3-22-2022

FTC v. Hackensack Meridian Health Inc

PRECEDENTIAL

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

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No. 21-2603

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FEDERAL TRADE COMMISSION

v.

HACKENSACK MERIDIAN HEALTH, INC.;
ENGLEWOOD HEALTHCARE FOUNDATION,
Appellants

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On Appeal from the United States District Court
for the District of New Jersey
(D. C. No. 2-20-cv-18140)
District Judge: Honorable John M. Vazquez

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Argued December 7, 2021
Before: SHWARTZ, PORTER and FISHER, *Circuit Judges*.

(Filed: March 22, 2022)

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OPINION OF THE COURT

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FISHER, *Circuit Judge*

Englewood Healthcare Foundation, a local New Jersey hospital, and Hackensack Meridian Health, Inc., New Jersey's largest healthcare system, agreed to a multi-million-dollar merger. The Federal Trade Commission opposes their merger and filed an administrative complaint alleging it violates Section 7 of the Clayton Act because it is likely to substantially

lessen competition. To prevent the parties from merging before the administrative adjudication could occur, the FTC filed suit in the District of New Jersey under Section 13(b) of the Federal Trade Commission Act, requesting a preliminary injunction pending the outcome of the administrative adjudication. The District Court granted the preliminary injunction, holding that the FTC established that there is a reasonable probability that the merger will substantially impair competition. For the reasons that follow, we will affirm.

I.

A. Factual History

Englewood Healthcare Foundation is a non-profit corporation that operates a single community hospital in Bergen County, New Jersey. It provides primary, secondary, and some non-complex tertiary services to patients. It does not provide more complex tertiary and quaternary services. It currently lacks the expertise, regulatory approvals, and facilities to perform those services.[1] Englewood is licensed for 531 beds, although it currently operates around 350 beds.

Hackensack Meridian Health is the largest hospital system in New Jersey. It is a sixteen-hospital health system with multiple academic medical centers, community hospitals, specialty hospitals, a medical school, and a research institution. Hackensack has two hospitals in Bergen County: Hackensack University Medical Center ("HUMC"), the busiest hospital in New Jersey, and Pascack Valley Medical Center, a small, acute care community hospital. HUMC offers all levels of care, but

[1] Hospital services range from primary care—the least complex, such as routine delivery of a baby—to quaternary care—the most complex, such as an organ transplant or experimental treatment.

it is Hackensack's only hospital that performs complex tertiary and quaternary services. HUMC is licensed for 781 beds, 711 of which are operational. In recent years, Hackensack has acquired other health providers, each time raising prices at the acquired facility.

Bergen County is part of a densely populated region of Northern New Jersey that borders New York City. Bergen County is home to three other hospitals affiliated with neither Englewood nor Hackensack. Some Bergen County residents seek care in nearby Northern New Jersey counties—*e.g.*, Hudson, Essex, and Passaic Counties—and New York.

In April 2018, Englewood hired a strategic planning consultant to explore ways to meet its capital needs and use its excess bed capacity. The consultant advised Englewood to consider searching for partnership opportunities. Shortly thereafter, the Englewood board of directors voted to pursue a merger. Englewood considered various merger partners and ultimately selected Hackensack.

Englewood and Hackensack signed a merger agreement, which took effect in September 2019. As part of the agreement, Hackensack committed $439.5 million in capital investments over eight years. Hackensack also agreed to make other clinical, operational, and financial investments, such as transferring patients from its hospitals to Englewood and developing Englewood into a "tertiary hub." *FTC v. Hackensack Meridian Health, Inc.*, No. 20-18140, 2021 WL 4145062, at *10 (D.N.J. Aug. 4, 2021).

B. Procedural History

After the signing of the agreement, the FTC filed an administrative complaint against the Hospitals alleging that the proposed merger would violate Section 7 of the Clayton Act, 15 U.S.C. § 18. In December 2020, the FTC filed suit in the

District of New Jersey, seeking a temporary restraining order and a preliminary injunction to enjoin the merger. The parties stipulated that the Hospitals would not effectuate the proposed merger until after the District Court ruled on the FTC's motion for a preliminary injunction.

The District Court conducted a seven-day evidentiary hearing on the preliminary injunction motion. During the hearing, the Court admitted over 500 exhibits into evidence and heard testimony from fifteen fact witnesses and seven expert witnesses. The District Court held that the FTC was likely to succeed on the merits and the equities weighed in favor of issuing the injunction. It concluded that the FTC had established a prima facie case by proposing properly defined product and geographic markets and showing that the merger would likely have anticompetitive effects. Because the Hospitals failed to rebut the FTC's prima facie case, the District Court granted the FTC's request for a preliminary injunction.

The Hospitals timely appealed.

II.[2]

Section 13(b) of the FTC Act empowers the FTC to ask a federal court to preliminarily enjoin a violation of § 7 "[u]pon

[2] The District Court had jurisdiction under 15 U.S.C § 53(b) (FTC injunction request) and 28 U.S.C. § 1331 (federal question). This Court has jurisdiction under 28 U.S.C. § 1291 (final decision) and 28 U.S.C. § 1292(a)(1) (order granting injunctive relief). The adjudicatory function of determining whether the FTC Act has been violated is vested in the FTC in the first instance. 15 U.S.C. § 45. The only purpose of a proceeding in federal court under § 13(b) of the Act is to obtain a preliminary injunction and preserve the status quo until the FTC can perform its adjudicatory function. Thus, the District

a proper showing that, weighing the equities and considering the Commission's likelihood of ultimate success, such action would be in the public interest." 15 U.S.C. § 53(b). The Hospitals challenge the preliminary injunction on one basis: that the District Court incorrectly concluded that the FTC is likely to succeed on the merits in the administrative proceeding.

A. The FTC established a prima facie case that the merger will substantially lessen competition

Section 7 of the Clayton Act bars mergers whose effect "may be substantially to lessen competition, or to tend to create a monopoly." 15 U.S.C. § 18. "Congress used the words '*may be* substantially to lessen competition' . . . to indicate that its concern was with probabilities, not certainties." *Brown Shoe Co. v. United States*, 370 U.S. 294, 323 (1962). Federal courts assess § 7 claims under a three-part, burden-shifting framework. *FTC v. Penn State Hershey Med. Ctr.* ("*Hershey*"), 838 F.3d 327, 337 (3d Cir. 2016). First, the FTC must establish a prima facie case that the merger is anticompetitive. *Id.* If the FTC establishes a prima facie case, the burden then shifts to the Hospitals to rebut it. *Id.* If the Hospitals succeed on rebuttal, the burden of production shifts back to the FTC "and merges with the ultimate burden of persuasion, which is incumbent on the [FTC] at all times." *Id.* (quoting *St. Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd.*, 778 F.3d 775, 783 (9th Cir. 2015)). "To establish a prima facie case, the [FTC] must (1) propose the proper relevant market and (2) show that

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Court's grant of an injunction "effectively terminated the litigation and constituted a final order which is appealable under 28 U.S.C. § 1291." *FTC v. Food Town Stores, Inc.*, 539 F.2d 1339, 1342 (4th Cir. 1976).

the effect of the merger in that market is likely to be anticompetitive." *Id.* at 337–38. The relevant market includes both a product market and a geographic market. *Id.* at 338. The Hospitals challenge the District Court's evaluation of the FTC's likelihood of success on three grounds: the Court's adoption of the FTC's geographic market definition; its use of the efficiencies defense standard for evaluating the Hospitals' claims of procompetitive benefits; and its holding that the FTC carried its ultimate burden of persuasion.

1. Product Market

"Determination of the relevant product and geographic markets is a necessary predicate to deciding whether a merger contravenes the Clayton Act." *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602, 618 (1974) (internal quotation marks omitted). The District Court found the relevant product market to be the "cluster of inpatient [general acute care] services" offered by Englewood and Hackensack's Bergen County hospitals and sold to commercial insurers. *Hackensack*, 2021 WL 4145062, at *15. The parties do not dispute the relevant product market, but their agreement ends here.

2. Geographic Market

"The relevant geographic market 'is that area in which a potential buyer may rationally look for the goods or services he seeks.'" *Hershey*, 838 F.3d at 338 (quoting *Gordon v. Lewistown Hosp.*, 423 F.3d 184, 212 (3d Cir. 2005)). The relevant market's geographic scope must be "[d]etermined within the specific context of each case," "correspond to the commercial realities of the industry," and "be economically significant." *Id.* (second and third phrases quoting *Brown Shoe*, 370 U.S. at 336–37). The plaintiff—here, the FTC—bears the burden of establishing the relevant geographic market. *Id.*

Courts and the FTC frequently use the hypothetical monopolist test to determine the relevant geographic market. A proposed market is properly defined, under this test, if a hypothetical monopolist who owns all the firms in the proposed market could profitably impose a small but significant non-transitory increase in price ("SSNIP") on buyers in that market. U.S. Dep't of Justice & Fed. Trade Comm'n, *Horizontal Merger Guidelines*, § 4.1.1, at 8–9 (2010).[3] Both parties here agree that this test is the proper one to apply.

The FTC proposed a relevant geographic market defined by all hospitals used by commercially insured patients who reside in Bergen County. This means that any hospital that serves a resident of Bergen County is included as a market participant even if that hospital is not in Bergen County. The FTC's proposed geographic market is thus patient-based, *i.e.*, it is defined by the location of patients rather than the location of hospitals. The FTC's expert, Dr. Leemore Dafny, chose Bergen County as the proposed market for three reasons: (1) Englewood and HUMC are in Bergen County; (2) the majority of Bergen County residents receive care in Bergen County; and (3) Bergen County is an economically significant area for insurers. Recognizing the unique commercial realities of the healthcare market and relying heavily on insurer testimony, the District Court accepted the FTC's proposed geographic market.

The Hospitals argue that the District Court erred in its formulation of the relevant geographic market. First, they

[3] The Merger Guidelines are not binding on the courts. However, "they are often used as persuasive authority." *Hershey*, 838 F.3d at 338 n.2 (quoting *St. Alphonsus*,778 at 784 n.9).

argue, the FTC did not prove the feasibility of price discrimination in the market. Second, they contend that even if a showing of price discrimination was not required, the proposed market does not pass the hypothetical monopolist test.

"[D]efinition of the relevant [geographic] market is a factual question dependent upon the special characteristics of the industry involved," so we review for clear error. *Hershey*, 838 F.3d at 335 (quoting *St. Alphonsus*, 778 F.3d at 783 (internal marks omitted)). However, "where a district court applies an incomplete economic analysis or an erroneous economic theory to [the] facts . . . , it has committed legal error subject to plenary review" and we will reverse. *Id.* at 336.

a. Price discrimination is not a prerequisite for a patient-based market

As a preliminary matter, we must address whether a showing of price discrimination is required for a patient-based geographic market. The Hospitals argue that a showing of price discrimination—specifically, that patients in the FTC's proposed market could be charged higher prices for inpatient general acute care services than patients living outside the proposed market—is required under the Merger Guidelines, case law, and economic literature. Thus, the Hospitals argue, when the District Court accepted the FTC's proposed market without this showing, it erred as a matter of law. We disagree.

We begin our analysis with the Merger Guidelines. The Guidelines themselves caution that they "should be read with the awareness that merger analysis does not consist of uniform application of a single methodology. Rather, it is a fact-specific process through which the [FTC] . . . appl[ies] a range of analytical tools to the reasonably available and reliable evidence . . . ." *Merger Guidelines*, § 1, at 1. This initial call

for flexibility is bolstered throughout the Guidelines by the use of permissive language such as "normally," "may," and "usually." *See e.g.*, §§ 4, 5. The Hospitals argue that § 4.2 of the Guidelines outlines the only allowable methods for establishing a customer-based geographic market. They take too restrictive a view of § 4.2. Using price discrimination is but one way the Guidelines say the FTC may define a customer-based geographic market. *Id.* § 4.2, at 14. The Guidelines even recognize that these types of geographic markets apply most often when traditional buyers and sellers are involved. *Id.* But nothing in the Guidelines states that a customer-based geographic market may be defined only through price discrimination.

The Hospitals next cite a slew of cases to argue customer-based geographic markets require a showing of price discrimination. But case law likewise provides us with no such mandate. Several of the Hospitals' cases involve markets starkly different from the healthcare market here. *See FTC v. Staples, Inc.*, 190 F. Supp. 3d 100, 112, 117–18 (D.D.C. 2016) (office supply companies); *FTC v. Wilh. Wilhelmsen Holding ASA*, 341 F. Supp. 3d 27, 47 (D.D.C. 2018) (marine water treatment providers). These markets, which involve traditional sellers and buyers, are not analogous to a complex healthcare market. The healthcare industry involves a two-stage model of competition. *Hershey*, 838 F.3d at 342. In the first stage, "insurers and hospitals negotiate to determine whether the hospitals will be in the insurers' networks and how much the insurers will pay them." *FTC v. Advocate Health Care Network*, 841 F.3d 460, 465 (7th Cir. 2016). In the second stage, "hospitals compete to attract patients, based primarily on non-price factors like convenience and reputation for quality." *Id.* Thus, unlike a traditional seller and buyer industry, healthcare involves different payors with different

incentives and competitive constraints. We must always consider the commercial realities of the industry involved. *See Brown Shoe*, 370 U.S. at 336–37.

In the other cases the Hospitals cite, courts mandated price discrimination because the FTC asked the court to impose a price discrimination requirement. For example, in *United States v. Eastman Kodak Co.*, the Second Circuit rejected the FTC's proposed customer-based market because the FTC failed to prove "systematic price discrimination." 63 F.3d 95, 107 (2d Cir. 1995). But the government there "chose[] to rebut Kodak's proposed market definition" and proposed its own geographic market "by relying on [a] theory of price discrimination." *Id.* The government did not argue, and the Second Circuit did not hold, that price discrimination was the only basis on which to define a customer-based market. The Second Circuit assumed without deciding that if it accepted the government's theory of price discrimination, the government would still lose because it did not proffer evidence to support its theory. *Id.* Here, by contrast, the FTC chose Bergen County as its geographic market based on a theory of economic significance—Englewood and HUMC are both located there, the vast majority of Bergen County residents receive care there, and insurers think Bergen County is economically significant. The FTC here, unlike in *Kodak*, provided evidence to support its theory.

St. Alphonsus provides a better example of defining a geographic market in the complex healthcare industry. *St. Alphonsus Med. Ctr.-Nampa, Inc. v. St. Luke's Health Sys.*, No. 1:12-cv-00560, 2014 WL 407446 (D. Idaho Jan. 24, 2014), *aff'd* 778 F.3d at 775. In *St. Alphonsus*, the FTC argued for, and the District Court found, a market based both on patient location and physician group location. *Id.* at *7–8. The FTC's argument in this case is remarkably similar. The commercial

realities here are that most Bergen County residents receive their inpatient general acute care services in Bergen County and thus insurers feel they cannot offer a plan that does not include any Bergen County hospital options. Therefore, just as the court in *St. Alphonsus* defined the market based on both patient and supplier location considerations, so too did the District Court here.

Finally, we see nothing in the economic literature to convince us that price discrimination is a prerequisite for a patient-based market. Far from "unambiguously stat[ing] that price discrimination is a prerequisite to defining a relevant customer-based geographic market," Hospitals' Br. at 26, the economic literature explains how a price discrimination theory applies to the definition of a relevant market when a price discrimination theory is used. *See* Jerry Hausman et al., *Market Definition Under Price Discrimination*, 64 Antitrust L.J. 367, 369 (1996); Phillip Areeda & Herbert Hovenkamp, *An Analysis of Antitrust Principles and Their Application*, ¶ 534d (4th and 5th Eds., 2021). The Hospitals point to one article that supports their reading of the Merger Guidelines. *See* Gregory Werden, *Why (Ever) Define Markets? An Answer to Professor Kaplow*, 78 Antitrust L.J. 729, 743 (2012). However, as discussed above, the Guidelines are flexible.

Thus, we are not willing to adopt a rigid requirement that price discrimination must be feasible in every customer-based geographic market. Instead, we hew to the fundamental antitrust principle that courts must consider the commercial realities of the industry involved when defining the relevant market. The District Court did not err.[4]

[4] Because we hold that the District Court correctly did not require a showing of price discrimination for the FTC's proposed patient-based market, we do not address the parties'

b. The FTC verified the patient-based market with the hypothetical monopolist test

To confirm the feasibility of a geographic market, courts often employ the hypothetical monopolist test. As already explained, the market is properly defined under this test if a hypothetical monopolist could impose a SSNIP, typically about five percent, in the proposed market. *Hershey*, 838 F.3d at 338 & n.1 (citing *Merger Guidelines*, § 4.1.2, at 10). "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." *Id.*

The FTC, through its expert Dr. Dafny, opined that the hypothetical monopolist test in this case is whether "a hypothetical monopolist of . . . all the hospitals supplying the cluster of inpatient [general acute care] services to residents of Bergen County [could] profitably impose a SSNIP." Hr'g Tr. vol. 3, 562:18–21, ECF No. 356. Insurers testified that Bergen County is economically significant to them and they cannot market a plan to Bergen County residents that does not include a Bergen County hospital. Thus, Dafny concluded that these insurers would be forced to accept a SSNIP from a hypothetical monopolist of all hospitals supplying the cluster of inpatient general acute care services to residents of Bergen County.

To empirically test her conclusion that Bergen County satisfies the hypothetical monopolist test, Dafny conducted a willingness-to-pay analysis. This analysis measures the bargaining leverage of a hospital by estimating the value that patients place on having access to that hospital. Patient preferences may depend on a multitude of factors, such as drive

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arguments regarding whether the FTC showed that price discrimination is feasible in the proposed market.

time to the hospital, services offered at the hospital, and the reputation of the hospital. The more value patients assign to the hospital, the more desirable that hospital is to an insurer's network, and the higher the price an insurer is willing to pay to include that hospital in its network. Insurers maintain bargaining leverage by having alternative hospitals that patients recognize as close substitutes to include in their networks. When individual hospitals merge, the merged entity may increase its collective bargaining leverage, as compared to the leverage each individual entity maintained on its own, because the merger limits insurers' ability to provide alternative hospitals for its enrollees.

Using patient discharge data from Bergen County residents from 2017 to 2019, Dafny used a statistical model to calculate the bargaining leverage of the six hospitals in Bergen County—*i.e.*, a subset of all hospitals that serve Bergen County residents. She calculated their leverage individually and as one entity owned by a hypothetical monopolist. Her calculations revealed that the merged hospitals' bargaining leverage increased by sixty-five percent as compared to each hospital's leverage if each negotiated independently. Dafny opined that, according to academic research, a change in leverage of this magnitude corresponds to a thirty-seven percent price increase, well above the five percent SSNIP threshold. Dafny reasoned that if a hypothetical monopolist of just this subset of hospitals could profitably impose a SSNIP on insurers, then a hypothetical monopolist of all hospitals serving Bergen County could likewise impose a SSNIP. The FTC argues that Dafny's extrapolation was proper because the insurers testified that Bergen County is economically significant and that they could not market a plan to Bergen County residents that did not include a Bergen County hospital.

The Hospitals argue that Dafny's proposed market and the methodology she applied do not match. They assert that Dafny envisioned a hypothetical monopolist that controlled only the six hospitals located in Bergen County—a market defined by the hospitals' location, rather than patients' location. Because she used the wrong market definition, they claim she only tested a subset of the FTC's proposed patient-based market. Thus, they argue, the District Court erred as a matter of law in finding the hypothetical monopolist test supported the FTC's proposed geographic market.

Hershey supports Dafny's methodology. There, we concluded that insurers would accept a price increase from the two merging hospitals rather than excluding them from their networks due to the economically significant nature of those hospitals. 838 F.3d at 346. While the hypothetical monopolist test required the government to show only that insurers would "accept a price increase rather than exclude *all* of the hospitals" in the geographic market, the government had actually answered a narrower question—whether insurers would accept a price increase rather than exclude *the two particular hospitals* that planned to merge. *Id.* Thus, by determining that insurers would accept a SSNIP rather than exclude even two hospitals from its network, we could easily conclude that insurers would accept a SSNIP rather than exclude all the hospitals in the county. *Id.*

As we did in *Hershey*, the District Court here found the extrapolation to be reasonable. The Court concluded that if a hypothetical monopolist owned all of the hospitals in Bergen County, "then insurers could attempt to redirect their customers to nearby hospitals outside of the county." *Hackensack*, 2021 WL 4145062, at *20. However, if the hypothetical monopolist also owned other nearby hospitals that serve Bergen County residents—*i.e.*, hospitals in Essex,

Hudson, and Passaic Counties—the monopolist's bargaining leverage would increase even more. The District Court accepted Dafny's extrapolation that the more hospitals the monopolist owned in the area, the greater leverage the monopolist would have over insurers because insurers would no longer have the option to redirect their Bergen County customers to nearby, non-county hospitals.

The Hospitals first challenge this extrapolation by arguing that Dafny did not consider how individuals from other counties—a large portion of the patients for hospitals outside Bergen County—would affect her analysis. They argue that "[t]o determine whether the hospitals located outside Bergen County could profitably raise their prices across the board, Dafny would have had to examine how insurers and competing hospitals would react to such a price increase, which would affect the prices charged to patients across the region." Reply Br. 13 (emphasis omitted). Not so. The District Court found the insurer testimony and supporting data that Bergen County is important to insurers credible and compelling. It was not clear error for the District Court to find that insurers' desire to offer plans that include hospitals in Bergen County outweighs any possible reaction competing hospitals further outside of Bergen County and neighboring counties would have to a price increase.

The Hospitals next argue that Dafny only considered the bargaining leverage of insurers, not patients. They point to Dafny's alleged concession in her deposition testimony that she applied the hypothetical monopolist test to a market "based on the location of facilities" and to the District Court's apparent acknowledgment that Dafny's willingness-to-pay analysis "examines the leverage that a hypothetical monopolist of Bergen County hospitals would have as to insurers." Hospitals' Br. 33–34 (emphasis omitted). But as Dafny explained in that

deposition and at the preliminary injunction hearing, she evaluated only hospitals located in Bergen County to predict what a hypothetical monopolist of all hospitals serving Bergen County residents—including those hospitals located in Bergen County—would do. Her hospital-based approach was but a first step to her patient-based analysis. The District Court recognized as much, noting that in the healthcare industry patient preferences and insurer preferences "cannot be viewed in separate, isolated spheres." *Hackensack*, 2021 WL 4145062, at *20. Again, the Hospitals take too rigid a view of the healthcare market. We therefore conclude that the District Court did not clearly err in its application of the hypothetical monopolist test.[5]

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For the reasons stated above, the District Court did not clearly err in finding the FTC demonstrated that Bergen County, including all hospitals that serve its residents, is a relevant geographic market.

3. The merger will lead to anticompetitive effects

After the relevant product and geographic markets are determined, "a prima facie case is established if the plaintiff proves that the merger will probably lead to anticompetitive effects in that market." *Hershey*, 838 F.3d at 346 (quoting *St.*

[5] The FTC alternatively alleged that Bergen County is a properly defined geographic market supported by the hypothetical monopolist test if a hospital-based approach is used. The Hospitals argue that the FTC forfeited this argument when its expert did not propose a hospital-based geographic market. Because we hold that the District Court did not err in defining a patient-based market, we need not address either argument.

Alphonsus, 778 F.3d at 785). Anticompetitive effects can include price increases and reduced product quality, product variety, service, or innovation. *See Merger Guidelines*, § 1, at 2. The record thoroughly supports the District Court's conclusion that the FTC established a prima facie case.

a. Market Concentration

One useful indicator of the competitive effects of a merger is market concentration. *Id.* § 5.3, at 18. Market concentration is measured by the Herfindahl-Hirschman Index ("HHI"). *Id.* A merger's HHI is calculated by summing the squares of the market shares of each market participant. Squaring the shares "gives proportionately greater weight to the larger market shares," *id.*, and economists consider the HHI to be "superior to such cruder measures" such as summing up the largest firms' market shares, *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 716 n.9 (D.C. Cir. 2001) (citation omitted). A pure monopoly would have an HHI of 10,000 (the square of a single business's 100 percent market share), while a market with many players would have an HHI near zero. *Merger Guidelines*, § 5.3, at 18. A post-merger market with an HHI below 1,500 is considered unconcentrated, a market between 1,500 and 2,500 is considered moderately concentrated, and a market with an HHI above 2,500 is considered highly concentrated. *Id.* § 5.3, at 19.

In addition to the post-merger HHI number, we also consider the increase in the HHI resulting from the merger. *Id.* § 5.3, at 18–19. A merger that increases the HHI by more than 200 points and results in a highly concentrated market, as described above, is "presumed to be likely to enhance market power." *Id.* § 5.3, at 19. The FTC may establish a prima facie case by showing a high market concentration based on HHI numbers alone. *See, e.g.*, *Hershey*, 838 F.3d at 347.

Using the methods described above, the FTC demonstrated that the post-merger HHI would be 2,835—a number that crosses the highly concentrated market threshold. The merger would increase the HHI by 841 points—over four times the 200-point benchmark that creates a presumption of enhanced market power if the merger results in a highly concentrated market. The FTC alleges that the post-merger combined Englewood/Hackensack Hospitals would command forty-seven percent of the market, with the next two closest competitors commanding only twenty-one percent and nine percent. The Hospitals do not dispute these numbers. Instead, they argue that the total HHI "barely exceed[s] the minimum 2,500 threshold" to trigger a presumption of anticompetitive effects. Hospitals' Br. 38. The Hospitals highlight that these numbers—an increase of 841 to an HHI of 2,835—are the "lowest [HHI numbers] that the FTC has relied on in any recent hospital-merger case involving [general acute care] services." *Id.* at 38–39. But the FTC is not required to show extraordinary numbers to make out a prima facie case that the merger would have anticompetitive effects. Anticompetitive effects can occur at even lower thresholds, as evidenced by the Guidelines. *Merger Guidelines*, § 5.3, at 19. For instance, a moderately concentrated market (with a total HHI below 2,500) involving only more than a hundred-point increase "potentially raise[s] significant competitive concerns and [may] warrant scrutiny." *Id.* The District Court correctly concluded that these numbers demonstrate the merger is presumptively anticompetitive.

b. Direct Evidence

Although the District Court needed no further evidence to find the FTC had established its prima facie case, the Court evaluated other evidence of anticompetitive effects presented by the FTC. This direct evidence strengthens the probability

that the merger will likely lead to anticompetitive effects and, thus, the FTC's prima facie case. *See St. Alphonsus*, 778 F.3d at 788 (relying on HHI numbers and direct evidence of anticompetitive effects to confirm the prima facie case); *Chi. Bridge & Iron Co. N.V. v. FTC*, 534 F.3d 410, 431–32 (5th Cir. 2008) (same); *Heinz*, 246 F.3d at 717 (same). As the District Court explained, the Hospitals, a consultant hired by Englewood, and insurance companies all indicated that the merger would lead to anticompetitive effects or, at the very least, recognized the Hospitals as competitors.

First, the Hospitals view each other as competitors. During Englewood's partner search, Englewood's president expressed hesitation about sharing information with Hackensack should the deal not go forward. Englewood representatives also speculated that Hackensack's motivation for merging might stem from its competition with Englewood. Hackensack's president similarly recognized Englewood as a competitor. The District Court also found that the Hospitals monitored each other's offerings and technology innovations and made decisions about their own businesses as a result.

Englewood's merger consultant likewise concluded that Hackensack was Englewood's main competitor. First, the consultant identified that Englewood and Hackensack draw their patients from a similar area in northern New Jersey. The District Court logically concluded that if the Hospitals merged, a competitor would be lost from that area. When evaluating merger offers, the consultant advised Englewood that accepting Hackensack's offer would slow down competition between the hospitals, but accepting another northern New Jersey health system's offer would intensify competition with Hackensack.

Finally, insurers that do business with the Hospitals recognized that the merger would have anticompetitive effects.

For example, one insurer testified that under its modeling and projections, were HUMC to leave its coverage network, fifty percent of the patients who would have gone there would choose to go to Englewood. Another insurer provided an internal analysis that showed that after the merger Englewood, HUMC, and Pascack Valley would account for sixty-two percent of the insurer's inpatient spending.

The District Court interpreted all of these statements—from the Hospitals' representatives, Englewood's consultant, and insurers—as evidence that the Hospitals are competitors and, should they merge, a competitor would be eliminated. The District Court's reasoning is sound.

Dafny also presented the District Court with various calculations that bolstered the FTC's prima facie case. First, she calculated diversion ratios of the hospitals in the market. A diversion ratio assesses the share of patients that would go to a certain hospital if their chosen hospital were not available to them. The higher the diversion ratio, the closer the competition between the named hospitals. Dafny calculated that nearly forty percent of Englewood's patients would choose a Hackensack hospital if Englewood were not available. Its next closest Bergen County competitor was at twelve percent. Dafny concluded that Hackensack places a strong competitive constraint on Englewood, which affects Englewood's pricing and quality. The District Court credited this analysis, unpersuaded again by the Hospitals' rigid argument that diversion ratios should focus only on insurer preferences.

Dafny also calculated the price impact of the merger and estimated the Hospitals would be able to increase prices by $31 million after the merger**.** Dafny used both her patient-based willingness-to-pay model and information from a peer-reviewed paper to generate her calculations. The Hospitals argue that Dafny's analysis is unreliable because it rests on

estimates of patient preferences rather than insurer preferences, and New Jersey claims data shows that there is no statistically significant correlation between the two. The Hospitals made the same argument before the District Court, which found the FTC's explanation more persuasive.

We see no clear error in the District Court's reasoning. The study Dafny used evaluated twenty-eight hospital mergers and examined whether there was a statistically significant correlation between a change in patient preferences and a change in price. Dafny testified that substantial literature supports the general proposition that hospitals that perform more strongly in the willingness-to-pay analysis command higher negotiated prices in the marketplace. In addition to this general principle, she explained that she was selective when using the study to make her calculations. She included only the mergers without variable cost savings because she had accounted for any cost savings from this merger as part of her efficiencies analysis. If she had not eliminated those cost-saving mergers from her calculations, she would be "double counting" the savings. *Hackensack*, 2021 WL 4145062, at *22. Through this analysis, she found a statistically significant correlation between changes in patient preferences and changes in price.

The Hospitals' sole argument against Dafny's methodology is that she did not use the best data available, which they say is New Jersey claims data. Their expert used that data and found no statistically significant correlation between patient preferences and hospital prices in New Jersey. Dafny addressed this criticism in the District Court, explaining that the Hospitals' expert's methodology using this data was "inferior" because it looked at only one point in time, omitted important variables, and included irrelevant factors that could lead to misleading estimates. Hr'g Tr. vol. 3, 578:22, ECF No.

356. Nonetheless, Dafny did an analysis using this data to refute the Hospitals' expert's results, but she adjusted for the supposed flaws in the other expert's methodology.[6] Her results using this data showed a statistically significant relationship between patient preferences and price, and ultimately resulted in price increase estimates that were higher than those using her original methodology. Thus, the FTC introduced evidence showing that the merger would lead to anticompetitive price increases using Dafny's preferred data *or* the Hospitals' preferred data.

Outside of the expert analyses, the District Court relied on previous Hackensack merger contracts to conclude the merger would lead to anticompetitive price increases. Contracts between Hackensack and facilities it had merged with in the past show Hackensack's ability to raise rates. The Hospitals challenge the District Court's reliance on the contracts, arguing they only reflect past, pre-merger power and have no bearing on this merger. But the Hospitals miss the

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[6] According to Dafny, the methodology used by the Hospitals' expert suffered from several flaws: he used willingness-to-pay and price measurements that were out of sync with the standards in the economic literature; although he controlled for observable factors present in rate negotiations between hospitals and insurers, such as insurer identity and system costs, he did not control for unobservable factors, such as the bargaining skills of the negotiators, that may independently affect prices; and he used all of northern New Jersey—an area consisting of fourteen counties—instead of the four-county area as his baseline, which further exacerbated problems associated with not controlling for unobservable factors because competitive conditions are more likely to differ as the geographic area expands.

District Court's point: past behavior is often indicative of future behavior. Furthermore, according to the Hospitals' expert and Hackensack's president, Hackensack has always been able to negotiate higher rate increases than Englewood**.** As the District Court put it, "the reasonable inference" is that Hackensack will continue to be able to do so after the merger, having added another Bergen County hospital to its portfolio. *Hackensack*, 2021 WL 4145062, at *24. Thus, regardless of whether the impact is $31 million, as Dafny estimated, or some lower figure, the District Court did not err in finding that, as a matter of common sense, there would be a significant price impact.

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The District Court did not clearly err in making these factual findings. This direct evidence, in addition to the HHI numbers, establishes a strong prima facie case of anticompetitive effects.

B. The Hospitals failed to rebut the FTC's prima facie case

Once the FTC establishes a prima facie case that a merger may substantially lessen competition, the burden shifts to the Hospitals to rebut the FTC's case. "[T]he Hospitals must show either that the combination would not have anticompetitive effects or that the anticompetitive effects of the merger will be offset by extraordinary efficiencies resulting from the merger." *Hershey*, 838 F.3d at 347. The "linchpin of any efficiencies defense" is the language of the Clayton Act, which "speaks in terms of 'competition.'" *Id.* at 349 (quoting *St. Alphonsus*, 778 F.3d at 790). The defense "requires proof that a merger is not, despite the existence of a prima facie case, anticompetitive" because "the prima facie case portrays inaccurately the merger's probable effects on competition." *Id.* (quoting *St. Alphonsus*, 778 F.3d at 790). This defense

recognizes that efficiencies created by a merger can "enhance the merged firm's ability and incentive to compete, which may result in lower prices, improved quality, enhanced service, or new products." *Merger Guidelines*, § 10, at 29.

To combat the likely anticompetitive harms the FTC established, the Hospitals offer a panoply of procompetitive benefits that may be reaped from the merger: upgrades and increased capacity limits at Englewood, the expansion of complex tertiary and quaternary care at HUMC, cost-savings that will result from service optimization between the Hospitals, and quality improvements at both Hospitals. They argue that these benefits, which the District Court recognized, show that the FTC did not establish a likelihood that the merger would substantially lessen competition. They claim they are not making an efficiencies defense, thus the stringent standard developed in other circuits need not apply. They say, instead, that procompetitive effects must simply be weighed in the balance together with anticompetitive effects when considering whether they have rebutted the FTC's prima facie case.

The existence of procompetitive benefits does not mean the absence of anticompetitive harms. The Hospitals' argument that there "would not likely be a substantial lessening of competition when both pro- and anti-competitive effects were duly considered," Reply Br. 26, is merely a different way of saying there would not likely be a substantial lessening of competition because the procompetitive effects offset the anticompetitive effects of the merger. Thus, the Hospitals' procompetitive benefits argument is an efficiencies defense.

Neither this Court nor the Supreme Court has formally adopted the efficiencies defense. *See Hershey*, 838 F.3d at 347. Other Circuits have at least been tentatively willing to recognize the defense, though none have held that it was

successfully invoked. *See ProMedica Health Sys., Inc. v. FTC*, 749 F.3d 559, 571 (6th Cir. 2014); *St. Alphonsus*, 778 F.3d at 788–92; *Heinz*, 246 F.3d at 720; *FTC v. Univ. Health, Inc.*, 938 F.2d 1206, 1222 (11th Cir. 1991). In *Hershey*, we explained that we were skeptical such a defense exists. 838 F.3d at 348. Although we have yet to see an efficiency so great as to justify a presumptively anticompetitive merger, we do not rule out that the efficiencies defense may be viable. But as in *Hershey*, we are not forced to confront that possibility. *Id.* Although this case is much closer than *Hershey*, the efficiencies defense, as adopted by other Circuits, is clearly not met here. Nonetheless, we address the defense and each of the Hospitals' claimed procompetitive benefits to clarify any ambiguity in *Hershey*.

For the efficiencies defense to be cognizable, the efficiencies must (1) "offset the anticompetitive concerns in highly concentrated markets"; (2) "be merger-specific" (*i.e.*, the efficiencies cannot be achieved by either party alone); (3) "be verifiable, not speculative"; and (4) "not arise from anticompetitive reductions in output or service." *Hershey*, 838 F.3d at 348–49 (internal quotation marks and citations omitted).

In *Hershey*, we expounded on the first element—whether efficiencies offset anticompetitive concerns—in the context of HHI numbers. *Id.* at 350.We stated that even if the hospitals could show an efficiency was verified, was merger-specific, and did not arise from anticompetitive reduction in output, the HHI numbers were so great as to "eclipse any others we have identified in similar cases." *Id.* Therefore, the merger was "so likely to be anticompetitive that 'extraordinarily great . . . efficiencies [were] necessary to prevent the merger from being anticompetitive.'" *Id.* (quoting *Merger Guidelines*, § 10, at 31). The District Court seems to have interpreted *Hershey* to mean that "extraordinary" efficiencies must be found in every

case where a prima facie case is established, regardless of the HHI numbers. *Hackensack*, 2021 WL 4145062, at *26, *30. We now clarify our earlier statements.

Efficiencies are best understood as a sliding scale. The magnitude of the efficiencies needed to overcome a prima facie case depends on the strength of the likely adverse competitive effects of a merger. At a minimum, the defendant must show that "the intended acquisition would result in significant economies and that [those] economies would ultimately benefit competition and, hence, consumers." *See Univ. Health*, 938 F.2d at 1223. *Hershey* examined the high end of the spectrum. There, the market had an HHI of 5,984—more than twice the highly-concentrated-market threshold—and an increase in HHI of 2,582—more than twelve times the 200-point increase that triggers a presumption of anticompetitive harm when the resulting market is highly concentrated. *Hershey*, 838 F.3d at 347. Recognizing that the HHI numbers were extraordinary, we declared that any efficiencies would have to be equally extraordinary to overcome the likely anticompetitive effects. *Id.* at 350. But not every invocation of the efficiencies defense will require that showing. Courts must take their cues from the HHI numbers and direct evidence presented by the government in each case.

Here, the District Court analyzed the Hospitals' claimed procompetitive benefits as efficiencies and concluded that they were insufficient to overcome the FTC's prima facie case. Although we agree with that conclusion, to the extent the District Court required a showing of extraordinary procompetitive effects, it would have been incorrect. The presumption of anticompetitive effects established by the FTC here does not rise to the level seen in *Hershey*. Nonetheless, we review conclusions of law de novo, *id.* at 335, and our review leads us to the same conclusion. Some procompetitive benefits

may exist, but they are not significant enough to offset the likely anticompetitive effects of the merger. Most of the Hospitals' claimed benefits were speculative or non-merger-specific. And the few procompetitive effects that the Hospitals did establish do not constitute significant economies that will ultimately benefit competition and, hence, the patients in Bergen County.

The District Court found that most of the Hospitals' commitments to increase Englewood's capacity and improve its clinical offerings were merely speculative. What the Hospitals called "hard commitments" were only commitments to "explore, assess, and collaborate." *Hackensack*, 2021 WL 4145062, at *26. Furthermore, many of these commitments were not Englewood-specific or enforceable. On the other hand, the Court noted that Hackensack's significant capital contribution could likely amount to a procompetitive benefit to Bergen County in a few ways, such as upgrading some physical facilities and providing Englewood with robotic technology, both of which would offer Bergen County patients more or upgraded services. But these modest upgrades alone are not significant enough to overcome the strong evidence of anticompetitive harms.

The District Court held that cost savings due to post-merger service optimization were also too speculative to be meaningful. The Court found that the $38 million figure the Hospitals relied on failed to account for the $439 million capital contribution by Hackensack. Additionally, the Court found more persuasive the evidence, or rather lack of evidence, presented about cost savings in past Hackensack mergers. Hackensack has previously acquired other hospitals in New Jersey, yet the Hospitals provided no evidence that consumers benefitted from cost savings due to service optimization between the merging parties. Whatever savings the merging

entities may have cashed in on, there was no evidence the savings ever flowed through to patients.

The District Court held that the benefit of expanded complex tertiary and quaternary care was both non-merger-specific and speculative. To embark on this expansion, Hackensack claims it must relieve capacity restraints at HUMC. But the District Court found that the only thing preventing HUMC from transferring patients to Englewood was financial or competitive motive. As the District Court stated, this motive may be legitimate, but it nonetheless undercuts the Hospitals' argument that the expansion can only occur if the merger moves forward. The District Court also noted that HUMC is currently expanding capacity and quaternary services through an ongoing upgrade project. Finally, the District Court rightly pointed out that Hackensack has three hospitals near HUMC that are not at capacity and likely could help alleviate HUMC's capacity restraints. The Hospitals have offered nothing to combat these findings.

Furthermore, the District Court found that any procompetitive benefit gained by easing HUMC's capacity restraints is speculative. First, the Hospitals provided no evidence that they have a plan to transfer patients from HUMC to Englewood. At best, the Hospitals have a sense of the number of patients they would like to transfer. Second, the Hospitals failed to account for the fact that many hospital referrals come from physicians not employed by HUMC and those physicians may not recommend their patients seek services at Englewood. Thus, even the Hospitals' transfer goals are speculative. Finally, assuming the capacity restraint problems were confirmed, the expansion of quaternary services is speculative. State approval is required for any such expansion and the process to gain that approval is expensive and time-consuming. Thus, the District Court correctly found

that the expansion of services at HUMC is not a cognizable efficiency.

As for the Hospitals' claim that the merger will provide quality improvements to both Englewood and HUMC, the District Court found these too were not merger-specific. Although the Court did not doubt that Hackensack's capital commitment would improve facilities and equipment at Englewood, it explained that such quality improvements were likely to happen regardless of a merger. Englewood is a high-quality hospital. It consistently performs well in multiple quality assessments and is motivated to maintain this quality of care because of its competition with HUMC. Therefore, Englewood would likely make similar quality improvements even if it did not merge with Hackensack. Furthermore, Englewood scores better than HUMC on multiple important performance measures, such as hospital safety, patient experience, timely and effective care, nursing recognition, and healthcare-associated infection rates. If the merger occurs, consumers would likely be disadvantaged because Englewood would no longer have an incentive to outperform HUMC and HUMC would have no reason to strive for improvement in those areas.

The District Court did not directly address the New Jersey Attorney General's finding that the merger is in the public interest under the New Jersey Community Health Care Assets Protection Act. Under the Act, the New Jersey Attorney General and the New Jersey Department of Health evaluate whether a nonprofit hospital transaction is in the public interest. Relevant to their inquiry, they evaluate whether the proposed transaction is "likely to result in the deterioration of quality, availability or accessibility of heath care services in the affected communities." N.J.S.A. 26:2H-7.11(b). Here, New Jersey concluded that Hackensack made commitments to

enhance Englewood's offerings to the community. Although that finding is independent of any antitrust analysis federal courts may perform, we would be remiss not to consider a state's assessment of the effects of a merger within its borders. Therefore, the District Court should have included the interests of the community, as assessed by the New Jersey Attorney General, in analyzing the likely effects of the merger.

Nonetheless, when we consider this assessment of the community's interests along with the modest quality improvements and upgrades likely to occur because of this merger, they are not significant enough to overcome the FTC's strong prima facie case. We thus conclude that the District Court did not err in holding that the Hospitals failed to rebut the prima facie case that the merger is likely to substantially lessen competition. Therefore, no additional evidence is necessary for the FTC to carry its ultimate burden of persuasion. *See Hershey*, 838 F.3d at 337.

III.

For these reasons, we will affirm the District Court's grant of preliminary injunctive relief.