

PRECEDENTIAL

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

No. 16-1345

VALSPAR CORPORATION;
VALSPAR SOURCING, INC.,
Appellant

v.

E. I. DU PONT DE NEMOURS AND COMPANY

On Appeal from the United States District Court
for the District of Delaware
(D.C. No. 1-14-cv-00527)
District Judge: Honorable Richard G. Andrews

Argued March 9, 2017
Before: HARDIMAN and KRAUSE, Circuit Judges,
and STENGEL,* Chief District Judge.

(Filed: September 14, 2017)

* The Honorable Lawrence F. Stengel, Chief United States District Judge for the Eastern District of Pennsylvania, sitting by designation.

James M. Lockhart [Argued]
James P. McCarthy
Kathryn E. Wendt
Lindquist & Vennum
80 South 8th Street
2000 IDS Center
Minneapolis, MN 55402

Frederick L. Cottrell, III
Jason J. Rawnsley
Chad M. Shandler
Richards Layton & Finger
920 North King Street
One Rodney Square
Wilmington, DE 19801
Counsel for Plaintiffs-Appellants

Randa Adra
Crowell & Moring
590 Madison Avenue
20th Floor
New York, NY 10022

Clifton S. Elgarten
Shari R. Lahlou [Argued]
Benjamin C. Wastler
Crowell & Moring
1001 Pennsylvania Avenue, N.W.
Washington, DC 20004

Kathleen F. McDonough
John A. Sensing
Potter Anderson & Corroon
1313 North Market Street
Wilmington, DE 19801
Counsel for Defendant-Appellee

Richard M. Brunell
American Antitrust Institute
Suite 1100
1730 Rhode Island Avenue, N.W.
Washington, DC 20036
*Counsel for American Antitrust Institute as Amicus
Curiae in support of Plaintiff-Appellant*

OPINION OF THE COURT

HARDIMAN, Circuit Judge

This appeal involves an alleged conspiracy to fix prices in the titanium dioxide industry in violation of Section 1 of the Sherman Act. Appellant Valspar, a purchaser of titanium dioxide, claimed Appellee DuPont conspired with other titanium dioxide suppliers to fix prices. Valspar argued that the price-fixing agreement was made manifest primarily by thirty-one parallel price increase announcements issued by the suppliers. DuPont countered that the parallel pricing was not the product of an agreement, but rather the natural consequence of the marketplace. Specifically, DuPont posited that because the market for titanium dioxide is an oligopoly, the price

movement was caused by “conscious parallelism”—an economic theory that explains oligopolists will naturally follow a competitor’s price increase in the hopes that each firm’s profits will increase. The District Court agreed with DuPont and granted its motion for summary judgment. We will affirm.

I

The facts of this case were essentially undisputed in the District Court. The parties agree that the market for titanium dioxide is an oligopoly. Titanium dioxide is a commodity-like product with no substitutes, the market is dominated by a handful of firms, and there are substantial barriers to entry.

Valspar, a large-scale purchaser of titanium dioxide, alleges that a group of titanium dioxide suppliers conspired to increase prices. It claims that the conspiracy began when DuPont—the largest American supplier—joined the Titanium Dioxide Manufacturers Association (TDMA) in 2002, when the association opened participation to non-European companies. Shortly after joining the TDMA, DuPont announced a price increase. Within two weeks, DuPont’s price increase was matched by Millennium, Kronos, and Huntsman (other TDMA members and members of the alleged conspiracy). This began what Valspar alleged to be the “Conspiracy Period”—twelve years during which the alleged conspirators announced price increases 31 times.

Valspar claims the conspiracy ended in late 2013 when DuPont exited the TDMA. According to Valspar’s calculations, the conspirators inflated the cost of titanium dioxide by an average of 16%. Because Valspar purchased \$1.27 billion of titanium dioxide from DuPont during the

relevant period, it claims it was overcharged to the tune of \$176 million.

II

In 2010, a class of titanium dioxide purchasers filed a price-fixing action against the suppliers in the United States District Court for the District of Maryland. Valspar opted out of that class and the remaining defendant suppliers settled the case after they were denied summary judgment. *See In re Titanium Dioxide Antitrust Litig.*, 959 F. Supp. 2d 799, 832 (D. Md. 2013). Valspar then filed its own claim in the United States District Court for the District of Minnesota, which was subsequently severed. Valspar settled all claims except this one against DuPont, which was transferred to the United States District Court for the District of Delaware, where DuPont moved for summary judgment. Although presented with “substantially the same record . . . as in the Maryland Class Action,” the District Court reached a “different conclusion.” *Valspar Corp. v. E.I. Du Pont De Nemours*, 152 F. Supp. 3d 234, 252 (D. Del. 2016). Reviewing the record and our Court’s precedents, the District Court found that “evidence of an actual agreement to fix prices” was “lacking.” *Id.* at 253. Reasoning that such evidence is necessary for a plaintiff to survive summary judgment, the District Court granted DuPont’s motion. *Id.*

III

The District Court had jurisdiction under 28 U.S.C. § 1331. We have appellate jurisdiction under 28 U.S.C. § 1291. Our standard of review is intertwined with substantive antitrust

law and the parties dispute its contours. We therefore begin by reviewing the applicable law.

A

Section 1 of the Sherman Act prohibits “[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade.” 15 U.S.C. § 1. Unlike § 2 of the Sherman Act, which addresses monopolization and other illegal unilateral conduct, § 1 applies only when there is an *agreement* to restrain trade; so a single firm’s independent action, no matter how anticompetitive its aim, does not implicate § 1. *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752, 761 (1984). While some offenses under § 1 are reviewed for reasonableness, *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 885–86 (2007), others have no possible competitive virtue and are therefore per se illegal, *Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1, 19–20 (1979). Horizontal price fixing (*i.e.*, price fixing among competitors) is one such per se violation because it is a “threat to the central nervous system of the economy.” *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 224 n.59 (1940).

Oligopolies pose a special problem under § 1 because rational, independent actions taken by oligopolists can be nearly indistinguishable from horizontal price fixing. This problem is the result of “interdependence,” which occurs because “any rational decision [in an oligopoly] must take into account the anticipated reaction of the other firms.” *In re Flat Glass Antitrust Litig.*, 385 F.3d 350, 359 (3d Cir. 2004) (alteration omitted) (quoting Philip E. Areeda & Herbert Hovenkamp, *Antitrust Law* 207 (2d ed. 2000)). In a market with many firms, “the effects of any single firm’s price and output decisions ‘would be so diffused among its numerous

competitors that they would not be aware of any change.” *Id.* (quoting Areeda & Hovenkamp, *supra*, at 206). The opposite is true in an oligopoly, where any price movement “will have a noticeable impact on the market and on its rivals.” *Id.* (quoting Areeda & Hovenkamp, *supra*, at 206); *see also In re Text Messaging Antitrust Litig.*, 782 F.3d 867, 875 (7th Cir. 2015) (oligopolists “watch each other like hawks”).

This “oligopolistic rationality” can cause supracompetitive prices because it discourages price reductions while encouraging price increases. A firm is unlikely to lower its price in an effort to win market share because its competitors will quickly learn of that reduction and match it, causing the first mover’s profits to decline and a subsequent decline in the overall profits of the industry. *Flat Glass*, 385 F.3d at 359. Similarly, if a firm announces a price increase, other market participants will know that “if they do not increase their prices to [the first-mover’s] level, [the first-mover] may be forced to reduce its price to their level. Because each of the other firms know this, each will consider whether it is better off when all are charging the old price or [the new one]. They will obviously choose [the new price] when they believe that it will maximize industry profits.” *Id.* (quoting Areeda & Hovenkamp, *supra*, at 207–08).

The Supreme Court has explained that this behavior does not violate antitrust laws. *See Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 227 (1993). Even though such interdependence or “conscious parallelism” harms consumers just as a monopoly does, it is beyond the reach of antitrust laws for two reasons. First, some courts and scholars theorize “that interdependent behavior is not an ‘agreement’ within the term’s meaning under the Sherman Act.” *Flat Glass*, 385 F.3d at 360 (citing Donald F. Turner, *The Definition of*

Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal, 75 Harv. L. Rev. 655, 663–65 (1962)). And second, “it is close to impossible to devise a judicially enforceable remedy for ‘interdependent’ pricing.” *Clamp-All Corp. v. Cast Iron Soil Pipe Inst.*, 851 F.2d 478, 484 (1st Cir. 1988) (Breyer, J.). The problem is this: “How does one order a firm to set its prices *without regard* to the likely reactions of its competitors?” *Id.*

B

“When faced with whether a plaintiff has offered sufficient proof of an agreement to preclude summary judgment, a court must generally apply the same summary judgment standards that apply in other contexts.” *Flat Glass*, 385 F.3d at 357. Accordingly, a court will enter summary judgment when the evidence shows “no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). As in other summary judgment contexts, we “review the record as a whole and in the light most favorable to the nonmovant, drawing reasonable inferences in its favor.” *In re Chocolate Confectionary Antitrust Litig.*, 801 F.3d 383, 396 (3d Cir. 2015).

However, we have recognized there is “an important distinction” to this general standard in antitrust cases. *Flat Glass*, 385 F.3d at 357. “[A]ntitrust law limits the range of permissible inferences from ambiguous evidence in a § 1 case.” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 588 (1986). Specifically, “conduct as consistent with permissible competition as with illegal conspiracy does not, standing alone, support an inference of antitrust conspiracy.”

*Id.*¹ The reason for this more rigorous standard is that mistaken inferences are especially costly in antitrust cases, since they

¹ As Valspar and our dissenting colleague point out, *Matsushita* involved an alleged conspiracy that did not make “economic sense,” 475 U.S. at 587, and the Court declined to draw liberal inferences because the defendants “had no rational economic motive to conspire,” *id.* at 596. While these unlikely-to-succeed conspiracies provide one good reason to be circumspect in our inferences, we have explained that oligopolistic interdependence provides another good reason for inferential modesty. See *Flat Glass*, 385 F.3d at 358 (“[D]espite the absence of the *Matsushita* Court’s concerns, this Court and others have been cautious in accepting inferences from circumstantial evidence in cases involving allegations of horizontal price-fixing among oligopolists.” (emphasis added)); *Chocolate*, 801 F.3d at 397 (explaining that “despite the facial plausibility of the Plaintiff’s theory and the circumstantial evidence supporting it, we must be cautious. . . . [since] the U.S. chocolate market is a textbook example of an oligopoly and we cannot infer too much from mere evidence of parallel pricing among oligopolists” (citation omitted)).

While the dissent’s interpretation of *Matsushita* is reasonable, it is contrary to Third Circuit jurisprudence. In *Chocolate*, we held that a plaintiff in an oligopoly case must provide inferences that show that the alleged conspiracy is “more likely than not.” 801 F.3d at 412. And in *Flat Glass*, we considered and rejected the dissent’s more limited reading of *Matsushita* by acknowledging that some scholars think our extension of *Matsushita* is “an unfortunate misinterpretation”

could penalize desirable competitive behavior and “chill the very conduct the antitrust laws are designed to protect.” *Id.* at 594.²

With those principles informing our analysis, this Court has developed specialized evidentiary standards at summary judgment in antitrust cases in general and in oligopoly cases in particular. Our analysis often begins with evidence of parallel price movements. *See Chocolate*, 801 F.3d at 397. In non-oligopolistic markets, “[p]arallel behavior among competitors is especially probative of price fixing because it is the sine qua non of a price fixing conspiracy.” *Southway Theatres, Inc. v. Ga. Theatre Co.*, 672 F.2d 485, 501 (5th Cir. Unit B 1982). But in an oligopolistic market, parallel behavior “can be a necessary fact of life,” *In re Baby Food Antitrust Litig.*, 166 F.3d 112, 122 (3d Cir. 1999), and “[a]ccordingly, evidence of conscious parallelism cannot alone create a reasonable

of that case while nonetheless continuing our “circumspect approach.” 385 F.3d at 359 & n.9 (citation omitted).

² If a plaintiff provides direct evidence, then the “strictures of *Matsushita* [do] not apply.” *Petruzzi’s IGA Supermarkets, Inc. v. Darling-Delaware Co.*, 998 F.2d 1224, 1233 (3d Cir. 1993). That is because “no inferences are required from direct evidence to establish a fact and thus a court need not be concerned about the reasonableness of the inferences to be drawn from such evidence.” *Id.* Valspar’s appeal does not involve direct evidence of conspiracy, and such evidence is rare in price-fixing cases. *See In re Plywood Antitrust Litig.*, 655 F.2d 627, 633 (5th Cir. 1981) (“[S]olemnized covenants to conspire are difficult to come by in any price fixing case.”).

inference of a conspiracy,” *Chocolate*, 801 F.3d at 398. Therefore, to prove an oligopolistic conspiracy with proof of parallel behavior, that evidence “must go beyond mere interdependence” and “be so unusual that in the absence of an advance agreement, no reasonable firm would have engaged in it.” *Baby Food*, 166 F.3d at 135.

Because proof of parallel behavior will rarely itself create an inference of conspiracy, a plaintiff will often need to “show that certain plus factors are present” in order “[t]o move the ball across the goal line.” *Chocolate*, 801 F.3d at 398–99. “Plus factors are proxies for direct evidence because they tend to ensure that courts punish concerted action—an actual agreement.” *Id.* (internal formatting and citations omitted). “Although we have not identified an exhaustive list of plus factors, they may include (1) evidence that the defendant had a motive to enter into a price fixing conspiracy; (2) evidence that the defendant acted contrary to its interests; and (3) evidence implying a traditional conspiracy.” *Id.* at 398.

While normally all three plus factors are weighed together, in the case of oligopolies the first two factors are deemphasized because they “largely restate the phenomenon of interdependence.” *Flat Glass*, 385 F.3d at 360. Put another way, “[e]vidence of a motive to conspire means the market is conducive to price fixing, and evidence of actions against self-interest means there is evidence of behavior inconsistent with a competitive market.” *Chocolate*, 801 F.3d at 398. Since those qualities are intrinsic to oligopolies, we instead focus on the third plus factor: “evidence implying a traditional conspiracy.” *Flat Glass*, 385 F.3d at 360 (citation omitted). To meet this factor, we require “proof that the defendants got together and exchanged assurances of common action or otherwise adopted a common plan even though no meetings, conversations, or

exchanged documents are shown.” *Id.* at 361 (citations omitted).³

³ Valspar seems to argue that proof of a tacit agreement among the suppliers—that is, an awareness that they were engaging in conscious parallelism—should suffice to meet this factor. We disagree. While tacit agreements remain illegal under § 1, *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 553 (2007), the third plus factor requires evidence implying *traditional* (i.e., explicit) conspiracy. See *Flat Glass*, 385 F.3d at 361 (requiring proof of an “actual, manifest agreement not to compete” (citation omitted)). As a practical matter, tacit conspiracy and conscious parallelism are difficult to differentiate, if such differentiation is possible at all. See Andrew Gavil, *Antitrust Law in Perspective: Cases, Concepts, and Problems in Competition Policy* 311 (2d ed. 2008) (“[The] boundary between tacit agreements—to which Section 1 applies—and parallel pricing stemming from oligopolistic interdependence” is not clear.); George A. Hay, *Horizontal Agreements: Concept and Proof*, 51 *Antitrust Bull.* 877, 894–95 & n.46 (2006) (theorizing how to distinguish between a tacit agreement and oligopolistic interdependence—“[i]f that can be done”—while noting that the distinctions might totally be lost on a jury). We have tried to eradicate this confusion by placing emphasis on the third plus factor and requiring “traditional conspiracy” evidence. See *Flat Glass*, 385 F.3d at 360–61. In other words, we realized that the type of evidence that might prove a “tacit” conspiracy (e.g., motive, actions against self-interest, parallel behavior, etc., *Interstate Circuit v. United States*, 306 U.S. 208, 225–28 (1939)) in the context of oligopolies can be unhelpfully equivocal, and thus decided to focus on evidence generally required to show an explicit,

After evaluating the evidence through our plus factor analysis, we then assess whether, “[c]onsidering the evidence as a whole,” it is “more likely than not [that the defendants] conspired to fix prices.” *Chocolate*, 801 F.3d at 412.⁴ This Court has at times employed different approaches for sifting through the proffered evidence. *Compare Flat Glass*, 385 F.3d 363–69 (summarizing all of plaintiff’s evidence without editorializing, and then performing an “Analytical Summary”

manifest agreement. Moreover, the sort of proof that would generally count towards proving a tacit conspiracy is largely accounted for in different parts of our oligopoly summary judgment framework. *See Baby Food*, 166 F.3d at 121–23, 130 (considering parallel pricing before the plus factors); *Flat Glass*, 385 F.3d at 360 (considering actions against self-interest and motive as part of first two plus factors). Although we do not rule out the possibility that evidence of a tacit agreement could suffice to meet this factor when a plaintiff also offers non-economic evidence of a traditional conspiracy—for example, when Company A proposes a parallel price increase to Company B, and Company B does not explicitly agree but then follows suit when Company A raises its prices, see *Interstate*, 306 U.S. at 222—economic evidence alone cannot demonstrate a tacit agreement under our oligopoly cases.

⁴ While the dissent wonders what it will “now take for a plaintiff relying on circumstantial evidence to move the ball across the goal line,” Dissent at 6, the above precedents already resolve that question. Namely, the plaintiff’s inferences must show that conspiracy is “more likely than not.” *Chocolate*, 801 F.3d at 412. That may be a high bar—but it is the bar established by this Court and binding on this panel.

to decide whether the body of evidence made conspiracy more likely than not), *with Chocolate*, 801 F.3d at 403–12 (looking at individual groupings of evidence to see whether any “supported an inference of conspiracy,” *id.* at 408, and then taking a holistic view of the evidence in context and determining that “it does not tend to exclude the possibility that [defendants] acted lawfully,” *id.* at 412). Whatever method is used, the bottom line is that “a plaintiff relying on ambiguous evidence alone cannot raise a reasonable inference of a conspiracy sufficient to survive summary judgment,” *Chocolate*, 801 F.3d at 396, but—like in all other summary judgment cases—that evidence must be viewed in the context of all other evidence, *Big Apple BMW, Inc. v. BMW of N. Am., Inc.*, 974 F.2d 1358, 1364–65 (3d Cir. 1992).

IV

We now turn to the evidence of record, which we will evaluate in light of the principles just outlined. We first consider the parallel pricing evidence, then move to evidence under the plus factors, and finally consider the record *in toto*.

A

1

Valspar bases its case primarily on the 31 parallel price increase announcements issued by the competitors during the alleged conspiracy, arguing that it is “inconceivable” that, on 31 occasions, the competitors “conduct[ed] independent analyses . . . [and] nearly simultaneously arrived at identical price increase amounts to be implemented on exactly the same day.” Valspar Br. 37.

Valspar's argument fails for two reasons. First, its characterization of the suppliers' price announcements neglects the theory of conscious parallelism and flies in the face of our doctrine that in an oligopoly "any rational decision *must* take into account the anticipated reaction of the other . . . firms." *Baby Food*, 166 F.3d at 122 (emphasis added) (citations omitted).⁵ Thus, DuPont does not claim that the competitors' numerous parallel price increases were discrete events—nor could it do so with a straight face. But it doesn't need to. The theory of interdependence recognizes that price movement in an oligopoly will be just that: *interdependent*. And that phenomenon frequently will lead to successive price increases, because oligopolists may "conclude that the industry as a whole would be better off by raising prices." *Chocolate*, 801 F.3d at 397.⁶

⁵ Indeed, this same mistake pervades Valspar's argument. As the District Court aptly explained, Valspar generally "neglects the theory of interdependence." *Valspar*, 152 F. Supp. 3d at 248. For example, despite the central role "conscious parallelism" and "interdependence" play in our oligopoly caselaw, each of those phrases appear only once in Valspar's opening brief.

⁶ Valspar also notes that the suppliers' executives denied engaging in "follow the leader pricing." Valspar Br. 15. Essentially, Valspar is arguing that we should infer a conspiracy from this potential pretext. That argument fails under our caselaw because "pretextual reasons are insufficient to create a genuine issue of fact without other evidence pointing to a price-fixing agreement." *Chocolate*, 801 F.3d at

Second, Valspar does not engage this Court's demanding rule that in order to raise an inference of conspiracy on this point, it was required to show that the suppliers' parallel pricing went "beyond mere interdependence [and was] so unusual that in the absence of advance agreement, no reasonable firm would have engaged in it." *Baby Food*, 166 F.3d at 135. Valspar never cites this important controlling precedent, nor does it attempt to show how it might be met.

Apart from Valspar's failure to carry its burden, DuPont demonstrates that "market realities . . . clearly controvert [Valspar's] contention" that these announcements are evidence of a conspiracy. *Id.* at 131. First, supply contracts in the titanium dioxide industry contained price-protection clauses requiring a notice period to customers before a price increase, meaning that if a supplier failed to match a competitor's announcement, it was foregoing the possibility of negotiating a price increase during that period. These industry-wide contractual provisions made the benefit of matching a price increase announcement high and the risk minimal: if a competitor later undercut that price in an effort to take market share, the supplier could refrain from implementing the price increase or even respond by lowering its price. Second, DuPont demonstrated that the market for titanium dioxide remained competitive despite the frequent price increase announcements. Indeed, Valspar employees testified that it was "very common" to negotiate away a supplier's attempt to increase price, DuPont Br. 6, and said that "[o]ften . . . an aggressive supplier would be interested in achieving more volume and would come in and offer a [lower] price," *id.* at 9.

411 (alterations omitted) (quoting *Miles Distribs. v. Specialty Constr. Brands, Inc.*, 476 F.3d 442, 452 (7th Cir. 2007)).

Across all suppliers' attempted price increases, Valspar was able to avoid that increase (or even negotiate a decrease) one-third of the time. Thus, Valspar's characterization of this evidence is controverted by market realities; "aggressive" and "common" price competition between firms is inconsistent with the idea that those same firms have conspired *not* to compete on price.⁷

2

Valspar also advances the related argument that the flurry of price announcements reflects a drastic change from pre-conspiracy behavior in the titanium dioxide market. A change in industry practices must be "radical" or "abrupt" to "create an inference of a conspiracy." *Chocolate*, 801 F.3d at 410 (citation omitted). Valspar claims to have met this standard because there were only three parallel price increase announcements before the alleged conspiracy period (as compared to the thirty-one during the conspiracy period).

⁷ Thus, the circumstances here are different than those in *Flat Glass*, where we stated that "[a]n agreement to fix prices is a per se violation of the Sherman Act even if most or for that matter all transactions occurred at lower [than list] prices." 385 F.3d at 362 (citation and alteration omitted). Here, we find significant not just that actual prices occurred below announced prices, but that actual prices occurred below announced prices *because alleged conspirators frequently undercut other members of the alleged conspiracy*. We are mindful that a "failed attempt to fix prices" is illegal, *id.* at 363, but it is likewise significant that the alleged conspirators behaved contrary to the existence of a conspiracy.

We disagree. In *Chocolate*, the plaintiffs advanced a similar argument, relying on an increased frequency in parallel pricing activity from pre-conspiracy behavior. There, we explained that “the focus of the Plaintiffs’ argument is unduly narrow” because “[h]istorically, parallel pricing in the U.S. chocolate market has not been at all uncommon.” *Chocolate*, 801 F.3d at 410. Here too, public parallel price increase announcements are “consistent with how this industry has historically operated.” *Valspar*, 152 F. Supp. 3d at 252 (quoting *Chocolate*, 801 F.3d at 410). Similarly, when other courts have found a radical or abrupt change to indicate conspiracy, that change has generally been more than just an uptick in frequency of a pre-established industry practice. See *Toys “R” Us, Inc. v. FTC*, 221 F.3d 928, 935 (7th Cir. 2000) (group of toy distributors unanimously stopped dealing with warehouse clubs after years of that being an industry norm). That logic rings particularly true in this context because “it is generally unremarkable for the pendulum in oligopolistic markets to swing from less to more interdependent and cooperative.” *Chocolate*, 801 F.3d at 410 (citing *Areeda & Hovenkamp*, *supra*, at 229).

B

Having found that the pattern of parallel price increases does not raise an inference of conspiracy, we next turn to Valspar’s argument that the plus factors evidence a conspiracy. As explained above, this Court has developed a specialized rule that in oligopolistic markets, “‘the first two factors largely restate the phenomenon of interdependence,’ . . . [which] leaves traditional non-economic evidence of a conspiracy as the most important plus factor.” *Chocolate*, 801 F.3d at 398 (citation omitted). Tellingly, Valspar ignores this important point and instead emphasizes why the first two plus factors are

met. Valspar's "victory . . . is a hollow one," however, having succeeded in showing interdependence but not conspiracy. *Id.* at 400.

1

The first factor relates to motive to enter a conspiracy, *i.e.*, that "the market is conducive to price fixing." *Id.* at 398. There is little doubt that this highly concentrated market for a commodity-like product with no viable substitutes and substantial barriers to entry was conducive to price fixing.

The second plus factor looks for evidence of action against self-interest, *i.e.*, "evidence that the market behaved in a noncompetitive manner." *Flat Glass*, 385 F.3d at 361 (citation omitted). Valspar presents evidence that there was "a 16% overcharge" and that "price increases were not correlated to supply-and-demand principles." Valspar Br. 57. While true, this is largely irrelevant because it ignores the fact that "firms in a concentrated market may maintain their prices at supracompetitive levels, or even raise them to those levels, without engaging in any overt concerted action." *Flat Glass*, 385 F.3d at 359.⁸

⁸ Although the first two plus factors may, at times, "do more than restate economic interdependence," *Flat Glass*, 385 F.3d at 361 n.12, Valspar has not shown that they do so here. For example, despite the dissent's insistence to the contrary, there is no evidence of record showing "unilateral exchanges of confidential price information," which is one example of an action against self-interest that may not simply be a result of interdependence. *See* Dissent at 10 (quoting *Flat Glass*, 385 F.3d at 361 n.12); *see also infra* Part IV-B-2 (discussing the

Most of Valspar's other economic expert evidence addresses the first two plus factors as well. *See Flat Glass*, 385 F.3d at 361 (explaining that the third plus factor is where "*non-economic* evidence" should be considered (emphasis added)). For example, Valspar notes that its expert "concluded there was economic evidence of ability to enforce their price-fixing agreement," and "found from an economic point of view the markets were relatively stable." Valspar Br. 41, 43. From findings like these, Valspar argues that "the district court should have accepted [the expert's] economic conclusions" that the competitors could not have acted independently. Valspar Br. 42. This gets things backwards. There is no dispute that the market was primed for anticompetitive interdependence and that it operated in that manner. Valspar's expert evidence confirming these facts mastered the obvious.⁹

information exchanges shown to have occurred between the suppliers).

⁹ In addition, Valspar would have us give the expert's conclusion an outsized role in the summary judgment analysis. While we have explained that a district court should not "impermissibly weigh[]" expert evidence by picking out "potential flaws," *Petruzzi's*, 998 F.2d at 1241, that does not mean that a district court is obligated to accept an expert's legal conclusions, *Dalberth v. Xerox Corp.*, 766 F.3d 172, 189 (2d Cir. 2014). Although Valspar's expert, Dr. Williams, concluded that its evidence excludes the inference that the competitors acted independently, that conclusion was based on predicates that are insufficient under our caselaw. For example, Dr. Williams took the type of evidence that we have said is of diminished value in the oligopoly context (*i.e.*, parallel price

We finally reach Valspar's evidence under our third plus factor: traditional conspiracy evidence, where we look for "proof that the defendants got together and exchanged assurances of common action or otherwise adopted a common plan even though no meetings, conversations, or exchanged documents are shown."¹⁰ *Flat Glass*, 385 F.3d at 361 (citation omitted). We approach the third plus factor as this Court did in *Chocolate*, first considering individual groups of evidence to see whether any raise an inference of conspiracy, before evaluating all of the proof in context. *See* 801 F.3d at 403–12. Here, we agree with the District Court that Valspar failed to raise an inference of conspiracy. Each strand of evidence is weaker than similar evidence in cases where this Court has

movement and evidence best considered under the first two plus factors) and from there concluded that the suppliers had illegally conspired. The District Court was correct to reject this line of argument and note that the evidence from which the expert based his conclusions is "not necessarily . . . evidence of an agreement" under our oligopoly caselaw. *Valspar*, 152 F. Supp. 3d at 243.

¹⁰ The dissent claims that we ignore this precedent and "required[] Valspar to present evidence of direct meetings and conversations." Dissent at 20. Not so. There is no doubt that a plaintiff can satisfy this plus factor with circumstantial evidence, but that circumstantial evidence must indicate the existence of an "actual, manifest agreement not to compete." *Flat Glass*, 385 F.3d at 361 (citation omitted). While Valspar marshals circumstantial evidence of anticompetitive behavior, the record does not show the existence of an actual agreement.

affirmed summary judgment in favor of companies that operate in an oligopolistic market.

First, Valspar shows that DuPont and the other competitors took part in a data sharing program offered by the Titanium Dioxide Manufacturers Association. As part of this program (the Global Statistics Program, or GSP) the competitors provided production, inventory, and sales-volume data (but never price data) to the TDMA, which then aggregated, anonymized, and redistributed the data.

Without citing any precedent to show why this type of information sharing was illegal, Valspar argues that the GSP allowed each conspirator to calculate its own market share and thus deduce whether it was getting its fair share of the conspiracy's profits. This argument suffers from the loaded question fallacy. Instead of setting out to prove: "Does the GSP show that a conspiracy existed?," Valspar attempts to answer: "How did the GSP further the conspiracy?" This approach cannot satisfy Valspar's burden. "[A] litigant may not proceed by first assuming a conspiracy and then explaining the evidence accordingly." *Blomkest Fertilizer, Inc. v. Potash Corp. of Saskatchewan*, 203 F.3d 1028, 1033 (8th Cir. 2000).

Moreover, our prior decisions undermine Valspar's argument that the GSP supports an inference of conspiracy. For example, in *Baby Food*, we affirmed summary judgment despite the fact that the alleged conspirators' sales representatives had "exchang[ed] pricing information," explaining that there was no evidence these exchanges had any effect over the companies' final pricing decisions, 166 F.3d 117, and observing, in any event, that "[t]he exchange of price data . . . can in certain circumstances increase economic efficiency and render markets more, rather than less,

competitive.” *Id.* at 125 (quoting *United States v. U.S. Gypsum Co.*, 438 U.S. 422, 443 n.16 (1978)). And in *Flat Glass*, the alleged conspirators each provided price data to a business that would use those inputs to set recommended prices for the industry. 385 F.3d at 355. The alleged conspirators knew how the recommended prices were calculated, so “were able to calculate backwards” and determine the price inputs used. *Id.* at 370. We explained that although this would rightfully “raise suspicion,” the “publication of pricing information can have a pro-competitive effect” and, with little other evidence supporting the inference of a conspiracy, affirmed summary judgment on that claim. *Id.*

The data exchanged as part of the GSP looks innocuous when compared to the information in *Baby Food* and *Flat Glass*. The GSP aggregated and blinded “members’ monthly sales, production, and inventory data worldwide,” but never collected price information. Valspar Br. 47. Valspar argues that “the co-conspirators partially disaggregated the data to track individual firms.” Valspar Br. 48. But as the District Court noted, “the evidence provided by Valspar does not support this conclusion” and Valspar’s own expert conceded that the GSP merely allowed each firm to calculate its *own* market share. *Valspar*, 152 F. Supp. 3d at 245–46.¹¹

¹¹ Additionally, the GSP most resembled a data collection program blessed by the Ninth Circuit in *In re Citric Acid Litigation*, where a centralized trade association “collected figures on production and sales from each of its members, audited this information on an annual basis, and produced statistics aggregated by country on citric acid production and sales.” 191 F.3d 1090, 1098 (9th Cir. 1999). That court called the program “wholly legal” and explained

Relatedly, Valspar claims that the alleged conspirators “used the TDMA meetings to communicate their pricing plans, coordinate price increases, and confirm that each competitor would follow the leader on price increases.” Valspar Br. 50. Valspar’s argument essentially begins and ends with opportunity: the TDMA meetings brought the competitors together, so one should assume that they used the meetings to conspire. But as the District Court noted, “[t]here is no evidence that there was any discussion of prices during these meetings and certainly no evidence of an agreement.” *Valspar*, 152 F. Supp. 3d at 246. Consequently, Valspar’s argument falls short under our precedents. *Chocolate*, 801 F.3d at 409 (“[E]vidence . . . that the executives from the [alleged conspirators] were in the same place at the same time . . . is insufficient to support a reasonable inference of concerted activity.”); *Petruzzi’s IGA Supermarkets, Inc. v. Darling-Del. Co.*, 998 F.2d 1224, 1235 (3d Cir. 1993) (“Proof of opportunity to conspire, without more, will not sustain an inference that a conspiracy has taken place.” (citation omitted)).

Next, Valspar suggests that the competitors used industry consultants as conduits to funnel information. For example, Valspar points to an e-mail from a Kronos employee to a consultant noting that the employee had heard rumors of an impending Huntsman price increase, but thought it “sound[ed] weird” and wanted to know if the consultant could “confirm anything from [his] lofty position.” Valspar Br. 20.

that it was “uncontested that these activities served the legitimate purpose of informing members of [market] conditions.” *Id.*

This sort of inquiry to a consultant is not probative of conspiracy. We have explained that “it makes common sense to obtain as much information as possible of the pricing policies and marketing strategies of one’s competitors.” *Baby Food*, 166 F.3d at 126. In fact, this type of inquiry undermines the existence of a conspiracy because conspirators would have no need to ask consultants about the specifics of their own conspiracy. See *Mayor & City Council of Balt., Md. v. Citigroup, Inc.*, 709 F.3d 129, 139 (2d Cir. 2013) (attempts to confirm future pricing plans of competitors “tend to suggest the *absence* of [competitor] communications” because if competitors were communicating directly they “would not have had to rely on third parties to confirm [each other’s] strateg[ies]”).

Valspar also emphasizes a selection of internal e-mails sent by the various competitors. For example, a DuPont e-mail advocated for a price modification “[o]nly if you are not undercutting a Kronos price increase!” Valspar Br. 9. A Millennium e-mail said: “We should have this extra [market] share—customers have been and want to buy this from us. Competitors will let us have this.” *Id.* at 8. And a Cristal e-mail stated that “all major global players have been very disciplined with pricing implementation up to this point.” *Id.* at 10.

These e-mails are helpful to Valspar, but only superficially. They may raise some suspicion insofar as they indicate that something anticompetitive is afoot. But as we have explained, oligopolistic conscious parallelism is *by nature* anticompetitive *and also* legal. See *Chocolate*, 801 F.3d at 397. Essentially, these e-mails show that the competitors were aware of the phenomenon of conscious parallelism and implemented pricing strategies in response to it. It makes sense that each firm would implement such strategies, since

conscious parallelism allows firms in an oligopoly to “in effect share monopoly power” and maintain “prices at a profit-maximizing, supracompetitive level.” *Brooke Group*, 509 U.S. at 227. To forbid firms in an oligopoly from considering conscious parallelism in its internal pricing decisions would be to require a firm to do the impossible: “set its prices *without regard* to the likely reactions of its competitors.” *Clamp-All Corp.*, 851 F.2d at 484 (Breyer, J.).

This logic explains away most of Valspar’s concerns. For example, DuPont would not want to undercut a Kronos price increase, because doing so would result in Kronos lowering its price and a concomitant decrease in profits for everyone. *See Flat Glass*, 385 F.3d at 359. Moreover, these same e-mails show that the competitors engaged in independent and contemporaneous internal deliberations. For example, a DuPont employee wrote: “From a testing perspective, it may be valuable to make the October announcement. *If our competitors do follow*, it sends a clear message to us that they are receiving/understanding our price increase messages . . . *If they don’t*, we would also learn how well we’ve trained them.” Valspar Br. 17 (emphases added).¹²

¹² Although Valspar and the dissent contend that the competitors implemented their conspiracy through public announcements of their price increases, these e-mails reflect that, even if such “signalling” occurred, it was not in furtherance of any prior agreement. Had the competitors “got[ten] together and exchanged assurances of common action or otherwise adopted a common plan,” *Flat Glass*, 385 F.3d at 361, there would have been no need for DuPont to resort to public announcements to “test” whether its competitors were “receiving/understanding [its] price increase

And a Kronos employee wrote that it “*hope[d]* that Du[P]ont is smart enough not to undo what we have all done in the TiO₂ market by keeping some sort of discipline.” *Id.* at 10 (first alteration in original) (emphasis added). We have explained that documents showing this type of internal deliberation may negate an inference of conspiracy. *Baby Food*, 166 F.3d at 131 (rejecting plaintiff’s interpretation of a set of documents because “[c]ontemporaneous documents also show that [an alleged conspirator] made independent pricing decisions.”); *Text Messaging*, 782 F.3d at 873 (noting that nothing in the allegedly collusive e-mails “suggests that [the defendants] believed there was a conspiracy among the carriers”).¹³

messages.” See *Williamson Oil Co. v. Philip Morris USA*, 346 F.3d 1287, 1310 (11th Cir. 2003) (refusing to infer a conspiracy from signalling among oligopolists absent evidence that it was in furtherance of an agreement); *Blomkest Fertilizer, Inc. v. Potash Corp. of Saskatchewan*, 203 F.3d 1028, 1037 (8th Cir. 2000) (same).

¹³ The dissent reads these e-mails differently, arguing that they show the competitors (1) often “would not undercut one another’s prices [(2)] *and that they were involved in an organization (i.e., cartel) controlling prices.*” Dissent at 11 (emphasis added) (citation omitted). We agree with the first proposition, but that is a natural consequence of oligopolistic interdependence. See *Flat Glass*, 385 F.3d at 359. As for the second proposition, we do not see enough evidence in the record to support it. While the internal e-mails indicate that the suppliers knew their pricing decisions may be consciously parallel and that their collective interests would at times be aligned, the e-mails do not evidence an explicit agreement to

Finally, Valspar highlights a handful of inter-competitor sales at below market prices, arguing that those sales were used to redistribute gains and losses to maintain the alleged conspiracy. But looking to the specific facts present here, the District Court found that the sales were “just as consistent with non-collusive activity as with conspiracy.” *Valspar*, 152 F. Supp. 3d at 244. First, Valspar’s expert conceded that the sales were at such low volumes that they would not have resulted in large shifts of market share, thus largely defeating Valspar’s theory of profit redistribution. Second, Hurricane Katrina knocked out one of DuPont’s titanium dioxide plants so it was unable to meet all its internal demand for the product, requiring DuPont to purchase it from other firms. Importantly, these sales occurred at prices sometimes higher and sometimes lower than the average prices for non-defendants. And third, a number of these sales were made by DuPont to Kronos pursuant to a cross-licensing agreement in order to avoid patent litigation. After this licensing agreement ended, DuPont successfully negotiated a price increase.

Valspar does not seriously dispute these explanations, but instead argues “[i]f one seller buys *anything* from another at nonmarket prices, then a resource transfer is made for which there is no reasonable, noncollusive explanation.” Reply Br. 21 (quoting Willam E. Kovacic et al., *Plus Factors and Agreement in Antitrust Law*, 110 Mich. L. Rev. 393, 423 (2011)). Valspar offers no case support for this proposition, but instead puts all its eggs in the basket of a single law review article. *See id.* But that law review article: (a) spends only one

fix prices—and often show that such an agreement was lacking.

paragraph on this theory; (b) cites no precedent or economic studies to support it; (c) recognizes that patent licensing and cross licensing can be legitimate; and (d) seems to limit its analysis to “interfirm transfers of resources that are largely void of productive unilateral motivations.” Kovacic, *supra*, at 423. In the face of DuPont’s reasonable explanations to the contrary, we decline to give this isolated quotation the force of law.

3

Having considered each piece of evidence individually and decided that none raises an inference of conspiracy, we must now consider the evidence as a whole.¹⁴ See *Chocolate*, 801 F.3d at 412. To summarize, granting all legitimate inferences to Valspar, it presented evidence of: parallel price movement, internal e-mails showing an awareness of this parallel price movement, competitor participation in a trade association and statistics sharing program, inter-firm sales at

¹⁴ Our dissenting colleague claims that, in the foregoing section, we went through “each individual piece of evidence and disregard[ed] it if we could feasibly interpret it as consistent with the absence of an agreement to raise prices.” Dissent at 19 (citation omitted). That misunderstands our mode of analysis. For the sake of coherence, we presented and discussed each piece of evidence separately, and found that no single piece on its own, made a conspiracy more likely than not. (After all, if a single piece of evidence made conspiracy more likely than not, Valspar would survive summary judgment and our task would end.) We now consider the evidence together to determine whether the entire body of evidence—viewed in context—tips the scale in Valspar’s favor.

below market prices, and use of industry consultants. In assessing this evidence, we look to this Court's three cases examining alleged oligopolistic conspiracies at summary judgment: *Chocolate* and *Baby Food*, where summary judgment was granted, and *Flat Glass*, where summary judgment was partially denied.

First, Valspar did not offer any single form of evidence that would have gotten it close to showing that a conspiracy is more likely than not. Valspar emphasizes the pattern of parallel price announcements, but for the reasons explained, we don't find them particularly persuasive. *See supra* Section IV-A-1, 2. By comparison, in *Chocolate* and *Baby Food*, where summary judgment was granted in favor of the alleged conspirators, the plaintiffs' cases were supported with far stronger lead evidence than present here. For example, the *Chocolate* plaintiffs established that the very same defendants had been part of a contemporaneous price-fixing conspiracy in Canada—to which one of the defendants had already pleaded guilty to the Canadian authorities. 801 F.3d at 393, 402. In *Baby Food*, the defendants had advance knowledge of each other's planned price increases (or decisions not to raise prices) on several occasions. 166 F.3d at 119–20. And this pales in comparison to *Flat Glass*—our one case in which defendant's motion for summary judgment was denied—where one of the defendant's alleged co-conspirators confessed to “an agreed upon, across the board price increase for the entire United States” to the Department of Justice in an attempt to gain leniency. 385 F.3d at 363 (citation omitted).

Just as Valspar's lead evidence is weaker than that in our relevant cases, so too is its supporting evidence. For example, although Valspar alleges that the competitors may have swapped certain price information through the TDMA or

consultants, there is no evidence that price information was ever voluntarily exchanged, and the information that allegedly was exchanged through these sources pales in comparison to what was shared in cases where we affirmed summary judgment to defendants. *See supra* Section IV-B-2. Likewise, the internal e-mails uncovered by Valspar look harmless next to those in our caselaw. First, all of the e-mails uncovered by Valspar were *internal* to each competitor, whereas in *Baby Food* there was regular communication *between* competitors. 166 F.3d at 119–20. Moreover, there is nothing in the competitors’ e-mails to indicate that their pricing behavior was the result of an actual agreement (as opposed to conscious parallelism), unlike in *Baby Food*, 166 F.3d at 120 (referring to the competitors’ “truce”). And again, these e-mails do not approach those from *Flat Glass*, where one conspirator wrote that it was “monitoring the market to make sure that all stick to the rules” and admitted that one of the conspirators “assured me that they were fully supportive of the price increase proposition.” 385 F.3d at 366–67 (citations omitted).

In sum, after reviewing the record as a whole, we conclude that the District Court did not err when it held that Valspar’s evidence did not meet our standard to survive summary judgment.

C

One final point deserves mention. Valspar makes much of the District of Maryland litigation where summary judgment was denied on a materially similar record. It argues that “principles of comity and the doctrine of *stare decisis* should have given the Delaware court greater pause before reaching a decision in conflict with the Maryland Action.” Valspar Br. 61.

Valspar's argument has an obvious flaw: the District of Maryland sits within the United States Court of Appeals for the Fourth Circuit. *See* 28 U.S.C. § 41. Thus, the Maryland District Court had no obligation to consider Third Circuit precedent, but the District Court in this case was bound by it. This resulted in the Maryland court applying a standard quite different from the one we have developed and that the District Court applied. *Compare Valspar*, 152 F. Supp. 3d at 240 ("A plaintiff relying on ambiguous evidence alone cannot raise a reasonable inference of conspiracy sufficient to survive summary judgment." (quoting *Chocolate*, 801 F.3d at 396–97)), *with Titanium Dioxide*, 959 F. Supp. 2d at 824 ("[W]here 'a plaintiff relies on ambiguous evidence to prove its claim, the existence of a conspiracy must be a reasonable inference that the jury could draw from that evidence.'" (citing *In re Publ'n Paper Antitrust Litig.*, 690 F.3d 51, 63 (2d Cir. 2012))). In light of Third Circuit precedent applying § 1 of the Sherman Act to oligopolies, the District Court did not err.¹⁵

¹⁵ Contrary to Valspar's contention, our caselaw does not foreclose the possibility that a plaintiff can defeat summary judgment with only circumstantial evidence in the Section 1 oligopoly context. That circumstantial evidence, however, must be non-economic evidence of an actual agreement between the conspirators, and not just a restatement of the interdependent economic conduct that we must accept in an oligopolistic marketplace. *See Petruzzi's*, 998 F.2d at 1242 ("mere consciously parallel behavior alone is insufficient to prove a conspiracy, [but] it is circumstantial evidence from which, *when supplemented by additional evidence*, an illegal agreement can be inferred." (emphasis added)). As explained

* * *

For the reasons stated, we will affirm the judgment of the District Court.

above, Valspar has not provided circumstantial non-economic evidence sufficient to support the inference of a conspiracy.

STENGEL, Chief District Judge, dissenting.

I respectfully dissent.

The essential question here is whether thirty-one (31) parallel price increase announcements by a small group of suppliers over a ten (10) year period were mere coincidence (lawful and, in fact, expected in the world of oligopolies) or evidence of an agreement to fix prices (unlawful even among oligopolists). I think there are enough factual issues in this case that the question whether it was a lawful coincidence or an unlawful agreement should be decided by a jury.

The majority's ruling creates an unworkable burden, not supported by our precedent, for plaintiffs seeking to prove a Sherman Act price-fixing case with circumstantial evidence. Second, it affirms a decision where a district judge weighed and compartmentalized evidence, a task better suited for juries—not judges.

An antitrust plaintiff may avoid summary judgment based upon circumstantial evidence alone. That concept is almost a legal axiom, yet it finds no home in the majority opinion. We have long held that a “plaintiff in a section 1 case does not have to submit direct evidence, *i.e.*, the so-called smoking gun, but can rely solely on circumstantial evidence and the reasonable inferences drawn from such evidence.” *Petruzzi's IGA Supermarkets, Inc. v. Darling-Delaware Co.*, 998 F.2d 1224, 1230 (3d Cir. 1993); *see, e.g., In re Baby Food Antitrust Litig.*, 166 F.3d 112, 124 (3d Cir. 1999) (“A plaintiff in a Section 1 conspiracy can establish a case solely on circumstantial evidence and the reasonable inferences to be drawn therefrom”). In other words, an antitrust plaintiff's

burden at summary judgment “is no different than in any other case.” *Id.* (quoting *Big Apple BMW, Inc. v. BMW of N. Am., Inc.*, 974 F.2d 1358, 1363 (3d Cir. 1992)); *In re Chocolate Confectionary Antitrust Litig.*, 801 F.3d 383, 396 (3d Cir. 2015). Today’s opinion all but explicitly states that, now, “the so-called smoking gun,” *Petruzzi’s*, 998 F.2d at 120, is required.

As a general principle, “antitrust law limits the range of permissible inferences from ambiguous evidence in a § 1 case,” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 588 (1986), and conduct that is “as consistent with permissible competition as with illegal conspiracy” cannot, on its own, support an inference of an antitrust conspiracy, *id.* (citing *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752 (1984)).

This Court favors a sliding scale approach to determine the types of inferences allowed to be drawn from circumstantial evidence in antitrust cases. According to our Circuit’s precedent, and that of the Supreme Court’s, the range of inferences that may be drawn from circumstantial evidence depends upon “the plausibility of the plaintiffs’ theory and the dangers associated with such inferences.” *Chocolate*, 801 F.3d at 396 (quoting *In re Flat Glass Antitrust Litig.*, 385 F.3d 350, 357 (3d Cir. 2004)). In cases where an antitrust plaintiff’s economic theory of liability “makes no economic sense,” and drawing inferences in the plaintiff’s favor would deter healthy competition, the plaintiff must produce “more persuasive evidence” to bolster its claim. *Id.* On the other hand, when a plaintiff’s theory makes economic sense, courts draw more

liberal inferences in favor of the plaintiff. *Id.* n.8.¹ Valspar presented an economic theory that makes perfect economic sense, yet the District Court and majority did not draw any inferences in Valspar’s favor.

The majority performs a thorough analysis of the evidence of parallel conduct and the “plus factors.” Viewing all this evidence as a whole, I believe it clear that summary judgment was not proper in this case.

A. Parallel Conduct

It is true that conscious parallelism alone cannot create an inference of conspiracy. The majority has taken this to mean that any evidence of conscious parallelism is therefore incapable of raising an inference of conspiracy. This is incorrect. Parallel pricing is a necessary requirement of any § 1 price-fixing claim, and simply because parallel pricing alone

¹ Based on this sliding scale approach—first articulated in *Matsushita*—courts have taken varying approaches to cases depending on the strength of the plaintiff’s theory. *Compare Matsushita*, 475 U.S. at 588–91 (refusing to draw liberal inferences from plaintiffs’ “predatory pricing” theory, which posited that multiple companies conspired to lower prices, because a conspiracy to *lower* prices makes no economic sense), *with Petruzzi’s*, 998 F.2d at 1232 (drawing liberal inferences and reversing summary judgment because the plaintiff’s theory, that companies conspired not to compete with each other, made “perfect economic sense”), *and Flat Glass*, 385 F.3d at 358 (drawing liberal inferences in reversing summary judgment given that “an agreement among oligopolists to fix prices . . . makes perfect economic sense”).

cannot preclude summary judgment does not mean that courts ignore evidence of it. Indeed, our precedent has repeatedly warned against overlooking this important factor in these types of cases, especially where the plaintiff’s economic theory—as it does here—makes perfect economic sense.²

The sheer number of parallel price increase announcements in this case—31 to be exact—is unprecedented. *Cf. Flat Glass*, 385 F.3d at 369 (reversing summary judgment in case involving 7 parallel price increases in 5 years); *Chocolate*, 801 F.3d at 410 (3 parallel price increase announcements insufficient to withstand summary judgment, in part, because there was no “abrupt” or “radical” shift in pre-conspiracy conduct). While this sheer number, in itself, cannot carry the day for Valspar, the other evidence viewed in conjunction with these parallel price increase announcements can.

This amount of parallel price increase announcements, in a relatively short time period, commands attention. In *Flat Glass*, we considered the temporal proximity between the companies’ respective price increase announcements as evidence of an agreement to conspire. 385 F.3d at 364–67. Here, there is evidence that many of the manufacturers’ price increase announcements were made within hours, days, or

² We discuss the plausibility of Valspar’s economic theory in greater detail *infra*. For now, it is enough to say we have previously held that Valspar’s exact economic theory (parallel price fixing among oligopolists) makes perfect economic sense: “an agreement among oligopolists to fix prices at a supracompetitive level . . . makes perfect economic sense.” *Flat Glass*, 385 F.3d at 358.

weeks of each other. For example, in one instance, DuPont announced a price increase at 11:00 a.m., Tronox matched it seven hours later, and Kronos matched it eight hours later. The next day, Millennium and Huntsman announced identical price increases. In another instance, all five TiO₂ manufacturers made the same price increase announcement within a four-day period. This close timing creates a strong inference of conspiracy.

The unprecedented amount of parallel price increase announcements, while not dispositive, would undoubtedly raise red flags to any reasonable fact finder. Valspar's theory of liability makes "perfect economic sense." *Chocolate*, 801 F.3d at 396. Accordingly, "more liberal inferences from the evidence," which necessarily includes the 31 parallel price increase announcements, should be drawn. *Id.* The majority's unwillingness to allow more liberal inferences in the plaintiff's favor seems to me to be a mistake. Instead, the majority gave little weight to the amount of parallel price increase announcements simply because parallel conduct itself is insufficient to create an inference of conspiracy. This approach sees the trees, not the forest. *See Flat Glass*, 385 F.3d at 357 (mandating courts analyze the evidence "as a whole" to determine whether "it supports an inference of concerted action").

Of course, "[f]or parallel pricing to go beyond mere interdependence, it must be so unusual that in the absence of an advance agreement, no reasonable firm would have engaged in it." *Baby Food*, 166 F.3d at 135. With that said, it is undoubtedly a question of *fact* as to whether the parallel pricing in this case was sufficiently "unusual." *Id.* No case to ever reach us has contained even half the amount of parallel price increase announcements present here—not to mention

that many of them here were separated by mere days or hours. This raises an obvious and serious question after today’s decision: What will it now take for a plaintiff relying on circumstantial evidence to move the ball across the goal line?

The sheer amount of parallel conduct in this case, coupled with the plausibility of Valspar’s economic theory, should inform our analysis of the plus factors. *Flat Glass*, 385 F.3d at 358 (“[A]n agreement among oligopolists to fix prices at a supracompetitive level . . . makes perfect economic sense” and therefore “more liberal inferences from the evidence should be permitted than in *Matsushita* because the attendant dangers from drawing inferences recognized in *Matsushita* are not present”); *id.* at n.8 (“*Matsushita* itself said little about proof requirements in a case where underlying structural evidence indicates that the offense is quite plausible” (quoting Herbert Hovenkamp, *The Rationalization of Antitrust*, 116 HARV. L. REV. 917, 925–26 (2003))).³ It did not. The majority paid very little mind to these distinctions—especially the plausibility of Valspar’s economic theory.

The majority’s formulation of the summary judgment

³ I share the concern of the amicus—namely, that it would be an absurd result if, “in situations ‘in which the danger of [parallel pricing] is most serious,’ liability would actually be ‘less likely.’” Amicus Br. at 15 (quoting Louis Kaplow, *Competition Policy & Price Fixing* 126 (2015)). A plain reading of our case law reveals this Court never intended to ramp up a price-fixing plaintiff’s burden of proof, especially when the plaintiff’s economic theory makes perfect economic sense. *Chocolate*, 801 F.3d at 396–97; *Flat Glass*, 385 F.3d at 358. In fact, courts must do the opposite in such a scenario by drawing liberal inferences in favor of the plaintiff. *Id.*

standard in this case, coupled with its dismissive treatment of unprecedented parallel-conduct evidence, creates too high a hurdle for plaintiffs attempting to prove a price-fixing conspiracy using circumstantial evidence. The limitations in antitrust cases announced in *Matsushita*, and that we followed in *Chocolate*, were never meant to require something more than circumstantial evidence of an agreement to preclude summary judgment. Nor did they impose some “special” burden. *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 467 (1992); see *Flat Glass*, 385 F.3d at 359 n.9 (“[U]nfortunately, many courts have read *Matsushita* as requiring a certain quantum evidence of verbal agreement before summary judgment can be avoided.” (quoting Herbert Hovenkamp, *The Rationalization of Antitrust*, 116 HARV. L. REV. 917, 925 (2003))); see also *Petruzzi’s*, 998 F.2d at 1230 (to create a genuine issue of material fact, the plaintiff “need not match, item for item, each piece of evidence proffered by the movant, but simply must exceed the ‘scintilla’ standard.”).

The U.S. Supreme Court has gone so far as to caution against this kind of misapplication of *Matsushita*. In *Eastman Kodak Co. v. Image Technical Services, Inc.*, it emphasized:

The Court’s requirement in *Matsushita* that the plaintiffs’ claims make economic sense did not introduce a special burden on plaintiffs facing summary judgment in antitrust cases. The Court did not hold that if the moving party enunciates any economic theory supporting its behavior, regardless of its accuracy in reflecting the actual market, it is entitled to summary judgment. *Matsushita* demands only that the nonmoving party’s inferences be reasonable in order to reach the jury, a requirement that was not invented, but

merely articulated, in that decision. If the plaintiff's theory is economically senseless, no reasonable jury could find in its favor, and summary judgment should be granted.

504 U.S. at 468–69 (footnote omitted). The Court in *Eastman Kodak* also expressed a preference to “resolve antitrust claims on a case-by-case basis, focusing on the particular facts disclosed by the record.” *Id.* at 467. This principle is particularly poignant here, where the “facts disclosed by the record” (*i.e.*, 31 parallel price increase announcements) are strongly suggestive of an agreement to fix prices.

B. The Plus Factors

Although the majority recognizes there is no exhaustive list of plus factors, *Flat Glass*, 385 F.3d at 360, it considers only a few select plus factors and fails to consider others. There is no one plus factor that is “strictly necessary.” *Id.* at 361 n.12 (quoting *In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651, 655 (7th Cir. 2002) (Posner, J.)). The presence of certain plus factors does not automatically preclude summary judgment. *Id.*; see *Petruzzi's*, 998 F.2d at 1242 (recognizing that a “wide range of circumstantial evidence can be used to establish needed plus factor”).

While we often rely on the “big 3” plus factors (motive, actions contrary to interest, and traditional conspiracy), the plus-factor inquiry is not intended to be rigid or formulaic. *Flat Glass*, 385 F.3d at 361 n.12; *Petruzzi's*, 998 F.2d at 1242. There is a slew of other viable plus factors, including, among others: (i) fixed relative market shares; (ii) exchanges of price information; and (iii) price, output, and capacity changes at the formation of the cartel. See William E. Kovacic et al., *Plus*

Factors and Agreement In Antitrust Law, 110 MICH. L. REV. 393, 415 (2011) (listing Posner’s “fourteen plus factors”); see also *id.* at 423 (recognizing that a company’s redistributions of gains and losses—or “true-ups”—are circumstantial evidence of a conspiracy); Richard A. Posner, *Antitrust Law* 87 (2d ed. 2001) (recognizing “signaling” as a plus factor, especially when the announcement occurs before the actual implementation of the price increase).

The majority is correct that evidence of the first two plus factors may not always nudge the ball over the goal line for a plaintiff at summary judgment because they “often restate interdependence.” *Flat Glass*, 385 F.3d at 361. But this is not always the case. Because our approach to these cases is fluid, and we must not compartmentalize evidence, there are some cases where these two factors may not simply restate interdependence. *Id.* n.12. For instance, certain acts against self-interest (*e.g.*, non-price acts against self-interest) “cannot simply be explained as a result of oligopolistic interdependence.” *Id.*

1. Motive to Enter Into a Conspiracy

Motive is “important to a court’s analysis, because [its] existence tends to eliminate the possibility of mistaking the workings of a competitive market . . . with interdependent, supracompetitive pricing.” *Flat Glass*, 385 F.3d at 361.

The majority mentioned only that evidence of motive often restates interdependence and thus does not create an inference of concerted action. However, in *Chocolate*, cited often by the majority, we simply recognized that “evidence of motive *without more* does not create a reasonable inference of concerted action.” 801 F.3d at 298 (emphasis added). Here,

there is much “more.”

2. Actions Against Self-Interest

In the District Court, Valspar pointed to substantial evidence that DuPont and the other manufacturers acted contrary to their self-interest. First, Valspar noted that TiO₂ prices rose despite no change in the TiO₂ market. Second, Valspar argued that the market shares of the TiO₂ manufacturers remained relatively stable from 2002 to 2013. Third, Valspar relied on the fact that DuPont and the other manufacturers made intercompany sales to each other at below-market value.

The District Court seemed not to heed *Flat Glass*’s pronouncement that “certain types of ‘actions against self interest’ may do more than restate economic interdependence.” 385 F.3d at 361 n.12.⁴ The explicit examples cited in *Flat Glass* were “unilateral exchanges of confidential price information.” *Id.* Unilateral exchanges of confidential price information, like other non-price actions against self-interest, “cannot simply be explained as a result of oligopolistic interdependence.” *Id.* Valspar presented a triable issue of fact on this point below. There is evidence that the GSP allowed DuPont and the other manufacturers to gain confidential information about each other regarding supply, demand, inventory, and market share.

In a 2002 email, Paul Bradley at Huntsman noted that it

⁴ The majority simply states, without consideration of the actual evidence, that “Valspar has not shown” that the first two plus factors “do more than restate the theory of interdependence.” Majority at 20 n.9. The actual evidence, discussed *supra* and *infra*, shows otherwise.

would be possible to “derive” each individual manufacturer’s production of TiO₂ from the GSP data. Valspar also produced evidence suggesting that the manufacturers collectively used industry consultant Jim Fisher as a conduit to share confidential information. Fisher attended an industry conference which the manufacturers—including DuPont—attended. According to Fisher, at this conference the TiO₂ manufacturers “discussed the need to take advantage of tight market conditions to improve pricing.”⁵

The same actions contrary to self-interest that led the Seventh Circuit to reverse summary judgment in *High Fructose* are also present here. Areeda’s treatise recognizes this in identifying the type of oligopoly that may nonetheless be collusive: “there were numerous oral and some written statements by employees of the defendant to the effect that they had an understanding that they would not undercut one another’s prices and that they were involved in an organization (i.e. cartel) controlling prices.” Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 1431b, at 232 (3d ed. 2010) (citing *High Fructose*, 295 F.3d at 662). As in *High Fructose*, here there are numerous statements from the manufacturers’ employees (including DuPont) expressing an understanding that they “would not undercut one another’s prices” and that they were involved in an organization to control prices. *Id.* In one email, ironically, the DuPont author parrots Areeda’s above “undercut[ing]” language verbatim in advising others to modify pricing “[o]nly if you are not *undercutting* a Kronos price increase!!!!” *Cf. High Fructose*, 295 F.3d at 662 (statement from defendant that “[w]e have an understanding

⁵ *In re Titanium Dioxide Antitrust Litig.*, 959 F. Supp. 2d 799, 812–13 (D. Md. 2013).

within the industry not to undercut each other's prices" served as evidence of "an explicit agreement to fix prices" (Posner, J.)). Another email from a different competitor recognized that "all are still acting in a disciplined manner, respecting each other's market positions and share and holding price."

There is no shortage of these emails, all of which support an inference that the TiO₂ manufacturers were working together pursuant to an agreement to maintain price. There are further emails indicating that all the TiO₂ suppliers were "on the bus," that DuPont was "training" others on price, and that some of the suppliers were planning price increase announcements in order to allow other suppliers to "get on their horses." In 2006, a DuPont executive went so far as to comment about another's price increase: "the timing may be no coincidence – their reading of the CEFIC info like ours should give them confidence that NA [North American] price increases can be prosecuted despite the flat market." This email is particularly probative of an agreement, given the DuPont executive's recognition that they could continue to hike up prices even though demand was decreasing. *See Flat Glass*, 385 F.3d at 358 (finding oligopolists "raising prices" indicative of a conspiracy when the price increases were made "absent increases in marginal cost or demand").

The repetitive pattern of public price increase announcements is also a garden variety example of action against self-interest. When there is evidence that "the publication of wholesale price increases was intended to make, and has the effect of . . . ensuring competitors could quickly learn of, and respond to" these price increases, an inference of an agreement to fix prices arises. *See Petroleum Prods. Antitrust Litig.*, 906 F.2d 432, 446–47 (9th Cir. 1990). A "price announcement given in the hope that rivals will follow"

evinces an agreement if “repetition creates an expectation of such behavior.” Areeda & Hovenkamp, *Antitrust Law* ¶ 1422b, at 171 (3d ed. 2010); *see id.* (“Although . . . mere proof of interdependent pricing, standing alone, may not serve as proof of an antitrust violation, we believe that the evidence concerning the purpose and effect of price announcements, when considered together with the evidence concerning the parallel pattern of price restorations, is sufficient to support a reasonable and permissible inference of an agreement, whether express or tacit, to raise or stabilize prices.” (quoting *Petroleum Prods.*, 906 F.2d at 446–47)).⁶

The majority relies heavily on the fact that not all of the co-conspirators’ parallel price increase announcements resulted in a sale at the actual announced price. Drawing a distinction between price increase *announcements* and actual

⁶ Citing to one single DuPont email, the majority reasons that “[h]ad the competitors got[ten] together and exchanged assurances of common action or otherwise adopted a common plan, . . . there would have been no need for DuPont to resort to public announcements to ‘test’ whether its competitors were ‘receiving/understanding [its] price increase messages.’” Majority at 29 n.14. While it may be possible to reach this conclusion by reading one email in isolation, the evidence as a whole creates a reasonable inference that there was more likely than not an agreement to fix prices. For example, evidence of the meetings between Fisher and *all* the alleged conspirators, as well as the *actual meetings* of top executives from Kronos and Huntsman (followed almost immediately by a parallel price increase announcement), as well as the conspirators *all* discussing “improving pricing” does create an inference of “a common plan.”

increases has been criticized by judges and scholars alike. Judge Posner has emphasized that “[i]n deciding whether there is enough evidence of price fixing to create a jury issue, a court asked to dismiss a price-fixing suit on summary judgment must be careful to avoid three traps.” *High Fructose*, 295 F.3d at 661.

One of Judge Posner’s traps is “to distinguish between the existence of a conspiracy and its efficacy.” *Id.* at 656. In other words, arguing that although there was an agreement to fix prices, the goods were not actually sold at that price. *Id.* The majority does just that by relying on the fact that, often times, DuPont and the manufacturers sold TiO₂ at a lower price than reflected in their initial parallel price increase announcements. As explained by Areeda (who the majority cites frequently and whose opinions permeate Third Circuit antitrust jurisprudence), a “price *announcement* given in the hope that rivals will follow” evinces an agreement if “repetition creates an expectation of such behavior.” Areeda & Hovenkamp, *Antitrust Law* ¶ 1422b, at 171 (3d ed. 2010) (emphasis added).

Our own precedent is at odds with such an analysis. See *Flat Glass*, 385 F.3d at 362 (rejecting the argument that “regardless of the . . . list prices, . . . the prices at which flat glass producers actually sold their product to customers [] declined during the period of the alleged conspiracy” because “[a]n agreement to fix prices is . . . a per se violation of the Sherman Act *even if most or for that matter all transactions occurred at lower prices*” (citing *High Fructose*, 295 F.3d at 656) (emphasis added)).

The majority fell into this trap. There is plenty of evidence, in the form of emails, that DuPont and the other TiO₂ manufacturers made price increase announcements “in the

hope that rivals will follow.” Areeda & Hovenkamp, *Antitrust Law* ¶ 1422b, at 171. While this is not conclusive evidence of an agreement, the scale tips in favor of finding an agreement when there is “repetition” of such price increase announcements. *Id.* If nothing else, this case involves repetitive price announcements. This repetition clearly gave the suppliers “an expectation,” *id.*, which is further illuminated by the drastic increase in parallel price increase announcements from 2002 to 2013. These emails, in conjunction with the pattern, frequency, and effect of the price announcements, tend to exclude the possibility that the TiO₂ manufacturers were acting independently.

Valspar also presented evidence that DuPont and the other suppliers consciously maintained static market shares. Market share stability is a well-recognized symptom of collusive and concerted action in antitrust cases. *See* William E. Kovacic et al., *Plus Factors and Agreement in Antitrust Law*, 110 MICH. L. REV. 393, 415, 422 (2011).⁷ The logic is not difficult to understand: a company acting in a healthy, competitive, and self-interested manner would seek to expand—not maintain or decrease—its own market share.⁸

⁷ The majority criticizes Valspar’s reliance on legal scholarship as opposed to case law. This is interesting given that (1) this Court has long turned to legal scholarship to inform their decisions in antitrust cases involving oligopolists, and (2) the majority itself cites to legal scholarship—including multiple law review articles—seven times.

⁸ For example, say Company A has a 30% market share in a particular industry and Company B has a 40% market share in that industry. Obviously, Company A and B, assuming they

The District Court acknowledged this evidence. Instead of submitting it to the jury as a disputed question of fact, however, the District Court summarily concluded that this evidence did not show collusion because the TiO₂ market is an oligopoly. *Valspar Corp. v. E.I. Du Pont De Nemours*, 152 F. Supp. 3d 234, 242–43 (D. Del. 2016). The majority took the same approach. Just like the District Court, the majority weighed the expert evidence on this issue and made a finding: that the evidence of (likely unilateral) market share stability was insufficient in this case to show concerted action or agreement. It seems to me that if the court is “weighing evidence” or “making findings” it should be at trial, on a full record and done by a fact finder, *i.e.*, a jury or judge sitting without a jury.

Dovetailing with this evidence of static market shares is evidence that the TiO₂ manufacturers made intercompany sales of TiO₂, meaning they sold TiO₂ to one another. This evidence might indicate pure competition but for the fact that the manufacturers frequently sold the TiO₂ to their competitors, at below-market prices. For example, when DuPont would sell Kronos TiO₂, Kronos paid an average of 16% *less* for the TiO₂ than DuPont’s own customers did. DuPont also sold TiO₂ to Millennium at below-market prices.⁹ One of Valspar’s experts, Dr. Williams, was able to identify

are competitive, would want to acquire as much market share for themselves as possible. Therefore, it would defy all logic and notions of procompetitive behavior for Company A (who has a lower market share) to take affirmative actions to stay at 30% rather than grow beyond a 30% market share.

⁹ *Titanium Dioxide*, 959 F. Supp. 2d at 814.

years of below-market sales between the TiO₂ manufacturers.

The majority downplays this evidence of below-market intercompany sales. It apparently considered these sales just as consistent with non-collusive activity as with conspiracy because: (1) DuPont used some TiO₂ in its own production in 2005 and 2006; (2) a DuPont plant in Mississippi shut down for five months; and (3) DuPont's sales to Kronos were governed by a patent settlement agreement from 2006 to 2008. The District Court, and the majority, found the volume of intercompany sales insufficient to constitute a "true-up."¹⁰

The majority notes that the intercompany sales were low in number and unlikely to show an agreement. According to this logic, there is no evidence of a "true-up" because the intercompany sales were fairly low in quantity. Yet the very purpose of a "true-up" is for the companies within a cartel to maintain their market share. Therefore, it might not necessarily make sense for a company to make a large cross-sale, or a large number of cross-sales, in order to maintain its relative market share.¹¹

¹⁰ A "true-up" occurs when companies in a conspiracy redistribute their individual gains and losses in order to comply with their conspiratorial agreement. Kovacic et al., *Plus Factors*, at 423. Such a transaction "leads to a strong inference of collusion" since there is "no reasonable noncollusive explanation" for intercompany sales at "nonmarket prices" between companies that are supposed to be competing with one another. *Id.*

¹¹ To use another example, say Company A enjoys 35% of the market share, while Company B has 50% of the market

Obviously, intercompany sales “could” be redistributions of gains or losses, *Valspar*, 152 F. Supp. 3d at 244, and “might” be explained by the closed DuPont plant, *id.* However, these “coulds” and “mights” cast doubt on—not support—DuPont’s argument for summary judgment. Where there are reasonable inferences that there was more likely than not a conspiracy to fix prices, summary judgment is not proper.¹² The majority, like the District Court, accepted each

share. Assume A and B are colluding and, thus, they want to raise prices and maintain market shares per their agreement. Then assume that Company A’s share drops to 33%. Company B may sell a very small amount of product to Company A simply to allow Company A to maintain its market share. Mistaking this as an insignificant sale, merely because of its size or lack of frequency, would be an oversight.

¹² Federal Rule of Civil Procedure 56 states: “The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). Simply because courts must exercise caution in these types of cases does not do away with Rule 56’s proposition that genuine disputes of material fact preclude summary judgment: “Generally, the movant’s burden on a summary judgment motion in an antitrust case ‘is no different than in any other case.’” *Intervest*, 340 F.3d at 159. In these cases, courts still must deny summary judgment if there is a genuine dispute of material fact and “view the facts *and any reasonable inferences* drawn therefrom in the light most favorable to the party opposing summary judgment.” *Id.* (emphasis added) (citing *Eastman Kodak*, 504 U.S. at 456). The majority did not do this. Also contrary to the majority’s

of DuPont’s explanations of possibly conspiratorial conduct and adopted each without much explanation. This approach should be unacceptable at the summary judgment stage. See *Flat Glass*, 385 F.3d at 368 (explaining we should not “consider each individual piece of evidence and disregard it if we could feasibly interpret it as consistent with the absence of an agreement to raise prices”); *Petruzzi’s*, 998 F.2d at 1230 (to create a genuine issue of material fact, the plaintiff “need not match, item for item, each piece of evidence proffered by the movant, but simply must exceed the ‘scintilla’ standard.”); Areeda & Hovenkamp, *Antitrust Law* § 14.03b, at 14–25 (4th ed. 2011) (plaintiffs need not “disprove all nonconspiratorial explanations for the defendants’ conduct” to prevail at summary judgment).

3. Traditional Conspiracy Evidence

Traditional conspiracy evidence is often the most important “plus factor” in a case like this one. *Chocolate*, 801 F.3d at 401. Traditional conspiracy evidence is evidence that “the defendants got together and exchanged assurances of common action or otherwise adopted a common plan even though no meetings, conversations, or exchanged documents are shown.” *E.g., id.* at 398. Even though “no meetings, conversations, or exchanged documents” are required as direct evidence of a conspiracy, DuPont urged us to require, in essence, exactly that.

This Court has explicitly and repeatedly held that “traditional conspiracy” evidence may exist “*even though no*

entire analysis, the “special consideration” and “caution” we apply in these types of cases informs—not supplants—the general guidelines found in Rule 56.

meetings, conversations, or exchanged documents are shown.” Chocolate, 801 F.3d at 398 (emphasis added); *Superior Offshore Internat’l, Inc. v. Bristow Grp.*, 490 F. App’x 492, 499 (3d Cir. 2012); *Burtch v. Milberg Factors, Inc.*, 662 F.3d 212, 227 (3d Cir. 2011); *In re Ins. Brokerage Antitrust Litig.*, 618 F.3d 300, 322 (3d Cir. 2010); *Flat Glass*, 385 F.3d at 361. Yet the majority seems to require Valspar to present evidence of direct meetings and conversations. The majority reasoned that since “there is no evidence that there was any discussion of prices during these meetings and certainly no evidence of an agreement,” Valspar’s argument “falls short.” Maj. Op. at 21.

In reality, Valspar presented various forms of traditional conspiracy evidence. For example, Valspar presented a Millennium email stating “we have competition on board for the Oct 1 price increase announcement.”¹³ Having “competition on board” for a price increase announcement certainly conveys that the suppliers somehow got together and exchanged assurances of “common action,” *i.e.*, to announce the same prices. *Id.* The same goes for the suppliers’ emails about the “collective needs” of the industry¹⁴ and getting everyone “on the bus” or, put another way, “on their horses.”

Today’s decision could easily be read to require direct evidence of an agreement in an oligopoly/antitrust case despite

¹³ *Titanium Dioxide*, 959 F. Supp. 2d at 829.

¹⁴ The District Court read this to mean the “collective needs” of Millennium alone. However, read in the context of the entire email, a reasonable jury could certainly conclude the opposite: that the author was referring to the collective needs of the TiO₂ industry members.

the fact that neither our prior jurisprudence (nor the Supreme Court's) has ever required such evidence. What's more, it is not even correct to state that no meetings or conversations between competitors took place. In 2004, the CEO of Millennium met with the President of Huntsman. *The very next day*, an internal Millennium email stated that they had "competition on board for the Oct 1 price increase announcement." A few years earlier in 2002, DuPont announced a price increase a few days after Jim Fisher met with Kronos and then with DuPont. And if that wasn't enough, according to Jim Fisher, the suppliers, *at a meeting together*, "discussed the need to take advantage of tight market conditions to improve pricing."¹⁵

I am not sure how this circumstantial evidence could be stronger. It unequivocally shows that one alleged conspirator's (Millennium's) CEO met with another alleged conspirator's (Huntsman's) President days before a parallel price increase announcement. This meeting occurred at the same time an email was written stating that TiO₂ "competition" was "on board" with a particular price increase announcement. Even more persuasive, there is evidence that all the TiO₂ suppliers discussed "improv[ing] pricing" at an industry conference in 2005 and that in 2002 DuPont and Kronos announced an identical price increase just days after Jim Fisher met with these two "competitors."

A jury should be allowed to determine whether Fisher's meetings with both Kronos and DuPont—days before a parallel price increase announcement—were suspect. A jury

¹⁵ *In re Titanium Dioxide*, 959 F. Supp. 2d at 812–13 (quoting Fisher) (emphasis added).

should be allowed to determine whether an email that “competition” is “on board” for a price increase announcement was concerted action, particularly when this email was written one day after Huntsman’s President personally met with Millennium’s CEO. A jury should be been permitted to decide whether a meeting with the TiO₂ manufacturers, in which they explicitly discussed “improv[ing] pricing,” supports an inference of concerted action. This is the exact sort of powerful evidentiary synergy the majority implies is absent from Valspar’s case.¹⁶ This approach misses by a mile an essential truth of actual courtroom litigation: that circumstantial evidence is competent, valid, and vital evidence in almost every conspiracy trial, civil or criminal. The courtroom litigation process, though sometimes messy and unpredictable, is the preferred method for the resolution of factual questions under our Seventh Amendment. And, with all its quirks, the

¹⁶ The majority does not discuss this particularly damning evidence, but states generally that “the record does not show the existence of an actual agreement.” Majority at 23 n.11. Contrary to the majority’s insistence, an actual agreement can be shown in the exact way that Valspar has set out to do so in this case. See Areeda & Hovenkamp, *Antitrust Law* ¶ 1422b, at 171 (3d ed. 2010) (“Although . . . mere proof of interdependent pricing, standing alone, may not serve as proof of an antitrust violation, we believe that the evidence concerning the purpose and effect of price announcements, when considered together with the evidence concerning the parallel pattern of price restorations, is *sufficient to support a reasonable and permissible inference of an agreement, whether express or tacit*, to raise or stabilize prices.”) (emphasis added).

civil trial is a far better method of evaluating evidence, direct or circumstantial, than an academic parsing of a printed record developed in discovery.

The inculpatory flavor of these emails is enhanced by the fact that the suppliers were all a part of the TDMA, which gave them access to highly confidential information via the GSP. The majority attempts to analogize the GSP to *In re Citric Acid Litigation*, 191 F.3d 1090 (9th Cir. 1990). In *Citric Acid*, the U.S. Court of Appeals for the Ninth Circuit rejected a theory that the alleged conspirators used their membership in a trade association as a front for conducting conspiratorial activities. 191 F.3d at 1097–98. It aptly pointed out that if courts “allowed conspiracy to be inferred from such activities *alone*, we would have to allow an inference of conspiracy whenever a trade association took almost any action.” *Citric Acid*, 191 F.3d at 1098 (emphasis added).

I agree with the majority that membership in a trade association, *in itself*, cannot serve as traditional evidence of a conspiracy. Nonetheless, our task is not to view the TiO₂ suppliers’ membership in the TDMA in a vacuum. When viewed in conjunction with the other evidence, the membership can be seen in a much different light than *Citric Acid*. For starters, there is evidence here (absent in *Citric Acid*, *Chocolate*, or any other case) of 31 parallel price increase announcements. Nearly all of these announcements came within thirty days of a TDMA meeting.¹⁷ Also absent from

¹⁷ DuPont’s insistence that it did not begin attending TDMA meetings until 2010 is moot given that it attended CEFIC meetings—long before 2010—that were concurrent with the TDMA meetings. *Valspar*, 152 F. Supp. 3d at 246 n.5.

Chocolate or *Citric Acid* is the presence of an industry consultant (Jim Fisher) who was simultaneously retained by multiple “competitors” to gather pricing information. Obviously, no court could say with certainty that DuPont agreed to fix prices with the other suppliers at the TDMA meetings. But making a judicial determination with certainty is not our job at summary judgment. The point is that, the above evidence, viewed in a light most favorable to Valspar—whose theory makes perfect economic sense—creates an inference of concerted action sufficient to reach a jury.

The majority downplays the role of this key “industry consultant” Jim Fisher. There is evidence suggesting Fisher was used as a vehicle to carry out the suppliers’ collusive agreement. On June 11, 2002, DuPont publicly announced a price increase.¹⁸ Four days prior, Jim Fisher had called DuPont’s Competitive Intelligence Manager, Connie Hubbard. In that conversation, Fisher conveyed confidential pricing information about one of DuPont’s competitors: Huntsman. This was the first Hubbard had heard of this Huntsman increase because it had not been announced publicly. This interaction, in itself, provides traditional conspiracy evidence in that it suggests Huntsman and DuPont may have used Fisher to implement a “common plan” to fix prices “even though no meetings, conversations, or exchanged documents are shown” between Huntsman and DuPont. *Chocolate*, 801 F.3d at 398.¹⁹

¹⁸ *Titanium Dioxide*, 959 F. Supp. 2d at 811.

¹⁹ Obviously, based on this evidence, and other evidence of Fisher’s cross-company communications, a reasonable jury could infer that no direct conversations between the TiO₂ manufacturers were needed if Fisher acted as their mouthpiece.

There is plentiful evidence of price signaling (another plus factor) in this case. In *Petroleum Products Antitrust Litigation*, the U.S. Court of Appeals for the Ninth Circuit confronted nearly identical circumstantial evidence of price signaling. 906 F.2d 432, 446 (9th Cir. 1990). Like here, in *Petroleum Products*, there was evidence that the competitors' "price increases were occasionally announced in advance of their effective date." 906 F.2d at 446 n.11. This type of preemptive announcement, the Ninth Circuit recognized, is "effective in allowing the price leader to communicate its intention and to receive reactions without having to incur substantial risk." *Petroleum Prods.*, 906 F.2d at 446 n.11.

DuPont maintains that it made price announcements publicly because it was required to do so per its contracts with customers. While it is true that DuPont was required to notify its customers when it changed its price, there is no evidence that DuPont was required to do so *publicly*. In fact, the record evidence suggests the opposite. Notably, DuPont never publicly announced price decreases. This supports an inference that DuPont's public price increase announcements were for the purpose of collusion rather than customer notification.

The TiO₂ manufacturers even admitted they did not use public price increase announcements to notify customers. When asked about the purpose of public announcements, Kronos's Jay Becker agreed he would "never" rely on a public price increase to provide Kronos customers with notice of a price increase. Gary Cianfichi, from Millennium, similarly stated that he did not believe any customer contract required public notice. Larry Rogers, from Kronos, testified he "really couldn't say why" price increases were announced publicly given that the customers were notified privately in writing. This evidence also supports an inference that the

manufacturers used public price increase announcements as a concerted method of fixing prices market-wide.

The traditional conspiracy evidence in this case is much different than it was in *Chocolate*. We recognized in *Chocolate* that a company's departure from pre-conspiracy conduct can serve as traditional conspiracy evidence, which is the "most important plus factor." *Chocolate*, 801 F.3d at 401, 410. The caveat is that the change from pre- to post-conspiracy conduct must be "radical" or "abrupt." *Id.* at 410. In *Chocolate*, there was no radical or abrupt change. This case differs from the departure of pre-conspiracy conduct in *Chocolate* in three significant respects.

First, and most basic, *Chocolate* involved comparing 2 pre-conspiracy price increases with 3 post-conspiracy price increases. *Id.* Here, by stark contrast, we must compare 3 pre-conspiracy increases with 31 post-conspiracy increases. In other words, in *Chocolate*, the pre-post ratio was just above 1:1 whereas here the ratio is 10:1. It would be difficult to claim that such a change in conduct is not "abrupt" or "radical." In a case with unprecedented (31) parallel price increase announcements, such a finding creates an unwarranted burden for plaintiffs relying on circumstantial evidence to prove a price-fixing conspiracy. The majority attempts to explain this radical and abrupt shift, implying it was "just an uptick in frequency."

Second, the nature of the communications between competitors in *Chocolate* is different from the communications here. In *Chocolate*, we found the communications unpersuasive in part because "unlike in *Flat Glass*," the communications did "not reveal pricing plans dependent on others following." *Id.* at 408. Here there is evidence, as in *Flat*

Glass, that could give rise to an inference that the TiO₂ manufacturers' pricing decisions were dependent upon the decisions of others. Like *Flat Glass* and unlike *Chocolate*, the communications here were made between high-level rather than low-level employees. The evidence that Fisher communicated contemporaneously with people from Kronos, Millennium, Huntsman, and DuPont suggests the individual suppliers' pricing plans were "dependent on others following." *Id.* The DuPont email advising to modify pricing "[o]nly if" it meant a Kronos price increase would not be "undercut" similarly suggests pricing plans "dependent on others following." *Id.* (emphasis added). As does Fisher's direct testimony that, at an industry meeting, the TiO₂ suppliers "discussed the need to take advantage of tight market conditions to improve pricing."²⁰ Finally, evidence that certain executives asked Jim Fisher to confirm others' planned price increase announcements further indicates the suppliers were making decisions not on their own—as the evidence showed in *Chocolate*—but rather, as in *Flat Glass*, based on other suppliers' price decisions.

Third, the pre-conspiracy prices in *Chocolate* related to "different products" than the post-conspiracy price increases. 801 F.3d at 410. Here, the pre-conspiracy and post-conspiracy price increase announcements related to the same fungible product: TiO₂. This argument, unlike the argument of the appellants in *Chocolate*, is an exact "apples-to-apples" comparison. *Chocolate*, 801 F.3d at 410.

One final point has been overlooked in comparing this case to *Flat Glass* and *Chocolate*: neither *Flat Glass* nor *Chocolate* involved nearly as many parallel price increase

²⁰ *In re Titanium Dioxide*, 959 F. Supp. 2d at 812–13.

announcements as we have here. To be clear, again, these parallel price increase announcements, viewed alone, are not enough to defeat summary judgment. However, we are not to “consider each individual piece of evidence and disregard it if we could feasibly interpret it as consistent with the absence of an agreement to raise prices.” *Flat Glass*, 385 F.3d at 368. When viewed alongside all the other evidence in this case, the unprecedented parallel price increase announcements—many of which were made hours or days within each other—create an inference that the suppliers’ conduct was collusive.

These principles are especially important given that the majority continually relies on the proposition that “[c]onduct as consistent with permissible competition as with illegal conspiracy does not, standing alone, support an inference of conspiracy sufficient to survive summary judgment.” *Matsushita*, 475 U.S. at 588; see *Valspar*, 152 F. Supp. 3d at 240, 244, 246, 249, 252–53 (relying on this principle with respect to individual pieces of evidence). *But see Flat Glass*, 385 F.3d at 368 (courts shall not “consider each individual piece of evidence and disregard it if we could feasibly interpret it as consistent with the absence of an agreement to raise prices”). *Matsushita* seems wrongly applied when used to discredit each separate piece of proffered evidence an antitrust plaintiff brings forth. *Flat Glass*, 385 F.3d at 358 n.8, 359 n.9. It is also wrongly applied in a case like this, where the plaintiffs’ theory—oligopolists conspired to fix prices—makes perfect economic sense. *Id.* at 358; *Petruzzi’s*, 998 F.2d at 1231–33 (rendering the *Matsushita* presumption against liberal inferences “unnecessary” because the plaintiffs’ “theory is not

implausible”).²¹

It would not be too difficult to view the 31 parallel price increase announcements, standing alone, as consistent with interdependence. This, of course, would ignore the comparatively miniscule amount of pre-conspiracy price increase announcements: 3. It would also not be too difficult to view the relative market share stability of the TiO₂ suppliers, standing alone, as consistent with interdependence. This, of course, would ignore the simultaneous intercompany sales at below-market value. The same goes for the manufacturers’ TDMA and CEFIC membership, meetings, and the GSP. There is nothing inherently collusive about trade associations, industry meetings, or aggregated statistics. This too, of course, would ignore the role Jim Fisher played as a communicator of confidential information between the TiO₂ suppliers and that the co-conspirators’ executives had meetings together days and hours before they announced parallel price increases.

The majority seems to discount the plausibility of Valspar’s economic theory. This factor has been a focal point in our antitrust jurisprudence for decades. *Matsushita*, 475 U.S.

²¹ DuPont relied on the requirement that, to survive summary judgment, Valspar must present evidence that “tends to exclude the possibility” that the alleged conspirators acted independently. *Matsushita*, 475 U.S. at 588. All of the evidence in this case, viewed in its totality, tends to exclude that the TiO₂ manufacturers acted independently. Contrary to DuPont’s interpretation, “tends to exclude the possibility” does not mean “unequivocally excludes the possibility.” Such a standard would defy our basic summary judgment jurisprudence, which views the evidence in a light most favorable to the nonmoving party.

at 588–91; *Chocolate*, 801 F.3d at 396; *Flat Glass*, 385 F.3d at 358; *Petruzzi's*, 998 F.2d at 1232. The majority substitutes this distinct factor with the more general theory of interdependence. See Maj. Op. at 8 n.1. According to the majority, in *Flat Glass*, this Court refused to draw liberal inferences in favor of the plaintiff because of the theory of interdependence. In fact, this Court did draw liberal inferences in *Flat Glass*, and reversed summary judgment, partly because the plaintiff's economic theory made perfect sense. It simply stated, in passing, that courts must be "cautious in accepting inferences from circumstantial evidence" in these types of cases—not that they do not do so. *Flat Glass*, 385 F.3d at 358.

There is no disagreement here that courts should take a "cautious" approach to accepting inferences from circumstantial evidence in price-fixing cases involving oligopolies. See *Chocolate*, 801 F.3d at 412 (explaining this approach); *Flat Glass*, 385 F.3d at 358–59 (same). I agree that this cautious approach is consistent with our Circuit's law. I disagree with the majority's transformation of this general "cautious" approach into a new approach that appears to shut the door on a district court's ability to accept reasonable inferences in any case involving oligopolists. Such a black-and-white approach is not resonant of the type of "caution" discussed in *Flat Glass* and *Chocolate*, but rather acts to usurp the jury's role in deciding cases loaded with circumstantial evidence of an actual agreement to fix prices.

In *Chocolate*, this Court confirmed that "[u]nder *Matsushita*, the range of acceptable inferences that may be drawn from ambiguous or circumstantial evidence varies with the plausibility of the plaintiffs' theory." 801 F.3d at 396; see also *id.* at n.8 (comparing cases where this Court has drawn liberal inferences when the plaintiff's theory made sense with

cases where this Court refused to do so because the theory did not make sense). In *Chocolate*, this Court did not view the theory of interdependence as a complete roadblock to drawing liberal inferences. *Id.* at 396–97. The only time this should happen is if the plaintiff is relying on “ambiguous evidence alone.” *Id.* at 396. Up until today, the general theory of interdependence never supplanted a court’s consideration of the plaintiff’s economic theory.²²

²² In an attempt to assuage concerns about its analysis, the majority tries to justify its heightened standard through *Chocolate*. According to the majority, this Circuit’s precedent has long required a plaintiff in this type of case to prove that it is “more likely than not” true that there was a price-fixing conspiracy in order to survive summary judgment. Majority at 9 n.1, 13, 13 n.4, 29–30, 29 n.14. The majority makes too much of this dicta. This was not, as the majority claims, some profound announcement of a new legal standard or rule. Indeed, this purportedly axiomatic language has never once been used in any other price-fixing case involving oligopolies. See generally *Matsushita*, 475 U.S. 574 (not using this language anywhere); *Monsanto*, 465 U.S. 752 (same); *Flat Glass*, 385 F.3d 350 (same); *Baby Food*, 166 F.3d 112 (same). The use of that phrase in *Chocolate* simply reflected the Court’s conclusion that the plaintiffs, in that particular case, had not been able to point to any reasonable inferences of a conspiracy. Even assuming *arguendo* this alleged “standard” were actually the measuring stick, the plaintiffs in this case have certainly met it.

C. Conclusion

I am certainly mindful of the theory of interdependence and the presence of an oligopoly. With that said, from the very start, Valspar presented a theory that makes perfect economic sense. It supported this theory with strong evidence of parallel conduct in the form of 31 (an unprecedented amount) of parallel price increase announcements. Recognizing conscious parallelism to be insufficient on its own to survive summary judgment, Valspar also presented viable evidence in support of the plus factors: (i) price signaling, (ii) exchanges of confidential information, (iii) relatively static market shares, (iv) intercompany sales of TiO₂ at below market price, (v) abrupt departure from pre-conspiracy conduct, and (vi) a market susceptible to conspiracy. Although the TiO₂ market is an oligopoly, Valspar also presented evidence that did not simply restate interdependence: non-price acts against self-interest. Finally, it presented traditional conspiracy evidence. Viewed together, and not compartmentalized, all this evidence was more than sufficient to preclude summary judgment.

For these reasons, I respectfully dissent.