* Many of them had given no thought to the effect of the merger or had no opinion. They lacked the same information about the merger presented in court, including from the economic experts. Their testimony on the impact and likely effect of the merger was speculative at best and is entitled to virtually no weight.[207]

In practice, courts tend to look for a conclusion that makes some sense of all the available evidence: including the teachings of the HMT and the qualitative factors associated with *Brown Shoe*. For example, when the Department of Justice challenged H&R Block's acquisition of TaxACT, a central question for the district court was whether the relevant market should include only free DIY tax preparation software, or whether it should also include assisted tax preparation services and/or taxpayers' ability to simply do their own taxes with pen and paper. This issue was a crucial one: a broader market definition would likely have led to a favorable decision for the merging parties; a narrower one was likely to spell doom for the deal. Notice how the district court deploys both hypothetical-monopolist and qualitative reasoning in explaining its conclusion.[208]

United States v. H & R Block, Inc.

833 F.Supp.2d 36 (D.D.C. 2011)

Judge Howell.

[1] Merger analysis begins with defining the relevant product market. Defining the relevant market is critical in an antitrust case because the legality of the proposed merger in question almost always depends upon the market power of the parties involved. Indeed, the relevant market definition is often the key to the ultimate resolution of this type of case because of the relative implications of market power.

[2] The government argues that the relevant market in this case consists of all DDIY [("digital do-it-yourself")] products, but does not include assisted tax preparation or pen-and-paper. Under this view of the market, the acquisition in this case would result in a DDIY market that is dominated by two large players—H & R Block ["HRB"] and Intuit—that together control approximately 90 percent of the market share, with the remaining 10 percent of the market divided amongst a plethora of smaller companies. In contrast, the defendants argue for a broader market that includes all tax preparation methods ("all methods"), comprised of DDIY, assisted, and pen-and-paper. Under this view of the market, the market concentration effects of this acquisition would be much smaller and would not lead to a situation in which two firms control 90 percent of the market. This broader view of the market rests primarily on the premise that providers of all methods of tax preparation compete with each other for the patronage of the same pool of customers—U.S. taxpayers. After carefully considering the evidence and arguments presented by all parties, the Court has concluded that the relevant market in this case is, as the DOJ contends, the market for digital do-it-yourself tax preparation products.

[3] A "relevant product market" is a term of art in antitrust analysis. The Supreme Court has set forth the general rule for defining a relevant product market: "The outer boundaries of a product market are determined by the reasonable interchangeability of use [by consumers] or the cross-elasticity of demand between the product itself and substitutes for it." [*Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962).] In other words, courts look at whether two products can be used for the same purpose, and, if so, whether and to what extent purchasers are willing to substitute one for the other.

[4] A broad, overall market may contain smaller markets which themselves constitute product markets for antitrust purposes. [T]he mere fact that a firm may be termed a competitor in the overall marketplace does not necessarily

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[207] United States v. Bazaarvoice, Inc., No. 13-CV-00133-WHO, 2014 WL 203966, at *61 (N.D. Cal. Jan. 8, 2014) (emphasis added).

[208] For a perspective on the market-definition dimension of the case, *see* Joseph J. Simons & Malcolm B. Coate, United States v. H&R Block*: An Illustration of the DOJ's New But Controversial Approach to Market Definition*, 10 J. Comp. L. & Econ. 543 (2014).

require that it be included in the relevant product market for antitrust purposes. Traditionally, courts have held that the boundaries of a relevant product market within a broader market may be determined by examining such practical indicia as industry or public recognition of the relevant market as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors. These "practical indicia" of market boundaries may be viewed as evidentiary proxies for proof of substitutability and cross-elasticities of supply and demand.

[5] An analytical method often used by courts to define a relevant market is to ask hypothetically whether it would be profitable to have a monopoly over a given set of substitutable products. If so, those products may constitute a relevant market. This approach—sometimes called the "hypothetical monopolist test"—is endorsed by the Horizontal Merger Guidelines issued by the DOJ and Federal Trade Commission. *See* Fed. Trade Comm'n & U.S. Dep't of Justice *Horizontal Merger Guidelines* (2010) (hereinafter, "Merger Guidelines"), § 4.1.1. In the merger context, this inquiry boils down to whether a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products 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. The "small but significant and non-transitory increase in price," or SSNIP, is typically assumed to be five percent or more.

[6] Thus, the question here is whether it would be hypothetically useful to have a monopoly over all DDIY tax preparation products because the monopolist could then profitably raise prices for those products by five percent or more; or whether, to the contrary, there would be no reason to monopolize all DDIY tax preparation products because substitution and price competition with other methods of tax preparation would restrain any potential DDIY monopolist from profitably raising prices. In other words, would enough DDIY users switch to the assisted or pen-and-paper methods of tax preparation in response to a five-to-ten percent increase in DDIY prices to make such a price increase unprofitable?

[7] In evaluating the relevant product market here, the Court considers business documents from the defendants and others, the testimony of the fact witnesses, and the analyses of the parties' expert economists. This evidence demonstrates that DDIY is the relevant product market in this case.

1. The Defendants' Documents Show That DDIY Is The Relevant Product Market.

[8] When determining the relevant product market, courts often pay close attention to the defendants' ordinary course of business documents. The government argues that the defendants' ordinary course of business documents in this case "conclusively demonstrate that competition with other [DDIY] firms drive Defendants' pricing decisions, quality improvements, and corporate strategy" for their own DDIY products—thus supporting the government's view of the relevant market. The defendants contend that the government has relied on "select, 'out-of-context' snippets from documents," and that the documents as a whole support the defendants' view that the relevant product market is all methods of tax preparation. The Court finds that the documentary evidence in this case supports the conclusion that DDIY is the relevant product market.

[9] Internal TaxACT documents establish that TaxACT has viewed DDIY offerings by HRB and TurboTax as its primary competitors, that it has tracked their marketing, product offerings, and pricing, and that it has determined its own pricing and business strategy in relation to those companies' DDIY products. Confidential memoranda prepared by TaxACT's investment bankers for potential private equity buyers of TaxACT identify HRB and TurboTax as TaxACT's primary competitors in a DDIY market. These documents also recognize that TaxACT's strategy for competing with Intuit and HRB is to offer a lower price for what it deems a superior product.

[10] While, as defendants point out, parts of these TaxACT documents also discuss the broader tax preparation industry, these documents make clear that TaxACT's own view—and that conveyed by its investment bankers to potential buyers—is that the company primarily competes in a DDIY market against Intuit and HRB and that it develops its pricing and business strategy with that market and those competitors in mind. These documents are strong evidence that DDIY is the relevant product market.

[11] Internal HRB documents also evidence HRB's perception of a discrete DDIY market or market segment. HRB and its outside consultants have tracked its digital competitors' activities, prices, and product offerings. Documents from HRB's DDIY business have also referred to HRB, TaxACT, and TurboTax as the "Big Three" competitors in the DDIY market. Finally, the documents show that, in connection with a proposed acquisition of TaxACT, HRB identified the proposed transaction as a way to grow its digital "market share" and has measured TaxACT's market share in a DDIY market. All of these documents also provide evidence that DDIY is a relevant product market.

[12] The defendants acknowledge that "the merging parties certainly have documents that discuss each other and digital competitors generally, and even reference a digital market and the 'Big Three,'" but contend this evidence is insufficient to prove a market. Rather, the defendants argue that the documents show that the relevant market is all methods of tax preparation, especially in light of documented competition between DDIY providers and assisted providers for the same overall pool of U.S. taxpayers who are potential customers. As discussed below, the Court disagrees and finds that the relevant product market is DDIY products.

2. The Relevant Product Market Does Not Include Assisted Tax Preparation Or Manual Preparation.

[13] It is beyond debate—and conceded by the plaintiff—that all methods of tax preparation are, to some degree, in competition. All tax preparation methods provide taxpayers with a means to perform the task of completing a tax return, but each method is starkly different. Thus, while providers of all tax preparation methods may compete at some level, this does not necessarily require that [they] be included in the relevant product market for antitrust purposes. DDIY tax preparation products differ from manual tax preparation and assisted tax preparation products in a number of meaningful ways. As compared to manual and assisted methods, DDIY products involve different technology, price, convenience level, time investment, mental effort and type of interaction by the consumer. Taken together, these different attributes make the consumer experience of using DDIY products quite distinct from other methods of tax preparation. The question for this court is whether DDIY and other methods of tax preparation are "reasonably interchangeable" so that it would not be profitable to have a monopoly over only DDIY products.

a. Assisted Tax Preparation Is Not In The Relevant Product Market.

[14] Apart from the analysis of their economic expert, the defendants' main argument for inclusion of assisted tax preparation in the relevant market is that DDIY and assisted companies compete for customers. As evidence for this point, the defendants emphasize that Intuit's marketing efforts have targeted HRB's assisted customers. While the evidence does show that companies in the DDIY and assisted markets all generally compete with each other for the same overall pool of potential customers—U.S. taxpayers—that fact does not necessarily mean that DDIY and assisted must be viewed as part of the same relevant product market. DDIY provides customers with tax preparation services through an entirely different method, technology, and user experience than assisted preparation. [. . .]

[15] As Judge Tatel explained in *Whole Foods*[, FTC v. Whole Foods Market, Inc., 548 F.3d 1028, 1048 (D.C. Cir. 2008) (Tatel, J., concurring)]: When the automobile was first invented, competing auto manufacturers obviously took customers primarily from companies selling horses and buggies, not from other auto manufacturers, but that hardly shows that cars and horse-drawn carriages should be treated as the same product market. . . .

[16] The key question for the Court is whether DDIY and assisted products are sufficiently close substitutes to constrain any anticompetitive DDIY pricing after the proposed merger. Evidence of the absence of close price competition between DDIY and assisted products makes clear that the answer to that question is no—and that DDIY is the relevant product market here. Significantly, despite some DDIY efforts to capture tax store customers, none of the major DDIY competitors sets their prices based on consideration of assisted prices. Indeed, there are quite significant price disparities between the average prices of DDIY and assisted products. The average price of TurboTax, the most popular DDIY brand is approximately $55. The average price of HRB's DDIY products is approximately $25. Overall, the DDIY industry average price is $44.13. In contrast, the typical price of an assisted tax return is significantly higher, in the range of $150–200. A 10 percent or even 20 percent price increase in the average price of DDIY would only move the average price up to $48.54 or $52.96, respectively—still substantially

below the average price of assisted tax products. The overall lack of evidence of price competition between DDIY and assisted products supports the conclusion that DDIY is a separate relevant product market for evaluating this transaction, despite the fact that DDIY and assisted firms target their marketing efforts at the same pool of customers.

[17] The defendants point to some evidence that HRB sets prices for certain assisted products to compete with DDIY. These are limited product offerings for which prices appear well below even the 25th percentile price for HRB's assisted products. Relatedly, the defendants' claim that prices for assisted and DDIY products "significantly overlap" is not strongly supported and relies on a comparison of the most limited, low-end assisted products with DDIY products generally. In sum, while defendants' have identified isolated instances in which assisted product offerings are priced lower than the average prices for typical assisted products, they do not and cannot demonstrate that this is generally the case. . . . .

b. Manual Tax Preparation Is Not In The Relevant Product Market.

[18] The defendants also argue that manual tax preparation, or pen-and-paper, should be included in the relevant product market. At the outset, the Court notes that pen-and-paper is not a "product" at all; it is the task of filling out a tax return by oneself without any interactive assistance. Even so, the defendants argue pen-and-paper should be included in the relevant product market because it acts as a "significant competitive constraint" on DDIY. The defendants' argument relies primarily on two factors. First, the defendants cite the results of a 2011 email survey of TaxACT customers. . . . Second, the defendants point to documents and testimony indicating that TaxACT has considered possible diversion to pen-and-paper in setting its prices.

[19] The Court finds that pen-and-paper is not part of the relevant market because it does not believe a sufficient number of consumers would switch to pen-and-paper in response to a small, but significant increase in DDIY prices. The possibility of preparing one's own tax return necessarily constrains the prices of other methods of preparation at some level. For example, if the price of DDIY and assisted products were raised to $1 million per tax return, surely all but the most well-heeled taxpayers would switch to pen-and-paper. Yet, at the more practical price increase levels that trigger antitrust concern—the typical five to ten percent price increase of the SSNIP test—pen-and-paper preparation is unlikely to provide a meaningful restraint for DDIY products, which currently sell for an average price of $44.13.

[20] The government well illustrated the overly broad nature of defendants' proposed relevant market by posing to the defendants' expert the hypothetical question of whether "sitting at home and drinking chicken soup [would be] part of the market for [manufactured] cold remedies?" he defendants' expert responded that the real "question is if the price of cold medicines went up sufficiently, would people turn to chicken soup?" As an initial matter, in contrast to the defendants' expert, the Court doubts that it would ever be legally appropriate to define a relevant product market that included manufactured cold remedies and ordinary chicken soup. This conclusion flows from the deep functional differences between those products. Setting that issue aside, however, a price has increased "sufficiently" to trigger antitrust concern at the level of a five to ten percent small, but significant non-transitory increase in price. Just as chicken soup is unlikely to constrain the price of manufactured cold remedies sufficiently, the Court concludes that a SSNIP in DDIY would not be constrained by people turning to pen-and-paper. First, the share of returns prepared via pen-and-paper has dwindled over the past decade, as the DDIY market has grown. Second, while pen-and-paper filers have been a net source of new customers for DDIY companies, both HRB and {redacted} executives have testified that they do not believe their DDIY products compete closely with pen-and-paper methods. Third, courts in antitrust cases frequently exclude similar "self-supply" substitutes from relevant product markets.

[21] While some diversion from DDIY to manual filing may occur in response to a SSNIP, the Court finds that it would likely be limited and marginal. The functional experience of using a DDIY product is meaningfully different from the self-service task of filling out tax forms independently. Manual completion of a tax return requires different tools, effort, resources, and time investment by a consumer than use of either DDIY or assisted methods. . . .

[22] Inclusion of all possible methods of tax preparation, including pen-and-paper, in the relevant product market also violates the principle that the relevant product market should ordinarily be defined as the smallest product market that will satisfy the hypothetical monopolist test. Indeed, the defendants' inclusion of pen-and-paper in the relevant market ignores at least one obvious, smaller market possibility that they might have proposed—the combined market of all DDIY and assisted tax preparation products. It is hardly plausible that a monopolist of this market—to which the only alternative would be pen-and-paper—could not impose a SSNIP.

[23] The defendants' proposed relevant market of all methods of tax return preparation is so broadly defined that, as the plaintiff's expert testified, there are no conceivable alternatives besides going to jail, fleeing to Canada, or not earning any taxable income. As the plaintiff's expert put it, "if you're talking about the market for all tax preparation, you're talking about a market where, in economist terms, demand is completely [in]elastic. There are no alternatives." In such circumstances, the usual tools of antitrust analysis—such as the hypothetical monopolist test—cease being useful because it is self-evident that a monopolist of all forms of tax preparation, including self-preparation, could impose a small, but significant price increase. Indeed, a monopolist in that situation could essentially name any price since taxpayers would have no alternative but to pay it. As the plaintiff's expert testified, defining a market that broadly negates the entire purpose of defining a relevant market in an antitrust case. . . . The Court agrees with this assessment and finds the defendants' proposed relevant market to be overbroad.

CASENOTE: United States v. Continental Can Co.

373 U.S. 441 (1964)

Today, as we have seen, courts generally approach market definition by identifying particular kinds of demand, such as specific end-uses of a product, and asking which products or services are available to meet that demand.[1] But the courts have not has not always taken such a granular approach. Earlier cases often applied a somewhat looser, broader approach to market definition.[209] In 1964's *Continental Can*, for example, the Supreme Court considered a challenge by the Department of Justice to the acquisition of the third-largest manufacturer of glass containers in the United States by the second-largest manufacturer of metal cans in the United States. The district court had held that the transaction should be analyzed in separate markets for (1) metal containers, (2) glass containers, and (3) beer containers (a market in which both metal and glass containers were competitive), and that, when analyzed in this light, the transaction did not create a reasonable probability of an anticompetitive effect in any market. The Supreme Court reversed.

Majority opinion (Justice White). The Court held that the transaction violated Section 7 in light of evidence that glass and metal containers were in competition for at least some uses. Specifically, the Court held that "the interindustry competition between glass and metal containers is sufficient to warrant treating as a relevant product market the combined glass and metal container industries and all end uses for which they compete." The Court did not include other materials, such as paper and plastic, in this market.

In so holding, the Court relied on evidence of a "general confrontation between metal and glass containers and competition between them for the same end uses which is insistent, continuous, effective and quantity-wise very substantial." The Court noted in broad terms that "[m]etal has replaced glass and glass has replaced metal as the leading container for some important uses; both are used for other purposes; each is trying to expand its share of the market at the expense of the other; and each is attempting to preempt for itself every use for which its product is physically suitable[.]" The Court was unconcerned by evidence that other kinds of containers, such as plastic and paper, also represented additional options for customers for many of the end-uses at issue, and did not clearly separate its analysis of competitive effects by reference to individual kinds of demand for containers.

Dissent (Justice Harlan). In dissent, Justice Harlan called the majority opinion a "travesty of economics" and "an abrupt and unwise departure from established anti-trust [sic] law." The dissent protested that relevant market should have been defined through a more disciplined assessment of *all* substitutes that competed to satisfy

[209] *See generally* Christine S. Wilson & Keith Klovers, *Same Rule, Different Result: How the Narrowing of Product Markets Has Altered Substantive Antitrust Rules*, 84 Antitrust L.J. 55 (2021).

particular kinds of demand. Justice Harlan complained that "without support in reason or fact, [the Court] dips into this network of competition and establishes metal and glass containers as a separate 'line of commerce,' leaving entirely out of account all other kinds of containers: plastic, paper, foil and any other materials competing for the same business."

He argued that "the Court is, in effect, laying down a 'per se' rule that mergers between two large companies in related industries are presumptively unlawful under s 7." And "[h]ereafter, however slight (or even nonexistent) the competitive impact of a merger on any actual market, businessmen must rest uneasy lest the Court create some 'market,' in which the merger presumptively dampens competition, out of bits and pieces of real ones. . . . This is said to be recognizing 'meaningful competition where it is found to exist.' It is in fact imagining effects on competition where none has been shown."

Implications. The majority's analysis in *Continental Can* reflects a broader-brush approach to market definition than modern practice would generally support. Today, courts would likely take a more granular approach, along the lines suggested by Justice Harlan.

NOTES

1) What is the value of market definition? Would we be better off without it? What could we do instead? Would it be better or worse to just ask "is it plausible that harm could result from this practice or transaction?"
2) Some writers have suggested that we should rely more heavily on market share thresholds, and/or on concentration statistics that measure the number of participants in a market and their respective shares. For example, Tim Wu has suggested a rule against mergers that reduce the number of competitors in a market to fewer than four.[210] What are the main advantages and disadvantages of moving antitrust further in this direction?
3) Are all rational supplier(s) constrained by other suppliers? How can we tell the difference between constraints from in-market substitutes and constraints from out-of-markets substitutes?
4) What metric do you think the court should have used to determine market share in the Facebook case? Why? Do you think a plaintiff should have to specify which metrics should be used in this way before getting the benefit of the discovery process?
5) The "*Brown Shoe* factors" are somewhat diverse. Do you think some are more important than others? Why? What should "industry and public recognition" mean and how could it be tested?
6) As we noted above, antitrust markets serve multiple functions in antitrust cases. For example, a market definition might provide the basis for identifying market power (*e.g.*, by calculating shares of the defined market); it also usually defines the area of analysis for determining whether adverse "anticompetitive effects" are to be feared; and it also usually defines the area in which benefits can be offered in justification of a harmful transaction or practice (that is, antitrust analysis generally does not allow "out of market" benefits to be considered). Should the same definition be applied for each of these purposes? Why, or why not?[211]
7) The general rule that harms in one market cannot be justified by benefits in another market under the rule of reason (which we will meet in more detail in Chapter IV) means, among other things, that a practice or transaction that is beneficial overall can normally be blocked if it inflicts overall harm in at least one market. What are the strongest arguments in favor of, and against, such a rule? What does it tell us about who antitrust law protects? What alternative rules can you imagine?

C. Special Cases

You will encounter various forms of "special" market definition. In this section, we will briefly meet five common special cases: buyer markets, bundles, clusters, price discrimination markets, and platforms.

[210] Tim Wu, THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE (2018) 129.

[211] *See*, *e.g.*, Daniel Francis & Jay Ezrielev, *Disaggregating Market Definition:* AmEx *and a Plural View of Market Definition*, 98 Neb. L.J. 460, 479 (2019).

1. Buyer Markets

Sometimes we undertake market definition in order to identify competitive constraints on a *purchaser* of products or services, such as an employer (remember, labor is a service!). In such cases, we simply turn the usual analysis on its head, to determine what other purchasers for the products or services in question might, by offering alternatives to suppliers, constrain the purchaser's ability to obtain infracompetitive prices. (You may find it helpful to look back at the discussion of monopsony in Chapter II.)

Horizontal Merger Guidelines § 12

12. Mergers of Competing Buyers

[1] Mergers of competing buyers can enhance market power on the buying side of the market, just as mergers of competing sellers can enhance market power on the selling side of the market. Buyer market power is sometimes called "monopsony power."

[2] To evaluate whether a merger is likely to enhance market power on the buying side of the market, the Agencies employ essentially the [same] framework . . . for evaluating whether a merger is likely to enhance market power on the selling side of the market. In defining relevant markets, the Agencies focus on the alternatives available to sellers in the face of a decrease in the price paid by a hypothetical monopsonist.

[3] Market power on the buying side of the market is not a significant concern if suppliers have numerous attractive outlets for their goods or services. However, when that is not the case, the Agencies may conclude that the merger of competing buyers is likely to lessen competition in a manner harmful to sellers.

[4] The Agencies distinguish between effects on sellers arising from a lessening of competition and effects arising in other ways. A merger that does not enhance market power on the buying side of the market can nevertheless lead to a reduction in prices paid by the merged firm, for example, by reducing transactions costs or allowing the merged firm to take advantage of volume-based discounts. Reduction in prices paid by the merging firms not arising from the enhancement of market power can be significant in the evaluation of efficiencies from a merger[.]

[5] The Agencies do not view a short-run reduction in the quantity purchased as the only, or best, indicator of whether a merger enhances buyer market power. Nor do the Agencies evaluate the competitive effects of mergers between competing buyers strictly, or even primarily, on the basis of effects in the downstream markets in which the merging firms sell.

> *Example 24:* Merging Firms A and B are the only two buyers in the relevant geographic market for an agricultural product. Their merger will enhance buyer power and depress the price paid to farmers for this product, causing a transfer of wealth from farmers to the merged firm and inefficiently reducing supply. These effects can arise even if the merger will not lead to any increase in the price charged by the merged firm for its output.

* * *

Concern with buyer-side market power was the focus of DOJ's 2021 challenge to Penguin Random House's proposed acquisition of Simon & Schuster. DOJ alleged that the transaction would harm competition to purchase publishing rights to highly anticipated books. The government won the battle over market definition—and went on to win the case.

United States v. Bertelsmann SE & CO.

Case No. 1:21-cv-02886 (D.D.C. Nov. 7, 2022)

Judge Pan.

[1] Penguin Random House ("PRH") is by far the largest book publisher in the United States. Owned by Bertelsmann SE & Co. KGaA ("Bertelsmann"), an international media and services company, PRH annually publishes over 2,000 new books in the U.S. and generates nearly $2.5 billion in revenue. Simon & Schuster, Inc.

("S&S"), owned by the media giant Paramount Global (formerly ViacomCBS), is the third-largest publisher in the U.S. S&S publishes about 1,000 new titles yearly and reported over $760 million in net sales in 2020. [. . .]

[2] In November 2021, the Antitrust Division of the United States Department of Justice ("the government") brought this action against PRH, S&S, and their parent companies ("the defendants"), seeking to block the merger of PRH and S&S under Section 7 of the Clayton Act. The government's case sounds in "monopsony," a market condition where a buyer with too much market power can lower prices or otherwise harm sellers. Essentially, the government alleges that the merger will increase market concentration in the publishing industry, which will allow publishing companies to pay certain authors less money for the rights to publish their books. [. . .]

[3] The book industry is dominated by five major publishing houses—PRH, HarperCollins Publishers, S&S, Hachette Book Group, and Macmillan Publishing Group, LLC—which are known as the "Big Five." Together, the Big Five held nearly 60 percent of the market for the sale of trade books in 2021 (i.e., books intended for general readership, as opposed to specialized books like textbooks or manuals). [. . .]

[4] Books begin, of course, with authors. Authors often spend years developing their ideas, conducting research, and refining their manuscripts or proposals before submitting them for publication. A project that is acquired may still take months or years of work before it becomes a completed book that is ready for distribution. To support themselves, authors often rely on "advances" from their publishers. An advance is an upfront payment against the royalties that an author may earn in the future. The advance is the single most important term in a contract for publishing rights because in a large number of cases, it may be the only compensation that the author will receive for their work. Indeed, most authors do not "earn out" their advances, i.e., ultimately earn royalties that exceed the amount of their advances. In addition to the advance, authors care about working with editors who share their vision for the book and who can help them to bring the book into the world. [. . .]

[5] . . . [T]he amount that is paid [by a publisher to an author] is inexorably determined by competition. In an auction, a skillful agent can capitalize on enthusiasm for a book and play bidders off against one another, knowing that a publisher will bid what it needs to buy that book because it only takes one passionate editor at another imprint to win that book away. [. . .]

[6] The government contends that the merger of PRH and S&S would harm competition to acquire the publishing rights to anticipated top-selling books, resulting in lower advances for the authors of such books and less favorable contract terms. The defendants do not dispute that if advances are significantly decreased, some authors will not be able to write, resulting in fewer books being published, less variety in the marketplace of ideas, and an inevitable loss of intellectual and creative output. The defendants vigorously contest, however, whether advances would decrease after the merger: They contend that competition would not be harmed and that advances would actually rise. [. . .]

[7] The government defines the relevant product market as the one for publishing rights to anticipated top-selling books. Anticipated top-selling books are those that are expected to yield significant sales, and for which authors therefore receive higher advances. The government contends that such books have distinctive characteristics, including the need for extra marketing, publicity, and sales support to allow them to reach broader audiences.

[8] The proposed market for anticipated top-selling books is a submarket of the broader publishing market for all trade books. Under the government's monopsony theory, the authors of anticipated top-selling books are "targeted sellers" against whom the merged defendants might lower the prices paid for the authors' wares. See . . . Merger Guidelines § 4.1.4 (If a monopsonist could "profitably target a subset of [sellers] for price [de]creases, the [government] may identify relevant markets defined around those targeted [sellers]."); cf. FTC v. Wilh Wilhelmsen Holding ASA, 341 F. Supp. 3d 27, 46–47 (D.D.C. 2018) ("[A]ntitrust markets can be based on targeted customers"); [FTC v. Sysco Corp., 113 F. Supp. 3d 1, 38–40 (D.D.C. 2015)] (discussing definition of markets based on targeted customers). In the monopsony context, a submarket exists when buyers can profitably cut prices to certain targeted sellers but not to others, in which case regulators may evaluate competitive effects separately by type of seller.

[9] Courts evaluate relevant product markets in the monopsony context in two ways: by considering qualitative, "practical indicia" as described by the Supreme Court in the *Brown Sho*e case; and by examining "supply

substitution" and applying the "hypothetical monopsonist test" . . . . The parties in this case focus their arguments on whether "practical indicia" support the finding of a market to publish anticipated top-selling books. Because the parties choose to fight on the battlefield of "practical indicia," that is where the Court begins its analysis. [. . .]

[10] To identify the books that are anticipated to sell well, the government focuses on the criterion of "distinct pricing": For analytical purposes, it defines anticipated top-selling books as those for which publishers pay an advance of at least $250,000. [. . .]

[11] In the publishing market for anticipated top-selling books, the Big Five publishers hold 91 percent of the market share, while smaller publishers collectively hold only 9 percent. By contrast, in the publishing market for books that earn advances below $250,000, the non-Big Five publishers have a much more substantial market share of 45 percent.

[12] As an initial matter, the government's use of high advances as a proxy for anticipated book sales is logical and supported by market realities. In publishing, advances are correlated with expected sales because books that are expected to sell well receive higher advances. In fact, advance levels are set by using [profit and loss statements ("P&Ls")], and the defining feature of a P&L is the sales estimate. Moreover, industry practices indicate that $250,000 is a reasonable place to draw the line: S&S and two of the three PRH adult divisions require approval from senior publishers or executives for advance offers of $250,000 or more; and *Publishers Marketplace*, a major industry publication, categorizes deals for $250,000 or more as "significant." This evidence is probative of "industry or public recognition" of a distinct category of books that receive advances at or above the $250,000 level.

[13] The defendants take aim at the $250,000 threshold that the government has chosen to bound the market. Most significantly, they argue that the $250,000 threshold is either too high or too low to define a submarket for anticipated top selling books. [. . .]

[14] The defendants' excessive concern over the specific dollar threshold betrays a misunderstanding of why the threshold was chosen. The market that the government seeks to define is the one for anticipated top-selling books, and the $250,000 demarcation was adopted only as an analytical tool to help it group together the books in question. The government's economic expert, Dr. Nicholas Hill, also conducted his analyses at other numerical thresholds (including $150,000, $250,000, $500,000, and $1 million) and observed consistent outcomes at those various high-dollar amounts. Thus, the $250,000 cutoff is merely useful; it is not intended to be a rigid bright line, but rather is helpful for analytical purposes to facilitate the assessment of anticompetitive effects. Accordingly, the Court rejects this argument against the government's defined market.

[15] The Court is unswayed by the defendants' tactic of enumerating other markets or submarkets in which competition would not be harmed by the merger. In addition to proposing submarkets at the $50,000- and $1 million- advance levels, the defendants also declare that the government could not prove anticompetitive effects from the merger in the broad market of publishing rights for all U.S. trade books, or in the downstream market for retail book sales. Those protestations are beside the point because the Clayton Act prohibits mergers that may substantially lessen competition "in *any* line of commerce or in *any* activity affecting commerce." 15 U.S.C. § 18 (emphasis added). Thus, even if alternative submarkets exist at other advance levels, or if there are broader markets that might be analyzed, the viability of such additional markets does not render the one identified by the government unusable.

[16] Ample precedent supports the government's use of a numerical cutoff to identify a submarket. It is common for courts to use seemingly arbitrary criteria to home in on a segment of a broader industry. [. . .]

[17] Aside from distinct pricing, the government argues that the remaining *Brown Shoe* factors demonstrate that there is a relevant submarket for the publishing rights to anticipated top-selling books. The government contends that such books have "peculiar characteristics and uses," in that they require stronger marketing, publicity, and sales support, which allow them to reach a broader audience of readers. In addition, authors of anticipated top-selling books are "distinct sellers," in that they (1) care more about their publishers' reputation and services, which ensure wider distribution of their books; (2) may receive more favorable contract terms than other authors; and (3) face different competitive conditions, as demonstrated by the dominant market share of the Big Five (91%) in

publishing anticipated top sellers. For all those reasons, the government argues, anticipated top-selling books are in a different category from books that are expected to sell relatively few copies, and publishers can target their authors for price decreases.

[18] The defendants, however, insist that all books are in the same market. They argue that books at all advance levels go through an identical editing, marketing, and distribution process; that there is no difference in the personnel who handle such books; that the contracts for all books are negotiated in the same way; and that any special terms in the contracts for some books simply result from an agent's leverage. . . .

[19] The Court has no trouble recognizing that anticipated top-selling books are distinct from the vast majority of books that do not carry the same expectations for success. Obviously, the entire publishing industry is dedicated to selling books; and all editors and publishers naturally are very focused on discovering and acquiring the books that they believe will drive sales. Evidence strongly supports the conclusion that, from the perspective of editors and publishers, not all books are created equal. Beyond advances, contracts for books that are expected to sell well are more likely to include favorable terms like higher royalty rates, higher levels of marketing support, "glam" packages (e.g., for hair, makeup, and wardrobe services), and airfare for authors. Publishers print more of the books they think will do well; circulate more advance copies of such books to reviewers or influencers to create excitement; push for interviews with more media outlets; and schedule book-tour appearances in more locations. Anticipated top-selling books also get more attention from marketing and sales teams. For example, Dr. Hill determined that S&S and PRH spend, on average, under $10,000 on marketing for books with advances under $250,000, and between $40,000 and $90,000 on marketing for books with advances over $250,000[.]

[20] The fact that the Big Five publish 91 percent of anticipated top sellers also supports a finding that the authors of such books have unique needs and preferences. Although smaller publishers can sometimes put out an anticipated top-selling book, it is the Big Five who have the back lists and the marketing, publicity, and sales advantages necessary to consistently provide the high advances and unique services that top-selling authors need. [. . .]

{*Eds.: following its application of the* Brown Shoe *factors, the court turned to the hypothetical monopolist—here monopsonist—test.*}

[21] The traditional way to define a relevant market in the monopsony context would be to examine the commonality and interchangeability of the buyers of a certain good. Indeed, the outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of supply between the product's buyers, in the case of monopsony, and the substitutes for such buyers. Accordingly, the touchstone is supply substitution.

[22] To test the proposed market boundaries, courts commonly turn to the hypothetical monopsonist test. The hypothetical monopsonist test ensures that markets are not defined too narrowly, on the theory that if the test identifies substitute buyers for the product in question, such buyers should be included in the market. The hypothetical monopsonist test assumes that there is only one buyer in the proposed market and asks whether that hypothetical buyer, freed from price regulation, could profitably target a subset of sellers for price decreases. If such a hypothetical monopsonist could profitably impose what economists call a small but significant and non-transitory decrease in price of at least five percent in the proposed market, that indicates the existence of a relevant market. [. . .]

[23] The government's expert, Dr. Hill, estimated what "actual diversions" would be for the defined market, i.e., the percentage of authors who would switch to self-publishing in the face of a small but significant and non-transitory decrease in advances paid for anticipated top-selling books. He found that even if some small number of authors switched to self-publishing, it would be profitable for publishers to decrease advances—that is, the defection of authors in response to the lowered advances would be far less than what would be necessary to make the decrease unprofitable.

[24] The defendants do not dispute that the relevant market of "publishing rights to anticipated top-selling books" passes the hypothetical monopsonist test. [. . .]

2. Bundle and Cluster Markets

There is some confusion and inconsistency in the literature and in court practice regarding the use of the terms "bundle" and "cluster" in market definition.[212] Following the example of Krisha Cerilli and others, we apply the following usage: "bundle" markets are used where purchasers demand a product or service composed of multiple components; "cluster" markets are a shorthand way of analyzing many individual markets at once on the basis that competitive conditions and effects are identical in each one.

Krisha A. Cerilli, Staples/Office Depot: Clarifying Cluster Markets

Comp. Pol'y Int'l (Aug. 2016)

[Certain] cases involve "hundreds if not thousands" of distinct product markets. In [*ProMedica Health System, Inc. v. FTC*, 749 F.3d 559 (6th Cir. 2014)], for instance, which involved a hospital merger, the merging hospitals offered hundreds of distinct medical procedures that were not functionally interchangeable (*e.g.*, chemotherapy is not a substitute for a hip replacement). Each distinct procedure therefore could be assessed as a distinct relevant market. But, as the court observed, it would be administratively burdensome to evaluate each of the hundreds of markets separately.

That is where the cluster market concept arises. *ProMedica* endorsed the concept of aggregating the distinct relevant markets together into a single "cluster" for analytical convenience. Such aggregation is permissible, the court held, when the competitive conditions in the separate markets are similar.

ProMedica is not the first or only case to endorse the concept of a cluster market based on analytical convenience. The concept has origins in the Supreme Court's landmark decision in *Brown Shoe Co. v. United States*. In *Brown Shoe*, the Court first observed that the "outer boundaries" of a relevant product market are determined by evaluating the scope of reasonable substitutes. But the Court then endorsed evaluating the markets for men's, women's and children's shoes together (even though distinct shoe sizes and types were not substitutes) because the competitive conditions for each market were similar. More recently, the cluster market approach has become a common feature of hospital merger cases. [. . .]

In [other cases], distinct product markets [are] not being aggregated for analytical convenience (as in *ProMedica*). Rather, there [is] a single market in which customers purchase[] a bundle or package of goods. *ProMedica* referred to this latter scenario as a "package-deal" approach, and explained that it can arise when customers value the convenience of purchasing certain items together, as a package. Another useful description is that the latter approach represents a bundle market.

a) Bundle Markets

In some cases, market demand is not really for a series of individual components, but for a "bundle" of multiple products and services delivered together. A good example is provided by the monopolization case against Grinnell. Grinnell had engaged in a series of acquisitions and practices that, the Justice Department alleged, had the object and effect of monopolizing a market for a bundle of "central station services": burglar alarm services, fire alarm services, and so on. Crucially, the Court held that these were not distinct markets that could be aggregated for shorthand purposes: they were components of a single integrated market for the entire package or bundle of services.

United States v. Grinnell Corp.

384 U.S. 563 (1966)

Justice Douglas.

[1] In the present case, [Grinnell's control over] 87% of the accredited central station service business leaves no doubt that the congeries of these defendants have monopoly power—power which, as our discussion of the record

[212] *See*, *e.g.*, Sharif Pharmacy, Inc. v. Prime Therapeutics, LLC, 950 F.3d 911, 918 (7th Cir. 2020) (using the terms indiscriminately).

indicates, they did not hesitate to wield—if that business is the relevant market. The only remaining question therefore is, what is the relevant market?

[2] In case of a product it may be of such a character that substitute products must also be considered, as customers may turn to them if there is a slight increase in the price of the main product. That is the teaching of the *du Pont* [*i.e.*, Cellophane] case, viz., that commodities reasonably interchangeable make up that "part" of trade or commerce which s 2 protects against monopoly power.

[3] The District Court treated the entire accredited central station service business as a single market and we think it was justified in so doing. Defendants argue that the different central station services offered are so diverse that they cannot under *du Pont* be lumped together to make up the relevant market. For example, burglar alarm services are not interchangeable with fire alarm services. They further urge that du Pont requires that protective services other than those of the central station variety be included in the market definition.

[4] But there is here a single use, *i.e.*, the protection of property, through a central station that receives signals. It is that service, accredited, that is unique and that competes with all the other forms of property protection. We see no barrier to combining in a single market a number of different products or services where that combination reflects commercial realities. To repeat, there is here a single basic service—the protection of property through use of a central service station—that must be compared with all other forms of property protection. [. . .]

[5] The defendants have not made out a case for fragmentizing the types of services into lesser units.

[6] Burglar alarm service is in a sense different from fire alarm service; from waterflow alarms; and so on. But it would be unrealistic on this record to break down the market into the various kinds of central station protective services that are available. Central station companies recognize that to compete effectively, they must offer all or nearly all types of service. The different forms of accredited central station service are provided from a single office and customers utilize different services in combination. We held in *United States v. Philadelphia Nat. Bank*, 374 U.S. 321, 356 [(1963)] that "the cluster" of services denoted by the term "commercial banking" is "a distinct line of commerce." . . . In our view the lumping together of various kinds of services makes for the appropriate market here as it did in the s 7 case.

[7] There are, to be sure, substitutes for the accredited central station service. But none of them appears to operate on the same level as the central station service so as to meet the interchangeability test of the *du Pont* case. Nonautomatic and automatic local alarm systems appear on this record to have marked differences, not the low degree of differentiation required of substitute services as well as substitute articles.

[8] Watchman service is far more costly and less reliable. Systems that set off an audible alarm at the site of a fire or burglary are cheaper but often less reliable. They may be inoperable without anyone's knowing it. Moreover, there is a risk that the local ringing of an alarm will not attract the needed attention and help. Proprietary systems that a customer purchases and operates are available; but they can be used only by a very large business or by government and are not realistic alternatives for most concerns. There are also protective services connected directly to a municipal police or fire department. But most cities with an accredited central station do not permit direct, connected service for private businesses. These alternate services and devices differ, we are told, in utility, efficiency, reliability, responsiveness, and continuity, and the record sustains that position. And, as noted, insurance companies generally allow a greater reduction in premiums for accredited central station service than for other types of protection.

[9] Defendants earnestly urge that despite these differences, they face competition from these other modes of protection. . . . What defendants overlook is that the high degree of differentiation between central station protection and the other forms means that for many customers, only central station protection will do. Though some customers may be willing to accept higher insurance rates in favor of cheaper forms of protection, others will not be willing or able to risk serious interruption to their businesses, even though covered by insurance, and will thus be unwilling to consider anything but central station protection.

* * *

The bundle market concept is one way of understanding the court's analysis in the first Staples / Office Depot challenge. In 1996, the office superstore Staples attempted to acquire its competitor Office Depot. The merging parties argued to the FTC, and subsequently to the district court, that there was no risk that the merged firm would acquire market power in markets for pens and post-it notes. But the FTC and Judge Hogan took a different view. As the following extract demonstrates, market definition in this case raised a number of complex issues. This extract makes use of the "submarket" concept: again, you can read that word as a synonym for "market."[213]

FTC v. Staples, Inc. (Staples / Office Depot I)

970 F. Supp. 1066 (D.D.C. 1997)

Judge Hogan.

[1] Defendants are both corporations which sell office products—including office supplies, business machines, computers and furniture—through retail stores, commonly described as office supply superstores, as well as through direct mail delivery and contract stationer operations. Staples is the second largest office superstore chain in the United States with approximately 550 retail stores located in 28 states and the District of Columbia, primarily in the Northeast and California. In 1996 Staples' revenues from those stores were approximately $4 billion through all operations. Office Depot, the largest office superstore chain, operates over 500 retail office supply superstores that are located in 38 states and the District of Columbia, primarily in the South and Midwest. Office Depot's 1996 sales were approximately $6.1 billion. OfficeMax, Inc., is the only other office supply superstore firm in the United States. [. . .]

[2] [T]he Commission and the defendants sharply disagree with respect to the appropriate definition of the relevant product market or line of commerce. As with many antitrust cases, the definition of the relevant product market in this case is crucial. In fact, to a great extent, this case hinges on the proper definition of the relevant product market.

[3] The Commission defines the relevant product market as "the sale of consumable office supplies through office superstores," with "consumable" meaning products that consumers buy recurrently, *i.e.*, items which "get used up" or discarded. For example, under the Commission's definition, "consumable office supplies" would not include capital goods such as computers, fax machines, and other business machines or office furniture, but does include such products as paper, pens, file folders, post-it notes, computer disks, and toner cartridges. The defendants characterize the FTC's product market definition as "contrived" with no basis in law or fact, and counter that the appropriate product market within which to assess the likely competitive consequences of a Staples-Office Depot combination is simply the overall sale of office products, of which a combined Staples-Office Depot accounted for 5.5% of total sales in North America in 1996. In addition, the defendants argue that the challenged combination is not likely "substantially to lessen competition" however the product market is defined. After considering the arguments on both sides and all of the evidence in this case and making evaluations of each witness's credibility as well as the weight that the Court should give certain evidence and testimony, the Court finds that the appropriate relevant product market definition in this case is, as the Commission has argued, the sale of consumable office supplies through office supply superstores.

[4] The general rule when determining a relevant product market is that the outer boundaries of a product market are determined by the reasonable interchangeability of use by consumers or the cross-elasticity of demand between the product itself and substitutes for it. Interchangeability of use and cross-elasticity of demand look to the availability of substitute commodities, i.e. whether there are other products offered to consumers which are similar in character or use to the product or products in question, as well as how far buyers will go to substitute one commodity for another. In other words, the general question is whether two products can be used for the same purpose, and if so, whether and to what extent purchasers are willing to substitute one for the other.

[5] Whether there are other products available to consumers which are similar in character or use to the products in question may be termed "functional interchangeability." The consumable office products at issue here are identical whether they are sold by Staples or Office Depot or another seller of office supplies. A legal pad sold by

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[213] *See supra* note 201 and accompanying text.

Staples or Office Depot is "functionally interchangeable" with a legal pad sold by Wal-Mart. A post-it note sold by Staples or Office Depot is "functionally interchangeable" with a post-it note sold by Viking or Quill. A computer disk sold by Staples-Office Depot is "functionally interchangeable" with a computer disk sold by CompUSA. No one disputes the functional interchangeability of consumable office supplies. However, as the government has argued, functional interchangeability should not end the Court's analysis. [. . .]

[6] The Court recognizes that it is difficult to overcome the first blush or initial gut reaction of many people to the definition of the relevant product market as the sale of consumable office supplies through office supply superstores. The products in question are undeniably the same no matter who sells them, and no one denies that many different types of retailers sell these products. After all, a combined Staples-Office Depot would only have a 5.5% share of the overall market in consumable office supplies. Therefore, it is logical to conclude that, of course, all these retailers compete, and that if a combined Staples-Office Depot raised prices after the merger, or at least did not lower them as much as they would have as separate companies, that consumers, with such a plethora of options, would shop elsewhere. [. . .]

[7] The [Supreme] Court in *Brown Shoe* provided a series of factors or "practical indicia" for determining whether a submarket exists including "industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors." Since the Court described these factors as "practical indicia" rather than requirements, subsequent cases have found that submarkets can exist even if only some of these factors are present. . . .

[8] . . . [T]he FTC focused on what it termed the "pricing evidence," which the Court finds corresponds with *Brown Shoe*'s "sensitivity to price changes" factor. First, the FTC presented evidence comparing Staples' prices in geographic markets where Staples is the only office superstore, to markets where Staples competes with Office Depot or OfficeMax, or both. Based on the FTC's calculations, in markets where Staples faces no office superstore competition at all, something which was termed a one firm market during the hearing, prices are 13% higher than in three firm markets where it competes with both Office Depot and OfficeMax. The data which underly this conclusion make it compelling evidence. Prices were compared as of January 1997, which, admittedly, only provides data for one specific point in time. However, rather than comparing prices from only a small sampling or "basket" of goods, the FTC used an office supply sample accounting for 90% of Staples' sales and comprised of both price sensitive and non price sensitive items. The FTC presented similar evidence based on Office Depot's prices of a sample of 500 items, also as of January 1997. Similarly, the evidence showed that Office Depot's prices are significantly higher—well over 5% higher, in Depot-only markets than they are in three firm markets.

[9] Other pricing evidence presented by the FTC is less convincing on its own, due to limitations in the underlying data. For example, relatively small samplings or "baskets" of goods may have been used or it may not be clear how many stock keeping units ("SKUs") of supplies were included. For example, the FTC also presented evidence comparing Staples' prices in Staples-only markets with Staples' prices in three-firm markets for four different time periods, August 1994, January 1995, August 1995, and May 1996. The result is startlingly similar to that found in the first two examples. Where Staples does not compete with other office superstores, it charges prices well over 5% higher than where it does so compete. While having the advantage of showing a trend over time, the Court recognizes that this evidence has some problems. These particular calculations were made based on a "basket" or sample of supplies comprised of supplies used by Staples to price check against Office Depot. The number of SKUs in the sample was not provided to the Court, and it appears that the components of the baskets may have changed over time. Therefore, the Court would not give much weight to this evidence standing alone. However, since additional evidence supports the same conclusion, the Court credits this evidence as confirmation of the general pricing trend.

[10] The FTC also pointed to internal Staples documents which present price comparisons between Staples' prices and Office Depot's prices and Staples' prices and OfficeMax's prices within different price zones. The comparisons between Staples and Office Depot were made in August 1994, January 1995, August 1995, and May 1996. Staples' prices were compared with OfficeMax's prices in August 1994, July 1995, and January 1996. For each comparison, Staples calculations were based on a fairly large "basket" or sample of goods, approximately 2000 SKUs containing both price sensitive and non-price sensitive items. Using Staples' data, but organizing it

differently to show which of those zones were one, two, or three firm markets, the FTC showed once again that Staples charges significantly higher prices, more than 5% higher, where it has no office superstore competition than where it competes with the two other superstores.

[11] The FTC offered similar price comparison evidence for Office Depot, comparing Office Depot's prices across Staples' zones. The comparisons were made in August 1994, January 1995, August 1995, and May 1996. Again, a large sample, approximately 2000 SKUs, was considered. The results of this analysis are slightly less favorable to the FTC's position. Price differentials are significantly smaller and there are even a few instances where Office Depot's prices appear to be higher in one of its three firm markets than prices in its two firm markets and at least one point where prices in one of the Depot-only zones were lower than prices in one of the three firm markets. On average, however, this evidence shows that Office Depot's prices are highest in its one firm markets, and lowest in its three firm markets.

[12] This evidence all suggests that office superstore prices are affected primarily by other office superstores and not by non-superstore competitors such as mass merchandisers like Wal–Mart, Kmart, or Target, wholesale clubs such as BJ's, Sam's, and Price Costco, computer or electronic stores such as Computer City and Best Buy, independent retail office supply stores, mail orders firms like Quill and Viking, and contract stationers. Though the FTC did not present the Court with evidence regarding the precise amount of non-superstore competition in each of Staples' and Office Depot's one, two, and three firm markets, it is clear to the Court that these competitors, albeit in different combinations and concentrations, are present in every one of these markets. For example, it is a certainty that the mail order competitors compete in all of the geographic markets at issue in this case. Office products are available through the mail in all 50 states, and have been for approximately 30 years. Despite this mail order competition, however, Staples and Office Depot are still able to charge higher prices in their one firm markets than they do in the two firm markets and the three firm markets without losing a significant number of customers to the mail order firms. [. . .]

[13] The Court has observed that office supply superstores look far different from other sellers of office supplies. Office supply superstores are high volume, discount office supply chain stores averaging in excess of 20,000 square feet, with over 11,000 of those square feet devoted to traditional office supplies, and carrying over 5,000 SKUs of consumable office supplies in addition to computers, office furniture, and other non-consumables. In contrast, stores such as Kmart devote approximately 210 square feet to the sale of approximately 250 SKUs of consumable office supplies. . . .

[14] In addition to the differences in SKU numbers and variety, the superstores are different from many other sellers of office supplies due to the type of customer they target and attract. The superstores' customer base overwhelmingly consists of small businesses with fewer than 20 employees and consumers with home offices. In contrast, mail order customers are typically mid-sized companies with more than 20 employees. Another example is contract stationers who focus on serving customers with more than 100 employees. . . .

[15] It is difficult to fully articulate and explain all of the ways in which superstores are unique. As the plaintiff and defendant requested, the Court viewed some of the various sellers of office supplies located in the Rockville, Maryland area, including Staples, Office Depot, CompUSA, Best Buy, CVS, Kmart, Giant Food, and Wal–Mart. Based on the Court's observations, the Court finds that the unique combination of size, selection, depth and breadth of inventory offered by the superstores distinguishes them from other retailers. Other retailers devote only a fraction of their square footage to office supplies as opposed to Staples or Office Depot. The evidence shows that the typical club, mass merchant, or computer store offers only 210 to 2000 square feet of office supplies, compared to over 11,182 square feet at a typical Staples. This was evident to the Court when visiting the various stores. Superstores are simply different in scale and appearance from the other retailers. No one entering a Wal–Mart would mistake it for an office superstore. No one entering Staples or Office Depot would mistakenly think he or she was in Best Buy or CompUSA. You certainly know an office superstore when you see one. [. . .]

[16] When assessing key trends and making long range plans, Staples and Office Depot focus on the plans of other superstores. In addition, when determining whether to enter a new metropolitan area, both Staples and Office Depot evaluate the extent of office superstore competition in the market and the number of office superstores the market can support. When selecting sites and markets for new store openings, defendants repeatedly refer to

markets without office superstores as "non-competitive," even when the new store is adjacent to or near a warehouse club, consumer electronics store, or a mass merchandiser such as Wal–Mart. In a monthly report entitled "Competitor Store Opening/Closing Report" which Office Depot circulates to its Executive Committee, Office Depot notes all competitor store closings and openings, but the only competitors referred to for its United States stores are Staples and OfficeMax.

b) Cluster Markets

A "cluster market" is really a number of distinct markets, described together for ease of discussion on the basis that competitive conditions and effects in those markets are, in relevant respects, identical.[214]

One commonly encountered cluster market is "the" market for "general acute care" services seen in many hospital cases. When two hospitals merge, the transaction can affect competition in multiple different service lines offered by the two hospitals: gastroenterologic care and orthopedic care, for example. These services do not compete with each other and so fall into separate markets for antitrust purposes. However, when conducting the analysis, it is often the case that many of these markets will involve the same competing hospitals, in the same respective competitive positions, and likely to be affected by the transaction in the same way. As a result, agencies and courts may use the term "general acute care market," or just GAC, as a shorthand for all these individual markets at once. (In fact, the market will usually be general acute care services *to a particular subset of purchasers,* reflecting the difference between commercial payors and government payors.[215])

Here's this concept in action in a hospital merger case.

ProMedica Health Sys., Inc. v. FTC

749 F.3d 559 (6th Cir. 2014)

Judge Kethledge.

[1] Often, the first steps in analyzing a merger's competitive effects are to define the geographic and product markets affected by it. Here, the parties agree that the relevant geographic market is Lucas County. The relevant product market or markets, however, are more difficult. The first principle of market definition is substitutability: a relevant product market must "identify a set of products that are reasonably interchangeable[.]" Horizontal Merger Guidelines § 4.1. Chevrolets and Fords might be interchangeable in this sense, but Chevrolets and Lamborghinis are probably not. The general question is whether two products can be used for the same purpose, and if so, whether and to what extent purchasers are willing to substitute one for the other.

[2] By this measure, each individual medical procedure could give rise to a separate market: if you need your hip replaced, you can't decide to have chemotherapy instead. But nobody advocates that we analyze the effects of this merger upon hundreds if not thousands of markets for individual procedures; instead, the parties agree that we should "cluster" these markets somehow. The parties disagree, however, on the principles that should govern which services are clustered and which are not.

[3] Two theories of clustering are pertinent here. The first—which the FTC advocates and the Commission adopted—is the "administrative-convenience" theory. (A better name might be the "similar-conditions" theory.) This theory holds, in essence, that there is no need to perform separate antitrust analyses for separate product markets when competitive conditions are similar for each. In *Brown Shoe*, for example, the Supreme Court analyzed together the markets for men's, women's, and children's shoes, because the competitive conditions for each of them were similar. [. . .]

[4] Here, the Commission applied this theory to cluster both primary services (but excluding OB [*i.e.*, obstetrical services], for reasons discussed below) and secondary services for purposes of analyzing the merger's competitive

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[214] *See, e.g.*, Brown Shoe Co. v. United States, 370 U.S. 294, 327–28 (1962) (applying cluster market analysis and refusing to consider competition in narrower categories because, "whether [such categories are] considered separately or together, the picture of this merger is the same").

[215] *See, e.g.*, FTC v. Penn State Hershey Med. Ctr., 838 F.3d 327, 338 (3d Cir. 2016) ("The District Court found, and the parties stipulated, that the relevant product market is general acute care ("GAC") services *sold to commercial payors.*") (emphasis added).

effects. Substantial evidence supports that demarcation. The respective market shares for each of Lucas County's four hospital systems (ProMedica, Mercy, UTMC, St. Luke's) are similar across the range of primary and secondary services. A hospital's market share for shoulder surgery, for example, is similar to its market share for knee replacements. Barriers to entry are likewise similar across primary and secondary services. So are the services' respective geographic markets. Thus, the competitive conditions across the markets for primary and secondary services are similar enough to justify clustering those markets when analyzing the merger's competitive effects.

[5] But the same is not true for OB [*i.e.*, obstetric] services, whose competitive conditions differ in at least two respects from those for other services. First, before the merger, ProMedica's market share for OB services (71.2%) was more than half-again greater than its market share for primary and secondary services (46.8%). And the merger would drive ProMedica's share for OB services even higher, to 80.5%—no small number in this area of the law. Second, and relatedly, before the merger there were only three hospital systems that provided OB services in Lucas County (ProMedica, Mercy, St. Luke's) rather than four; after the merger, there would be only two. (One might also suspect that the geographic market for OB services is smaller than it is for other primary services—one can drive only so far when the baby is on the way—but the record is not clear on that point.) The Commission therefore flagged OB as a separate relevant market for purposes of analyzing the merger's competitive effects. For the reasons just stated, substantial evidence supports that decision. [. . .]

[6] The reference to demand-side considerations in § 4 of the Guidelines concerns the manner in which one defines a relevant market, not the conditions under which one can cluster admittedly different markets when analyzing a merger's competitive effects. The administrative-convenience theory asks a different question (whether the competitive conditions for two markets are similar enough to analyze them together) than the one answered by § 4 of the Guidelines (how one defines an individual market in the first place). . . . . [. . .]

[7] The relevant markets, for purposes of analyzing the merger's competitive effects, are what the Commission says they are: (1) a cluster market of primary (but not OB) and secondary inpatient services (hereafter, the "GAC market"), and (2) a separate market for OB services.

3. Price-Discrimination Markets

Legal market definition is an exercise in line-drawing: some products or services are "in" the market, while others are "out." But, as we noted above, different buyers may have different perspectives on substitutability. Some customers—the inframarginal ones—might need, or highly value, a specific feature of a product or service, and so cannot turn to products or services that do not have such a feature, while others might not care about that feature at all and so enjoy a much wider range of substitutes.

When the group of inframarginal customers can be easily identified by the merged firm and targeted for some kind of adverse treatment (such as a price increase), then a court or agency might define a market around that group of customers. This is called a "price discrimination" or "targeted customer" market.

Horizontal Merger Guidelines § 4

4.1.4 Product Market Definition with Targeted Customers

[1] If a hypothetical monopolist could profitably target a subset of customers for price increases, the Agencies may identify relevant markets defined around those targeted customers, to whom a hypothetical monopolist would profitably and separately impose at least a SSNIP. Markets to serve targeted customers are also known as price discrimination markets. In practice, the Agencies identify price discrimination markets only where they believe there is a realistic prospect of an adverse competitive effect on a group of targeted customers.

Example 11: Glass containers have many uses. In response to a price increase for glass containers, some users would substitute substantially to plastic or metal containers, but baby food manufacturers would not. If a hypothetical monopolist could price separately and limit arbitrage, baby food manufacturers would be vulnerable to a targeted increase in the price of glass containers. The Agencies could define a distinct market for glass containers used to package baby food.

[2] The Agencies also often consider markets for targeted customers when prices are individually negotiated and suppliers have information about customers that would allow a hypothetical monopolist to identify customers that are likely to pay a higher price for the relevant product. If prices are negotiated individually with customers, the hypothetical monopolist test may suggest relevant markets that are as narrow as individual customers[.] Nonetheless, the Agencies often define markets for groups of targeted customers, i.e., by type of customer, rather than by individual customer. By so doing, the Agencies are able to rely on aggregated market shares that can be more helpful in predicting the competitive effects of the merger.

* * *

This concept is easier to state than it is to apply. In reality, *every* market has some marginal consumers and some inframarginal ones. So courts must often consider whether the inframarginal ones are sufficiently vulnerable—that is, inelastic and identifiable to the supplier—to justify the use of a price-discrimination market.[216]

In the following extract, the D.C. Circuit—faced with a challenge to the acquisition by the Whole Foods supermarket chain of its competitor Wild Oats—wrestles with the question of whether the right market definition is limited to "premium natural and organic supermarkets" or "PNOS." As the court recognizes, price discrimination can occur even when a store cannot literally identify its inframarginal customers as they walk through the door, simply by charging higher margins on the products that those inframarginal customers are focused on buying, and lower margins on the products for which the store faces more competition. (For more on the economics of price discrimination and its different forms, look back at Chapter II.)

FTC v. Whole Foods Market, Inc.

548 F.3d 1028 (D.C. Cir. 2008)

Judge Brown.

[1] A market must include all products reasonably interchangeable by consumers for the same purposes. Whether one product is reasonably interchangeable for another depends not only on the ease and speed with which customers can substitute it and the desirability of doing so, but also on the cost of substitution, which depends most sensitively on the price of the products. A broad market may also contain relevant submarkets which themselves constitute product markets for antitrust purposes. The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.

[2] To facilitate this analysis, the Department of Justice and the FTC developed a technique called the SSNIP ("small but significant non-transitory increase in price") test, which both Dr. Murphy and Dr. Scheffman [*i.e.*, the experts retained by the FTC and the merging parties respectively] used. In the SSNIP method, one asks whether a hypothetical monopolist controlling all suppliers in the proposed market could profit from a small price increase. If a small price increase would drive consumers to an alternative product, then that product must be reasonably substitutable for those in the proposed market and must therefore be part of the market, properly defined.

[3] Experts for the two sides disagreed about how to do the SSNIP of the proposed PNOS ["premium natural and organic supermarkets"] market. Dr. Scheffman used a method called critical loss analysis, in which he predicted the loss that would result when marginal customers shifted purchases to conventional supermarkets in response to a SSNIP. He concluded a hypothetical monopolist could not profit from a SSNIP, so that conventional supermarkets must be within the same market as PNOS. In contrast, Dr. Murphy disapproved of critical loss analysis generally, preferring a method called critical diversion that asked how many customers would be diverted to Whole Foods and how many to conventional supermarkets if a nearby Wild Oats closed. Whole Foods's internal planning documents indicated at least a majority of these customers would switch to Whole Foods, thus making the closure profitable for a hypothetical PNOS monopolist. One crucial difference between these approaches was

[216] *See*, *e.g.*, FTC v. Wilh. Wilhelmsen Holding ASA, 341 F. Supp. 3d 27, 51–57 (D.D.C. 2018) (defining market around global fleet customers in light of evidence that they constituted a distinct group with distinct needs and were vulnerable to price discrimination).

that Dr. Scheffman's analysis depended only on the marginal loss of sales, while Dr. Murphy's used the average loss of customers. Dr. Murphy explained that focusing on the average behavior of customers was appropriate because a core of committed customers would continue to shop at PNOS stores despite a SSNIP.

[4] In appropriate circumstances, core customers can be a proper subject of antitrust concern. In particular, when one or a few firms differentiate themselves by offering a particular package of goods or services, it is quite possible for there to be a central group of customers for whom only that package will do. What motivates antitrust concern for such customers is the possibility that fringe competition for individual products within a package may not protect customers who need the whole package from market power exercised by a sole supplier of the package.

[5] Such customers may be captive to the sole supplier, which can then, by means of price discrimination, extract monopoly profits from them while competing for the business of marginal customers. Not that prices that segregate core from marginal consumers are in themselves anticompetitive; such pricing simply indicates the existence of a submarket of core customers, operating in parallel with the broader market but featuring a different demand curve. Sometimes, for some customers a package provides access to certain products or services that would otherwise be unavailable to them. Because the core customers require the whole package, they respond differently to price increases from marginal customers who may obtain portions of the package elsewhere. Of course, core customers may constitute a submarket even without such an extreme difference in demand elasticity. After all, market definition focuses on what products are reasonably substitutable; what is reasonable must ultimately be determined by settled consumer preference.

[6] In short, a core group of particularly dedicated, "distinct customers," paying "distinct prices," may constitute a recognizable submarket, whether they are dedicated because they need a complete cluster of products, because their particular circumstances dictate that a product is the only realistic choice, or because they find a particular product uniquely attractive. For example, [in *FTC v. Staples, Inc.*, 970 F.Supp. 1066, 1078–79 (D.D.C. 1997)] the existence of core customers dedicated to office supply superstores, with their unique combination of size, selection, depth, and breadth of inventory, was an important factor distinguishing that submarket. As always in defining a market, we must take into account the realities of competition. We look to the *Brown Shoe* indicia, among which the economic criteria are primary.

[7] The FTC's evidence delineated a PNOS submarket catering to a core group of customers who have decided that natural and organic is important, [and a] lifestyle of health and ecological sustainability is important. It was undisputed that Whole Foods and Wild Oats provide higher levels of customer service than conventional supermarkets, a unique environment, and a particular focus on the core values these customers espoused. The FTC connected these intangible properties with concrete aspects of the PNOS model, such as a much larger selection of natural and organic products, and a much greater concentration of perishables than conventional supermarkets.

[8] Further, the FTC documented exactly the kind of price discrimination that enables a firm to profit from core customers for whom it is the sole supplier. Dr. Murphy compared the margins of Whole Foods stores in cities where they competed with Wild Oats. He found the presence of a Wild Oats depressed Whole Foods's margins significantly. Notably, while there was no effect on Whole Foods's margins in the product category of "groceries," where Whole Foods and Wild Oats compete on the margins with conventional supermarkets, the effect on margins for perishables was substantial. Confirming this price discrimination, Whole Foods's documents indicated that when it price-checked conventional supermarkets, the focus was overwhelmingly on "dry grocery," rather than on the perishables that were 70% of Whole Foods's business. Thus, in the high-quality perishables on which both Whole Foods and Wild Oats made most of their money, they competed directly with each other, and they competed with supermarkets only on the dry grocery items that were the fringes of their business.

[9] Additionally, the FTC provided direct evidence that PNOS competition had a greater effect than conventional supermarkets on PNOS prices. Dr. Murphy showed the opening of a new Whole Foods in the vicinity of a Wild Oats caused Wild Oats's prices to drop, while entry by non-PNOS stores had no such effect. Similarly, the opening of Earth Fare stores (another PNOS) near Whole Foods stores caused Whole Foods's prices to drop immediately. The price effect continued, while decreasing, until the Earth Fare stores were forced to close.

[10] Finally, evidence of consumer behavior supported the conclusion that PNOS serve a core consumer base. Whole Foods's internal projections, based on market experience, suggested that if a Wild Oats near a Whole Foods were to close, the majority (in some cases nearly all) of its customers would switch to the Whole Foods rather than to conventional supermarkets. Since Whole Foods's prices for perishables are higher than those of conventional supermarkets, such customers must not find shopping at the latter interchangeable with PNOS shopping. They are the core customers. Moreover, market research, including Dr. Scheffman's own studies, indicated 68% of Whole Foods customers are core customers who share the Whole Foods "core values."

[11] Against this conclusion the defendants posed evidence that customers "cross-shop" between PNOS and other stores and that Whole Foods and Wild Oats check the prices of conventional supermarkets. But the fact that PNOS and ordinary supermarkets are direct competitors in some submarkets is not the end of the inquiry. Of course customers cross-shop; PNOS carry comprehensive inventories. The fact that a customer might buy a stick of gum at a supermarket or at a convenience store does not mean there is no definable groceries market. Here, cross-shopping is entirely consistent with the existence of a core group of PNOS customers. Indeed, Dr. Murphy explained that Whole Foods competes actively with conventional supermarkets for dry groceries sales, even though it ignores their prices for high-quality perishables.

[12] In addition, the defendants relied on Dr. Scheffman's conclusion that there is no clearly definable core customer. However, this conclusion was inconsistent with Dr. Scheffman's own report and testimony. Market research had found that customers who shop at Whole Foods because they share the core values it champions constituted at least a majority of its customers. Moreover, Dr. Scheffman acknowledged there are core shoppers who will only buy organic and natural and for that reason go to Whole Foods or Wild Oats. He contended they could be ignored because the numbers are not substantial. Again, Dr. Scheffman's own market data undermined this assertion.

[13] In sum, the district court believed the antitrust laws are addressed only to marginal consumers. This was an error of law, because in some situations core consumers, demanding exclusively a particular product or package of products, distinguish a submarket. The FTC described the core PNOS customers, explained how PNOS cater to these customers, and showed these customers provided the bulk of PNOS's business. The FTC put forward economic evidence—which the district court ignored—showing directly how PNOS discriminate on price between their core and marginal customers, thus treating the former as a distinct market. Therefore, I cannot agree with the district court that the FTC would never be able to prove a PNOS submarket. This is not to say the FTC has in fact proved such a market, which is not necessary at this point. To obtain a preliminary injunction under [15 U.S.C.] § 53(b), the FTC need only show a likelihood of success sufficient . . . to balance any equities that might weigh against the injunction.

Judge Kavanaugh, dissenting.

[14] [T]he record evidence in this case does not show that Whole Foods changed its prices in any significant way in response to exit from an area by Wild Oats. In the four cases where Wild Oats exited and a Whole Foods store remained, there is no evidence in the record that Whole Foods then raised prices. Nor was there any evidence of price increases after Whole Foods took over two Wild Oats stores.

[15] In the absence of any evidence in the record that Whole Foods was able to (or did) set higher prices when Wild Oats exited or was absent, the District Court correctly concluded that Whole Foods competes in a market composed of all supermarkets, meaning that "all supermarkets" is the relevant product market and that the Whole Foods–Wild Oats merger will not substantially lessen competition in that product market.

[16] In addition to the all-but-dispositive price evidence, the District Court identified other factors further demonstrating that the relevant market consists of all supermarkets.

[17] The record shows that Whole Foods makes site selection decisions based on all supermarkets and checks prices against all supermarkets, not only so-called organic supermarkets. . . . The point here is simple: Whole Foods would not examine the locations of and price check conventional grocery stores if it were not a competitor of those stores. Whole Foods does not price check Sports Authority; Whole Foods does price check Safeway.

[18] The record also demonstrates that conventional supermarkets and so-called organic supermarkets are aggressively competing to attract customers from one another. . . . The record shows that Whole Foods has made progress: Most products that Whole Foods sells are not organic. Conversely, conventional supermarkets have shifted towards emphasizing fresh, natural and organic" products. Most of the major chains and others are expanding into private label organic and natural products.

[19] So the dividing line between "organic" and conventional supermarkets has blurred. As the District Court aptly put it, the train has already left the station. The convergence undermines the threshold premise of the FTC's case. This is an industry in transition, and Whole Foods has pioneered a product differentiation that in turn has caused other supermarket chains to update their offerings. These are not separate product markets; this is a market where all supermarkets including so-called organic supermarkets are clawing tooth and nail to differentiate themselves, beat the competition, and make money. [. . .]

[20] In an attempt to save its merger case . . . the FTC cites marginally relevant evidence and advances a scattershot of flawed arguments.

[21] First, the FTC says that so-called organic supermarkets like Whole Foods and Wild Oats constitute their own product market because they are characterized by factors that differentiate them from conventional supermarkets. Those factors include intangible qualities such as customer service and tangible factors such as a focus on perishables.

[22] This argument reflects the key error that permeates the FTC's approach to this case. Those factors demonstrate only product differentiation, and product differentiation does not mean different product markets. [. . .]

[23] The key to distinguishing product differentiation from separate product markets lies in price information. As Professors Areeda and Hovenkamp have stated, differentiated sellers generally compete with one another sufficiently that the prices of one are greatly constrained by the prices of others. . . . To distinguish differentiation from separate product markets, courts thus must ask whether one seller could maximize profit by charging "more than the competitive price without losing too much patronage to other sellers. Here, in other words, could so-called organic supermarkets maximize profit by charging more than a competitive price without losing too much patronage to conventional supermarkets? Based on the evidence regarding Whole Foods's pricing practices, the District Court correctly found that the answer to that question is no. So-called organic supermarkets are engaged in product differentiation; they do not constitute a product market separate from all supermarkets.

[24] Second, the FTC points to internal Whole Foods studies and other evidence showing that if a Wild Oats near a Whole Foods were to close, most of the Wild Oats customers would shift to Whole Foods. But that says nothing about whether Whole Foods could impose a five percent or more price increase and still retain those customers (and its other customers), which is the relevant antitrust question. In other words, the fact that many Wild Oats customers would shift to Whole Foods does not mean that those customers would stay with Whole Foods, as opposed to shifting to conventional supermarkets, if Whole Foods significantly raised its prices. And even if one could infer that all of those former Wild Oats customers would so prefer Whole Foods that they would shop there even in the face of significant price increases, that would not show whether Whole Foods could raise prices without driving out a sufficient number of other customers as to make the price increases unprofitable. In sum, this argument is a diversion from the economic analysis that must be conducted in antitrust cases like this. The District Court properly found that the expert evidence in the record leads to the conclusion that Whole Foods could not profitably impose such a significant price increase.

[25] Third, the FTC cites comments by Whole Foods CEO John Mackey as evidence that Whole Foods perceived Wild Oats to be a unique competitor. Even if Mackey's comments were directed only to Wild Oats, that would not be evidence that Whole Foods and Wild Oats are in their own product market separate from all other supermarkets. It just as readily suggests that Whole Foods and Wild Oats are two supermarkets that have similarly differentiated themselves from the rest of the market, such that Mackey would be especially pleased to see that competitor vanish. Beating the competition from similarly differentiated competitors in a product market is

ordinarily an entirely permissible competitive goal. Saying as much, as Mackey did here, does not mean that the similarly differentiated competitor is the only relevant competition in the marketplace. [. . .]

[26] The bottom line is that, as the District Court found, there is no evidence in the record suggesting that Whole Foods priced differently based on the presence or absence of a Wild Oats store in the area. That is a conspicuous—and all but dispositive—omission in . . . the FTC's case. [. . .]

[27] . . . [T]he Court's decision resuscitates the loose antitrust standards of *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962), the 1960s-era relic. . . . This is a problem because *Brown Shoe*'s brand of free-wheeling antitrust analysis has not stood the test of time.

4. Platform and Zero-Price Markets

In principle, the standard, substitutability-based approach to market definition can be applied to platform markets—that is, markets involving services that connect, or facilitate interactions among, users or groups of users—just like any others. But in *Ohio v. American Express* the Supreme Court signaled a dramatic break with the substitutability principle. In short, American Express provided certain services to cardholders, and certain other services to merchants. Of course, those services were not substitutable for one another: and, thus, ordinarily they would be included in two different markets. But in a blockbuster decision that has been much criticized, the Court held that a *single* market should be defined to embrace both sides of the platform in a single antitrust market, announcing a rule that would apply prospectively to other "transaction platforms." This has left a sharp question about how far this departure from substitutability extends, in a digital economy full of multisided platform businesses.

The case involved a challenge to AmEx's "antisteering" rules, which prohibited merchants that accepted AmEx from nudging or "steering" consumers to use other (*i.e.*, non-AmEx) credit cards, even if those cards charged lower fees to the merchant. The government plaintiffs alleged that the antisteering rules unlawfully harmed price competition by chilling competition among credit cards, in violation of Section 1 of the Sherman Act, and pointed to evidence of increased merchant fees as evidence of harm. The Court set out its market definition analysis in the following terms.

Ohio v. American Express Co.

138 S.Ct. 2274 (2018)

Justice Thomas.

[1] Because legal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law, courts usually cannot properly apply the rule of reason without an accurate definition of the relevant market. Without a definition of the market there is no way to measure the defendant's ability to lessen or destroy competition. Thus, the relevant market is defined as the area of effective competition. Typically this is the arena within which significant substitution in consumption or production occurs. But courts should combine different products or services into a single market when that combination reflects commercial realities.

[2] [C]redit-card networks are two-sided platforms. Due to indirect network effects [*i.e.*, the fact that the product becomes more attractive to one category of users (such as merchants) as the number or activity of another category of users (such as cardholding consumers) increases], two-sided platforms cannot raise prices on one side without risking a feedback loop of declining demand. And the fact that two-sided platforms charge one side a price that is below or above cost reflects differences in the two sides' demand elasticity, not market power or anticompetitive pricing. Price increases on one side of the platform likewise do not suggest anticompetitive effects without some evidence that they have increased the overall cost of the platform's services. Thus, courts must include both sides of the platform—merchants and cardholders—when defining the credit-card market.

[3] To be sure, it is not always necessary to consider both sides of a two-sided platform. A market should be treated as one sided when the impacts of indirect network effects and relative pricing in that market are minor. Newspapers that sell advertisements, for example, arguably operate a two-sided platform because the value of an advertisement

increases as more people read the newspaper. But in the newspaper-advertisement market, the indirect network effects operate in only one direction; newspaper readers are largely indifferent to the amount of advertising that a newspaper contains. Because of these weak indirect network effects, the market for newspaper advertising behaves much like a one-sided market and should be analyzed as such.

[4] But two-sided transaction platforms, like the credit-card market, are different. These platforms facilitate a single, simultaneous transaction between participants. For credit cards, the network can sell its services only if a merchant and cardholder both simultaneously choose to use the network. Thus, whenever a credit-card network sells one transaction's worth of card-acceptance services to a merchant it also must sell one transaction's worth of card-payment services to a cardholder. It cannot sell transaction services to either cardholders or merchants individually. To optimize sales, the network must find the balance of pricing that encourages the greatest number of matches between cardholders and merchants.

[5] Because they cannot make a sale unless both sides of the platform simultaneously agree to use their services, two-sided transaction platforms exhibit more pronounced indirect network effects and interconnected pricing and demand. Transaction platforms are thus better understood as supplying only one product—transactions. In the credit-card market, these transactions are jointly consumed by a cardholder, who uses the payment card to make a transaction, and a merchant, who accepts the payment card as a method of payment. Tellingly, credit cards determine their market share by measuring the volume of transactions they have sold.

[6] Evaluating both sides of a two-sided transaction platform is also necessary to accurately assess competition. Only other two-sided platforms can compete with a two-sided platform for transactions. A credit-card company that processed transactions for merchants, but that had no cardholders willing to use its card, could not compete with Amex. Only a company that had both cardholders and merchants willing to use its network could sell transactions and compete in the credit-card market. Similarly, if a merchant accepts the four major credit cards, but a cardholder only uses Visa or Amex, only those two cards can compete for the particular transaction. Thus, competition cannot be accurately assessed by looking at only one side of the platform in isolation.

[7] For all these reasons, in two-sided transaction markets, only one market should be defined. Any other analysis would lead to mistaken inferences of the kind that could chill the very conduct the antitrust laws are designed to protect. Accordingly, we will analyze the two-sided market for credit-card transactions as a whole to determine whether the plaintiffs have shown that Amex's antisteering provisions have anticompetitive effects.

Justice Breyer, with whom Justices Ginsburg, Sotomayor, and Kagan join, dissenting.

[8] [. . .] I recognize that properly defining a market is often a complex business. Once a court has identified the good or service directly restrained . . . it will sometimes add to the relevant market what economists call "substitutes": other goods or services that are reasonably substitutable for that good or service. The reason that substitutes are included in the relevant market is that they restrain a firm's ability to profitably raise prices, because customers will switch to the substitutes rather than pay the higher prices.

[9] But while the market includes substitutes, it does not include what economists call complements: goods or services that are used together with the restrained product, but that cannot be substituted for that product. An example of complements is gasoline and tires. A driver needs both gasoline and tires to drive, but they are not substitutes for each other, and so the sale price of tires does not check the ability of a gasoline firm (say a gasoline monopolist) to raise the price of gasoline above competitive levels. As a treatise on the subject states: "Grouping complementary goods into the same market" is "economic nonsense," and would "undermine the rationale for the policy against monopolization or collusion in the first place." 2B [Phillip Areeda & Herbert Hovenkamp, ANTITRUST LAW] ¶ 565a, at 431.

[10] Here, the relationship between merchant-related card services and shopper-related card services is primarily that of complements, not substitutes. Like gasoline and tires, both must be purchased for either to have value. Merchants upset about a price increase for merchant-related services cannot avoid that price increase by becoming cardholders, in the way that, say, a buyer of newspaper advertising can switch to television advertising or direct mail in response to a newspaper's advertising price increase. The two categories of services serve fundamentally different purposes. And so, also like gasoline and tires, it is difficult to see any way in which the price of shopper-

related services could act as a check on the card firm's sale price of merchant-related services. If anything, a lower price of shopper-related card services is likely to cause more shoppers to use the card, and increased shopper popularity should make it easier for a card firm to raise prices to merchants, not harder, as would be the case if the services were substitutes. Thus, unless there is something unusual about this case . . . there is no justification for treating shopper-related services and merchant-related services as if they were part of a single market, at least not at step 1 of the rule of reason. [. . .]

[11] Missing from the majority's analysis is any explanation as to why, given the purposes that market definition serves in antitrust law, the fact that a credit-card firm can be said to operate a "two-sided transaction platform" means that its merchant-related and shopper-related services should be combined into a single market. The phrase "two-sided transaction platform" is not one of antitrust art—I can find no case from this Court using those words. The majority defines the phrase as covering a business that "offers different products or services to two different groups who both depend on the platform to intermediate between them," where the business "cannot make a sale to one side of the platform without simultaneously making a sale to the other" side of the platform. I take from that definition that there are four relevant features of such businesses on the majority's account: they (1) offer different products or services, (2) to different groups of customers, (3) whom the "platform" connects, (4) in simultaneous transactions.

[12] What is it about businesses with those four features that the majority thinks justifies a special market-definition approach for them? It cannot be the first two features—that the company sells different products to different groups of customers. Companies that sell multiple products to multiple types of customers are commonplace. A firm might mine for gold, which it refines and sells both to dentists in the form of fillings and to investors in the form of ingots. Or, a firm might drill for both oil and natural gas. Or a firm might make both ignition switches inserted into auto bodies and tires used for cars. I have already explained that, ordinarily, antitrust law will not group the two nonsubstitutable products together for step 1 purposes.

[13] Neither should it normally matter whether a company sells related, or complementary, products, i.e., products which must both be purchased to have any function, such as ignition switches and tires, or cameras and film. It is well established that an antitrust court in such cases looks at the product where the attacked restraint has an anticompetitive effect. The court does not combine the customers for the separate, nonsubstitutable goods and see if "overall" the restraint has a negative effect. That is because, as I have explained, the complementary relationship between the products is irrelevant to the purposes of market-definition.

[14] . . . The relevant question is whether merchant-related and shopper-related services are substitutes, one for the other, so that customers can respond to a price increase for one service by switching to the other service. As I have explained, the two types of services are not substitutes in this way. And so the question remains, just as before: What is it about the economic relationship between merchant-related and shopper-related services that would justify the majority's novel approach to market definition?

[15] What about the last two features—that the company connects the two groups of customers to each other, in simultaneous transactions? That, too, is commonplace. Consider a farmers' market. It brings local farmers and local shoppers together, and transactions will occur only if a farmer and a shopper simultaneously agree to engage in one. Should courts abandon their ordinary step 1 inquiry if several competing farmers' markets in a city agree that only certain kinds of farmers can participate, or if a farmers' market charges a higher fee than its competitors do and prohibits participating farmers from raising their prices to cover it? Why? If farmers' markets are special, what about travel agents that connect airlines and passengers? What about internet retailers, who, in addition to selling their own goods, allow (for a fee) other goods-producers to sell over their networks? Each of those businesses seems to meet the majority's four-prong definition.

[16] Apparently as its justification for applying a special market-definition rule to "two-sided transaction platforms," the majority explains that such platforms "often exhibit" what it calls "indirect network effects." By this, the majority means that sales of merchant-related card services and (different) shopper-related card services are interconnected, in that increased merchant-buyers mean increased shopper-buyers (the more stores in the card's network, the more customers likely to use the card), and vice versa. But this, too, is commonplace. Consider, again, a farmers' market. The more farmers that participate (within physical and esthetic limits), the more

customers the market will likely attract, and vice versa. So too with travel agents: the more airlines whose tickets a travel agent sells, the more potential passengers will likely use that travel agent, and the more potential passengers that use the travel agent, the easier it will likely be to convince airlines to sell through the travel agent. And so forth. Nothing in antitrust law, to my knowledge, suggests that a court, when presented with an agreement that restricts competition in any one of the markets my examples suggest, should abandon traditional market-definition approaches and include in the relevant market services that are complements, not substitutes, of the restrained good.

CASENOTE: United States v. Sabre Corp.

452 F. Supp. 3d 97 (D. Del. 2020) (vacated as moot)

The *AmEx* decision was huge news (by antitrust standards) and has spawned a healthy literature.[217] And it wasn't long until a district court relied on *AmEx*—in the 2020 *Sabre* decision—to reach a surprising conclusion. The *Sabre* decision itself was vacated for mootness, but it stands as an excellent example of how a lower court might understand and apply the central logic of *AmEx*.

In *Sabre*, the court considered DOJ's challenge to a proposed merger between Sabre, a two-sided "global distribution system" ("GDS") platform that connects airlines with travel agents, and Farelogix, a business that supplied IT services to airlines that the airlines used to deal in various ways with travel agents, including to receive and process orders. Unlike Sabre, Farelogix did not deal directly with travel agents: Judge Stark of the U.S. District Court for the District of Delaware had to decide whether and how, after *AmEx*, this fact affected the merger analysis.

The court made extensive findings of fact suggestive of competition between the parties. A "preponderance of the evidence shows that Sabre and Farelogix do view each other as competitors," the court held, "although only in a limited fashion." "The record reflects competition between Sabre's and Farelogix's direct connect solutions for major airlines." Among other things, the parties "competed to provide an NDC direct connect platform" to one customer; "Sabre viewed Farelogix as its 'main competitor' for [another] opportunity." The parties' services also directly overlapped: "Sabre and Farelogix each allow airlines to send their offers to travel agencies, process orders or bookings, and service those orders." And Farelogix identified Sabre as a "key competitor" in order delivery and offer management. Airlines appeared to share this perspective: some airlines considered Sabre's and Farelogix products as "partial substitute[s]" for one another. American Airlines described Farelogix's product as "a low cost substitute for GDSs" like Sabre, while a United employee testified that Farelogix was the "only alternative" to GDSs as a means of reaching U.S. travel agencies. And so on.

And yet, despite concluding that the parties *did* compete with one another in fact, the court held that *AmEx* required the conclusion that they did *not* compete with one another as a matter of law. The court held: "DOJ cannot prevail on its claim as a matter of law. Only other two-sided platforms can compete with a two-sided platform for transactions, and Farelogix is not a two-sided platform, as even DOJ concedes. Even if it is not always necessary to consider both sides of a two-sided transaction platform, it is necessary to do so where, as here, both sides of Sabre's GDS platform facilitate a single, simultaneous transaction between participants. Airlines on one side of Sabre's GDS cannot make a sale to travel agencies on the other side of the GDS unless both sides of the platform simultaneously agree to use Sabre's GDS services. This is a requirement in order for Sabre's GDS to provide its product: transactions." Even if this were not the case, the court added, DOJ had failed to evaluate the other side of the Sabre GDS. DOJ's evidence had focused on the travel-agency side of the Sabre platform, and could not constitute an "accurate assessment of competitive effects" in the absence of airline-side effects evidence as well.

[217] *See*, *e.g.*, Steven C. Salop, Daniel Francis, Lauren Sillman & Michaela Spero, *Rebuilding Platform Antitrust: Moving On from Ohio v. American Express Co.*, 84 Antitrust L.J. 883 (2022); Michael L. Katz & A. Douglas Melamed, *Competition Law as Common Law: American Express and the Evolution of Antitrust*, 168 U. Pa. L. Rev. 2061 (2020); Dennis W. Carlton, *The Anticompetitive Effects of Vertical Most-Favored-Nation Restraints and the Error of American Express*, 2019 Colum. Bus. L. Rev. 93 (2019); Erik Hovenkamp, *Platform Antitrust*, 44 J. Corp. L. 713 (2019); Michael Katz & Jonathan Sallet, *Multisided Platforms and Antitrust Enforcement*, 127 Yale L.J. 2142 (2018).

This decision was mooted, and subsequently vacated, when the parties abandoned the deal after a challenge from the U.K. competition agency. Do you agree with Judge Stark's reading of *AmEx*?

* * *

Platform business models often involve the provision of products or services at zero (or even negative) prices: for example, users may receive email, search, and personal social networking services for free because those platforms are supported by advertising. The existence of such "zero-price" products poses an obvious challenge for SSNIP-based versions of the HMT: how can you assess the impact of a hypothetical 5–10% price increase on a $0 price?[218] To respond to this problem, some have proposed alternatives, such as the use of a "small but significant non-transitory decrease in quality" ("SSNDQ") test for applying the HMT to such markets.[219] What advantages—and what challenges—would such an approach present? A number of antitrust investigations have concerned competition in zero-price markets: agencies and courts have indicated that the antitrust laws apply fully in such markets despite the lack of a traditional price.[220]

NOTES

1) To what extent do the categories of "special" market definition you have seen—buyer, cluster, bundle, price discrimination, and platform—undermine or qualify the principle of demand-side substitutability as the key to market definition? What, if anything, would be a better key to the concept of market definition?
2) A significant area of antitrust policy attention today is labor monopsony: in particular, whether antitrust enforcement and doctrine have failed to challenge practices and transactions that create or augment buyer-side market power in markets for labor. *See, e.g.*, Eric A. Posner, HOW ANTITRUST FAILED WORKERS (2021). How might you go about defining a labor market? What evidence would you use to prove its scope and the shares of participants?
3) What is the point of using a cluster market definition?
4) The *Sabre* opinion is notable, among other things, for acknowledging that the parties considered each other to be competitors but holding that they were not competitors for the purposes of antitrust law. When and why do you think antitrust courts should defer to the ordinary-course views of market participants, assuming that their documents express a consistent view? When and why do you think that antitrust courts should conclude that they "know better," in a relevant sense, than the market participants do?
5) How would you characterize the *Whole Foods* majority's views of when a price-discrimination market is appropriate? What other kinds of businesses would be able to discriminate in a similar fashion?
6) The price-discrimination market definition rule could, in principle, lead to very small markets. As technological and commercial developments make it easier to personalize terms of dealing with individual customers, price discrimination may be getting easier in some markets. Does this technological change matter for the development of antitrust doctrine?[221]
7) In *AmEx* the Court noted that there are close relationships between activities on the various sides of a platform business, and cited this fact as a reason to deviate from ordinary market-definition principles. But *many* markets are connected by close relationships: for example, markets that are upstream or downstream of one another, or markets for products and services that are complementary. For example, if dinner knives become cheaper, demand for dinner forks will increase. Should we consider applying the *AmEx* approach to other cases of "closely related" markets? What would be the consequences of broadening antitrust markets in this way?

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[218] *See, e.g.*, John M. Newman, *Antitrust in Zero-Price Markets: Applications*, 94 Wash. U. L. Rev. 49, 64–65 (2016).

[219] Daniel Mandrescu, *The SSNIP Test and Zero-Pricing Strategies: Considerations for Online Platforms*, 2 Eur. Comp. & Reg. L. Rev. 244 (2018); Note by the European Union, *Quality Considerations in the Zero-Price Economy*, https://one.oecd.org/document/DAF/COMP/WD(2018)135/en/pdf (Nov. 28, 2018) ¶ 22.

[220] *See, e.g.*, FTC v. Facebook, Inc., Case No. 20-3590, 2022 WL 103308 (D.D.C. Jan. 11, 2022) (personal social networking services); Statement of Commissioner Ohlhausen, Commissioner Wright, and Commissioner McSweeny Concerning Zillow, Inc./Trulia, Inc., FTC File No. 141-0214 (February 19, 2015) (describing FTC analysis of possible harm on zero-priced side of real estate platform).

[221] *Compare* Jerry A. Hausman, Gregory K. Leonard & Christopher A. Vellturo, *Market Definition Under Price Discrimination*, 64 Antitrust L.J. 367 (1996) (noting some practical problems in achieving price discrimination) *with* Background Note by the OECD Secretariat, *Personalized Pricing in the Digital Era* (Nov. 28, 2018), https://www.justice.gov/atr/page/file/1312741/download (reviewing issues of technology and policy relating to personalized pricing in a digital economy).

D. Geographic Market Definition

In some cases, geography is an important dimension of competition and thus an important aspect of market definition. Some products are difficult, dangerous, or expensive to transport, meaning that purchasers may strongly prefer a local supplier. Likewise, some services may require that the consumer travel to receive them, with the result that a consumer may strongly prefer a local service provider. In such cases, the market may have an important geographic dimension. In other cases, geography may not matter at all.

CASENOTE: United States v. Pabst Brewing Co.

384 U.S. 546 (1966)

A helpful formulation of the basic idea of a geographic market can be found in Justice Harlan's concurrence in *Pabst Brewing*. That case dealt with DOJ's challenge to the consummated acquisition of the eighteenth-largest brewer in the nation, Blatz Brewing, by the tenth-largest, Pabst. In a brief opinion, the Court held the merger was unlawful, referring variously to the merged firm's competitive position: (1) in individual states; (2) in a "three state area" of Wisconsin, Illinois, and Michigan; and (3) in the nation as whole. The Court explained that "[i]n 1957 [(*i.e.*, the year before the acquisition)] these two companies had combined sales which accounted for 23.95% of the beer sales in Wisconsin, 11.32% of the sales in the three-state area of Wisconsin, Illinois, and Michigan, and 4.49% of the sales throughout the country. . . . the probable effect of the merger on competition in Wisconsin, in the three-state area, and in the entire country was sufficient to show a violation of s 7 in each and all of these three areas."

The *Pabst* majority denied that it was necessary to agonize about which was the "right" frame in which to assess competition. "Congress did not seem to be troubled about the exact spot where competition might be lessened; it simply intended to outlaw mergers which threatened competition in any or all parts of the country."

Justice Harlan concurred in the judgment, but vigorously disagreed with the Court's treatment of geographic market. In so doing, he mapped out a good guide to the kind of approach that courts commonly take today. Any assessment of competitive effects, he argued, "necessarily involves a study of statistics and other evidence bearing upon market shares, market trends, number of competitors and the like. Obviously such figures will vary depending upon what geographic area is chosen as relevant, and the possibilities for 'gerrymandering' are limitless." The rule, he argued, was fairly clear: "[t]he appropriate geographic area in which to examine the effects of an acquisition is an area in which the parties to the merger or acquisition compete, and around which there exist economic barriers that significantly impede the entry of new competitors. Of course . . . no such designation is perfect, for all geographic markets are to some extent interconnected, and over time any barrier may be overcome or may disappear owing to structural or technological changes in the industry, *e.g.*, refrigeration which widened markets for 'perishable' foods."

Applying that test to the facts of the Pabst / Blatz merger, he concluded that the Government had made a satisfactory showing, among other things, that the State of Wisconsin was a relevant geographic market. A series of considerations favored this conclusion. First, both parties were significant competitors in Wisconsin. "[I]ndeed Blatz was the leading seller in Wisconsin and Pabst the fourth largest."

Second, competition in Wisconsin was clearly dominated by local suppliers. "Wisconsin . . . was dominated by substantially the same group of brewers maintaining substantially the same market shares year after year without serious challenge from other brewers operating in other sectors of the country. This picture of local concentration in various regional markets is supported by evidence that brewers are able to sell the same beer in different States for different prices (exclusive of transportation cost). . . . [A]bout 90% of beer sold in Wisconsin comes from breweries located in that State or nearby in Minnesota. . . . To the extent that it is true that local breweries have an advantage in terms of efficiency and thus cost, a significant barrier exists to brewers who wish to sell in Wisconsin but brew their beer in other areas of the country."

Third, Wisconsin-specific investment in marketing and distribution would be necessary for competitive entry into the state. "Beer is not a fungible commodity like wheat; product differentiation is important, and the ordinary

consumer is likely to choose a particular brand rather than purchase any beer indiscriminately. . . . [W]ere a brewer from, say, Colorado, interested in entering the Wisconsin market, a great deal of costly preliminary promotional activity would be required before sizable Wisconsin sales could be expected. In addition, the record indicates that beer is sold through distribution networks operating on regional, statewide, and local levels. There are numerous examples in the record of the highly specialized salesmanship needed to induce local retail sellers to carry, display, and advertise new brands of beer." These entry barriers were of significant magnitude: "To enter [Wisconsin] the new entrant must be prepared to incur considerable expense over a substantial period of time[.]"

Fourth, and finally, the regulatory environment was distinctive: "Methods of sales promotion permitted in one State are unlawful in others. State regulations govern labeling, size of containers, alcoholic content of beer, shipping procedures, and credit arrangements with wholesalers. A brewer wishing to enter the Wisconsin market does not merely start transporting beer to Milwaukee; he must comply with these various state requirements, which may differ from those in the States in which he has always dealt."

All this evidence supported the conclusion that Wisconsin was a distinct geographic market. "In terms of antitrust consequences, this means that those already within such a local market can engage in oligopolistic pricing or other practices without a very real threat that brewers operating in other areas could easily, and within a reasonably short time, enter the Wisconsin market as effective competitors of those already entrenched there."

Justice Harlan's approach—not the majority's!—exemplifies the kind of analysis that courts often perform today.

Geography is commonly important in hospital merger cases. (Why do you think this is?) In the following extract, the court considers some challenging aspects of geographic market definition in the FTC's challenge to a proposed hospital merger in Pennsylvania, and explains why an older analytical approach—the Elzinga-Hogarty test—is no longer used to measure the geographic bounds of hospital markets.

FTC v. Penn State Hershey Medical Center

838 F.3d 327 (3d. Cir. 2016)

Judge Fisher.

[1] The relevant geographic market is that area in which a potential buyer may rationally look for the goods or services he seeks. Determined within the specific context of each case, a market's geographic scope must correspond to the commercial realities of the industry being considered and be economically significant. The plaintiff (here, the Government) bears the burden of establishing the relevant geographic market.

[2] A common method employed by courts and the FTC to determine the relevant geographic market is the hypothetical monopolist test. Under the Horizontal Merger Guidelines issued by the U.S. Department of Justice's Antitrust Division and the FTC, if a hypothetical monopolist could impose a small but significant non-transitory increase in price ("SSNIP") in the proposed market, the market is properly defined. If, however, consumers would respond to a SSNIP by purchasing the product from outside the proposed market, thereby making the SSNIP unprofitable, the proposed market definition is too narrow. Important for our purposes, both the Government and the Hospitals agree that this test should govern the instant appeal.

[3] The Government argues, as it did before the District Court, that the relevant geographic market is the "Harrisburg area." More specifically, the four counties encompassing and immediately surrounding Harrisburg, Pennsylvania: Dauphin, Cumberland, Lebanon, and Perry counties.

[4] The District Court rejected the Government's proposed geographic market. It first observed that 43.5% of Hershey's patients—11,260 people—travel to Hershey from outside the four-county area, which "strongly indicate[d] that the FTC had created a geographic market that [was] too narrow because it does not appropriately account for where the Hospitals, particularly Hershey, draw their business." Second, it held that the nineteen hospitals within a sixty-five-minute drive of Harrisburg "would readily offer consumers an alternative" to accepting a SSNIP. . . . The failure to propose the proper relevant geographic market was fatal to the Government's motion, and the District Court denied the preliminary injunction request.

[5] We conclude that the District Court erred in both its formulation and its application of the proper legal test. Although the District Court correctly identified the hypothetical monopolist test, its decision reflects neither the proper formulation nor the correct application of that test. We find three errors in the District Court's analysis. First, by relying almost exclusively on the number of patients that enter the proposed market, the District Court's analysis more closely aligns with a discredited economic theory, not the hypothetical monopolist test. Second, the District Court focused on the likely response of patients to a price increase, completely neglecting any mention of the likely response of insurers. . . . .

i. Formulation of the Legal Test

[6] In formulating the legal standard for the relevant geographic market, the District Court relied primarily on the Eighth Circuit's decision in [*Little Rock Cardiology Clinic PA v. Baptist Health*, 591 F.3d 591 (8th Cir. 2009)]. According to the District Court, to determine the geographic market, a court must apply a two-part test. First, it must determine the market area in which the seller operates, its trade area. Second, it must then determine whether a plaintiff has alleged a geographic market in which only a small percentage of purchasers have alternative suppliers to whom they could practicably turn in the event that a defendant supplier's anticompetitive actions result in a price increase. Under the District Court's inquiry, the "end goal" of the relevant geographic market analysis is to delineate a geographic area where, in the medical setting, few patients leave . . . and few patients enter.

[7] This formulation of the relevant geographic market test is inconsistent with the hypothetical monopolist test. Rather, it is one-half of a different test utilized in non-healthcare markets to define the relevant geographic market: the Elzinga–Hogarty test. The Elzinga–Hogarty test consists of two separate measurements: first, the number of customers who come from outside the proposed market to purchase goods and services from inside of it, and, second, the number of customers who reside inside the market but leave that market to purchase goods and services.[222]

[8] The Elzinga–Hogarty test was once the preferred method to analyze the relevant geographic market and was employed by many courts. But subsequent empirical research demonstrated that utilizing patient flow data to determine the relevant geographic market resulted in overbroad markets with respect to hospitals. Professor Elzinga himself testified before the FTC that this method was not an appropriate method to define geographic markets in the hospital sector. [. . .]

[9] As the amici curiae Economics Professors have persuasively demonstrated, patient flow data—such as the 43.5% number emphasized by the District Court—is particularly unhelpful in hospital merger cases because of two problems: the "silent majority fallacy" and the "payor problem." The silent majority fallacy is the false assumption that patients who travel to a distant hospital to obtain care significantly constrain the prices that the closer hospital charges to patients who will not travel to other hospitals. The constraining effect is non-existent because patient decisions are based mostly on non-price factors, such as location or quality of services. This fallacy is particularly salient here, where the District Court relied almost exclusively on the fact that Hershey attracts many patients from outside of the Harrisburg area. In deciding that patients who travel to Hershey would turn to other hospitals outside of Harrisburg if the merger gave rise to higher prices, the District Court did not consider

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[222] [Editorial note:] The text of the opinion here is not an especially illuminating way to describe the Elzinga-Hogarty test (which you do not need to worry about anyway). But for those wanting a better explanation: "The E-H method usually starts with two measurements. First, an analyst determines the geographic area responsible for a percentage of the sales of the hospital or hospitals in question. Elzinga and Hogarty originally suggested an area responsible for 75 percent of sales, and then later suggested 90 percent for a "strong market" and 75 percent for a "weak market." This area is sometimes called the service area, the draw area, or the catchment area. In the context of health care markets in particular, and in the markets for services more generally, the measure of the service area is referred to as the Little In From Outside (LIFO) measure. Put simply, this means that the hospitals service few patients from outside the service area. The second measurement is the percentage of residents in the service area who obtain their care from hospitals within the area. This is called the Little Out From Inside (LOFI) measure. Again, in the simplest terms, this means that few patients from the service area obtain care outside of the area. The economic presumption is that these static measures are inversely proportional to the number of patients who would switch to hospitals outside the service area in the face of a post-merger price increase. That is, the larger the percentage of patients who leave the proposed market, the larger the number of patients that would switch to hospitals outside the market." H.E. Frech et al., *Elzinga-Hogarty Tests and Alternative Approaches For Market Share Calculations In Hospital Markets*, 71 Antitrust L.J. 921, 926–27 (2004). The test is no longer applied in hospital merger cases for the reasons explained in the text.

that Hershey is a leading academic medical center that provides highly complex medical services. We are skeptical that patients who travel to Hershey for these complex services would turn to other hospitals in the area.

[10] Although the District Court did not employ strict cutoffs to determine whether too many patients enter or leave the proposed market, the silent majority fallacy renders the test employed by the District Court unreliable even in the absence of precise thresholds. In other words, the inadequacy of using patient flow data to determine the geographic market does not depend on whether the District Court used an exact percentage or whether it used a more flexible approach: relying solely on patient flow data is not consistent with the hypothetical monopolist test.

[11] Moreover, even assuming that relying strictly on patient flow data is consistent with the hypothetical monopolist test, the District Court did not consider the other half of the equation: patient outflows. The Government presented undisputed evidence that 91% of patients who live in Harrisburg receive GAC services in the Harrisburg area. Such a high number of patients who do not travel long distances for healthcare supports the Government's contention that GAC services are inherently local and that, in turn, payors would not be able to market a healthcare plan to Harrisburg-area residents that did not include Harrisburg-area hospitals. Although the District Court was not required to cite every piece of evidence it received, or even on which it relied, citing only patient inflows and ignoring patient outflows creates a misleading picture of the relevant geographic market.

ii. Likely Response of Payors

[12] The next problem with utilizing patient flow data—the payor problem—underscores the second error committed by the District Court. By utilizing patient flow data as its primary evidence that the relevant market was too narrow, the District Court failed to properly account for the likely response of insurers in the face of a SSNIP. In fact, it completely neglected any mention of the insurers in the healthcare market. This incorrect focus reflects a misunderstanding of the commercial realities of the healthcare market.

[13] As the FTC and several courts have recognized, the healthcare market is represented by a two-stage model of competition. In the first stage, hospitals compete to be included in an insurance plan's hospital network. In the second stage, hospitals compete to attract individual members of an insurer's plan. Patients are largely insensitive to healthcare prices because they utilize insurance, which covers most of their healthcare costs. Because of this, our analysis must focus, at least in part, on the payors who will feel the impact of any price increase.

[14] The Hospitals argue that there is no fundamental difference between analyzing the likely response of consumers through the patient or the payor perspective. We disagree. Patients are relevant to the analysis, especially to the extent that their behavior affects the relative bargaining positions of insurers and hospitals as they negotiate rates. But patients, in large part, do not feel the impact of price increases. Insurers do. And they are the ones who negotiate directly with the hospitals to determine both reimbursement rates and the hospitals that will be included in their networks.

[15] Imagine that a hospital raised the cost of a procedure from $1,000 to $2,000. The patient who utilizes health insurance will still have the same out-of-pocket costs before and after the price increase. It is the insurer who will bear the immediate impact of that price increase. Not until the insurer passes that cost on to the patient in the form of higher premiums will the patient feel the impact of that price increase. And even then, the cost will be spread among many insured patients; it will not be felt solely by the patient who receives the higher-priced procedure. This is the commercial reality of the healthcare market as it exists today.

[16] Thus, consistent with the mandate to determine the relevant geographic market taking into account the commercial realities of the specific industry involved, when we apply the hypothetical monopolist test, we must also do so through the lens of the insurers: if enough insurers, in the face of a small but significant non-transitory price increase, would avoid the price increase by looking to hospitals outside the proposed geographic market, then the market is too narrow. . . . It was error for the District Court to completely disregard the role that insurers play in the healthcare market.

[17] We do not mean to suggest that, in the healthcare context, considering the effect of a price increase on patients constitutes error standing alone. Patients, of course, are relevant. For instance, an antitrust defendant may be able

to demonstrate that enough patients would buy a health plan marketed to them with no in-network hospital in the proposed geographic market. It would necessarily follow that those patients who purchased the health plan would have to turn to hospitals outside the relevant market (lest they pay significant out-of-pocket costs for an out-of-network hospital). In this scenario, patient response is clearly important, but it is not important with respect to patients' response to the price increase demanded by the post-merger Hospitals. The District Court here did not address this correlated behavior. And although it is possible that this scenario could play out in some healthcare market, to assume that it would in Harrisburg defies the payors' testimony. The payors repeatedly said that they could not successfully market a plan in the Harrisburg area without Hershey and Pinnacle. In fact, one payor that attempted to do just that (with Holy Spirit, a Harrisburg-area hospital, no less) lost half of its membership. That is to say nothing about whether payors would be able to successfully market a plan without any Harrisburg-area hospital, which is the less burdensome question the Government was tasked with answering under the hypothetical monopolist test. [. . .]

[18] Our conclusion that the District Court incorrectly formulated and misapplied the proper standard does not end the inquiry. We must still determine whether the Government has met its burden to properly define the relevant geographic market. We conclude that it has.

[19] The Government presented extensive evidence showing that insurers would have no choice but to accept a price increase from a combined Hershey/Pinnacle in lieu of excluding the Hospitals from their networks. First, two of Central Pennsylvania's largest insurers—Payor A and Payor B—testified that they could not successfully market a network to employers without including at least one of the Hospitals. Payor A's representative stated in his deposition that "[y]ou wouldn't have a whole lot of choice" if Hershey and Pinnacle raised their prices following a merger and there was no price agreement; that "there would be no network without" a combined Hershey and Pinnacle; and that the combined entity would have more bargaining leverage. He estimated that the insurer would lose half of its membership in Dauphin County if they tried to market a plan that excluded Pinnacle and Hershey. [. . .]

[20] The results of one natural experiment also support the insurer's testimony. From 2000 until 2014, Payor E was able to market a viable network in Harrisburg that included only Holy Spirit and Pinnacle but did not include Hershey. In August 2014, Pinnacle terminated its agreement with Payor E. After losing Pinnacle from its network, Payor E negotiated substantial discounts with Holy Spirit and large hospitals in York and Lancaster counties and was able to offer plans at a substantial discount. Despite being priced much lower than its competitors, Payor E lost half its members, who switched to other health plans. Brokers informed the Payor E representative that it no longer had a viable network without Pinnacle, and even in the face of substantial discounts for Payor E's health plan, patients were willing to pay more to other insurers for health plans that included Hershey or Pinnacle. [. . .]

[21] All of the aforementioned evidence answered an even narrower question than the one presented: the Government was not required to show that payors would accept a price increase rather than excluding the merged Hershey/Pinnacle entity from their networks; it was required to show only that payors would accept a price increase rather than excluding all of the hospitals in the Harrisburg area. That is the inquiry under the hypothetical monopolist test. Considering the evidence put forth by the Government, we conclude that the Government has met its burden to properly define the relevant geographic market. It is the four-county Harrisburg area.

E. Market Power, Market Share, and Entry Barriers

As we noted above and in Chapter II, the hallmark of market power is the ability to extract prices or other terms in excess of those that would be available in a competitive market.

There are two main ways to plead and prove market power in an antitrust case. The first is sometimes called "direct proof" of power. Unfortunately—and consistent with our discussion of the ambiguities of market power described above—courts have not always been clear or consistent about what exactly such proof might look like, beyond the general observation that it should connote some kind of power over price and output: namely, clear evidence of the power to profitably increase price above, or reduce output below, competitive levels. But it is hard to spot this in practice: not least because in the real world businesses are usually already maximizing their profits

and the "competitive" baseline is hard to calculate. In fact, as Dan Crane has put it in the course of a vigorous criticism of direct-proof mechanisms: "The most commonly repeated maxim—that proof of restricted output and supracompetitive prices establishes market power—is not an analytical criterion at all but merely repeats the definition of market power. It amounts to saying that a plaintiff directly proves market power when she directly proves market power."[223] In *AmEx* the Supreme Court indicated for the first time that this "direct" method of proof might be unavailable in cases involving "vertical" agreements or restraints, although it is not clear why such a limitation would be necessary or desirable.[224]

The second, and much more common, method of proving market power is through so-called "indirect" or "circumstantial" proof. This involves the relative simplicity of a high share of a defined market protected by barriers to entry.[225] What counts as a "high" share has been partly illuminated by litigation: less than thirty percent is generally not enough,[226] although some authorities suggest otherwise[227]; the Ninth Circuit has said that "44 percent is sufficient as a matter of law to support a finding of market power, if entry barriers are high and competitors are unable to expand their output in response to supracompetitive pricing"[228]; sixty percent is surely enough, if supported by other evidence such as entry barriers[229]; and a higher share standing alone might be enough to raise at least a presumption of market power even without other evidence.[230]

Market shares are usually calculated based on the best available evidence of competitive significance in the foreseeable future. In most cases, this will be current sales revenue information, as the HMGs explain.

Horizontal Merger Guidelines § 5

5.2 Market Shares

[1] The Agencies normally calculate market shares for all firms that currently produce products in the relevant market, subject to the availability of data. The Agencies also calculate market shares for other market participants if this can be done to reliably reflect their competitive significance.

[2] Market concentration and market share data are normally based on historical evidence. However, recent or ongoing changes in market conditions may indicate that the current market share of a particular firm either

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[223] Daniel A. Crane, *Market Power Without Market Definition*, 90 Notre Dame L. Rev. 31, 45 (2014). *See also id.* ("Without guidance from the Supreme Court, lower courts have tried to specify the criteria for a direct evidence approach. The results are a baffling potpourri. Among the criteria identified by courts are: (1) evidence of restricted output and supracompetitive prices; (2) the presence of entry barriers; (3) the exclusion of competition; (4) control over prices; (5) the defendant's ability to engage in price discrimination; (6) 'sustained supranormal profits;' and (7) abrupt changes in practices following the elimination of competitors.").

[224] *See infra* § VI.B. (discussing this aspect of *AmEx*).

[225] *See*, *e.g.*, Rebel Oil Co. v. Atl. Richfield Co., 51 F.3d 1421, 1434 (9th Cir. 1995) ("To demonstrate market power circumstantially, a plaintiff must: (1) define the relevant market, (2) show that the defendant owns a dominant share of that market, and (3) show that there are significant barriers to entry and show that existing competitors lack the capacity to increase their output in the short run."). The concept of a barrier to entry is surprisingly tricky. For a general working definition, *see*, *e.g.*, Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 307 (3d Cir. 2007) ("Barriers to entry are factors, such as regulatory requirements, high capital costs, or technological obstacles, that prevent new competition from entering a market in response to a monopolist's supracompetitive prices."). For a selection of deeper discussions, *see*, *e.g.*, Daniel E. Lazaroff, *Entry Barriers and Contemporary Antitrust Litigation*, 7 U.C. Davis Bus. L.J. 1 (2006); R. Preston McAfee, Hugo M. Mialon & Michael A. Williams, *What Is a Barrier to Entry?* AEA Papers & Procs. 461 (May 2004); Richard Schmalensee, *Sunk Costs and Antitrust Barriers to Entry*, 94 Am. Econ. Rev. 471 (2004); Harold Demsetz, *Barriers to Entry*, 72 Am. Econ. Rev. 47 (1982).

[226] *See* Jefferson Par. Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 27 (1984) (30% share alone not sufficient); Hardy v. City Optical Inc., 39 F.3d 765, 767 (7th Cir. 1994) (30% is "the minimum market share from which the market power required to be shown at the threshold of a tying case can be inferred"); Grappone, Inc. v. Subaru of New England, Inc., 858 F.2d 792, 797 (1st Cir. 1988) (less than 30% market share precludes finding of significant market power); PSI Repair Servs., Inc. v. Honeywell, Inc., 104 F.3d 811, 818 (6th Cir. 1997) ("A thirty-percent share of the market, standing alone, provides an insufficient basis from which to infer market power.").

[227] United States v. Visa U.S.A., Inc., 163 F. Supp. 2d 322, 341 (S.D.N.Y. 2001) (indicating that MasterCard could hold market power with a 26% share of dollar transactional volume).

[228] Rebel Oil Co. v. Atl. Richfield Co., 51 F.3d 1421, 1438 (9th Cir. 1995).

[229] *See*, *e.g.*, FTC v. AbbVie Inc, 976 F.3d 327, 371 (3d Cir. 2020) ("A court can infer market power from a market share significantly greater than 55 percent."); In re Visa Check/Mastermoney Antitrust Litig., No. 96-CV-5238 (JG), 2003 WL 1712568, at *4 (E.D.N.Y. Apr. 1, 2003) (holding that "nearly 60 percent" of a market "easily qualifies as 'appreciable economic power'").

[230] Park v. Thomson Corp., No. 05 CIV. 2931 (WHP), 2007 WL 119461, at *8 (S.D.N.Y. Jan. 11, 2007) ("[T]hat Defendants possess an 80-90% market share might, standing alone, permit an inference of market power.").

understates or overstates the firm's future competitive significance. The Agencies consider reasonably predictable effects of recent or ongoing changes in market conditions when calculating and interpreting market share data. For example, if a new technology that is important to long-term competitive viability is available to other firms in the market, but is not available to a particular firm, the Agencies may conclude that that firm's historical market share overstates its future competitive significance. The Agencies may project historical market shares into the foreseeable future when this can be done reliably.

[3] The Agencies measure market shares based on the best available indicator of firms' future competitive significance in the relevant market. This may depend upon the type of competitive effect being considered, and on the availability of data. Typically, annual data are used, but where individual transactions are large and infrequent so annual data may be unrepresentative, the Agencies may measure market shares over a longer period of time.

[4] In most contexts, the Agencies measure each firm's market share based on its actual or projected revenues in the relevant market. Revenues in the relevant market tend to be the best measure of attractiveness to customers, since they reflect the real-world ability of firms to surmount all of the obstacles necessary to offer products on terms and conditions that are attractive to customers. In cases where one unit of a low-priced product can substitute for one unit of a higher-priced product, unit sales may measure competitive significance better than revenues. For example, a new, much less expensive product may have great competitive significance if it substantially erodes the revenues earned by older, higher-priced products, even if it earns relatively few revenues. In cases where customers sign long-term contracts, face switching costs, or tend to re-evaluate their suppliers only occasionally, revenues earned from recently acquired customers may better reflect the competitive significance of suppliers than do total revenues.

[5] In markets for homogeneous products, a firm's competitive significance may derive principally from its ability and incentive to rapidly expand production in the relevant market in response to a price increase or output reduction by others in that market. As a result, a firm's competitive significance may depend upon its level of readily available capacity to serve the relevant market if that capacity is efficient enough to make such expansion profitable. In such markets, capacities or reserves may better reflect the future competitive significance of suppliers than revenues, and the Agencies may calculate market shares using those measures. Market participants that are not current producers may then be assigned positive market shares, but only if a measure of their competitive significance properly comparable to that of current producers is available. When market shares are measured based on firms' readily available capacities, the Agencies do not include capacity that is committed or so profitably employed outside the relevant market, or so high-cost, that it would not likely be used to respond to a SSNIP in the relevant market. [. . .]

[6] When the Agencies define markets serving targeted customers, these same principles are used to measure market shares, as they apply to those customers. In most contexts, each firm's market share is based on its actual or projected revenues from the targeted customers. However, the Agencies may instead measure market shares based on revenues from a broader group of customers if doing so would more accurately reflect the competitive significance of different suppliers in the relevant market. Revenues earned from a broader group of customers may also be used when better data are thereby available.

* * *

In practice, courts may consider both direct and indirect evidence, just as the district court did in the *AmEx* litigation. The trial court's ultimate liability finding in that case was overturned on appeal, but the Supreme Court did not purport to overturn the market power finding (or indeed any of the district court's factual findings). The following extract, drawn from a much longer passage, gives a flavor of the judicial analysis of market power.

United States v. American Exp. Co.

88 F. Supp. 3d 143 (E.D.N.Y. 2015), reversed (on other grounds(?)), 138 S.Ct. 2274 (2018)

Judge Garaufis.

[1] Defined by the Supreme Court as the power to control prices or exclude competition, market power may be proven directly through evidence of specific conduct indicating the defendant's power to control prices or exclude competition, or it may be inferred based on the defendant firm's large share of the relevant market when viewed in the context of the competitive dynamics therein. The Government presents evidence on both points. [. . .]

[2] American Express's percentage share of the network services market is compelling evidence of market power. In reaching this determination, the court remains mindful that data regarding a firm's raw share of the relevant market is probative of market power only after full consideration of the relationship between market share and other relevant market characteristics, including the strength of the competition, the probable development of the industry, the barriers to entry, the nature of the anticompetitive conduct, and the elasticity of consumer demand that characterize this particular market. . . .

[3] Today, American Express is the second largest GPCC [general purpose credit card] card network when measured by charge volume. As of 2013, Amex accounted for 26.4% of general-purpose credit and charge card purchase volume in the United States. It trails only Visa's 45% market share and is larger than both MasterCard (23.3%) and Discover (5.3%). Despite Amex's protestations to the contrary, the proper metric for assigning market shares among the four GPCC networks is the dollar value of the transactions facilitated on those networks. Although other measures of a network's size, such as the number of cards in circulation, the breadth of its merchant acceptance network (whether actual or perceived), and the total number of transactions, will affect that firm's ability to compete in a market characterized by network effects, charge volume is the most direct measure of output in this particular market, and is also the primary determinant of the remuneration networks receive from merchants in exchange for network services. *See* Merger Guidelines § 5.2 ("In most contexts, each firm's market share is based on its actual or projected revenues from the targeted customers."). As a result, in terms of raw percentage share of the relevant market, American Express is larger today than MasterCard was at the time of the *Visa* litigation, when the Second Circuit held that MasterCard possessed market power.

[4] Furthermore, the network services market remains highly concentrated and constrained by high barriers to entry, just as it was in Visa. American Express is one of only four major suppliers of GPCC card network services, and three of the competitors in this market (Visa, American Express, and MasterCard) are significantly larger than the fourth (Discover). The structural susceptibility of this market to an exercise of market power is exacerbated by its inherently high barriers to entry, which further reduce the likelihood that an attempt at anticompetitive conduct would be defeated by new suppliers entering the market. In addition to the sizable setup costs associated with developing the infrastructure and branding necessary to compete in the network services market, any new entrant would also need to overcome what executives from Amex and Discover have termed the "chicken and the egg problem." That is, due to the aforementioned network effects inherent in this platform, a firm attempting entry into the GPCC network market would struggle to convince merchants to join a network without a significant population of cardholders and, in turn, would also struggle to convince cardholders to carry a card associated with a network that is accepted at few merchants. Accordingly, the network services market is not only highly concentrated, but also remarkably static; no firm has entered the GPCC card network services market in the United States since Discover launched its network in 1985. [. . .]

[5] Consequently, American Express's 26.4% share of a highly concentrated market with significant barriers to entry suggests that the firm possesses market power. Yet, Amex's market share alone likely would not suffice to prove market power by a preponderance of the evidence were it not for the amplifying effect of cardholder insistence. [. . .]

[6] American Express's highly insistent or loyal cardholder base is critical to the court's finding of market power in this case. The ability of merchants to resist potential anticompetitive behavior by Amex, including significant price increases, by shifting customers to less expensive credit card networks or other forms of payment is severely impeded by the segment of Amex's cardholder base who insist on paying with their Amex cards and who would

shop elsewhere or spend less if unable to use their cards of choice. In Visa, both the district court and Second Circuit recognized the amplifying effect of cardholder loyalty on Visa's and MasterCard's positions in the market, noting that insistence effectively precluded merchants from dropping acceptance of either Visa or MasterCard credit cards and supported a finding of market power as to both networks. Here, the record developed at trial illustrates a similar dynamic among Defendants' cardholders and merchants, supported not only by merchant testimony on the effect of cardholder insistence, but also by American Express itself, which expressly recognizes, quantifies, and leverages the loyalty of its cardholders in its business dealings with merchants.

[7] Cardholder insistence is derived from a variety of sources. First, and perhaps most importantly, cardholders are incentivized to use their Amex cards by the robust rewards programs offered by the network. Enrollees in American Express's Membership Rewards program, for example, receive points for purchases made with their Amex cards, and may then redeem those points with Amex or one of its redemption partners for merchandise, gift cards, frequent flyer miles, statement credits, or other goods and services. Cardholders who value the ability to earn points, miles, or cash rebates often centralize their spending on their Amex cards to maximize these benefits. Similar "single-homing" behavior is also observed among the approximately 10–20% of Amex cardholders who own or regularly carry only their Amex cards, as well as among those cardholders who consolidate their credit card spending on their American Express cards for other reasons. Amex's industry-leading corporate card program, for instance, drives a significant degree of insistent spending, particularly at those T & E merchants that cater to the needs of business travelers. Indeed, according to one study by American Express, approximately 70% of Corporate Card consumers are subject to some form of "mandation" policy, by which employers require the employee-cardholders to use Amex cards for business expenses.

[8] As in *Visa*, Plaintiffs also have presented merchant testimony illustrating the manner in which cardholder insistence effectively prevents merchants from dropping American Express. While a number of merchant witnesses testified that their companies had never considered terminating acceptance of Amex due to the network's share of the merchants' receipts or a generalized concern that their customers would shop elsewhere if unable to use their American Express cards, others have analyzed the issue in detail and arrived at the same conclusion: The foregone profits associated with losing Amex-insistent customers rendered dropping Amex commercially impractical. Though American Express may be fairly characterized as a discretionary card for consumers when compared to the ubiquity enjoyed by Visa and MasterCard, the degree to which its cardholders insist on using their Amex cards affords the network significant power over merchants, particularly in a market in which merchants' primary recourse when faced with a price increase or similar conduct is an "all-or-nothing" acceptance decision. Defendants' efforts to minimize the significance of cardholder insistence by recasting it as mere "brand loyalty" are unavailing. [. . .]

[9] Finally, the court is unconvinced by Defendants' argument that cardholder insistence cannot be a source of durable market power. Though Defendants are correct that transitory market power is not of particular concern under the federal antitrust laws, the requirement that market power be "durable" speaks to whether a new entrant or other market forces could quickly bring the defendant's exercise of power to an end. The court is aware of no authority that supports Defendants' position that market power is not durable if its maintenance requires continual and replicable investment by the defendant firm. Put simply, American Express cannot avert a finding of market power premised on cardholder insistence merely because that loyalty and its current market share would dissipate if the company were to stop investing in those programs that make its product valuable to cardholders. Of course it would, as would the share of any company that abandoned a core element of a successful business model. Here, the durability of Defendants' power is ensured by the sustained high barriers to entry in the network services market, as evidenced by the lack of any meaningful entry into the market since 1985, and the decades-long persistence of the restraints at issue in this case. [. . .]

[10] Certain of Amex's pricing practices provide direct evidence of the company's market power in the network services market, albeit to varying degrees. [T]he record shows that between 2005 and 2010, American Express repeatedly and profitably raised its discount rates to millions of merchants across the United States as part of its Value Recapture ("VR") initiative without losing a single large merchant and losing relatively few small merchants as a result. Similar evidence of low defection rates among merchants following repeated network price increases

was viewed by the district court in Visa as strong evidence of Visa and MasterCard's market power. The court finds the same is true here. [. . .]

[11] Faced with a declining premium over the all-in rates charged by Visa and MasterCard in the early 2000s . . . American Express executed a series of targeted price increases in certain industry segments between 2005 and 2010, with the stated purpose of better aligning its prices with the value it perceived as being delivered to both cardholders and merchants. Because these Value Recapture initiatives were not paired with offsetting adjustments on the cardholder side of the platform, the resulting increases in merchant pricing are properly viewed as changes to the net price charged across Amex's integrated platform. Given the low rates of merchant defection observed in response to this initiative, which increased prices that were already at or above the competitive level, Value Recapture illustrates Amex's successful exercise of market power.

* * *

Barriers to entry, and to expansion by existing competitors, are a critical element in the indirect proof of market power. As we saw in Chapter II, the economics of entry barriers can raise some complicated questions!

CASENOTE: Rebel Oil Co., Inc. v. Atlantic Richfield Co.

51 F.3d 1421 (9th Cir. 1995)

When assessing market power, courts consider whether the prospect of entry by new rivals, or expansion by existing ones, would defeat any attempt to exert market power. The Ninth Circuit's decision in *Rebel Oil* provides an extended discussion of both entry *and* expansion. That case involved an allegation by plaintiff Rebel Oil, that its competitor Atlantic Richfield Co. ("ARCO") had engaged in "predatory pricing"—a kind of monopolization scheme that we will meet in Chapter VII that involves charging below-cost prices to drive rivals from the market and thus acquiring monopoly power—in markets for retail gasoline. The district court had granted summary judgment to ARCO, on the ground that ARCO had not acquired market power through this scheme, because entry and expansion was sufficiently easy that ARCO would not be able to profitably raise prices above competitive levels. Rebel Oil appealed. The Ninth Circuit evaluated the evidence of barriers to entry and expansion, and affirmed the district court's decision.

Entry or expansion can preclude market power. The court began by noting that "[a] mere showing of substantial or even dominant market share alone cannot establish market power sufficient to carry out a predatory scheme. The plaintiff must show that new rivals are barred from entering the market and show that existing competitors lack the capacity to expand their output to challenge the predator's high price."

Entry analysis. The court defined entry barriers as "additional long-run costs that were not incurred by incumbent firms but must be incurred by new entrants, or factors in the market that deter entry while permitting incumbent firms to earn monopoly returns. The main sources of entry barriers are: (1) legal license requirements; (2) control of an essential or superior resource; (3) entrenched buyer preferences for established brands; (4) capital market evaluations imposing higher capital costs on new entrants; and, in some situations, (5) economies of scale. In evaluating entry barriers, we focus on their ability to constrain not those already in the market, but those who would enter but are prevented from doing so."

On this point, the court held that Rebel Oil had mustered enough evidence that significant entry barriers existed to preclude summary judgment. Among other things, a Nevada law prohibited major oil refiners from entering and operating gasoline stations: only smaller, independent players could enter. Indeed, during the relevant time period, only two new operators had entered, each operating just one station. The court held that, given this evidence, summary judgment for ARCO on the issue of entry was inappropriate.

Expansion analysis. The court next turned to the prospect of expansion: whether rivals could increase output in response to an attempted price increase. "[I]f rivals have idle plants and can quickly respond to any predator's attempt to raise prices above competitive levels, the predator will suffer an immediate loss of market share to competitors. In that instance, the predator does not have market power."

And here the record doomed Rebel Oil's claim. During the relevant period, two of ARCO's competitors had substantially expanded their portfolio of stations (Texaco acquired 40 new stations, and Southland 32). Moreover, both of those firms could easily expand their output to discipline any attempted price increase by ARCO. "Gasoline is produced in Los Angeles refineries, then shipped to Las Vegas via the Cal-Nev pipeline. Competitors do not have to build more gas stations to satisfy customers' wants. They can simply purchase and transport more gasoline via the pipeline."

Rebel Oil protested that rivals like Texaco and Southland would *not* in fact discipline ARCO, because they were co-participants in an oligopolistic market engaged in tacit collusion with ARCO. They would match any price increase, not discipline it. But the court held that, even if this were true, it would not justify a finding that ARCO held market power. Being a member of an oligopoly was not sufficient, as a matter of law, to infer unilateral market power. "We recognize," said the court, "that a gap in the Sherman Act allows oligopolies to slip past its prohibitions, but filling that gap is the concern of Congress, not the judiciary."

The analysis of market power may present particular challenges in an "aftermarket": that is, a market for products or services sold to customers that have already bought a particular primary product. For example, we could speak of an aftermarket for printer cartridges sold to customers that have already bought a particular primary printer, or for repair and maintenance services sold to customers that have already bought particular primary equipment, or for games or other apps sold to customers that have already bought a particular primary smartphone or tablet.

Some complex puzzles can arise when the market for the primary good appears competitive but the aftermarket does not (*e.g.*, because other competitors do not have access to the IP or know-how needed to offer compatible aftermarket products or services). In those circumstances, is it meaningful to speak about "market power" in the aftermarket if consumers can factor aftermarket conditions into their purchasing decisions for the primary product or service, and if that primary market is truly competitive? Is this market power, flowing from freedom from competition, or just the kind of power that any trading party might end up in after making relationship-specific investments?

The leading case dealing with aftermarkets is *Eastman Kodak*, in which the Court controversially held that the concept of monopoly power (itself just a substantial amount of market power) could indeed be applied to aftermarkets. In *Kodak*, as you will see, the primary market was for the supply of "copying and micrographic equipment," and the aftermarket was for the supply of service and parts for such equipment. The Court's decision highlighted some features of consumer behavior in real markets, including transaction costs and information asymmetries, that had not previously played much of an important role in Supreme Court antitrust assessments.[231]

Eastman Kodak Co. v. Image Technical Services, Inc.

504 U.S. 451 (1992)

Justice Blackmun.

[1] Kodak [argues] that even if it concedes monopoly share of the relevant parts market [*i.e.*, the aftermarket], it cannot actually exercise the necessary market power for a Sherman Act violation. This is so, according to Kodak, because competition exists in the equipment market [*i.e.*, the primary market]. Kodak argues that it could not have the ability to raise prices of service and parts above the level that would be charged in a competitive market because any increase in profits from a higher price in the aftermarkets at least would be offset by a corresponding loss in profits from lower equipment sales as consumers began purchasing equipment with more attractive service costs. [. . .]

[231] There is a rich literature here. *See*, *e.g.*, John M. Yun, *App Stores, Aftermarkets & Antitrust*, 53 Ariz. St. L.J. 1283 (2021); David A.J. Goldfine & Kenneth M. Vorrasi, *The Fall of the Kodak Aftermarket Doctrine: Dying A Slow Death in the Lower Courts*, 72 Antitrust L.J. 209 (2004); Paul L. Joskow, *Transaction Cost Economics, Antitrust Rules, and Remedies*, 18 J. L. Econ. & Org. 95 (2002); Carl Shapiro, *Aftermarkets and Consumer Welfare: Making Sense of* Kodak, 62 Antitrust L.J. 483 (1995); Eleanor Fox, Eastman Kodak Company v. Image Technical Services, Inc.—*Information Failure as Soul or Hook?* 62 Antitrust L.J. 759 (1994); Benjamin Klein, *Market Power in Antitrust: Economic Analysis after* Kodak, 3 Sup. Ct. Econ. Rev. 43 (1993).

[2] Kodak contends that there is no need to examine the facts when the issue is market power in the aftermarkets. A legal presumption against a finding of market power is warranted in this situation, according to Kodak, because the existence of market power in the service and parts markets absent power in the equipment market simply makes no economic sense, and the absence of a legal presumption would deter procompetitive behavior. [. . .]

[3] The extent to which one market prevents exploitation of another market depends on the extent to which consumers will change their consumption of one product in response to a price change in another, *i.e.*, the cross-elasticity of demand. Kodak's proposed rule rests on a factual assumption about the cross-elasticity of demand in the equipment and aftermarkets: If Kodak raised its parts or service prices above competitive levels, potential customers would simply stop buying Kodak equipment. Perhaps Kodak would be able to increase short term profits through such a strategy, but at a devastating cost to its long term interests. Kodak argues that the Court should accept, as a matter of law, this basic economic reality, that competition in the equipment market necessarily prevents market power in the aftermarkets.

[4] Even if Kodak could not raise the price of service and parts one cent without losing equipment sales, that fact would not disprove market power in the aftermarkets. The sales of even a monopolist are reduced when it sells goods at a monopoly price, but the higher price more than compensates for the loss in sales. Kodak's claim that charging more for service and parts would be a short-run game, is based on the false dichotomy that there are only two prices that can be charged—a competitive price or a ruinous one. But there could easily be a middle, optimum price at which the increased revenues from the higher priced sales of service and parts would more than compensate for the lower revenues from lost equipment sales. The fact that the equipment market imposes a restraint on prices in the aftermarkets by no means disproves the existence of power in those markets. Thus, contrary to Kodak's assertion, there is no immutable physical law—no "basic economic reality"—insisting that competition in the equipment market cannot coexist with market power in the aftermarkets.

[5] We next consider the more narrowly drawn question: Does Kodak's theory describe actual market behavior so accurately that respondents' assertion of Kodak market power in the aftermarkets, if not impossible, is at least unreasonable?

[6] To review Kodak's theory, it contends that higher service prices will lead to a disastrous drop in equipment sales. Presumably, the theory's corollary is to the effect that low service prices lead to a dramatic increase in equipment sales. According to the theory, one would have expected Kodak to take advantage of lower priced ISO service as an opportunity to expand equipment sales. Instead, Kodak adopted a restrictive sales policy consciously designed to eliminate the lower priced ISO service, an act that would be expected to devastate either Kodak's equipment sales or Kodak's faith in its theory. Yet, according to the record, it has done neither. Service prices have risen for Kodak customers, but there is no evidence or assertion that Kodak equipment sales have dropped.

[7] Kodak and the United States attempt to reconcile Kodak's theory with the contrary actual results by describing a marketing strategy of spreading over time the total cost to the buyer of Kodak equipment. In other words, Kodak could charge subcompetitive prices for equipment and make up the difference with supra–competitive prices for service, resulting in an overall competitive price. This pricing strategy would provide an explanation for the theory's descriptive failings—if Kodak in fact had adopted it. But Kodak never has asserted that it prices its equipment or parts subcompetitively and recoups its profits through service. Instead, it claims that it prices its equipment comparably to its competitors and intends that both its equipment sales and service divisions be profitable. Moreover, this hypothetical pricing strategy is inconsistent with Kodak's policy toward its self-service customers. If Kodak were underpricing its equipment, hoping to lock in customers and recover its losses in the service market, it could not afford to sell customers parts without service. In sum, Kodak's theory does not explain the actual market behavior revealed in the record.

[8] Respondents offer a forceful reason why Kodak's theory, although perhaps intuitively appealing, may not accurately explain the behavior of the primary and derivative markets for complex durable goods: the existence of significant information and switching costs. These costs could create a less responsive connection between service and parts prices and equipment sales.

[9] For the service-market price to affect equipment demand, consumers must inform themselves of the total cost of the "package"—equipment, service, and parts—at the time of purchase; that is, consumers must engage in accurate lifecycle pricing. Lifecycle pricing of complex, durable equipment is difficult and costly. In order to arrive at an accurate price, a consumer must acquire a substantial amount of raw data and undertake sophisticated analysis. The necessary information would include data on price, quality, and availability of products needed to operate, upgrade, or enhance the initial equipment, as well as service and repair costs, including estimates of breakdown frequency, nature of repairs, price of service and parts, length of "downtime," and losses incurred from downtime.

[10] Much of this information is difficult—some of it impossible—to acquire at the time of purchase. During the life of a product, companies may change the service and parts prices, and develop products with more advanced features, a decreased need for repair, or new warranties. In addition, the information is likely to be customer-specific; lifecycle costs will vary from customer to customer with the type of equipment, degrees of equipment use, and costs of down-time.

[11] Kodak acknowledges the cost of information, but suggests, again without evidentiary support, that customer information needs will be satisfied by competitors in the equipment markets. It is a question of fact, however, whether competitors would provide the necessary information. A competitor in the equipment market may not have reliable information about the lifecycle costs of complex equipment it does not service or the needs of customers it does not serve. Even if competitors had the relevant information, it is not clear that their interests would be advanced by providing such information to consumers.

[12] Moreover, even if consumers were capable of acquiring and processing the complex body of information, they may choose not to do so. Acquiring the information is expensive. If the costs of service are small relative to the equipment price, or if consumers are more concerned about equipment capabilities than service costs, they may not find it cost efficient to compile the information. Similarly, some consumers, such as the Federal Government, have purchasing systems that make it difficult to consider the complete cost of the "package" at the time of purchase. State and local governments often treat service as an operating expense and equipment as a capital expense, delegating each to a different department. These governmental entities do not lifecycle price, but rather choose the lowest price in each market.

[13] As Kodak notes, there likely will be some large-volume, sophisticated purchasers who will undertake the comparative studies and insist, in return for their patronage, that Kodak charge them competitive lifecycle prices. Kodak contends that these knowledgeable customers will hold down the package price for all other customers. There are reasons, however, to doubt that sophisticated purchasers will ensure that competitive prices are charged to unsophisticated purchasers, too. As an initial matter, if the number of sophisticated customers is relatively small, the amount of profits to be gained by supracompetitive pricing in the service market could make it profitable to let the knowledgeable consumers take their business elsewhere. More importantly, if a company is able to price discriminate between sophisticated and unsophisticated consumers, the sophisticated will be unable to prevent the exploitation of the uninformed. A seller could easily price discriminate by varying the equipment/parts/service package, developing different warranties, or offering price discounts on different components.

[14] Given the potentially high cost of information and the possibility that a seller may be able to price discriminate between knowledgeable and unsophisticated consumers, it makes little sense to assume, in the absence of any evidentiary support, that equipment-purchasing decisions are based on an accurate assessment of the total cost of equipment, service, and parts over the lifetime of the machine. [. . .]

[15] In sum, there is a question of fact whether information costs and switching costs foil the simple assumption that the equipment and service markets act as pure complements to one another.

[16] We conclude, then, that Kodak has failed to demonstrate that respondents' inference of market power in the service and parts markets is unreasonable, and that, consequently, Kodak is entitled to summary judgment.

NOTES

1) How would you explain to a layperson what market power is? What would you do to look for it in practice: for example, to figure whether your local grocery store holds market power?
2) Bands, sports teams, and movie stars often have fans who do not regard *other* bands, sports teams, and movie stars as reasonable substitutes. Often these fans will pay a significant premium for their favorite. Does this mean that these bands, sports teams, and movie stars all have market or monopoly power?
3) Suppose that you were in charge of figuring out whether a proposed merger between two hospitals would create buyer-side market power in certain labor markets—that is, labor monopsony power—and specifically in markets for the services of: (a) orthopedic surgeons; (b) administrative support staff; and (c) janitors and custodial workers. Concretely and in detail, what would you do to figure out how to define markets (including: what services should be included? what should the geographic scope of the market be?) and to measure market power? How would you estimate the parties' respective market shares? What documents and information would you need, and from whom could you get it?
4) Edwin Rockefeller once wrote that market power "is an imagined power, like witchcraft."[232] Do you agree? How is market power like, or unlike, other kinds of power we encounter in everyday life?
5) Do you think direct proof or indirect proof of market power is more likely to be reliable? Why, and under what conditions?
6) Commentators at the time of *Eastman Kodak* speculated that the decision—and specifically the holding that you can have market power in an aftermarket even if you lack market power in the primary market—would have radical implications for antitrust law. But in practice its impact has been very modest. In today's world of platform ecosystems, in which consumers often pick a platform (say, an iPhone or Android phone, or a Nintendo or Sony games console, or an Apple or Microsoft personal computer) and then face a narrower set of choices for complementary products and services, the ground rules of "aftermarket antitrust" seem to be very important indeed. How do you think the *Kodak* analysis would—or should—map onto today's platform ecosystems? Is each of these companies a monopolist of its own ecosystem, or a competitor in a market for ecosystems?
7) What facts do you think courts should look at to determine whether they should be worried about aftermarket power? Can you identify any industries or markets in which aftermarket power might be a source of concern?
8) Could or should the *Rebel Oil* court have held that, because existing competitors were members of an oligopoly engaging in tacit collusion, expansion was unlikely to constrain any effort by ARCO to exercise market power?

F. Oligopoly and Tacit Collusion

We saw in Chapter II that some markets—particularly but not exclusively those that are concentrated, transparent, and in which participants have symmetrical incentives—are vulnerable to "oligopoly" effects, including "tacit collusion" in particular. The core feature of tacit coordination is that the participants recognize their shared interest in a reduced level of competition, and that each participant eases off its competitive efforts on the tacit understanding that others will do the same. The factors that tend to facilitate such an outcome are described in Chapter II.[233]

Although mere tacit collusion is not illegal, antitrust approaches it with some suspicion. For example, mergers or acquisitions likely to facilitate tacit collusion can be unlawful for that reason.[234] And if the line is crossed from mere tacit collusion to actual conspiracy—that is, if the participants have entered into an *agreement*—then Section 1 of the Sherman Act will have plenty to say about it, and the market power of the participants can be assessed jointly.[235]

[232] Edwin Rockefeller, THE ANTITRUST RELIGION (2007) 40.
[233] *See supra* § II.H. (tacit collusion).
[234] *See infra* Chapter VIII.
[235] *See infra* Chapters IV–V.

In the absence of a merger or agreement, antitrust doctrine generally does not permit the pricing power of the oligopolistic whole to be attributed to any individual participant. As Chief Judge Diane Wood of the Seventh Circuit pointed out in 2018, this is something of an anomaly:

> Oligopolies have always posed problems for conventional antitrust law: without something that can be called an agreement, they elude scrutiny under section 1 of the Sherman Act, 15 U.S.C. § 1, and yet no individual firm has enough market power to be subject to Sherman Act section 2, 15 U.S.C. § 2. Tacit collusion is easy in those markets, and firms have little incentive to compete on the basis of price, preferring to share the profits rather than to fight with each other.[236]

As you will recall, the Ninth Circuit said something similar in *Rebel Oil*, rejecting the claim that market power (in that case, monopoly power in the context of a Section 2 claim) could be inferred from the presence of oligopoly in a market:

> Rebel's evidence cannot, as a matter of law, be the basis for inferring market power in its attempted monopolization claim. Although oligopoly pricing cannot be ruled out as a plausible means to recoup predatory losses, oligopoly pricing standing alone does not prove that ARCO has market power, at least not the degree of market power to raise the concerns of the Sherman Act. The fact that competitors may see proper, in the exercise of their own judgment, to follow the prices of another manufacturer, does not establish any suppression of competition or any sinister domination, and does not violate the Sherman Act. The reason for this rule is clear. To pose a threat of monopolization, one firm alone must have the power to control market output and exclude competition. An oligopolist lacks this unilateral power. By definition, oligopolists are interdependent. An oligopolist can increase market price, but only if the others go along.[237]

Of course, it is possible that one or more members of an oligopoly might have unilateral market power in their own right, in light of the factors described above: the point here is only that the existence of an oligopoly does not, without more, provide a legal basis to infer that any individual participant holds market power.[238]

NOTES

1) Should antitrust doctrine prohibit oligopoly or tacit collusion? How? What remedy would we apply to fix it? (We will focus on this problem, among others, in Chapter IV.)
2) Might it be better to treat every participant in an oligopoly as holding market power for the purposes of antitrust doctrine? Why, or why not?
3) The participants in an oligopoly are normally perfectly aware of what is going on, and they may know and intend that higher prices and consumer harm will result from their interdependent behavior. So why should an "agreement" to fix prices be a necessary condition for antitrust liability? And how should we tell when one exists? (We will encounter plenty of law on this question in Chapter IV**:** for now, think about this as a question of pure principle.) What alternative limiting conditions could you imagine?

G. Some Further Reading

Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 Antitrust L.J. 129 (2007)

Daniel A. Crane, *Market Power Without Market Definition*, 90 Notre Dame L. Rev. 31 (2014)

Magali Eben, *The Antitrust Market Does Not Exist: Pursuit of Objectivity in a Purposive Process*, 17 J. Comp. L. & Econ. 586 (2021)

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[236] Kleen Prod. LLC v. Georgia-Pac. LLC, 910 F.3d 927, 931 (7th Cir. 2018).

[237] Rebel Oil Co. v. Atl. Richfield Co., 51 F.3d 1421, 1442–43 (9th Cir. 1995).

[238] *See*, *e.g.*, Holiday Wholesale Grocery Co. v. Philip Morris Inc., 231 F. Supp. 2d 1253, 1316 (N.D. Ga. 2002) (noting that Philip Morris held individual market power in an oligopolistic market: "The fact that Philip Morris exercised its market power by using its nearly 50% share of the market is not enough to infer that Philip Morris and the remaining Defendants entered into an agreement to fix prices. Moreover, the nature of an oligopoly teaches that when there is a strong market leader, that leader will be the price leader and other market players will often raise prices along with the market leader in order to increase their profit.").

Lapo Filistrucchi, Damien Geradin, Eric Van Damme & Pauline Affeldt, *Market Definition in Two-Sided Markets: Theory and Practice*, 10 J. Comp. L. & Econ. 293 (2014)

David Glasner & Sean P. Sullivan, *The Logic of Market Definition*, 83 Antitrust L.J. 293 (2020)

Pamela Jones Harbour & Tara Isa Koslov, *Section 2 in a Web 2.0 World: An Expanded Vision of Relevant Product Markets*, 76 Antitrust L.J. 769 (2010)

Louis Kaplow, *Market Definition: Impossible and Counterproductive*, 79 Antitrust L.J. 361 (2013)

Thomas G. Krattenmaker, Robert G. Lande & Steven C. Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 Geo. L.J. 241 (1987)

Ioana Marinescu & Eric A. Posner, *A Proposal to Enhance Antitrust Protection Against Labor Market Monoposony*, Roosevelt Institute Working Paper (Dec. 2018)

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Gregory J. Werden, *The History of Antitrust Market Delineation*, 76 Marquette L. Rev. 123 (1992)