DCI WORKING PAPER

WP#11 October 2025

Monopoly Maintenance Law: Underdeveloped and Misdirected

NICOLAS PETIT

EUI DEPARTMENT OF LAW
BerkeleyHaas

Abstract

Current application of US antitrust law is at odds with common sense. The US v Google LLC decision provides a prime example. Apple extracts billions of dollars annually from Google, yet antitrust agencies and courts identify Google as the monopolist. The reason for this error lies in the underdeveloped state of the monopoly maintenance doctrine. Following Microsoft, the law allows plaintiffs to charge dominant firms with violations of Section 2 of the Sherman Act for conduct responsive to monopoly power exploitation by a trading partner. Section 2 of the law thus supports liability findings against dominant firms that pay exorbitant prices to a monopolist based on the argument that they get a competitive advantage in return. To address this flaw, a market power utilization requirement must be rehabilitated to prevent antitrust law from being systematically misdirected against the wrong firms.

Keywords

Monopoly Maintenance; Section 2 Sherman Act; Antitrust Law; Market Power Utilization; Exclusive Dealing; Digital Economy; Coercion

Nicolas Petit

Nicolas Petit is Professor of Law at the European University Institute, a Visiting Professor at Antonin Scalia Law School at George Mason University and a Senior Fellow at UC Berkeley.
The author is grateful to Prince Amadi for editorial assistance.

Introduction

It is not the first time in history that the application of Section 2 of the Sherman Act is illogical. In the past, monopolization cases have fallen into the "*paradox*" of punishing efficient business conduct.[1] Today, however, the issue is less one of paradox and more of a misdirect. Recent monopoly maintenance cases involve charges against firms for paying onerous prices to other firms that are conspicuously, and arguably analytically, as much of a monopolist as they are. In *US v. Google LLC* (hereafter *US v. Google*), the District Court for the DC Circuit condemned a distribution agreement under which Google pays tens of billions of dollars annually to Apple in exchange for exclusivity.[2]

The misdirect is fundamental. A monopolist sells something that rivals cannot replicate, and that buyers demand. A monopolist, therefore, should not demand exclusivity, let alone pay for it. A monopolist, by contrast, supplies exclusivity and charges for it.

The misdirect is particularly apt to present itself when two dominant firms take part in a value exchange. The issue will arise in the digital economy. Due to the pervasive nature of network effects, cases against a dominant defendant will also often involve dominant trading partners. Equally, it is likely that these cases will be brought as monopoly maintenance claims. In the digital economy, most platforms have achieved monopoly through unobjectionable means from an antitrust standpoint.[3] As platforms age, however, there is a risk that they mobilize their monopoly power in anticompetitive ways, hence a possible use case for monopoly maintenance doctrine. In these circumstances, it is important and not a given that the defendant selected by the plaintiffs is the one harming the other.

Cases like *US v. Google* exist because they overlook the market power utilization requirement that monopoly power needs to be used to exclude rivals. This paper is thus concerned with a key question: Can a monopoly be unlawfully maintained by exclusionary practices that do not entail the utilization of market power? The answer under the current doctrine is yes. This paper, however, argues that the answer should be no. *US v. Google* highlights this flaw. The Court fixated on the exclusivity in the agreements, overlooking the fact that the transaction was a value exchange. Arguably, the court was swayed by a quote from a Google executive, "*we are not getting anything*" without exclusivity, while missing a preceding quote in the same document stating, "*this contract is an exchange*".[4]

To review these questions, this paper is organized as follows. Section 1 describes the emergence and arrested development of monopoly maintenance doctrine. Section 2 uses the *US v. Google* case as a concrete example to illustrate a central puzzle: the infirmities of monopoly maintenance doctrine drive courts to confuse the price setter and the price taker in a value exchange between two large firms. Section 3 proposes the addition of a "*market power utilization*" test in monopoly maintenance cases to rationalize Section 2 doctrine and prevent misdirected antitrust remedies.

---

[1] Robert H. Bork, *The Antitrust Paradox: A Policy at War with Itself* (Basic Books 1978).
[2] *United States v. Google LLC*, No. 1:20-cv-3010 (D.D.C. 2025).
[3] Note, however, the FTC challenge against Meta's acquisition of a monopoly through the purchase of WhatsApp and Instagram. See *FTC v. Facebook, Inc. (Facebook II),* 581 F. Supp. 3d 34, 40 (D.D.C. 2022).
[4] *United States v Google LLC, supra p. 212*.

1. The Scattered and Unfinished Development of Monopoly Maintenance Doctrine

The judicial concept of monopoly maintenance is old. But the cases have been sporadic (A), and their jurisprudential contribution Delphic (B).

A. Emergence of Monopoly Maintenance as a Special Category of Section 2 Offence

The first cases of monopoly maintenance were not treated as a special category of offense.[5] The *Alcoa* case of 1945 did not speak expressly of monopoly maintenance.[6] Yet, the facts involved a monopoly maintenance scenario, namely, whether the lawful monopoly in production of virgin ingot "*thrust upon*" *Alcoa* by two patents until 1909 had been "*continued for the ensuing 28 years*" through unlawful practices.[7]

Similarly, in the *Griffith* case of 1947, the Court held that a single cinema theater acquisition of exclusive exhibition rights over a movie will "*usually … not violate § 2 of the Sherman Act unless he has acquired or maintained his strategic position*".[8] But the Court envisaged the rest of the case as one of monopoly acquisition.[9]

A reference to monopoly maintenance appears in the *Grinnell* case of 1966.[10] Almost in passing, the Court considered that the second element of the offense covered two scenarios:

> The offense of monopoly under § 2 of the Sherman Act has two elements: (1) the possession of monopoly power in the relevant market and (2) the wilful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product. business acumen, or historic accident.

The Court considered the case under an acquisition of monopoly angle.[11]

---

[5] The focus here is on Section 2. Note that in the *Standard Oil* case of 1949, the Court also made reference to the maintenance of a dominant position in Section 3 of the Clayton Act.

[6] *United States v. Aluminum Co. of Am.,* 148 F.2d 416 (2d Cir. 1945).

[7] Some practices that had "*perpetuated*" the monopoly between 1909 and 1912 were declared unlawful and forbidden by a decree of 1912. In a previous Section 1 case against US Steel, the word maintain appears in the dissent of Justice Day: "*[the corporation] is entitled to maintain its size and the power that legitimately goes with it, provided no law has been transgressed in obtaining it*". See *United States v. United States Steel Corp.,* 251 U.S. 417 (1920).

[8] *United States v. Griffith*, 334 U.S. 100, 68 S. Ct. 941, 92 L. Ed. 1236 (1948).

[9] *Standard Oil Co. v. United States*, 337 U.S. 293 (1949) ("*the stronger the inference that an important factor in attaining and maintaining that position has been the use of requirements contracts to stifle competition rather than to serve legitimate economic needs; "the figures show that as a group they have maintained or improved their control, of the market*").

[10] *United States v. Grinnell Corp.*, 384 U.S. 563 (1966). The facts do not matter much. The initial statement of law governing the offense of monopoly under Section 2 does. The case is essentially known for its "*elucidation*" of the "*sweeping*" language of Section 2. *LePage's Inc. v. 3M,* 324 F.3d 141 (3d Cir. 2003) ("*Because this section is in sweeping language, suggesting the breadth of its coverage, we look to the Supreme Court decisions for elucidation of the standard*").

[11] The opinion does not elaborate on whether a specific legal standard is associated with a scenario of willful maintenance of monopoly power. The sole fact possibly related to a monopoly maintenance scenario is that the defendants had been exposed to an outbreak of competition in 1907 when some restrictive agreements ended. The defendants regained control of the market through unlawful means.

In his dissent in *Otter Tail* of 1973, Justice Stewart characterized the majority opinion as a showing of "*Otter Tail's maintenance of monopoly control by hindering the emergence of municipal power companies*".[12] Less explicitly, the Court had considered that the defendant instituted litigation against competing electricity suppliers with the expectation that this would "*preserve its predominant position*".[13]

The first clear treatment of monopoly maintenance as a special offense appears in the 1979 decision of the Court of Appeals in *Berkey Photo*.[14] The case is known as the authority on the possibility of challenging a dominant firm's new product introduction as a violation of Section 2. The facts focused on the incumbent monopolist Kodak's release of demonstrably inferior film and photo camera products. Kodak had not informed competing camera manufacturers about the new film format that would have allowed them to enter. With lead time in films, Kodak pre-empted the market for the next iteration of photo cameras.

Here, the facts do not matter as much as the statement of law. The Court of Appeals decision brings a substantial contribution to the monopoly maintenance doctrine. The Court recognizes expressly the acquisition or maintenance dichotomy by stating that under Section 2, *"[the] doctrine has two branches. Unlawfully acquired power remains anathema even when kept dormant. And it is no less true that a firm with a legitimately achieved monopoly may not wield the resulting power to tighten its hold on the market*."

The second branch concerns the scenario of "*achieved dominance*". The Court says somewhat cryptically that the firm in such "*a market might find its control sufficient to preserve*". In that case, antitrust law will reach the "*variety of techniques*" that a complacent monopolist deploys to keep its share of the market. If there were any doubt, the *Berkey Photo* court seeks to clarify that monopoly, once achieved lawfully, is not beyond the reach of Section 2. The principle that antitrust law does not prohibit the possession of monopoly power does not immunize dominant firms to legal challenges against "*anticompetitive actions serving to maintain*" their market share. [15]

The following years do not add much to the development of monopoly maintenance doctrine.[16] A dissent of Justice Scalia in the 1992 *Kodak* case contains a reference to the idea that monopoly maintenance claims will often involve ordinary business conduct.[17]

---

[12] *Id*.
[13] *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973).
[14] *Berkey Photo, Inc. v. Eastman Kodak Co.,* 603 F.2d 263 (2d Cir. 1979).
[15] *Berkey Photo, Inc. v. Eastman Kodak Co.*, 457 F. Supp. 404 (S.D.N.Y. 1978). The District Court held that the "*antitrust laws do not permit wilful maintenance of monopoly power by conduct that might for a company without such power be deemed* "honestly industrial"*"*. In its decision, the District Court had singled out as problematic the "*ample evidence of anticompetitive actions serving to maintain the steadily huge share Kodak enjoyed of the film market*". The court also talked of the "*film monopoly itself unlawfully maintained*".
[16] Reflecting the more general trend of limited enforcement of Section 2 that characterized the period.
[17] *Eastman Kodak Co. v. Image Technical Servs., Inc.,* 504 U.S. 451 (1992), Scalia dissent. The dissent hinted that "*Where a defendant maintains substantial market power, his activities are examined through a special lens: Behavior that might otherwise not be of concern to the antitrust laws—or that might even be viewed as procompetitive-can take on exclusionary connotations when practiced by a monopolist*". In other words, the monopoly share maintained by the defendants acts as a filter that taints trivial business behavior with a veneer of illegality.

The *Microsoft* case of 2000 marks a next step in the development of monopoly maintenance doctrine.[18] Even though the case did not reach the Supreme Court, Justice Jackson's findings – confirmed on appeal –[19] contain a few dicta on monopoly maintenance. The Government case centred on practices deployed by Microsoft – principally contracts with exclusivity provisions – to counter the threat that middleware represented for its "*coveted monopoly power in the market for Intel-compatible PC operating systems*".[20] In line with the idea initiated in *Berkey Photo*, and repeated by Justice Scalia in *Kodak*, Justice Jackson considered that Microsoft's conduct ought to be reviewed under a "*specific analytical approach*". The opinion thus proceeded to treat the Government's Section 2 claims in a full Section on "*maintenance of monopoly power by anticompetitive means*".[21]

The conclusions of law are, however, relatively terse about what is specific in the monopoly maintenance case. Their main contribution is clear language whereby maintenance means to "*preserve*", or to "*perpetuate*" a monopoly, as opposed to create, and perhaps extend a monopoly.[22] The rest of the opinion is a mixed bag. The legal standard of a monopoly maintenance claim is stated in a somewhat vague way:

> The threshold question in this analysis is whether the defendant's conduct is "exclusionary" – that is, whether it has restricted significantly, or threatens to restrict significantly, the ability of other firms to compete in the relevant market on the merits of what they offer customers.[23]

Perhaps more clearly, the Court further adds that the evidence must show "*significant exclusionary impact*", for conduct to be deemed "*anticompetitive*".[24]

In the following years, a few Districts and Appellate Courts' decisions add marginal contributions to the monopoly maintenance doctrine. In the *Conwood* case of 2002, the Court of Appeals for the 6th Circuit acknowledged the existence of a specific "*willful-maintenance-of-monopoly power prong*".[25] The legal analysis deployed by the Court, however, gives little support to the idea that the legal standard actually differed under a monopoly maintenance prong.

The following year, *3M v LePage* presented another opportunity for a Court of Appeals to consider monopoly maintenance claims.[26] The case has a convoluted procedural history, but the facts are straightforward. 3M, a dominant supplier of transparent scotch tape, had started

---

[18] *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30 (D.D.C. 2000).
[19] *U.S. v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).
[20] As is well known, Microsoft was criticized for what has been termed the "*applications barrier to entry*". The Court held: "*In pursuit of this goal, Microsoft sought to convince developers to concentrate on Windows-specific APIs and ignore interfaces exposed by the two incarnations of middleware that posed the greatest threat, namely, Netscape's Navigator Web browser and Sun's implementation of the Java technology*".
[21] *Id.*
[22] *Id.* The Court of Appeal's opinion talks of "*preserving its monopoly*".
[23] *Id*.
[24] *Id*.
[25] 290 F.3d 768 (6th Cir. 2002). In this case, the dominant United States Tobacco Sales and Marketing Company had used its power as a category manager to destroy rival Conwood's racks and point of sale materials and reduce the number of Conwood facings through exclusive agreements with and misrepresentations to retailers. These facts were held exclusionary conduct without a sufficient justification, and the Courts considered that USTC had maintained its monopoly power by engaging in such conduct.
[26] *LePage's Inc. v. 3M*, 324 F.3d 141 (3d Cir. 2003).

a second brand of private label tape, seeking to take control of it through bundled rebates, and then "*kill it*". Documents attested that 3M executives did not want their private label product to succeed. The Third Circuit also found ample evidence of exclusionary conduct and appeared to hint that evidence of price increases following the rebates could denote successful monopoly maintenance. Again, by using direct price evidence and intent as possible proof methods, *3M v LePage* appears to align the legal standard for monopoly maintenance claims with the legal standard for acquisition of monopoly ones. Perhaps, the main contribution of the case is to show that extension of monopoly in a secondary market constitutes "*precisely what "§ 2 of the Sherman Act prohibits by covering conduct that maintains a monopoly. Maintaining a monopoly is not the type of valid business reason that will excuse exclusionary conduct*".[27]

In *US v. Denstply* from 2005, the Department of Justice's appeal invited the Court to treat monopoly maintenance charges as a stand-alone category of violation of Section 2, hinting at specific "*legal standards*".[28] Here, a dominant manufacturer of artificial tooth had banned its dental product dealers from selling competing tooth lines. The case is interesting because it prompted the Court of Appeals to perform a *de novo* review of the lower courts' conclusions of law. With that context in mind, the Third Circuit's synthetic description of the legal standard in monopoly maintenance claims takes significance, all the more given the somewhat empty statements embodied in prior opinions.

According to the Court, the conventional proof triplet of monopolization law applies. The analytical focus is on the existence of monopoly power, anticompetitive effects, and the absence of business justification. But the Court warns that the superposition of predatory or exclusionary practices on a base of monopoly power will be insufficient to carry a finding of Section 2 violation. The conduct must appear to bring "*a significant contribution to maintaining monopoly power*". Harm to competitors does not allow an inference of harm to competition. A higher threshold must be met to find widespread business practices like exclusive dealing arrangements to be *"an improper means of maintaining a monopoly*".

After *Dentsply*, the case law on monopoly maintenance under Section 2 recedes. One case, *McWane v. FTC,* features a monopoly maintenance scenario.[29] In response to a new entrant, *McWane,* a dominant supplier of domestic pipe fittings, had threatened its dealers to remove rebates and cut off supplies for 3 months unless they bought all their requirements from it. The decision, rendered under Section 5 of the FTC Act, says nothing new beyond recalling the requirement bearing on the government to show that anticompetitive conduct "*reasonably appears to significantly contribute to maintaining monopoly power*".[30]

[27] *Id*. This paragraph also restates the *Berkey Photo* idea that maintaining a monopoly is not a business justification, it is an antitrust violation.
[28] See Final Brief of the US Government in *United States v. Dentsply*, *supra* ("*Dentsply misstates the legal standards governing monopoly maintenance under Section 2 of the Sherman Act*").
[29] *McWane, Inc. v. FTC*, No. 14-11363 (11th Cir. 2015).
[30] *Id*.

B. Incompleteness of Monopoly Maintenance Doctrine in relation to Legal Standards, Precedential Authority, and Economic Logic

As just seen, the monopoly maintenance doctrine was mostly developed in a few Courts of Appeal decisions from the early 2000s. The stock of available opinions stays silent on important legal (1;2) and economic (3) questions.

1. Legal Standard

There is no comprehensive Supreme Court treatment of the monopoly maintenance doctrine. True, some cases exist. But to paraphrase the 11th Circuit in *McWane v. FTC*, the Supreme Court has not provided "*a clear formula with which to evaluate a monopoly maintenance claim*".[31]

What we know about monopoly maintenance is this. First, the case-law applies a three-step structured "*rule of reason*" in monopoly maintenance cases that is virtually like claims of unlawful acquisition of monopoly.

Second, monopoly maintenance claims cover both protection and extension of monopoly.[32] To be more precise, monopoly maintenance concerns not just protection of existing monopoly in market A. Monopoly maintenance claims also reach defensive extension in market B. *3M v. Lepage* shows that the foreclosure of competition in market B is an act of unlawful monopoly maintenance because it protects market A. This is confirmed by *Berkey Photo,* where the District Court and the Court of Appeals treated the usage of monopoly power in film as a lever into other markets, like photofinishing, as a distinct analytical claim.

By contrast, antitrust jurisprudence does not give guidance on what a dominant firm can do to lawfully defend its monopoly. Cases of monopoly maintenance cover ordinary business activities like exclusive deals, rebates, or product introductions. The cases draw the line between lawful and unlawful conduct on the facts specific to each case. True, the Courts have occasionally added language that hints at what is the test of "*abuse*".[33] *Dentsply* says that the law "*does not permit maintenance of … monopoly by unfair practices*".[34] *Microsoft* suggests that the test is whether the dominant firm's conduct undermines "*the ability of other firms to compete in the relevant market on the merits of what they offer customers*". Finally, and perhaps more usefully, both *Dentsply* and *McWane v. FTC* suggest an economic analysis of whether the conduct "*significantly contribute to maintaining monopoly power*". The usual test to address that question consists in figuring out how much monopoly power would stay if the dominant firm revoked the practice. That test, however, was not deployed in *Dentsply* and *McWane v. FTC*. It is thus hard to know whether our conjecture is correct.

The truth is the law of monopoly maintenance vegetates in a state of deep underdevelopment. The situation is problematic. If we take seriously the case-law which consistently considers monopoly maintenance claims as a special category, then we must necessarily presume that

[31] *Id*.
[32] Said differently, the monopoly maintenance doctrine concerns itself with direct protection of monopoly and indirect protection by extension.
[33] *United States v. Swift & Co.*, 286 U.S. 106 (1932) ("*size carries with it the opportunity for abuse*").
[34] *United States v. Dentsply Int'l, Inc.,* 399 F.3d 181 (3d Cir. 2005).

there is a legal difference between the analysis of a claim of monopoly acquisition and maintenance.

The issue, put differently, is this: it cannot be that claims of monopoly acquisition and maintenance are legally analyzed the same. Otherwise, the Courts would not need to discuss Section 2 cases in monopoly maintenance terms. They would treat all cases under a generic concept of monopolization. Or they would use the statutory dichotomy and consider cases of (i) monopoly protection as "*monopolization*" of a temporarily challenged or lost dominant position and (ii) monopoly extension as "*attempts to monopolize*" other markets. There would be no need for monopoly maintenance as a special category.

But this is not what agencies and courts do. In *Dentsply*, the Government complaint stated that there is a "*critical distinction in Section 2 law between the conduct of existing monopolists (monopoly maintenance) and of firms that seek to become monopolists (acquisition of monopoly power or attempted monopolization*".[35] The Court of Appeals did not challenge that point. It may even have pushed it further, suggesting that a presumption of legality applied in the acquisition of monopoly cases, and fell in monopoly maintenance cases.[36]

The bottom line is that the law on monopoly maintenance has gaping holes. The Courts would be well advised to develop a monopoly maintenance doctrine in a manner that differs from the law applicable to the acquisition of monopoly claims.

2.Precedential Weakness

Monopoly maintenance doctrine is not just underdeveloped. It stands on precarious precedential grounds and is at risk of being overturned. There are no more than a dozen cases in the books. Many are Court of Appeals decisions. Only a fraction of them concerns Section 2 of the Sherman Act. In Section 2, cases like *Otter Tail,* where the facts before the Supreme Court involved clear acts of monopoly maintenance, the Court did not pick up on the *Grinnell* dichotomy.

To be fair, *Microsoft* is often singled out as a key authority on monopoly maintenance. Justice Jackson himself wrote confidently that "*Prior cases have established an analytical approach to determining whether challenged conduct should be deemed anticompetitive in the context of a monopoly maintenance claim*". But *Microsoft*'s conclusions of law were not reviewed by the Supreme Court. And unlike the *Alcoa* case, *Microsoft* is not sanctified by a statute that deems the decision "*final and conclusive*" likening it to a Supreme Court opinion.[37]

Then there is a more serious issue with *Microsoft*. Its statements on the law of monopoly maintenance are based on an incorrect understanding of precedent. For example, the

---

[35] *Id*.
[36] *United States v. Dentsply*, *supra* ("*While we may assume that Dentsply won its preeminent position by fair competition, that fact does not permit maintenance of its monopoly by unfair practices*").
[37] *LePage v. 3M*, *supra* ("*The modern era begins with the decision by Judge Learned Hand in United States v. Aluminium Co. of America, 148 F.2d416 (2d Cir.1945) ("Alcoa"). Because four members of the Supreme Court were disqualified, the Supreme Court was required to apply the provision of the Expediting Act, Section 29 of Title 15, U.S.C., 1940 ed., currently 28 U.S.C. § 2109, to certify the case to the three most senior judges of the relevant circuit.[6] Under the statute, the decision of that court was "final and conclusive," thus equating it to a decision of the Supreme Court*").

statement whereby the test consists in assessing "*the ability of other firms to compete in the relevant market on the merits of what they offer customers*" quotes Justice Scalia's dissent in *Kodak,* which is *not* a monopoly maintenance case. In other considerations about monopoly maintenance doctrine, Justice Jackson cites *Aspen Skiing*, which is also *not* a monopoly maintenance case.
Considering these defects, *Microsoft* cannot provide much precedential support to courts seeking to apply monopoly maintenance law. The best authority to date must be *Dentsply*, another Court of Appeals case not endorsed by the Supreme Court.

3. Economic Logic

Economic logic demands the development of distinct legal tests for monopoly acquisition and maintenance cases.

First, in a monopoly maintenance case, a monopoly position must be antecedent to the element of conduct. By contrast, in a monopoly acquisition case, the monopoly position must be subsequent to the element of conduct. The distinction matters. In a monopoly maintenance case, the antecedent monopoly position will always be verifiable by empirical observation. By contrast, in a monopoly acquisition case, the subsequent monopoly position may not be completed and may have to be established by theoretical prediction. Economic proof will be harder in the monopoly acquisition case. Courts and agencies may decide to ease burdens in such cases depending on their preference towards type 1 and type 2 errors.

Second, in a monopoly maintenance case, there must be an economic force that decreases or destroys monopoly power in the absence of criticized conduct. This implies that entry or expansion barriers around the dominant firm are weakening. In a monopoly acquisition case, by contrast, no such force exists. Instead, entry and expansion barriers rise coincidentally and causally as a result of the conduct. The hard question consists in disentangling the extent to which the criticized conduct contributes to raising these barriers and proving that its impact is substantial.

Last, in a monopoly maintenance case, the firm whose monopoly power is threatened enjoys substantial control over market output. Put differently, the dominant firm can influence the output of rivals. A successful claim of monopoly maintenance must therefore adduce evidence that this power over output is used to counteract the weakening of entry and expansion barriers. In contrast, in the monopoly acquisition case, the firm under review – at least initially – lacks power over output. Early business strategies deployed to gain a monopoly will therefore not possibly involve restrictions of rival output. More generally, monopoly acquisition cases will encompass a wider range of business practices that do not always involve the exercise of monopoly power.

C. Resurgence of Monopoly Maintenance Cases in the Digital Economy

1. Network Effects and the Economic Structure of Section 2 Litigation

In a digital economy powered by network effects, the population of dominant firms may grow. More Section 2 cases should be expected. However, network effects – essentially cost and utility benefits – make it challenging to suspect or presume that an anticompetitive mechanism supports the emergence of dominant positions. Moreover, the demonstration of the respective contribution of anticompetitive practices and network effects to monopolization will be costly and difficult to establish.

These factors – coupled with the general policy preference to allow small digital firms to scale – explain both descriptively and normatively why most Section 2 cases will, and arguably should, arise in a monopoly maintenance context. This typically occurs once a firm has reached what economists refer to as the '*tipping point*'.

The typical monopoly maintenance case in a digital market will thus involve a firm that has already tipped the market. Such cases will focus on anticompetitive conduct that willfully offsets the weakening of network effects in the monopolized market or in adjacent markets that are competitive to the monopolized market.

2. Dominant Perpetrators and Victims

One overlooked implication of the above logic is that some monopoly maintenance cases in the digital economy will concern the anticompetitive harm caused by the conduct of a dominant firm to … other digital dominant firms. Put differently, cases will feature dominant perpetrators and dominant victims.[38]

But wait. How can monopoly maintenance acts by a dominant digital firm harm a dominant rival? There is only one dominant firm in a relevant market.

To see this, the focus should move to the dominant firms' trading partners. Monopoly maintenance strategies can be pursued through the coercion of a dominant customer or supplier. For example, in *Microsoft*, the exclusion of non-dominant rival Netscape was carried out by buying from dominant software distributor AOL a commitment to promote Internet Explorer to the near exclusion of Netscape Navigator. The Court recognized AOL's large market position in its Findings of Fact: "*In late 1995 and early 1996, senior executives at Microsoft recognized that AOL accounted for a substantial portion of all existing Internet access subscriptions and that it attracted a very large percentage of new IAP subscribers. Indeed, AOL was and is the largest and most important IAP*".[39]

One may object that the dominant trading partner is not harmed. In *Microsoft*, software distributors received money as a consideration for browser exclusivity. But harm may stem from the trading partner being denied sales absent exclusivity. Take the *EPIC v. Apple* case.[40] While the monopoly maintenance charges were rejected, the facts on the record illustrate how Apple's restrictions of apps developers' ability to inform users rom of other payment systems within apps denied them the opportunity of more profitable sales.

3. Who is the Victim by the Way?

Assume that monopoly maintenance strategies are carried out through deals between dominant trading partners. This point has an implication virtually ignored in the literature –

---

[38] And in some cases of private action, dominant defendants and dominant plaintiffs.

[39] *United States v. Microsoft*, Findings of Fact, *supra*.

[40] We caveat the fact that the monopoly maintenance charges were rejected by the District Court and on appeal.

including in policy and judicial statements. If both digital trading partners are dominant, each has in theory the ability to impose on another a reduction of its output, but both cannot.
The question then is: who coerced who? The answer requires at least an economic assessment of both trading partners' respective positions on their relevant markets, and of the relative economic value of their product and services.

But in the typical monopoly maintenance case, antitrust doctrine will not study trading partners' monopoly power. Generally, antitrust agencies, plaintiffs, and courts presume that the monopoly maintenance suspect coerces its trading partners.

Now, what is the legal significance of the theoretical impossibility to make a valid inference of coercion in monopoly maintenance cases where a dominant firm and its trading partners are in a bilateral monopoly?

Well, short of establishing coercion, the business behavior that supports the monopoly maintenance strategy cannot be deemed "*wilful*" as required by *Grinnell*.[41] The element of culpability required in a Section 2 case is missing. By contrast, credit may be given to two confounding factors. First, the terms of the bilateral transaction may be the result of "*a superior product, business acumen, or historic accident*".[42] Second, the terms of the bilateral transaction may reflect the exercise of monopoly power by the trading partner.

In either case, the key conclusion is this: a careful market investigation of both dominant firms' and their trading partners' monopoly power needs to be carried out, and it must determine that the defendant, not its trading partners, was the one exerting market power to maintain monopoly. Short of that analytical step, there exists no support to a finding of anticompetitive monopoly maintenance.

2. The Great Misdirect in Monopoly Maintenance Cases

To make our discussion of the infirmities of monopoly maintenance doctrine more concrete, we study the *US v. Google, LLC,* case (hereafter, *US v. Google*) and highlight an unresolved paradox at the heart of the case: Google is declared guilty of monopoly maintenance notwithstanding the fact that it pays billions to Apple to access its distribution bottleneck (A). We then show that an economic study of the value exchange between dominant firms can resolve the paradox (B). We discuss how to indirectly implement that economic evaluation by reviewing evidence related to the bargaining process (C).

A. Question: Default Sells, but who's Coercing?

The idea that dominant firms use exclusive dealing to maintain monopoly power over a market has supported multiple findings of antitrust violations, often under Section 2. In many cases, defendants have failed to convince courts that their exclusive dealing demands had nothing to do with monopoly maintenance.

---

[41] *United States v. Grinnell Corp.*, *supra*.
[42] *Id*.

The *US v. Google* case belongs to that family.[43] The decision spells out fairly straight facts (1). But a logical paradox that remains unresolved casts light on the insufficiency of the decision's economic analyses (2).

1. US v. Google, LLC

In August 2024, Judge Mehta of the U.S. District Court for the District of Columbia held that Google had unlawfully maintained monopoly power in the markets for general search and for general search text advertising by entering into anticompetitive exclusive dealing agreements with browser developers, mobile device makers, and wireless carriers.

One exclusive deal played a major role in supporting the Court's evidentiary conclusion of anticompetitive monopoly maintenance: a revenue sharing arrangement (hereafter, RSA) between Google and Apple known as the Internet Services Agreement (hereafter, ISA).[44]

The arrangement is complex, but its main features can be summarized as follows. The ISA specifies that Google will retrocede to Apple a percentage of the advertising revenue that it generates from queries run through Apple's personal assistant Siri, on device search Spotlight, or its browser Safari.[45] The ISA covers all of Apple's devices.

In exchange for the revenue share, Google is the "*default*" general search engine (hereafter, GSE) called to run queries on Apple's devices at the above key access points. In 2022, Google paid Apple approximately USD 20 Billion in revenue share, double the 2020 payment.

In addition to the revenue share, Google search is also the exclusive preloaded general search engine on all Apple desktop and mobile devices.[46]

The ISA is a complex beast. It has been the subject of many amendments. The Decision, and perhaps even more clearly the docket of evidence and testimony, show that a consistent thread in these amendments has been an extension of Apple's revenue share in exchange for an increase in the coverage of defaults on Apple's products.

The Court observed that in practice, the ISA worked as an exclusive dealing contract.[47] The ISA foreclosed 28% of all search queries to rival GSE providers.[48] Given that the broader network of distribution agreements entered by Google foreclosed 50% of all queries to rival GSE providers, a case without the ISA would only have reached a foreclosure share of 22%. It is permissible to doubt that this level of foreclosure would have been sufficient to meet the standard of '*substantiality*' applicable in exclusive dealing cases, or the requirement of substantial contribution to monopoly maintenance. Moreover, the foreclosure share of 22%

---

[43] *United States v. Google, LLC*, No. 20-cv-3010, 2024 WL 3647498 (D.D.C. Aug. 5, 2024).
[44] *Id* at para. 290 and following. The latest ISA was concluded in 2016, and in 2021 it was extended for a period of 5 years up to 2026, JX97 at 357.
[45] *Id* at para. 294-295.
[46] *Id* at p. 158.
[47] *Id* at p.211 ("*even though the ISA contains no express exclusivity provision, its terms in combination with Apple's established business practices means that Google will be the only GSE preloaded on an Apple device. That makes it exclusive*").
[48] *Id* at p. 221. Dr. Whinston, the US Government expert, found that 28% of all queries in the United States are run through the default search access points covered by the ISA.

appears to be the one at the peak success of the ISA. In previous years, the foreclosure share attributable to the ISA was presumably lower.

2. Economic Puzzle in the Facts and Legal Paradox in the Decision

The billion-dollar question in *US v. Google* has always been this: why would a search engine monopolist, who claims to have the best product, use exclusive dealing agreements?

For, indeed, if the monopolist has the best product, it need not worry about competition, and exclusive dealing is unnecessary. Put differently, exclusive dealing is not consistent with a monopolist's claim that it maintains a monopoly through product superiority.

Google's inability to address that logical roadblock allegedly convinced the Court that the antitrust case was sound. Under the Government's theory, the company faced a lose-lose proposition. Either Google did not have the best product, and its exclusive deals harmed competition. Or, Google had the best product, and the company was motivated by a desire for exhaustive domination and merciless persecution of residual competition. In either scenario, Google loses.

Of the two variations, Judge Mehta considered the second one to be the most plausible. The decision acknowledges that Google search "*has long been the best search engine, particularly on mobile devices*".[49] Google search has "*no true competitor*".[50] At trial, an Apple senior executive confessed "*that there's no price that Microsoft could ever offer [them] to*" preload Bing.[51]

But instead of inferring a Google's nefarious purpose of persecuting competitors in every possible niche, Judge Mehta found another motivation for monopoly maintenance in the testimony at trial of a former Google executive and founder of rival GSE Neeva.[52] To the question "*why [does] Google pays billions in revenue share when it already has the best search engine*"? the witness answered that the payments "*provide an incredibly strong incentive for the ecosystem to not do anything*"; they "*effectively make the ecosystem exceptionally resist[ant] to change*"; and their "*net effect . . . [is to] basically freeze the ecosystem in place*".[53] Such an alternative anticompetitive motivation came in handy for Judge Mehta because crushing residual competition would not have crossed the threshold of "*substantial*" foreclosure required in an exclusive dealing case. Yet, it is hard to understand why the decision found that testimony "*particularly compelling*". In its market analysis, the Court found ample economic evidence of "*market stasis*" in GSEs.[54] The decision even conjectures that "*the next great search engine (if there is to be one) will not be built in a rented garage like Google*".[55] It adds

---

[49] *Id*, p. 203 ("*Apple and Mozilla occasionally assess Google's search quality relative to its rivals and find Google's to be superior*"; and "*Google's rivals have tried to oust it as the default GSE … These firms have not succeeded in part due to their inferior quality*")
[50] *Id*, p. 204.
[51] *Id*, p. 205.
[52] The decision states that the witness is "*particularly compelling*".
[53] *Id*, p. 205.
[54] *Id*, p. 204.
[55] *Id*, p. 168.

that "*the internet of today is a far different animal. Hundreds of millions of dollars is just the opening ante to enter the search market*".[56]

By endorsing the 'ecosystem freezing' theory, however, Judge Mehta contradicts his statements of fact. If the economics of GSEs are such that short term entry at scale is blocked, the market is already frozen, and the additional exclusive dealing restraint is useless. Yet, Mehta clung to the fiction that "*these largely undisputed facts are not inconsistent with possessing and exercising monopoly power*".[57]

In sum, in attempting to resolve the economic puzzle of the case, Judge Mehta introduced a legal paradox.

B. Answer: Monopoly is Relational, and in a Value Exchange, the Monopolist is the Firm with the Highest Scarcity Rent!

The absence of any good answer to the economic puzzle exposed Google's Achilles' heel. But it needed not have been this way. There is a way out. To start, one should realize that Google and Apple were engaged in a value exchange. And there are two directions in a value exchange. In *US v. Google*, Google 'sold' the right to preload a search engine to Apple, and Apple 'sold' distribution to Google. Apple paid Google with a default commitment. Google paid Apple with a revenue share.

In any value exchange, the surplus is rarely split evenly. This is also true in a value exchange between two monopolists. The theoretical question in such a setting is thus: which firm's monopoly power allows it to extract the greatest share of the transaction's surplus? The answer to that question will reveal the identity of the 'real' monopolist in the value exchange.

Now, two monopolists engaged in value exchange are bargaining over their ability to restrict output. In other words, monopolists bargain over their power to extract scarcity rents. Differentials in the value of scarcity rents will determine who gets the highest surplus. The party with the most valuable scarcity rent absent the transaction – that is the party with the best outside option – will be the 'real' monopolist in the transaction. The identity of the 'real' monopolist is thus determined by the relative strength of each firm's outside option. But it is not determined by the 'true' value of each firm's observable outside option. It is determined by the value of the outside options perceived by both parties during the negotiation.

The important word is perceived. Apple's true outside GSE option was weak. As indicated above, the trial testimony revealed that there was *"no price that Microsoft could ever offer"* for Apple *"to make the switch, because of Bing's inferior quality*".[58] But it could well be that in the course of negotiation over the ISA and its amendments, Google perceived Apple's GSE outside options to be much stronger, and its own to be weaker.

Of course, the decision claims that this was not the case because at one point in time, Google had internally analysed what Microsoft would need to offer Apple for exclusive distribution in a study called "*Alice in Wonderland*". Google found the price to be prohibitively high for Microsoft.

[56] *Id*.
[57] *Id*, p. 204.
[58] *Id*, para 327.

The Court therefore inferred that "*Google understood that Bing was not a viable option, which minimized Apple's leverage*".[59] But that inference is unwarranted. First, the internal study does not cover the entire history of the ISA. Second, Apple may well have had outside options other than Microsoft, like vertical integration, and Google's perception were also shaped by these.

The upshot is that monopoly power is relational. When two monopolists bargain, the net value of exchange will reveal which firm is the price setter and which is the price taker. The problem, of course, is that it is hard to determine the net dollar value exchanged when transactions involve payments in kind, like a default. An indirect method must be employed by courts and agencies.

C. Comment: Studying the Bilateral Bargaining Process to Test Inferences of Monopoly Power

Courts occasionally review the bargaining process behind disputed business conduct. For example, study of licensing discussions in intellectual property cases cast light on whether a patent holder was engaged in good faith negotiations with an unlicensed implementer of its technology.

A similar technique can be employed to test the validity of the inference that monopoly is being coercively maintained by the defendant. The *Google* court did this to a certain extent (1). But its review of the licensing negotiation evidence is selective. These infirmities cast doubt on the implicit theory of the case that Google was the price setter in the ISA (2).

1. The Court's Review of the ISA Licensing Negotiation

The *US v. Google* decision examines the ISA negotiation history in detail. The Court's understanding of that negotiation can be summarized as follows:[60]

- The ISA started in 2002 for a period of 5 years. Google pays no revenue share; Apple gives no default;
- In 2005, Google offers the revenue share to Apple, as it grows "*concerned*" that Yahoo will replace Google. The revenue shared represents a USD 10 million payment, and 50% of Google's advertising revenue;
- In 2007, the ISA is modified to cover the newly introduced iPhone, as well as all other products like iPods and Safari for Windows.
- In 2012, Apple asks Google to drop the exclusivity without touching the 50% revenue share. The resulting amendments introduced in the 2014 joint cooperation agreement maintain Google as the exclusive default.
- In 2016, a last ISA is signed. It still requires Apple to set Google as the default search engine on Safari for all its devices. Google now also pays revenue share on Chrome queries.

[59] *Id*, para 328.
[60] This is detailed in a section b) "History of the ISA" at paras. 312 and following.

2. Another Perspective on the ISA Licensing Negotiation

Two facts invite an alternative reading ISA licensing negotiation: (i) Apple has continuously asked for flexibility, implying it had strong outside options; (ii) Google has systematically refused and raised the revenue share, implying it had weak outside options.

Against that backdrop, a further level of refinement can be reached by studying each ISA amendment one by one. For each amendment, we review the Decision and the available trial evidence and testimony. We ask ourselves the question: who is the 'price setter'? Recall that for each ISA amendment, the Decision hints that it is Google.

- 2005 amendment – The Decision evokes Google growing "*concerned that Yahoo might replace Google*". The decision does not talk of the entry of Yahoo. The choice of the word "*replace*" calls attention to the possibility of threats from Apple to switch GSEs. The 2005 amendment also provides that Apple can walk away unilaterally in the third year, which denotes confidence of Apple in its future outside options.
- 2007 amendment – The Decision mentions a Google "*worry*" that Apple might install Yahoo as a default GSE on Safari for Windows. In a bargaining game between sophisticated companies like Apple and Google, it is hard to believe that such a worry would come out of managerial paranoia.[61] The Decision does not explain what prompted Google's worry.
- 2014 amendment – The Decision describes the joint cooperation agreement as one which simply maintained Google as the exclusive default search engine. But the Decision omits a key piece of information. The heavily redacted contract in the docket shows that the share of the RS has changed, and we can reasonably conjecture that it was raised. That omission throws doubt on the credibility and impartiality of the account given of the ISA in the Decision.
- 2016 amendment – Now Apple receives a revenue share that includes searches initiated on Chrome queries, even though Apple does not preload Chrome onto its devices.

A careful study of the modifications of the ISA does not paint Google as the price setter it is supposed to be under the theory of the case. Additional pieces of contextual information found in the Decision paint an alternative picture. In particular, Google may have perceived Apple's outside options stronger that they were, owing in part to a combination of tactical moves by Apple:

- Around 2007, Apple wanted to offer a choice screen where Google was one of two possible choices for search provider (not default) on Safari for PC;[62]
- Around 2016, Apple has introduced and integrated homegrown search functionality like Suggestions into its devices;
- Around 2018, Apple has taken steps "*to grow its capacity in search*".[63]
- In 2018, Apple hires the former head of Google Search, John Giannandrea.

---

[61] See UPX0552 mentioning the usage of "*professional negotiators*".
[62] See UPX0126.
[63] *Id.*, para 301.

Besides, multiple emails in the record additionally display evidence of Apple's aggressive negotiation tactics. They can be read as tactics seeking to extract a high price from Google.[64] In the end, another version of the ISA history can be proposed. Apple played hardball when it negotiated with Google for the integration of search capability within its products. It used a variety of tactics to extract more money from Google. Apple wanted financial compensation and would only give Google the option to be on a choice screen. Then, Apple wanted more revenue share, and deployed moves to worry Google into believing it had strong outside options. Through that lens, the rationale for anticompetitive exclusion that the Court believes to see in Google's requests for exclusivity and default is less compelling. Google might just have been involved in high fly bargaining with a hungry counterparty. It was perhaps even fooled into thinking that Apple had strong exit opportunities, like building its own search engine.[65]

3. The Risk of Confusing Price Setter and Price Taker

When two dominant firms bargain, one ultimately extracts a portion of the other's monopoly profits. Which of them prevails is not a given. This outcome is a function of the value of each firm's scarcity rent. The firm with the more valuable scarcity rent – and thus the superior outside option – will possess greater bargaining leverage. The outcome is also a function of the firm's skill changing its trading partner's perception of the strength of its scarcity rent.

If courts focus on only one party, they risk confusing the price setter and the price taker in a value exchange between two monopolists. This lopsided analytical approach in turn fuels illogical application of antitrust. The *US v. Google* case gives no good answer to the question of why Google would pursue exclusivity if it had the best product, the highest share, and users would anyway type www.google.com in their browser in the absence of a default.[66]

Now, even if Google was "*very generous*", it received something of value under the ISA.[67] In internal emails, Google executives wrote, "*we are not getting anything*" without exclusivity. That line led Judge Mehta to discern an evil anticompetitive purpose. However, that statement may just have meant that Google wanted something in return for its payments.

---

[64] An Apple internal email says that Apple knows they are extracting lots of value under the revenue share ("*We build them up, create incremental negotiating leverage to keep the take rate high from Google, and further our optionality to replace Google down the line*"). See UPX0240. A Google internal email says that Google would be paying a lot in revenue share if there was no default ("*Given current deal terms, we would be paying them significant amount of money. Revenue share seems rich for non-default and non-exclusive deal*"). See UPX0137. And an internal Google email from Joan Braddi says that "*Again, these are negotiating tactics that Steve is famous for to get his terms*", when Apple suggested it would use "two types of browsers, one with Y and one with Google". See UPX0552.

[65] The Decision cites a Giannandrea email attesting that no alternative search engine emerged because it's not VC fundable proposition. But the Decision is selective in its treatment of the email. Giannandrea's email also acknowledged that he "*can imagine that Apple can build a search engine to compete*", even though he finds it's probably not the best way to differentiate their products. See UPX0240. If Giannandrea, a former Googler, believes so, some current Googlers might have thought so during the negotiation.

[66] See UPX0072 ("*I explained how many of the people using their browser would already be typing in www.google.com so this uptick/incremental number was very important to us and could be determined by a trial*"). Moreover, the obsession with default is inconsistent with evidence whereby users did download browsers that were not preloaded.

[67] See UPX0552.

Now, what is this thing? Let us accept for a moment that the search monopolist had a higher quality search product.[68] Defaults, preloading, and home page placement still make business sense independent of any motivation for anticompetitive exclusion. Getting users back without default placement takes time. Here, a default is useful because it allows Google to economize on this time. And as in other walks of life, time is money. That value represented the rent differential between both.

This leaves one last question unanswered. Should the other monopolist be blamed for extracting monopoly profits? The answer is negative. First, the direct usage of monopoly power is not unlawful under US antitrust law. Second, "*skill, foresight, and industry*" is not reprehensible under Section 2.[69]

3. A Market Power Utilization Test of Coercion for Monopoly Maintenance Law

The misdirection in monopoly maintenance cases is avoidable. Agencies and courts can apply a "*market power utilization*" test (hereafter, MPU) to proof check their analysis. The test asks whether the suspected monopolist coerced its trading partner into enacting a restraint of competition (A). If the test succeeds, the finding of a violation is robust. If it fails, the monopolist is not liable for restraint.

This paper argues that the MPU test is grounded in sound legal and economic reasons. First, it defines monopoly power as the power to coerce a trading party into a restraint (A). Second, it operationalizes that coercion as a refusal to deal, providing a practical and economically verifiable standard (B). Finally, it rationalizes Section 2 doctrine by removing from its scope conduct that belongs to other bodies of law (C).

A. Market Power Utilization as Coercion to Enact a Restraint of Competition

Monopoly power is a single thing: the power to coerce. The (correct) economic idea that a monopoly firm has power over output means that it can deny output to buyers without fear they will get it from other sellers. A monopolist, simply put, can walk away from a transaction. This gives the monopolist the leverage to coerce, force, or pressure trading partners into extractive deals.

Coercion can be used to draw a variety of advantages from third parties. These advantages can be direct monetary transfers, or they can be anticompetitive obligations. These obligations include exclusive dealing (*US v Dentsply*), boycotts of competitors (*Lorain Journal Co. v. United States*),[70] and full-line forcing (*McWane v. FTC*). The advantages can also be a mix of both, as seen in *US v Google*. As previously noted, these anticompetitive advantages serve to offset the weakening of barriers to entry and "*destroy threatened competition*".[71]

---

[68] See *United States v. Google, supra* p. 212.

[69] See *United States v. Alcoa*, *supra*. In *Otter Tail Power Co. v. United States*, 410, *supra,* the Court used different words, stating that "*an enterprise will protect itself against loss by operating with superior service, lower costs, and improved efficiency*".

[70] See *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951).

[71] *Id*.

The idea of coercion finds support in antitrust doctrine. In *US v. United Shoe Machinery*, the Court spoke of power "*oppressively used*".[72] In *FOGA*, the Court singled out the disputed combination for "*the coercion it could and did practice upon a rival method of competition*".[73] A particularly good illustration of coercion used to enact an anticompetitive restraint is found in *McWane v. FTC*.[74] There, the element of coercion consisted of the threat that distributors who bought from rivals might lose their rebates or be cut off from purchasing McWane's domestic fittings for up to three months if they failed to observe exclusivity.

A discussion of coercion must engage with several opinions that suggest that monopoly power grants special abilities. In *Berkey Photo*, for example, the Court held that "*many anticompetitive actions are possible or effective only if taken by a firm that dominates its smaller rivals*".[75] Yet, this idea of a special power of monopolists is incompatible with other judicial pronouncements whereby an unlawful act of monopolization or monopoly maintenance can be "*an industry-wide practice of relying upon exclusive contracts*".[76] The issue is thus whether monopoly power gives rise to some superhero-like ability, or whether it is the 'status' of monopolist that denies its holder the benefit of ordinary practices on account of a notion of strict liability or duty of extra care.

The Courts have appeared to resolve the discussion by endorsing the latter interpretation. Monopoly power "*magnifies*" the effects of ordinary practices.[77] Scalia's dissent in *Kodak* accordingly invites courts to use a "*special lens"* to detect procompetitive practices with *"exclusionary connotations"* when "*practiced by a monopolist*".[78]

There is simply no economic basis for an inference whereby the juxtaposition of monopoly power and of an ordinary business practice produces substantial anticompetitive harm. Any such inference would be equivalent to condemning drivers for speeding on the mere ground that they own (not even drive) a Ferrari.[79]

The chemistry between monopoly power and business conduct is much more complex. Hence, our test of coercion is a more logical fit. Under the MPU test of coercion, antitrust law forbids practices that can be used by anyone – like exclusive dealing – precisely because they are the result of oppressive behavior. This last point must be scrutinized.

B. Coercion as Refusal to Deal

An MPU always rests on a threat by a monopolist to refuse to deal. To be precise, a firm makes an MPU if it withholds from the market some or all the output demanded at a competitive price, or if it offers the demanded output at a monopoly price.

---

[72] *United States v. United Shoe Machinery Co*. 247 U.S. 32 (1918).
[73] *Fashion Originators' Guild of America v. FTC*, 312 U.S. 457 (1941).
[74] *McWane v FTC*, *supra*.
[75] *Berkey Photo, Inc. v. Eastman Kodak Company*, 603 F.2d 263 (2d Cir. 1979)
[76] *Tampa Elec. Co. v. Nashville Coal Co*., 365 U.S. 320 (1961)
[77] *3M v. LePage*, *supra* (talking of "*magnified rebates*", as in "*The effect of 3M's rebates were even more powerfully magnified than those in SmithKline because 3M's rebates required purchases bridging 3M's extensive product lines*").
[78] *Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. 451 (1992).
[79] The idea behind this metaphor is credited to antitrust economist Alberto Heimler.

No Court has caught better the notion of MPU as refusal to deal than the *Berkey Photo* Court:

> A use of monopoly power is an action that a firm would have found substantially less effective, or even counterproductive, if it lacked market control. Thus, the classic example of such a use is a refusal to deal in goods or services needed by a competitor in a second market … But, a firm without control of the market that attempts this will simply drive the purchaser to take its patronage elsewhere.[80]

That language allows for a subtle but key distinction. The test that we are proposing does not envision MPU as the injury of anticompetitive conduct, like a recoupment test in a predatory pricing case. Instead, it envisions MPU as the instrument of anticompetitive conduct.

In practice, an MPU test works as follows: courts and agencies ask, was the impugned anticompetitive restraint imposed by a threat of holdout? If the answer is yes, then the fulfillment of the other requirements of monopoly power, anticompetitive effects, and absence of a business justification will support a finding of a Section 2 violation. By contrast, if the answer is no, the source of the restraint of competition cannot be attributed to the suspected monopolist. It is likely that the trading party has asked for the restraint of competition or granted it as consideration for a reciprocal MPU. This scenario is arguably what happened in *US v. Google*.

It is important to realize that when defined as a refusal to serve output at competitive conditions, our MPU test ejects some business conduct from the scope of antitrust law. For example, business conduct not utilizing monopoly power in the above economic sense – such as industrial espionage, judicial harassment, anticompetitive defamation, or preemptive acquisitions – would fall short of a Section 2 violation.[81]

We believe this is the correct approach. In *Conwood v. United States Tobacco*, the Court of Appeals rightly held "*Isolated tortious activity alone does not constitute exclusionary conduct for purposes of a § 2 violation, absent a significant and more than a temporary effect on competition, and not merely on a competitor or customer*". It added that "*business torts will be violative of § 2 only in "rare gross cases*".[82] Cases of Section 2 violations by monopoly maintenance that do not instrumentalize monopoly power are anomalies.[83]

C. Reasoning Section 2 Doctrine

An abundant stock of cases requires proof of MPU but fails to articulate what is concretely asked from plaintiffs and agencies.[84] In other cases, MPU is confused with the natural benefits

[80] *Berkey Photo, Inc. v. Eastman Kodak Company*, *supra*.
[81] These can however fall within the scope of antitrust law in the context of acquisition of monopoly power.
[82] *Conwood Co. v. United States Tobacco Co*., 290 F.3d 768 (2002)
[83] See also, *NYNEX Corp. v. Discon*, Inc., 525 U.S. 128 (1998), warning that an extension of the per se rule against group boycott to the facts at hand would "*transform cases involving business behavior that is improper for various reasons, say, cases involving nepotism or personal pique, into treble damages antitrust cases*".
[84] In *Otter Tail*, the Court found that an energy supplier's refusal to cooperate with municipal retail constituted MPU. The court held that *Otter Tail* had "*used its monopoly power in the towns in its service area to foreclose competition or gain a competitive advantage, or to destroy a competitor, all in violation of the antitrust laws*". See *Otter Tail v US*, *supra*. In *Aspen Skiing*, the Court endorsed the utilization interpretation of Section 2 by talking of "*abuse of monopoly power*". See *Aspen Skiing v. Aspen Highlands Skiing*, 472 U.S. 585 (1985). Lower courts endorsed this too. In *Conwood*, the Court of Appeals (6th Cir.) held that "*maintaining … market control by the exercise of that*

of size and integration.[85] In *Alcoa*, Learned Hand observed that Alcoa had "*utilized its size for abuse*".[86] Obviously, it defies understanding to appreciate the instrumental role that size could ever play in the building of new plants or the correct anticipation of future market trends. Hiding sloppy reasoning behind pompous rhetoric, Judge Hand conceded that the crux of the problem resided in Alcoa's "*great organization, having the advantage of experience, trade connections, and the elite of personnel*".

The requirement of MPU makes perfect sense. Not only does it rationalize Section 2 doctrine by removing from its scope conduct that can be dealt with under other bodies of law. It also gives meaning to the idea that dominant firms can lawfully use their superior efficiency to compete on the merits.

Conclusion

The vexing paradox at the heart of *US v. Google* lays bares the logical flaw in the current monopoly maintenance doctrine. The current legal regime, stalled since the *Microsoft* era, fails to distinguish between price setting and price taking firms. By risking incorrectly identifying the true holder of monopoly power in a value exchange, the law risks being systematically misdirected at the wrong firm. This is a problem in the digital economy where trading partners will often be large, dominant firms.

This paper offers a way out by returning to first principles. A test of MPU instructs courts and agencies to focus on the instrument deployed to enact the suspected restraint of competition. Absent coercion – itself based on a straight or constructive refusal to deal – the restraint is not problematic. The MPU test offers a clear, verifiable standard that rationalizes Section 2 doctrine, distinguishing between legitimate superior efficiency and unlawful oppressive behavior. Adopting an MPU requirement is essential to avoid the misapplication of antitrust remedies to firms that pay a toll to a gatekeeper.

---

power is sufficient to complete a violation of section 2".

[85] *Berkey Photo, Inc. v. Eastman Kodak Company*, *supra.*

[86] *US v. Alcoa*, *supra.*