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United States Court of Appeals
Tenth Circuit

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UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

August 21, 2023

Christopher M. Wolpert
Clerk of Court

CHASE MANUFACTURING, INC.,

Plaintiff - Appellant,

v.

No. 22-1164

JOHNS MANVILLE
CORPORATION,

Defendant - Appellee.

UNITED STATES OF AMERICA,

Amicus Curiae.

Appeal from the United States District Court
for the District of Colorado
(D.C. No. 1:19-CV-00872-MEH)

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Patrick M. Kuhlmann, Attorney (Jonathan S. Kanter, Assistant Attorney General; Doha G. Mekki, Principal Deputy Assistant Attorney General; Maggie Goodlander, Deputy Assistant Attorney General; David B. Lawrence, Policy Director; Daniel E. Haar and Nickolai G. Levin, Attorneys, with him on the brief), Washington, D.C., for amicus curiae the United States of America in support of neither party.

Before **PHILLIPS, MURPHY, and ROSSMAN**, Circuit Judges.

PHILLIPS, Circuit Judge.

In this antitrust case, we consider whether the district court erred in granting summary judgment to a monopolist—a company supplying nearly 100% of the relevant market—that had threatened to stop selling needed products to its customers if they bought from a new market entrant offering a superior product for less money.

For decades, Johns Manville Corp. (or JM) was the sole domestic manufacturer and supplier of calcium silicate (or “calsil”), a substance used to make thermal pipe insulation. Thus, it had faced no competition in selling its calsil to thermal-pipe-insulation distributors around the United States. In March 2018, Chase Manufacturing, Inc. (doing business as Thermal Pipe Shields, Inc., or TPS) challenged JM’s monopoly status by entering the calsil market with a superior and less expensive product.¹ JM responded by threatening distributors that it would not sell to them if they bought TPS’s competing calsil. The threats

¹ For summary-judgment purposes, we resolve factual disputes in TPS’s favor as the nonmovant. Here, TPS has presented evidence that its calsil was superior and less expensive. For instance, TPS’s customers commented that TPS’s calsil was “top of the line” and “a superior product” to JM’s calsil. And TPS used a different process to make its calsil “significantly stronger” than JM’s. We resolve fact disputes on those points for TPS.

had the desired effect. By August 2021, more than three years after TPS's market entry, JM retained over 97% of the domestic calsil market.

TPS sued under the Sherman Act, alleging that JM had unlawfully (1) maintained its monopoly and (2) tied the availability of its insulation products to distributors' not buying TPS's calsil. The district court granted summary judgment for JM. Though we affirm some of the district court's rulings, we hold that it erred in finding no genuine issues of material fact on whether JM unlawfully maintained its monopoly after TPS's market entry. So we reverse and remand.

BACKGROUND

I. Factual Background

This case concerns an important product in American industry: thermal pipe insulation. Many industrial facilities, including power plants and oil refineries, use pipes to transport materials at temperatures up to 1200 degrees Fahrenheit. To protect against dangers associated with superheated pipes, these facilities line their pipes with thermal insulation resistant to high temperatures.

Until the 1970s, industrial facilities preferred asbestos insulation for their thermal pipes. But since then, these facilities have transitioned to safer alternatives, including calsil. Calsil is "hydrous calcium silicate" that can be form-fitted for diverse sizes and shapes of industrial equipment, such as pipes and tanks. It is a desirable substance for insulation because it is inherently heat-resistant, durable, noncombustible, and anticorrosive.

JM is a leading manufacturer of thermal pipe insulation. It sells a variety of insulation products manufactured from calsil, mineral wool, fiberglass, expanded perlite, and thin blanket. JM is the exclusive manufacturer of calsil in the United States, operating plants in Colorado and Louisiana.² Marketed under the brand name Thermo-1200, JM's calsil complies with the performance specifications set by the American Society for Testing and Materials.³ Federal regulations use these ASTM standards to test thermal insulation.

Until 2018, JM was not only the sole domestic calsil manufacturer but also the exclusive domestic calsil supplier. It sold calsil to thermal-pipe-insulation distributors in the United States, including the five largest: Distribution International, Inc.; Specialty Products & Insulation Co.; General Insulation Co.; MacArthur Co.; and Bay Insulation Supply.⁴ In turn, these distributors sold calsil to industrial users and contractors based on project specifications. From 2016 to 2021, JM sold about 83% of its calsil to distributors. Distribution International's senior vice president of strategic

² Once, JM operated eight calsil plants in the United States and Canada. But JM has closed six plants as demand for calsil has declined over the past 40 years in favor of other products like aerogel and mineral wool.

³ JM manufactures another calsil product under the brand name Super Caltemp Gold 1700, which can withstand temperatures up to 1700 degrees Fahrenheit. As far as we can tell, TPS does not compete with JM on calsil resistant to 1700-degree temperatures.

⁴ We refer to these companies as Distribution International, Specialty Products, General Insulation, MacArthur, and Bay Insulation.

sourcing, Robert Hlavenka, testified that before 2018, the distributor bought all its calsil from JM, totaling up to \$15 million in annual purchases.

In March 2018, TPS entered the U.S. calsil market with a competing product under the brand name TPSX-12. TPS had its calsil manufactured by a Chinese factory and then imported into the United States.⁵ As did JM's calsil, TPS's complied with ASTM standards, withstood temperatures up to 1200 degrees Fahrenheit, and allowed for formfitting for various industrial uses. But TPS's calsil came with other advantages. For one, TPS priced its calsil 20 to 25% less than JM priced its Thermo-1200. For another, because TPS used a different manufacturing process than JM, TPS's calsil was stronger and more flexible.

Distributors noted TPS's market entry and its competing calsil. Hlavenka described that Distribution International had "moderate" interest in TPS's calsil and "believe[d] that the TPS product is a superior product."⁶ In fact, in early 2020, Distribution International became the exclusive supplier of TPS's calsil in the Gulf Coast region. And, on behalf of 4-State Supply, Inc., a smaller distributor, Joseph Guest testified that TPS's calsil was "top of the line," while acknowledging that it could "take[] a while to get."

⁵ Before TPS's market entry, JM also imported Chinese calsil for sale in the United States.

⁶ Asked why the interest wasn't stronger, Hlavenka responded that TPS had a "new product" that needed to be "delivered" and would "take some time to kick off."

Other distributors also bought some of TPS's calsil. Bay Insulation, one of the five largest distributors, agreed to serve as TPS's exclusive calsil supplier for two California regions. And two smaller distributors, APi Distribution and GLT Fabricators, reached similar exclusivity agreements with TPS for small regions elsewhere in the United States.⁷ All told, between 2018 and August 2021, TPS sold more than \$2.3 million in calsil to nine distributors, including some to each of the five largest distributors. Twenty-two other distributors kept buying calsil exclusively from JM.

JM immediately recognized the threat TPS's less expensive and superior calsil posed to its market share. An internal JM email, sent days after TPS's market entry, advised JM's sales force this way: "If we need to bring the sword, then 'If you [the distributors] choose to buy material from Thermal Pipe Shields, then that will significantly alter your company's relationship with Johns Manville as a mechanical insulation partner.'" In another March 2018 internal email, a JM manager coached his sales team to stress TPS's "foreign manufacturing," JM's superior "support after the sale," Thermo-1200's better "water-resistance," and TPSX-12's lack of "testing."

JM closely monitored TPS's calsil sales to distributors and worried about the competition. For instance, in a June 2018 internal email—subject line: "MacArthur buying from TPS???"—a JM manager lamented the large

⁷ The record shows that TPS terminated its agreement with GLT Fabricators in early 2020.

distributor’s possibly having bought calsil from TPS. And in a November 2018 internal presentation, JM employees conceded that Thermo-1200 “h[e]ld no competitive quality or price advantage” over TPSX-12. They also posed a market-share hypothetical envisioning that JM could lose significant market share against TPS’s less expensive and superior calsil.

JM’s internal concerns presaged its external conduct. JM publicly responded to TPS’s market entry in three ways: (1) by pressuring distributors not to buy TPS’s calsil, (2) by altering the terms of its distributor rebate agreements, and (3) by denigrating the quality of TPS’s calsil to distributors by falsely raising concerns about asbestos and silica particles.⁸ We briefly describe each in turn.

First, the summary-judgment record shows that JM employees told distributors that JM would not sell its products to them if they bought calsil from TPS. For example, in a March 2018 email to Distribution International employees, a JM manager warned,

You along with your team are aware of the potential dangers and liabilities you may face in selling this imported product You and your team are free to promote and sell any products you wish; however, the breadth and terms of our partnership could potentially change with your promotion and distribution of such imported product.

⁸ Inhalation of silica particles is an occupational hazard strictly regulated by the U.S. Occupational Safety and Health Administration. *See generally Silica, Crystalline*, OSHA, <https://www.osha.gov/silica-crystalline> (last visited July 26, 2023).

Hlavenka likewise testified about JM's pressure tactics. He recalled that JM's Hal Shapiro, a former global sales manager, had threatened to shift JM's calsil business in Houston to a competitor of Distribution International if it continued to buy TPS's calsil.⁹

As for JM's threats to 4-State, Guest recalled a JM sales representative (Chad Meyer) telling him at an October 2018 trade show that "if [4-State] continued to buy Thermal Pipe Shield's, TPS's Calsil, [4-State] would no longer be able to purchase Johns Manville Calsil." Guest testified that Meyer told him that this message "c[ame] from upper management" at JM.¹⁰ Guest also recalled that, about a week after the trade show, JM stopped shipping products to 4-State's Wichita branch and started shipping to its Lenexa branch. But Guest acknowledged that JM later discounted 4-State's calsil purchases to offset the increased shipping costs from the Lenexa branch.

The summary-judgment record also contains information about JM's pressuring other distributors, including Bay Insulation, Specialty Products, General Insulation, and APi Distribution. In a December 2018 email, Bay

⁹ Hlavenka paraphrased the threat, "If you don't upset the apple cart, so to speak, and distribute our products, [JM] won't set up [with the other distributor]."

¹⁰ JM's internal emails help corroborate Guest's account of Meyer's threat. In an October 2018 email exchange between JM employees (including Meyer), a JM employee recounted that 4-State ordered "1 container" of calsil from TPS. Another JM employee responded, "Let [me] try to set up a quick meeting with [4-State]. Please pull [its] sales reports. We are going to cut them off."

Insulation employees reported that “[JM is] taking a hard line against selling anyone who is stocking a ‘different’ brand” and could “make it pretty hard to do business with [it].” And in notes memorializing a January 2019 meeting with Specialty Products, TPS reported that “JM would stop selling calsil to [Specialty Products] in markets that purchased TPSX-12” and that “JM would punish [Specialty Products] by creating longer lead times for ALL JM products if [it] purchased TPSX-12.” In an October 2019 email, TPS employees recounted a meeting with General Insulation in which it declined to fill an end-customer order for TPS’s calsil because of JM’s pressuring. And in an October 2018 email, JM employees criticized APi Distribution’s decision to buy TPS’s calsil, noting that “[JM] would not be supporting [APi Distribution] in the future if [it] support[s] TPS.”

Second, the summary-judgment record reveals that JM added new terms to its rebate agreements in response to TPS’s market entry. Before March 2018, JM offered some of its distributors ratcheted rebates based on the volume of products purchased. For example, in January 2018, JM executed a rebate agreement with Bay Insulation under which it agreed to 1% to 5% reimbursements for annual purchases exceeding about \$2.46 million. After TPS’s market entry in March 2018, JM included different terms in at least two rebate agreements, this time including “a rebate benchmark that combine[d] calsil and perlite purchases together as a bundled item.” None of the later rebate agreements contain exclusivity provisions.

Third, the summary-judgment record shows that JM disparaged the quality of TPS's imported calsil to some distributors. JM's Meyer recalled telling Guest that Chinese calsil "may have contained trace amounts of asbestos." Hlavenka testified that Shapiro told him that Distribution International needed to be "real careful with Chinese calsil because the amount of free silica in [TPS's] product could be a huge issue." And in a July 2018 email exchange, an APi Distribution employee told TPS's president David Shong that an unnamed JM employee and an unnamed Distribution International salesperson both said that TPS's calsil contained asbestos.

II. Procedural Background

In March 2019, TPS sued JM. In an amended complaint, TPS alleged that JM had violated the Sherman Act's prohibitions on monopolization and tying and that JM had also violated § 43(a) of the Lanham Act by disparaging TPS's calsil.¹¹ For its monopolization claim, TPS asserted four forms of JM's exclusionary conduct: (1) threatening to refuse to supply distributors with calsil, (2) exclusive dealing through rebates, (3) disparaging TPS's calsil, and (4) tying calsil to its non-calsil products.

To support its Sherman Act claims, TPS relied on expert opinions from Dr. Frederick R. Warren-Boulton, an economist with an expertise in vertical

¹¹ In February 2022, TPS voluntarily dismissed its Lanham Act claim as "redundant" of its Sherman Act claims.

restraints on trade.¹² Reviewing JM’s sales data from 2016 to August 2021, Dr. Warren-Boulton opined that JM had maintained its monopoly power in the domestic calsil market for more than three years after TPS’s market entry. He reported that JM enjoyed much higher gross margins on calsil compared to its other thermal-insulation products (in which it faced competitive markets). And he reported the same for JM’s domestic calsil sales as compared to JM’s international calsil sales (which, again, were more competitive markets).

Dr. Warren-Boulton also opined that JM “has sufficient economic power over its distributors and other direct customers in the US” to impede TPS’s market growth. He noted, for example, that distributors chose JM’s calsil despite “earn[ing] significantly higher [profits] on calsil purchased from Thermal Pipe Shields than on calsil purchased from Johns Manville.” He further opined that TPS should have enjoyed a larger market share of the domestic calsil market, noting that “[e]conomic theory predicts that, in a market with two firms with identical marginal costs selling a homogenous good such as calsil, the firms will each have a market share of 50%.”

¹² A vertical restraint is a “restraint of trade involving a combination of persons at different levels of the market structure,” such as manufacturers and distributors. *Euromodas, Inc. v. Zanella, Ltd.*, 368 F.3d 11, 16 (1st Cir. 2004) (citation omitted).

The district court denied JM’s motion to exclude Dr. Warren-Boulton’s expert testimony.¹³ But it later granted JM’s summary-judgment motion. *Chase Mfg., Inc. v. Johns Manville Corp.*, 601 F. Supp. 3d 911, 935 (D. Colo. 2022). The district court ruled that TPS hadn’t raised a genuine issue of material fact in support of its Sherman Act monopolization and tying claims.

First, the district court relied on the refusal-to-deal-with-rivals standard to analyze TPS’s claim of threats not to supply distributors. *Id.* at 926. Thus, the district court required TPS to show that “a distributor suffered actual negative repercussions and harm as a result of a purchase of [TPS’s] calsil” and that “[JM] suffered self-inflicted harm” in the short term by losing calsil sales to distributors. *Id.* at 927. As the district court saw it, TPS couldn’t raise a genuine issue of material fact over lost sales because, “[w]hen [JM] did threaten to (or actually did) stop selling calsil to a distributor, it occurred in those markets where [it] could shift that business to another local distributor.” *Id.*

Second, the district court rejected TPS’s exclusive-dealing claim that TPS based on JM’s rebate agreements with distributors. *Id.* at 928–30. The court concluded that TPS “d[id] not demonstrate how the rebate scheme goes beyond permissible price competition to unlawful coercion.” *Id.* at 929. The

¹³ JM has not sought review of the district court’s order denying JM’s motion to exclude Dr. Warren-Boulton’s expert opinions. We thus consider Dr. Warren-Boulton’s opinions in resolving whether TPS has raised a genuine issue of material fact supporting its Sherman Act claims.

district court ruled that TPS had raised no genuine issue of material fact of any “exclusive dealing arrangement whereby [JM] expressly prohibited distributors from doing business with [TPS]” or of any “coercive effect” to support a de facto exclusive-dealing claim. *Id.*

Third, the district court rejected TPS’s disparagement claim, concluding that TPS had raised no genuine issue of material fact about whether “the [disparaging] statements played a significant role in dissuading a distributor from buying [TPS’s] calsil.” *Id.* at 932. For instance, the district court noted that TPS had not raised a genuine issue of material fact about how the disparaging statements were “clearly false.” *Id.* at 931.

Fourth, the court concluded that TPS had raised no genuine issue of material fact in support of its tying claims under the Sherman Act. *Id.* at 932–34. It reasoned that TPS hadn’t “demonstrate[d] how [JM] wielded market power over” its non-calsil products. *Id.* at 934. The district court further faulted TPS for failing to show “some sort of arrangement to tie sales of different insulating materials together.” *Id.*¹⁴

TPS timely appealed the grant of summary judgment on its monopolization and tying claims.

¹⁴ The district court also found that TPS hadn’t raised a genuine issue of material fact about whether it suffered an antitrust injury. *Id.* at 934–35.

JURISDICTION

We have jurisdiction under 28 U.S.C. § 1291 to review a district court’s grant of summary judgment as a final order.

STANDARD OF REVIEW

We review de novo rulings on summary judgment, using the same standard that applies in the district court. *N.M. Oncology & Hematology Consultants, Ltd. v. Presbyterian Healthcare Servs.*, 994 F.3d 1166, 1171 (10th Cir. 2021) (citation omitted). Summary judgment is appropriate “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). In assessing whether the district court properly granted summary judgment, we resolve factual disputes and draw reasonable inferences in the nonmovant’s favor. *In re EpiPen Mktg., Sales Pracs. & Antitrust Litig.*, 44 F.4th 959, 980 (10th Cir. 2022) (citation omitted). In antitrust cases, we also presume that businesses act rationally in conducting their affairs. *N.M. Oncology*, 994 F.3d at 1172 (citing *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 595 (1986)).

We have said that “[s]ummary judgment is of particular importance in the area of antitrust law, because it helps to avoid wasteful trials and prevent lengthy litigation that may have a chilling effect on pro-competitive market forces.” *In re EpiPen*, 44 F.4th at 980 (citations omitted). But we have cautioned that “in a broad sense, summary judgment in antitrust cases should be

used sparingly.” *Sports Racing Servs., Inc. v. Sports Car Club of Am., Inc.*, 131 F.3d 874, 882 (10th Cir. 1997) (citation omitted).

DISCUSSION

TPS appeals the district court’s grant of summary judgment on its monopolization and tying claims. It contends that the district court erred by resolving genuine issues of material fact against it. JM counters that TPS has not raised any genuine issues of material fact to support its claims. We conclude that genuine issues of material fact preclude summary judgment on TPS’s § 2 monopolization claim. But we agree with JM that the district court properly granted summary judgment on TPS’s § 1 tying claim.

I. Section 2 Monopolization

Section 2 of the Sherman Act prohibits entities from monopolizing “any part of the trade or commerce among the several States” or “with foreign nations.” 15 U.S.C. § 2. To succeed on a § 2 monopolization claim, a plaintiff must prove “(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” *In re EpiPen*, 44 F.4th at 981 (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966)). A private plaintiff seeking damages must also show that (3) “its injuries were caused by the defendant’s anticompetitive conduct.” *Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1070 (10th Cir. 2013) (citations omitted). We often refer to this trio of

elements as (1) monopoly power, (2) exclusionary conduct, and (3) antitrust injury.¹⁵

A. Monopoly Power

“Monopoly power is the power to control prices or exclude competition.” *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956). We have said that plaintiffs can prove monopoly power “directly” “by showing the defendant has actually raised prices substantially above a competitive level without sacrificing business.” *Novell*, 731 F.3d at 1071 (collecting cases). Plaintiffs can also prove monopoly power “indirectly” “by defining a relevant product and geographic market, pointing to the defendant’s share of that market and perhaps barriers to entry . . . , and then asking us to infer from this evidence the power to raise price.” *Id.* (collecting cases).

We conclude that TPS has cleared this hurdle on summary judgment. Dr. Warren-Boulton collected purchasing data from 31 distributors in the calsil market, which revealed that JM accounted for 97.3% of the market by August 2021—more than \$84 million in sales. *See Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 481 (1992) (“Respondents’ evidence that Kodak controls nearly 100% of the parts market and 80% to 95% of the service market, with no readily available substitutes, is . . . sufficient to survive summary judgment under the more stringent monopoly standard of § 2.”

¹⁵ We have sometimes referred to the first element as “market power.” *See Novell*, 731 F.3d at 1070.

(citations omitted)). Dr. Warren-Boulton also analyzed JM’s product lines and opined that JM enjoyed substantially higher gross margins on its domestic calsil sales, even after TPS entered the market. And, using a metric called the “Lerner Index,” he determined that demand for JM’s calsil was substantially more inelastic (meaning less responsive to price changes) than its other products.¹⁶ Dr. Warren-Boulton’s numbers provide direct evidence of JM’s monopoly power:

JM Product	Gross Margin	Monthly Lerner Index
Calsil	39.2%	70.7%
Fiberglass	15.4%	16.4%
Expanded Perlite	5.0%	31.1%
Mineral Wool	-0.6%	36.0%
Thin Blanket	26.9%	28.6%

Further, indirect evidence supports Dr. Warren-Boulton’s findings that JM controlled prices in the domestic calsil market. Hlavenka testified that Distribution International continued to buy 99% of its calsil from JM after TPS entered the market. This was so despite his belief “that the TPS product is a superior product . . . t[o] the JM product.” Relatedly, employees from Bay

¹⁶ The Lerner Index is a “mathematical formula expressing the relationship between a firm’s own elasticity and the marginal cost of the goods sold.” *United States v. Eastman Kodak Co.*, 63 F.3d 95, 108 (2d Cir. 1995) (citation omitted). As we understand it, the higher the score on the index, the more inelastic the demand for the product is.

Insulation observed that JM could “simply raise the price to put [calsil] out of reach.” And both Hlavenka and Guest testified that their companies could not stay in business without access to JM’s products. Hlavenka put it this way:

Q. Does [Distribution International] feel that it could decide not to do business with JM across the board?

A. I don’t think that we can do without JM.

Q. Why is that?

A. Because we have a lot of markets that we’re supplying their product, and we—we can’t get the other suppliers to support us in those markets.

We agree with the district court that TPS has presented more than enough evidence to show a genuine issue of material fact that JM had monopoly power in the domestic calsil market.

B. Exclusionary Conduct

A company violates § 2 when it maintains or attempts to maintain a monopoly by engaging in exclusionary conduct. *In re EpiPen*, 44 F.4th at 981 (citation omitted). Monopoly status alone is not unlawful under § 2; indeed, “[t]he opportunity to charge monopoly prices—at least for a short period—is what attracts ‘business acumen’ in the first place” by “induc[ing] risk taking that produces innovation and economic growth.” *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004). Rather, “the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive *conduct*.” *Id.*

“[A]nticompetitive conduct comes in too many forms and shapes to permit a comprehensive taxonomy.” *Novell*, 731 F.3d at 1072 (citation omitted). Courts approach § 2 claims on a “case-by-case basis.” *Eastman Kodak*, 504 U.S. at 467. The question is “whether, based on the evidence derived from past cases, the conduct at issue before us has little or no value beyond the capacity to protect the monopolist’s market power.” *Novell*, 731 F.3d at 1072 (citation omitted). Some “common forms” of anticompetitive conduct are tying, exclusive dealing, predatory pricing, and defrauding regulators or consumers. *Id.* (collecting cases).

We exercise caution when evaluating what qualifies as exclusionary conduct under the Sherman Act. “Whether any particular act of a monopolist is exclusionary, rather than merely a form of vigorous competition, can be difficult to discern.” *In re EpiPen*, 44 F.4th at 981 (citations omitted). Ultimately, our task is to “distinguish[] between exclusionary acts, which reduce social welfare, and competitive acts, which increase it.” *Id.* (citation omitted). And because “[r]eal-world monopolists may engage in allegedly exclusionary conduct which does not fit within a single paradigm,” we often try to “disaggregate” a monopolist’s actions into “component parts.” *Id.* at 982.

In carrying out this analysis, we must be mindful of a few boundaries. First, “the antitrust laws . . . were enacted for the protection of competition not competitors.” *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488 (1977) (cleaned up). Second, “purely unilateral conduct does not run afoul of

section 2,” because “businesses are free to choose whether or not to do business with others and free to assign what prices they hope to secure for their own products.” *Novell*, 731 F.3d at 1072 (internal quotation marks omitted) (quoting *Pac. Bell Tel. Co. v. linkLine Commc’ns, Inc.*, 555 U.S. 438, 448 (2009)). And third, clear rules are of utmost importance in antitrust cases. *Pac. Bell Tel.*, 555 U.S. at 452 (“Courts are ill suited to act as central planners, identifying the proper price, quantity, and other terms of dealing.” (citation and internal quotation marks omitted)).

1. TPS has raised a genuine issue of material fact as to exclusionary conduct.

With these principles in mind, we turn to whether TPS has raised a genuine issue of material fact about whether JM’s threats were exclusionary conduct. As alluded to earlier, we ask whether “the conduct at issue before us has little or no value beyond the capacity to protect the monopolist’s market power.” *Novell*, 731 F.3d at 1072. As we’ve noted, “section 2 misconduct usually involves some assay by the monopolist into the marketplace.” *Id.*; see also *In re EpiPen*, 44 F.4th at 996 (noting that coercion by a monopolist “casts doubt on the assumption” that allegedly anticompetitive conduct is procompetitive); *McWane, Inc. v. FTC*, 783 F.3d 814, 834 (11th Cir. 2015) (reasoning that a “unilaterally imposed” threat by a monopolist on its distributors endangered competition because it lacked any procompetitive

justification). For several reasons, we conclude that TPS has raised a genuine issue of material fact about whether JM's threats were exclusionary.

First, the summary-judgment record shows that JM exercised significant market power in the calsil market over its distributors. As of August 2021, more than three years after TPS's market entry, JM retained more than 97% of the calsil market. For decades before that, JM acted as a monopolist in the market, enabling it to hinder market entry and to embed itself with thermal-pipe-insulation distributors. *See United States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 189–90 (3d Cir. 2005) (“The evidence demonstrated conclusively that [the entrenched monopolist] Dentsply had supremacy over the dealer network and it was at that crucial point in the distribution chain that monopoly power over the market for artificial teeth was established. The reality in this case is that the firm that ties up the key dealers rules the market.”). As Hlavenka and Guest testified, Distribution International and 4-State needed JM's products to maintain their businesses. And as Dr. Warren-Boulton showed, JM overwhelmingly relied on its distributors to supply contractors.

Second, and relatedly, the summary-judgment record shows that distributors did not flock to TPS's calsil, despite its 20-to-25% lower price and superior quality. At least some distributors considered TPS's calsil superior to JM's. But even after TPS's March 2018 entry into the market, Distribution International, one of the largest distributors in the country, bought a mere 1% of its calsil from TPS. And many distributors bought nothing. A jury can

determine whether JM was able to bend the market unlawfully in its favor by threatening distributors that JM would refuse to supply them with its products. *Cf. Dentsply*, 399 F.3d at 189 (“The apparent lack of aggressiveness by competitors is not a matter of apathy, but a reflection of the effectiveness of Dentsply’s exclusionary policy. Although its rivals could theoretically convince a dealer to buy their products and drop Dentsply’s line, that has not occurred.”).

Third, and relatedly again, the summary-judgment record contains significant evidence of JM’s coercive behavior toward its distributors. Both Hlavenka and Guest testified that JM employees threatened not to supply their companies with calsil if Distribution International and 4-State bought TPS’s calsil. And, as mentioned, several emails from JM, TPS, and distributors describe JM’s pressure tactics. Viewing the evidence most favorably to TPS, we see JM as leaving its distributors with an all-or-nothing choice: stop doing business with TPS or lose access to JM’s enormous thermal-insulation inventory. Unsurprisingly then, the summary-judgment record supports the inference that the distributors “acceded to [JM’s] heavy economic pressure” by limiting purchases from TPS. *Dentsply*, 399 F.3d at 196; *see also McWane*, 783 F.3d at 837–38 (finding exclusionary conduct where a monopolist “tie[d] up the key dealers” and “the targeted rival gained market share—but less than it likely would have absent the conduct” (alteration in original) (citations omitted)).

Fourth, JM has not rebutted the sensible inference that its threats were anticompetitive, based on TPS's evidence that its calsil was superior and less expensive than JM's.¹⁷ It has not explained how its conduct fostered competition. *See Dentsply*, 399 F.3d at 196–97 (finding anticompetitive harm when an entrenched monopolist failed to show a “sufficiently pro-competitive objective”). And we “throw[any procompetitive assumption] out the window when record evidence suggests coercion by the monopolist.” *In re EpiPen*, 44 F.4th at 996.

JM's conduct resembles another monopolist's conduct that the Supreme Court deemed exclusionary under § 2 of the Sherman Act. *Lorain J. Co. v. United States*, 342 U.S. 143 (1951). From 1933 to 1948, an Ohio newspaper (Lorain Journal) commanded an “overpowering” monopoly on news coverage to 99% of readers in Lorain, Ohio. *Id.* at 146–47, 149–50. Lorain Journal also served as the exclusive outlet for media advertisers in Lorain. *Id.* at 149–50. In 1948, a regional radio station (WEOL) began airing and competing with Lorain Journal for advertiser revenue. *Id.* at 147. About all WEOL's revenue came from advertisers. *Id.* at 148. In response, Lorain Journal “refused to accept local advertisement in the Journal from any Lorain County advertiser who advertised or who [it] believed to be about to advertise over WEOL.” *Id.* The Court described the newspaper's conduct this way:

¹⁷ We note that at least one distributor complained about “breakage” concerns with JM's calsil.

[Lorain Journal] monitored WEOL programs to determine the identity of the station's local Lorain advertisers. Those using the station's facilities had their contracts with the publisher terminated and were able to renew them only after ceasing to advertise through WEOL. The program was effective. Numerous Lorain County merchants testified that, as a result of the publisher's policy, they either ceased or abandoned their plans to advertise over WEOL.

Id. at 149.

Invoking the Sherman Act, the Court ruled that Lorain Journal's "attempt to regain its monopoly of interstate commerce by forcing advertisers to boycott a competing radio station violated § 2." *Id.* at 152. It considered the "most illuminating" evidence to be "the substantial monopoly which was enjoyed in Lorain by the publisher from 1933 to 1948, together with a 99% coverage of Lorain families." *Id.* That monopoly power meant that any threat from Lorain Journal "amounted to an effective prohibition of the use of WEOL." *Id.* at 153. As the Court noted, "Numerous Lorain advertisers wished to supplement their local newspaper advertising with local radio advertising but could not afford to discontinue their newspaper advertising in order to use the radio." *Id.*

The newspaper's conduct in *Lorain Journal* parallels JM's exclusionary conduct here. Just as an upstart rival alarmed the monopolist newspaper, so too does the summary-judgment record support that JM immediately recognized the threat TPS posed to its market share. Within days of TPS's market entry, JM emailed its sales force, warning of TPS's competitive threat and proposing to cut off any distributors buying TPS's calsil. And just as the newspaper knew that its threats would force its advertisers to get in line, so too does the

summary-judgment record support the inference that JM likely knew that its threats would spur its distributors into action—or inaction, as it were. As Hlavenka put it, “I don’t think that we can do without JM.”

The district court concluded otherwise, borrowing a standard from refusal-to-deal-with-rivals caselaw (such as *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985)) and concluding that TPS failed to meet that standard. *Chase Mfg.*, 601 F. Supp. 3d at 925–28. TPS, JM, and the United States (as amicus) all agree that the court applied the wrong legal standard.¹⁸ And so do we. We have never extended a refusal-to-deal-with-rivals analysis outside that situation, nor have we mandated analyzing § 2 exclusionary conduct under any solitary framework. *See Novell*, 731 F.3d at 1072 (“[A]nticompetitive conduct comes in too many forms and shapes to permit a comprehensive taxonomy.”); *In re EpiPen*, 44 F.4th at 982 (“Real-world monopolists may engage in allegedly exclusionary conduct which does not fit within a single paradigm, instead exhibiting characteristics of several

¹⁸ Though it concedes the district court’s analytical error, JM contends that we should not use this case to classify the proper framework for JM’s threatening conduct and instead rule that TPS either waived or invited the refusal-to-deal issue in the district court. Even so, JM advances an exclusive-dealing framework for analyzing TPS’s asserted exclusionary conduct. The issue of how to analyze TPS’s § 2 claim is before us, so we reject JM’s argument to save this issue for another day. *See In re Syngenta AG MIR 162 Corn Litig.*, 61 F.4th 1126, 1182 (10th Cir. 2023) (“[O]ur preservation doctrines function *not* as absolute constraints on our power to review but, rather, more like prudential norms. That is, whether issues should be deemed waived is a matter of discretion.” (citation and internal quotation marks omitted)).

common forms of alleged misconduct.”). Indeed, as the United States points out, a refusal-to-deal framework applies to narrow situations often remedied by monopolists sharing their technology with rivals.

The district court erred in choosing the refusal-to-deal-with-rivals framework to measure the legality of JM’s conduct. Instead, it should have adopted an approach that looked to the reality of the calsil market and the practical effect of JM’s conduct. *See Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 326–28 (1961).¹⁹

¹⁹ We touch briefly on TPS’s other alleged forms of exclusionary conduct. TPS presents no argument linking JM’s rebate agreements to the § 2 monopolization claim, instead contending that the rebates support the § 1 tying claim. Similarly, TPS cabins its disparagement argument to a single paragraph in its opening brief. It presents no argument for how JM’s disparaging comments were anticompetitive or how they were “so widespread and longstanding and practically incapable of refutation that they are capable of injuring both consumers and competitors.” *Novell*, 731 F.3d at 1079–80 (citations omitted). And TPS presents little argument for how tying qualifies as an anticompetitive maintenance of JM’s monopoly under § 2 of the Sherman Act—instead relying exclusively on § 1 tying caselaw. By inadequately briefing these arguments, TPS has waived them. *See United States v. Walker*, 918 F.3d 1134, 1151 (10th Cir. 2019) (collecting cases).

We do not suggest that TPS’s evidence of disparagement is irrelevant under § 2 of the Sherman Act; indeed, we considered it alongside TPS’s evidence of JM’s threats to distributors. TPS just hasn’t given us enough argument for a freestanding exclusionary-conduct theory of disparagement. Nor do we suggest that tying is per se non-actionable under § 2, just that TPS has not made that argument. *See Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law*, ¶ 1758 (2022) (“Both sections of the Sherman Act [§§ 1 and 2] might also be implicated if the defendant inflates the price of the tying product in which it has a dominant market position, and then uses a bundled discount to moderate the overall price to at least some customers.”).

2. JM's counterarguments do not convince us that summary judgment is appropriate.

We reject JM's counterarguments because none of them refute that TPS has raised a genuine issue of material fact on whether JM's threats were exclusionary.

JM contends that we should use an exclusive-dealing framework to evaluate the effect of its threats and that, under that framework, TPS couldn't prevail. But even if we adopted an exclusive-dealing framework, many of the exclusive-dealing cases relied on by JM *support* our ruling that JM's conduct was exclusionary. *Dentsply* is instructive. There, an entrenched monopolist manufacturer (Dentsply) owned 75 to 80% of the artificial-teeth-manufacturing market. *Dentsply*, 399 F.3d at 184. Artificial-teeth dealers bought from Dentsply and several other manufacturers and sold to dental laboratories. *Id.* at 184–85. For 15 years, Dentsply enforced a policy that dealers “may not add further tooth lines to their product offering” from competing manufacturers. *Id.* at 185. Unsurprisingly, several dealers dropped competing product lines because they could not survive without access to the dominant manufacturer in the market. *See id.* at 194.

Reviewing the district court's bench-trial ruling for Dentsply, the Third Circuit ruled that the district court should have granted the government's proposed injunction against Dentsply. *Id.* at 184, 197. It based that ruling on “the nature of the relevant market and the established effectiveness of the

restraint despite the lack of long term contracts between the manufacturer and its dealers.” *Id.* at 184. Indeed, in concluding that Dentsply’s policy was anticompetitive, the Third Circuit analyzed the policy’s efficacy, noting that “[a]n . . . anti-competitive effect is seen in the exclusionary practice here that limits the choices of products open to dental laboratories, the ultimate users.” *Id.* at 194. The Third Circuit also noted that the anticompetitive nature of the policy became apparent by analyzing the market structure. As it saw it, the policy hurt end customers because the dealers in the market were the only direct link to the dental laboratories. *See id.* at 191–93 (“The undeniable reality . . . is that dealers have a controlling degree of access to the laboratories.”).

We read *Dentsply* as finding a genuine issue of material fact supporting the exclusionary-conduct element based on the evidence of the monopolist’s threatening to withhold its products from distributors. As here with calsil, the artificial-teeth market was saturated with dealers that relied on the monopolist manufacturer to serve the dental laboratories. And as here, the threats flowing from Dentsply’s policy proved effective, as shown by Dentsply’s rivals’ paltry market shares and the dealers’ unwillingness to buy from Dentsply’s rivals. All to say *Dentsply* (and similar exclusive-dealing cases) support a holding that a monopolist engages in exclusionary conduct by threatening distributors in this way. *See In re EpiPen*, 44 F.4th at 996–97 (analyzing *Dentsply* and noting that “[c]oercion—although unnecessary to establish a successful exclusive dealing

case—will often be present in successful exclusive dealing cases because the presence of coercion in such cases casts doubt on the assumption that the exclusive deals are naturally procompetitive”).²⁰

In re EpiPen also supports our ruling that JM’s threats raise a genuine issue of material fact for the exclusionary-conduct element. That case involved two domestic epinephrine auto-injector sellers—Mylan, which exclusively sold EpiPen in the United States from 2007 to 2012, and Sanofi, which challenged Mylan’s market hegemony in 2013 with its new Auvi-Q. *In re EpiPen*, 44 F.4th at 968–69. Citing Mylan’s exclusivity contracts for EpiPen with pharmacy benefit managers (PBMs), Sanofi sued Mylan under § 2 of the Sherman Act. *Id.* at 979, 982. Reviewing a grant of summary judgment, we affirmed the district court’s ruling that Mylan’s exclusive dealing with PBMs didn’t violate § 2, reasoning that Sanofi hadn’t raised genuine issues of material fact about whether Mylan’s conduct excluded Auvi-Q from the market. *Id.* at 1006. For support, we noted that Auvi-Q remained available as a covered drug to nearly 70% of the U.S. population,²¹ that Sanofi initially priced its Auvi-Q as a premium product, that the PBMs (not Mylan) “often instigated exclusivity to

²⁰ We recognize that the evidence of market exclusion in *Dentsply* was undoubtedly stronger than what TPS has thus far mustered. But *Dentsply* concerned rulings from a bench trial, which help explain the more developed record. So too here, we think triable issues persist as to whether JM’s threats worked a market exclusion.

²¹ And nothing stopped the remaining 30% of U.S. consumers from paying out of pocket for Auvi-Q. *Id.* at 988.

stimulate price competition,” and that PBM testimony revealed no coercive tactics from Mylan. *Id.* at 987–99.

Though an exclusive-dealing case, *In re EpiPen* still helps in reaching our outcome here. There, 70% of the U.S. population had access to Auvi-Q covered by insurance; here, the record shows little more than \$2.3 million in TPS-calsil sales over three years to less than 10 (of 31) distributors. There, Sanofi didn’t offer a better price for its Auvi-Q; here, the record shows that TPS offered a better price for a higher-quality product.²² There, the PBMs initiated the exclusivity agreements to induce price competition; here, the record shows that the monopolist JM pressured its distributors into practical market exclusion to slow TPS’s growth. And there, Mylan didn’t coerce the PBMs into exclusivity; here, the record reveals evidence of JM’s threatening emails and TPS’s meager market share.

JM next counters that “TPS presented *no* evidence that any distributor stopped purchasing TPS calsil due to any actual or implied threat or disparaging remark by Johns Manville.” But what matters is not whether JM succeeded in totally excluding TPS from the calsil market but whether JM’s actions substantially foreclosed TPS from the market and impeded TPS’s market growth. *See ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 283 (3d Cir. 2012) (“[J]ust as ‘total foreclosure’ is not required for an exclusive dealing

²² We note that Sanofi eventually recalled Auvi-Q for failing to inject epinephrine. *In re EpiPen*, 44 F.4th at 969.

arrangement to be unlawful, nor is complete exclusivity required with each customer.” (citation omitted)); *Dentsply*, 399 F.3d at 191 (“Under [§ 2] of the Sherman Act, it is not necessary that all competition be removed from the market.”). At this stage, the summary-judgment record (as well as common sense) tells us that when the sole domestic manufacturer of a product in a two-firm market threatens to withhold that product from distributors, distributors will be wary to engage with the monopolist’s competitor. *See United States v. Microsoft Corp.*, 253 F.3d 34, 77–78 (D.C. Cir. 2001) (finding an actionable § 2 claim when the defendant made threats and “internal documents and deposition testimony confirm[ed] both the anticompetitive effect and intent of its actions”). And that wariness harms distributors and end customers alike: with less distribution of TPS’s calsil, the supply chain had little choice but JM’s more expensive and inferior calsil.

On this point, we find persuasive the Eleventh Circuit’s decision in *McWane*. There, a reigning monopolist (McWane) imposed an exclusivity policy on its distributors, in which McWane clawed back lucrative rebates to distributors that bought from its rivals. *McWane*, 783 F.3d at 820–21. Several distributors (including the two largest in the market) stopped buying from one of McWane’s rivals, Star Pipe Products. *Id.* at 821. Despite these exclusionary tactics, Star was able to gain 10% market share in two years. *Id.* at 822. Rebuffing the argument that Star’s market share showed a lack of exclusion, the Eleventh Circuit relayed that “[t]he test is not total foreclosure, but whether

the challenged practices bar a substantial number of rivals or severely restrict the market's ambit." *Id.* at 838 (quoting *Dentsply*, 399 F.3d at 191). So it didn't matter that Star had acquired some market share "[g]iven the ample evidence in the record that [McWane's anticompetitive conduct] significantly contributed to key dealers freezing out Star." *Id.*

JM's other arguments are best left for trial. JM complains that "TPS took depositions of *only two* distributors," suggesting that TPS did not expect favorable testimony from other distributors. This is speculation. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986) ("Obviously, Rule 56 does not require the nonmoving party to depose her own witnesses."). Next, JM asserts that Hlavenka's and Guest's testimonies show innocent reasons for TPS's small market share. But they also show that JM used its authority as a monopolist to pressure distributors. At trial, JM can explain its conduct, and the jury can find facts and determine credibility. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986) ("Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge, whether he is ruling on a motion for summary judgment or for a directed verdict."). Finally, JM generally asserts that many emails relied on by TPS are hearsay. But it does not analyze the statements individually or try to rebut the district court's determination that hearsay exceptions might apply. *See Celotex*, 477 U.S. at 324 ("We do not mean that the nonmoving party *must*

produce evidence in a form that would be admissible at trial in order to avoid summary judgment.” (emphasis added)).²³

C. Antitrust Injury

Under Section 4 of the Clayton Act, “any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue therefor.” 15 U.S.C. § 15(a). “The primary concern of the antitrust laws is the corruption of the competitive process, not the success or failure of a particular firm” *Cohlma v. St. John Med. Ctr.*, 693 F.3d 1269, 1280 (10th Cir. 2012) (citation omitted). Indeed, as we’ve said, “[T]he antitrust injury requirement ensures that a plaintiff can recover only if the loss stems from a competition-*reducing* aspect or effect of the defendant’s behavior.” *Elliott Indus. Ltd. P’ship v. BP Am. Prod. Co.*, 407 F.3d 1091, 1124–25 (10th Cir. 2005) (citation omitted).

For the same reasons given above, TPS has presented a genuine issue of material fact about harm to competition. Its expert’s report reveals that JM maintained more than 97% of the market as of August 2021—more than three years after TPS’s market entry. And the report reveals that through August

²³ We do not rule whether any of the emails are admissible as non-hearsay or under hearsay exceptions. JM has presented us with no individualized hearsay analysis of these emails nor provided the district court with analysis of relevant hearsay exceptions (such as the business-records exception). And JM does not directly challenge the district court’s determination that hearsay exceptions could save these emails—which, in any event, we would review deferentially for abuse of discretion. See *Wright-Simmons v. City of Oklahoma City*, 155 F.3d 1264, 1268 (10th Cir. 1998).

2021, JM enjoyed much higher gross margins on domestic calsil than on its other products. *See Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, 762 F.3d 1114, 1129 (10th Cir. 2014) (finding a genuine issue of material fact when the plaintiff presented evidence of the defendant’s ability “to charge supracompetitive prices” and other competitors’ “insubstantial” market share); *McWane*, 783 F.3d at 838 (finding evidence of supracompetitive prices—that is, that “McWane’s prices and profit margins for domestic fittings were notably higher than prices for imported fittings, which faced greater competition”—as “powerful evidence of anticompetitive harm”).²⁴ And notably, JM expressed internally that its calsil “h[e]ld no competitive quality or price advantage” over TPS’s calsil and that TPS could significantly erode its market share. *See Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768, 790 (6th Cir. 2002) (finding competitive harm when evidence showed that a monopolist’s market share “dropped approximately 1 percent per year between 1979 and 1990” and “would have fallen much faster” in a competitive market). All to say, JM’s concentrated market position, supracompetitive prices, and several threats serve to raise a genuine issue of material fact about whether JM deprived the market of access to TPS’s less expensive, superior calsil.

* * *

²⁴ Supracompetitive prices are simply “prices above competitive levels” that monopolists often impose to reap higher profits. *Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1433–34 (9th Cir. 1995) (citing *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 225–26 (1993)).

We hold that TPS presented genuine issues of material fact on the elements of its § 2 monopolization claim. We reverse the district court’s contrary conclusion and remand.

II. Section 1 Tying

For its § 1 tying claim, TPS contends that the district court erred in dismissing this claim. It argues that it presented evidence that “JM conditioned customers’ access to its non-calsil products on their not buying TPS calsil” and that “JM derived sufficient economic power from its other insulation products to leave distributors no choice but to accept the condition to buy JM calsil.”²⁵ We conclude that TPS hasn’t raised a genuine issue of material fact about whether JM conditioned sales of its non-calsil products on distributors’ not buying calsil from TPS.

Section 1 of the Sherman Act prohibits unreasonable restraints on trade. 15 U.S.C. § 1. We have analyzed tying arrangements under this broad prohibition. *See Suture Express, Inc. v. Owens & Minor Distrib., Inc.*, 851 F.3d 1029, 1036–37 (10th Cir. 2017). A tying arrangement is “an agreement by a party to sell one product but only on the condition that the buyer also purchases

²⁵ We note that TPS’s tying claim has evolved. In its original complaint, TPS alleged that JM tied its fiberglass and expanded perlite products to purchases of calsil. It then amended the claim to allege that JM used its economic power in the fiberglass and perlite markets to force customers to exclusively buy JM calsil (thereby cutting off access to TPS calsil). Below, the district court analyzed whether “[JM] incentivized distributors to buy its calsil by tying it to their purchases of its other products.” *Chase Mfg.*, 601 F. Supp. 3d at 932.

a different (or tied) product, or at least agrees that he will not purchase that product from any other supplier.” *Eastman Kodak*, 504 U.S. at 461–62 (citation omitted). Tying arrangements include “instances of discount bundling—when a seller charges less for a package of two products linked together than the sum of the prices at which it sells each product individually.” *Suture Express*, 851 F.3d at 1037 (citations omitted). Indeed, “the crux of tying lies in the seller’s exploitation of its control over the tying product to force the buyer into the purchase of a tied product that the buyer . . . might have preferred to purchase elsewhere on different terms.” *It’s My Party, Inc. v. Live Nation, Inc.*, 811 F.3d 676, 684 (4th Cir. 2016) (citation and internal quotation marks omitted).

We have reasoned that tying arrangements “can be used for good or for ill,” noting for example that “buyers often find package sales attractive; a seller’s decision to offer such packages can merely be an attempt to compete effectively.” *Suture Express*, 851 F.3d at 1037 (cleaned up) (citation omitted). We allow plaintiffs to prove either per se tying or unreasonable tying under the rule of reason. *Id.* A per se tying claim requires proof that “(1) two separate products are involved; (2) the sale or agreement to sell one product is conditioned on the purchase of the other; (3) the seller has sufficient economic power in the tying product market to enable it to restrain trade in the tied product market; and (4) a ‘not insubstantial’ amount of interstate commerce in the tied product is affected.” *Id.* (citing *Sports Racing Servs.*, 131 F.3d at 886).

The rule of reason requires consideration of these factors alongside the “procompetitive justifications for the tying arrangement” and “the effects of that arrangement in both the tying and tied markets.” *Id.* (citation omitted).

With that, we turn to the evidence before the district court. TPS argues that two pieces of evidence show a genuine issue of material fact about whether JM unlawfully tied its products to distributors’ not buying TPS’s calsil: (1) JM’s threat to Hlavenka to shift business to another distributor in the Houston market, and (2) JM’s altered rebate agreements. For several reasons, neither piece of evidence bears fruit under either a per se or rule-of-reason analysis.

A. Tying-Product Market Power

We start with a deficiency in TPS’s tying claim: it has not shown a genuine issue of material fact about whether JM had market power over its tying products. “[I]n all cases involving a tying arrangement, the plaintiff must prove that the defendant has market power in the tying product.” *Suture Express*, 851 F.3d at 1038–39 (quoting *Ill. Tool Works, Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 46 (2006)). It can do so by “show[ing] evidence of either power to control prices or the power to exclude competition.” *Id.* at 1039 (citation omitted); *see also N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 11 (1958) (reasoning that § 1 of the Sherman Act requires proof of “sufficient economic power to impose an appreciable restraint on free competition in the tied product”). This evidence is “important because if the defendant has substantial

power in the tying market, then the tie has the potential of injuring competition by forcing consumers to take the tied product just to get the tying one.” *Suture Express*, 851 F.3d at 1039 (citation omitted).²⁶

TPS hasn’t shown a genuine issue of material fact about whether JM had sufficient economic power over the tying-product market. For one, it has not identified with precision what the tying product is. *See id.* at 1037 (“A tie-in exists when a seller conditions its sale of a product (the ‘tying’ product) on the purchase of a second product (the ‘tied’ product).” (citation omitted)); *Sports Racing Servs.*, 131 F.3d at 879, 886–87 (defining tying product as “a racer’s purchase of [a defendant’s] racing services,” in turn defined as “the ability to compete in [defendant]-sanctioned . . . races”). TPS’s opening brief is telling, referring to the alleged tying product as “non-calsil products,” “other insulation products,” “JM’s must-have non-calsil products,” and “other products.” Opening Br. 40–45. Without a sufficiently identified tying product, we cannot assess if JM had market power over it—much less whether any anticompetitive conduct arose. *See Midwest Commc’ns, Inc. v. Minn. Twins, Inc.*, 779 F.2d 444, 454 (8th Cir. 1985) (reasoning that “failure to identify the tying product” meant that “the jury could [not] have rationally assessed [the defendants’] economic

²⁶ We echo our observation in *Suture Express* that we have not resolved whether this market-power analysis applies under the rule of reason. 851 F.3d at 1039–40. We need not resolve that issue here though because, as in *Suture Express*, both parties agree that market power is an element of TPS’s tying claim.

power in the tying product or the anticompetitive effect, if any, of the alleged unlawful tying arrangement in the market for the tied product”); *cf. Mountain View Pharmacy v. Abbott Lab’ys*, 630 F.2d 1383, 1387–88 (10th Cir. 1980) (“[A] complaint alleging tying violations of the antitrust laws should at least provide defendants with some notice as to which products are being tied.”).

Nor has TPS raised a genuine issue of material fact even if we assumed all JM’s non-calsil products were tying products. TPS hasn’t pointed to any evidence showing that JM “control[led] prices” or had “the power to exclude competition” in the markets for its non-calsil products. *Suture Express*, 851 F.3d at 1039. It instead relies on general evidence purporting to show that distributors needed JM’s non-calsil products, for instance noting that Distribution International “doubted its ability to obtain adequate supply of some [non-calsil] products from alternate suppliers.” So, TPS concludes, “JM’s economic power over its line of products is sufficient to compel customers to make calsil purchasing decisions that are only rational because they preserve access to JM’s must-have non-calsil products.”

In our view, this inference is a bridge too far for a § 1 tying claim. The thrust of an unlawful tying claim is leveraging *control* over a tying-product market to force a customer to buy another product it likely wouldn’t have bought. *Suture Express*, 851 F.3d at 1039. This hurdle is “moderately high”: “it means *significant* market power—more than the mere ability to raise price only slightly, or only on occasion, or only to a few of a seller’s many customers.”

Grappone, Inc. v. Subaru of New Eng., 858 F.2d 792, 796 (1st Cir. 1988).

Without some evidence that JM controlled the market for its non-calsil products, we can't reasonably infer that JM could have used its non-calsil products to force its distributors to exclusively buy its calsil. That's especially so because JM had markedly lower gross margins for its non-calsil products, which Dr. Warren-Boulton described as "sold in relatively competitive markets." And indeed, Dr. Warren-Boulton also found that many distributors purchased little or no non-calsil products from JM.

B. JM's Threat to Distribution International

TPS has also not raised a genuine issue of material fact about whether JM maintained an unlawful tying arrangement. It first points to Hlavenka's testimony that JM threatened to shift its Houston-based business from Distribution International to General Insulation.²⁷ But that testimony doesn't even reference JM's non-calsil products, much less tell us JM explicitly tied its non-calsil business with Distribution International to the distributor's not buying TPS calsil:

Q: Did Johns Manville . . . offer any improved terms or anything to . . . secure more of your business in response to your decision to do some work with TPS?

A: . . . Hal [Shapiro] had mentioned to me . . . that we don't sell General; but if somebody were to start stocking TPS, we may

²⁷ Though this testimony helps support TPS's § 2 claim, it does not support its § 1 tying claim. *Anderson*, 477 U.S. at 248 ("Only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment.").

have to relook at setting up General, because we would lose share in the Gulf Coast.

Nothing in Hlavenka’s testimony mentions the sale of specific products in the Houston market or otherwise. *See Eastman Kodak*, 504 U.S. at 462 (“[T]o defeat a motion for summary judgement on [a] claim of a tying arrangement, a reasonable trier of fact must be able to find . . . that [the defendant] has tied the sale of the two products.”).

We also note that other portions of Hlavenka’s testimony undermine TPS’s position that JM allegedly tied its non-calsil products to the purchase of JM calsil or the non-purchase of TPS calsil. For instance, Hlavenka testified:

Q: Johns Manville has never threatened to not sell perlite to [Distribution International], has it?

A: No.

. . . .

Q: Did Johns Manville ever threaten [Distribution International] to not sell fiberglass pipe insulation to it?

A: No, it never did.

And 4-State purchased no fiberglass and few other non-calsil products from JM. TPS has not shown a genuine issue of material fact of JM’s tying arrangement through its threats. *See Systemcare, Inc. v. Wang Lab’ys Corp.*, 117 F.3d 1137, 1144 (10th Cir. 1997) (noting that tying arrangements exist when the buyer “is coerced into purchasing the tied product from the producer because of the producer’s market power in the tying product”).

C. The Rebate Agreements

Nor do the rebate agreements save TPS's tying claim.²⁸ Nothing in the rebate agreements conditions sales of JM's calsil on distributors' not buying TPS's calsil. None of the rebate agreements contain exclusivity provisions. Instead, the rebate agreements provide discounts for bulk purchases of JM's products. These discounts do not *condition* the sale of calsil on non-calsil products or *coerce* the distributors to buy non-calsil products. *Areeda & Hovenkamp, supra*, ¶ 1759 ("Simply offering two products together without actually forcing the buyer to take both is not a tie.").

In fact, distributors could receive rebate discounts by buying JM's non-calsil and nothing else. Consider Distribution International's rebate agreement, which provides, "Purchases of Calcium Silicate & Perlite will receive an additional 1.0% rebate, back to dollar one if the combined total purchases of these products exceeds \$18,666,600." So Distribution International could reap the rebate by buying, say, \$19 million in perlite and nothing else. *See Ungar v. Dunkin' Donuts of Am., Inc.*, 531 F.2d 1211, 1226 (3d Cir. 1976) ("It is only when the buyer's freedom to choose a given product is restricted that the tying doctrine comes into play: so long as 'the buyer is free to take either product by

²⁸ We note that the parties have provided only redacted copies of the rebate agreements, which has impeded our analysis. Some of these redactions (including those in Bay Insulation's revised agreement) cover material terms, such as the rebate volumes and dollar amounts.

itself there is no tying problem.” (quoting *N. Pac. Ry.*, 356 U.S. at 6 n.4)).²⁹ And, in any event, TPS does not tell us how a bundled discount like this is anticompetitive or harmful to competition. See *In re EpiPen*, 44 F.4th at 997–98 (noting that “penalties or supply shortages” could be relevant evidence of market effects from anticompetitive discount contracts). To be sure, it points us to no legal authority saying so nor makes a rule-of-reason argument.

We hold that TPS has not shown a genuine issue of material fact to save its tying claim.

CONCLUSION

TPS has presented enough evidence to support its § 2 monopolization claim: its expert has shown monopoly power and antitrust injury and JM’s threats show exclusionary conduct. TPS hasn’t presented enough evidence to support its § 1 tying claim. We thus affirm the district court’s grant of summary judgment to JM on TPS’s § 1 tying claim. But we reverse on TPS’s § 2 monopolization claim and remand for further proceedings.³⁰

²⁹ We note that Dr. Warren-Boulton has not analyzed JM’s costs to show whether “the discount has the effect of disabling a hypothetical equally efficient rival who sells only one of the two products from competing with the bundled price.” *Areeda & Hovenkamp*, *supra*, ¶ 1758.

³⁰ We provisionally allowed the parties to file their briefs and the record under seal. The parties have since moved to seal portions of the record and of the appellate briefing. To the extent this opinion cites sealed portions of the briefs and record, those portions are unsealed. We grant the remainder of the parties’ motions to seal.