COMMENT

THE ECONOMIC FOUNDATIONS AND IMPLICATIONS OF THE PER SE RULE

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The per se rule is born out of the intrinsically economic consideration as to the optimal allocation of scarce judicial resources. The problem with any rule or rationing scheme is that while it may conserve judicial resources, it could also foreclose meritorious defenses. We examine the welfare failures of some simple rationing schemes to uncover the premise underlying the per se rule's summary condemnation of certain conduct. Through illustrative examples, we then demonstrate that even when its indicia are met, an overly mechanical application of the per se rule that impedes a meritorious defense can lead to the perverse misallocation of judicial resources. Prudence is thus critical when invoking the per se rule.

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I. INTRODUCTION

As a pair of economists writing about the per se rule, we are keenly aware of the risk of being viewed as goldfish offering to share their insights on riding bicycles. At first blush, economics might appear to be irrelevant to the per se rule. After all, the purpose of the per se rule is to define areas of antitrust law within which economics is deemed unnecessary.[1] In that light, isn't the expression "the economics of the per se rule" an oxymoron?

In fact, as we elaborate below, the per se rule rests on a foundation of economic considerations. Furthermore, the quotidian practice of the per se rule requires conducting economic analysis to reach economic judgments. Of even more significance, misapplication of the per se rule can yield unintentional effects that are contrary to the purpose underlying the rule. In other words, economic concerns and reasoning pervade every aspect of the per se rule.

In this Comment, we examine the per se rule through the lens of social welfare. We begin by showing that the rule exists to address economic considerations. We then discuss the problems and distortions that can occur when courts and agencies implement the rule in the real world. We provide four instructive examples to illustrate this discussion. The examples feature fact patterns that arguably support application of the per se rule to condemn summarily the

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[1] *See* Cont'l T. V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 49–50 (1977) ("*Per se* rules of illegality are appropriate only when they relate to conduct that is manifestly anticompetitive. . . . '[B]ecause of their pernicious effect on competition and lack of any redeeming virtue [they] are conclusively presumed to be unreasonable and therefore illegal without elaborate inquiry as to the precise harm they have caused or the business excuse for their use.'" (quoting N. Pac. Ry. Co. v. United States, 356 U.S. 1, 5 (1958))).

described conduct. But a more careful inquiry reveals that in each instance the conduct at issue has at least some procompetitive effects, and thus that the per se rule should be inapplicable.

With the goal of moving beyond a merely procedural consideration of the applicable standard of review, we offer a fuller analysis of the conduct at issue in each example and demonstrate that there is at least a reasonable likelihood that the conduct did not merely have some procompetitive effect but could have been procompetitive on net.[2] If that were the case, condemning the conduct under the per se rule would have perversely imposed a deadweight loss to social welfare.

II. ECONOMICS PROVIDES THE PRINCIPLED BASIS FOR HAVING A PER SE RULE AND IS INTRINSIC TO ITS APPLICATION

A. Scarcity Is the Foundation of the Per Se Rule

The per se rule seeks to truncate antitrust inquiry into certain conduct.[3] Why not delve fully into all matters? It must be that we believe that the judicial resources required to litigate are scarce, so that there is excess demand for these resources.[4] To see this, consider the counterfactual in which

[2] Of course, this is not to say that all matters that are subject to per se condemnation are also always procompetitive on net. An empirical and fact-specific analysis is required to answer that question.

[3] *See* Broad. Music, Inc. v. Columbia Broad. Sys., Inc. (*BMI*), 441 U.S. 1, 8 (1979) ("[Obviously anticompetitive] agreements . . . are conclusively presumed illegal without further examination under the rule of reason[.]").

[4] The per se rule is sometimes justified as being necessary to prevent "deep pocketed" defendants from exhausting the resources available to plaintiffs or enforcers.

> The goal of preventing false positives provided a focus for the comparative evaluation of alternative legal rules, and became a barometer for evaluating the scope of antitrust prohibitions. This translated into a call for a higher evidentiary burden on plaintiffs . . . which included a requirement of more economic evidence to support competitive harm allegations.

the resources—including time—necessary to litigate all types of matters are available in such abundance that the parties can litigate every matter in full depth without an opportunity cost. In this scenario, it would be in society's interest to litigate fully all antitrust matters, including those involving conduct that now falls under the per se rule. There would be no point in truncating a litigation to conserve judicial resources because—by construction—there are abundant resources to litigate fully all other matters, including matters that do not involve antitrust allegations.

Thus, the principled justification for the per se rule derives from a fundamentally economic concern: when judicial resources are scarce, how do we best allocate those resources to serve society's interests?[5] In the language of economists,

> Many of the assumptions that guided this generation-long retrenchment of antitrust rules were mistaken[.]
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> . . . Continued reliance on what are now exaggerated fears of "false positives," and failure adequately to consider the harm from "false negatives," have led courts to impose excessive demands of proof on plaintiffs that belie both established procedural norms and sound economic analysis. This does not result in more reasonable antitrust standards, but instead results in an embedded ideological preference for non-intervention and a "thumb on the scales" that creates a tendency toward false negatives . . . . Indeed the effect goes well beyond a "thumb on the scales," because it effectively shifts the default presumption from neutral to pro-defense.

Andrew I. Gavil and Steven C. Salop, *Probability, Presumptions and Evidentiary Burdens in Antitrust Analysis: Revitalizing the Rule of Reason for Exclusionary Conduct*, 168 U. PA. L. REV. 2107, 2111–13 (2020) (footnotes omitted). While such justifications for the per se rule focus on distributive aspects, they are still founded on the scarcity of resources.

[5] Administrative convenience alone is not enough to justify the per se rule, Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877, 894–95 (2007), but the rule increases "business certainty and litigation efficiency," Arizona v. Maricopa County Medical Society, 457 U.S. 332, 344 (1982), by simplifying cases where economic effects are relatively clear. *See Leegin*, 551 U.S. at 894–95; Herbert Hovenkamp, *The Rule of Reason*, 70 FLA. L. REV. 81, 98 (2018) ("One must assume that a full-blown rule of reason inquiry is much costlier than analysis under the per se rule. . . . Thus, the rule of reason is justifiable only to the extent that it provides superior outcomes.").

how do we allocate resources in order to maximize social welfare?

Formulating an answer to that question requires an understanding of what happens in a world of scarce resources. When the demand for judicial resources exceeds its supply, it is not possible to provide every matter with all the resources that it merits. Scarcity leads to rationing. The question then becomes: what form of rationing is the most efficient, or how do we ration judicial resources so as to minimize the impact of rationing?

B. Optimal Rationing

There are many aspects to litigation (e.g., discovery, motion practice, hearings), and each requires various resources.[6] For the current purposes, we simplify and represent all these resource demands simply as trial days. Now suppose that a judge, considering their docket for the next calendar year, estimates that in an ideal, unconstrained world it would take 730 trial days to hear fully the matters assigned to that docket.[7] Then, even if the court remained in

[6] *See* Hovenkamp, *supra* note 5, at 98.

[7] There is significant evidence of docket overload in the real world. *See, e.g.*, Marin K. Levy, *Judicial Attention as a Scarce Resource: A Preliminary Defense of How Judges Allocate Time Across Cases in the Federal Courts of Appeals*, 81 GEO. WASH. L. REV. 401, 402–03 (2013) ("[T]he growth of the federal appellate caseload has far outpaced the growth of the federal appellate judiciary. The average annual filings per active judgeship stood at 73 in 1950 . . . and hovers around 330 today[.]" (footnotes omitted)); *see also generally* Bert I. Huang, *Lightened Security*, 124 HARV. L. REV. 1109 (2011) (linking overwork in circuit courts to outcomes of appeals). In 2019, the Judicial Conference released its biennial report on expanding judgeships, recommending sixty-five new permanent district court judgeships and five new circuit court judgeships. BARRY J. MCMILLION, CONG. RSCH. SERV., R45899, RECENT RECOMMENDATIONS BY THE JUDICIAL CONFERENCE FOR NEW U.S. CIRCUIT AND DISTRICT COURT JUDGESHIPS: OVERVIEW AND ANALYSIS 12 (2019). The Judicial Conference has argued that certain district courts "continue to struggle with extraordinarily high and sustained workloads." *Id.* at 15 (internal quotation marks omitted) (quoting Letter from Jud. Conf. of the U.S. to Hon. Lindsey Graham, Chairman, S. Comm. on the Jud. (May 14, 2019)). The district courts where the Judicial Conference recommends new permanent judgeships have an average of 646

session each of the 365 days of the year, the demand for trial days in that year still would be twice the amount of resources that are available.

1. "First Come, First Served" Rationing

Consider first a simple rationing rule: start working through the docket from the top to the bottom, giving each matter the full trial length that it requires. Under this approach, because getting through the full docket requires twice as many trial days as are available, the court will not hear some matters at all. It will run out of available trial time before it gets through the docket. Matters at the top of the docket would have the good fortune to receive a "full hearing," but matters toward the end of the docket would receive no hearing at all.[8]

In this rationing scheme, the court provides full access to justice to litigants who filed early in the year but denies access to justice to others whose only failure was that their dispute happened to occur later in the year. Denying a hearing to some claims only because they happened later in the year does not present a particularly attractive rationing mechanism from the perspective of social welfare.

2. Pro-Rata Rationing

Consider another potential rationing mechanism. In this approach, recognizing that there is twice as much demand for trial days as there is supply, the judge gives each matter exactly one half of the trial days that it would receive in an unconstrained world. For example, if the parties would demand a ten-day trial in a world unconstrained by the availability of judicial resources, their matter would receive a five-day trial schedule.

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weighted filings per authorized judgeship compared to the national average of 521 per weighted judgeship. *Id.* at 18.

[8] Or, alternatively, the court would postpone those trials to some later year. Postponement would delay resolution for cases at the end of the docket and delay cases later added to the docket.

This rationing scheme does ensure that the court hears every matter in a timely manner, so it corrects the most obvious flaw in the first approach. However, it is still arbitrary. The court gives the same pro-rata fraction of the "ideal" trial time to all matters, even if it can ascertain that some are meritless by answering just two or three questions and even though other matters might present subtle, nuanced, and important questions of fact and law.

This highlights a critical failure in the first two rationing schemes: they allocate resources without regard to the merits of the matters. In this example, all matters receive fifty percent of their demanded trial time, regardless of whether society has more at stake in getting right some of the matters on the docket.

3. Efficient Rationing

The failures of the first two rationing rules suggest the foundation for a better rationing scheme. Suppose that there are some antitrust matters on the docket and that the answers to two or three questions can determine quickly whether the conduct at issue in these matters is anticompetitive. Rather than giving each matter a full trial that uses scarce resources to flesh out and adjudicate arguments that may be irrelevant or unavailing, the court can conduct the trial in stages. First, it can answer the potentially dispositive two or three questions. If the answers to these questions indicate that the disputed conduct is anticompetitive, the court can truncate the trial.

For example, suppose that the defendants admit to setting prices collectively in a cartel but seek to argue that the cartel prices were just and reasonable.[9] The idea of the per se rule as an efficient rationing mechanism is to recognize that there is a de minimis chance that such an argument has merit and to refrain from wasting resources in litigating such claims.[10]

[9] The Supreme Court has rejected this argument. United States v. Trenton Potteries Co., 273 U.S. 392, 401 (1927).

[10] *See* Monroe v. Child.'s Home Ass'n of Ill., 128 F.3d 591, 594 (7th Cir. 1997) ("Sometimes a detailed search for explanations is so unlikely to be

The efficient rationing of scarce judicial resources thus hinges on asking whether there is a social benefit to litigating each matter. In matters for which the answer to this question is almost surely negative, the optimal approach to rationing is to truncate further inquiry and redirect judicial resources to other matters.

In this light it can be seen that the per se rule implements a cost-benefit analysis that aims to allocate resources efficiently by directing judicial resources away from matters in which the disputed conduct is almost surely anticompetitive.[11] Thus, the per se rule is a profoundly economic approach to the problem that the demand for judicial resources exceeds its supply.[12]

It also bears note that, in addition to providing the foundation of the per se rule, economic reasoning is intrinsic to the practice of the per se rule. In order to determine whether the rule applies, one must determine whether the conduct at issue has any pro-competitive effects.[13] This inquiry is inherently economic in nature.

III. WHEN PRINCIPLES MEET REALITY

The principles discussed above are not particularly controversial. We live in a world of scarce resources, and it is in our interest to allocate prudently those resources. If a court can ascertain that conduct at issue is almost certainly

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productive that courts devise rules—the *per se* rule in antitrust, *res ipsa loquitur* in torts—to shortcut the process.").

[11] William C. Wood, *Costs and Benefits of Per Se Rules in Antitrust Enforcement*, 38 ANTITRUST BULL. 887, 887 (1993) ("In existing justifications of the per se rules there is an explicit cost-benefit argument. A per se rule, it is argued, is less costly than a rule of reason.").

[12] It should also be noted that the per se rule could benefit society by providing clear guidance as to what kind of conduct will be condemned summarily under the law, and is thus discouraged. *See* Mark A. Lemley & Christopher R. Leslie, *Categorical Analysis in Antitrust Jurisprudence*, 93 IOWA L. REV. 1207, 1225, 1258–59 (2008) (noting that per se rules can provide certainty but criticizing the Supreme Court's frequent alteration of per se illegal categories of conduct).

[13] *See* Broad. Music, Inc. v. Columbia Broad. Sys., Inc. (*BMI*), 441 U.S. 1, 19–20 (1979).

anticompetitive, it should redirect judicial resources away from that matter and toward other matters.

As with any other rule, the devil is in the implementation. Even rules that are principled in their intents can have deleterious effects when implemented or administered imprudently. Faulty application of a rule can lead to unintended consequences that reduce, rather than enhance, social welfare.[14]

With regard to the per se rule, what statisticians and economists refer to as "Type I errors" are of particular concern. These are "false positives": errors involving incorrect acceptance that *X* is true when, in fact, *X* is not.[15] In our system of justice, a Type I error is grave because it condemns summarily a practice that is actually benign.[16] Once applied, the per se rule truncates further inquiry into a matter, and abbreviating the inquiry limits the exploration of the nuanced analysis that may be required in order to demonstrate that the conduct at issue was benign—i.e., to realize that a Type I error occurred in the first place.

There is heightened concern if these false positives occur systematically.[17] For example, suppose that one implements the per se rule by going down a checklist of indicia of coordinated action and goes no further once one finds sufficient indicia. The problem with this implementation is that coordinated decisionmaking is insufficient to conclude

[14] *Cf., e.g.*, Arndt Christiansen & Wolfgang Kerber, *Competition Policy with Optimally Differentiated Rules Instead of "Per Se Rules vs Rule of Reason"*, 2 J. COMPETITION L. & ECON. 215, 216 (2006) (discussing possible "negative welfare effects" of enforcement approaches that rely on non-optimal levels of case-specific consideration).

[15] William E. Kovacic, *The Future Adaptation of the Per Se Rule of Illegality in U.S. Antitrust Law*, 2021 COLUM. BUS. L. REV. 33, 41 n.25.

[16] *See generally* Roxann E. Henry, *Per Se Antitrust Presumptions in Criminal Cases*, 2021 COLUM. BUS. L. REV. 114.

[17] Commentators have criticized various per se rules for introducing systematic errors. *See, e.g.*, Recent Development, *The Course Correction a Century in the Making:* Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 127 S. Ct. 2705 (2007)*, 31 HARV. J.L. & PUB. POL'Y 855, 865 (2008) (summarizing criticism of the erstwhile per se ban on resale price maintenance).

that conduct is anticompetitive.[18] Condemning summarily all conduct that is coordinated will thus condemn some conduct that is benign.[19]

Moreover, rational economic agents will develop strategies to optimize their outcomes based on the existence of the rule.[20] Thus, if the implementation of the rule obscures pro-competitive effects, parties can game it in a manner that yields outcomes that are contrary to its intent. For example, one can envision scenarios in which antitrust enforcers or private antitrust plaintiffs recognize that a full examination of the competitive implications of the conduct that they are challenging could reveal some procompetitive benefits. Without casting aspersions on anyone's character or integrity, when rational litigants face the risk that a finder of fact who is allowed to weigh pro- and anticompetitive effects will rule against them, it can be tempting—and intellectually rationalizable once one is convinced that one is in the right[21]—to argue that such an in-depth examination simply should not occur because the conduct at issue is per se illegal.

The underlying problem with over-application of the per se rule is that the rule limits defendants' ability to defend themselves. As such, the per se rule can present a Catch-22: its application forecloses the ability to show that it should not have been applied.[22] A rule that presents a Catch-22 may systematically generate outcomes that distort the purpose of the rule.

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[18] *See* 1 JULIAN O. VON KALINOWSKI ET AL., ANTITRUST LAWS AND TRADE REGULATION § 11.02, LexisNexis (database updated Dec. 2020) (noting that unlawful restraints of trade involve both coordination and anticompetitive effects).

[19] For examples of such errors, see *infra* Part IV.

[20] For an example of this type of adaptation, see *infra* notes 28–29 and accompanying text.

[21] *See* James C. Cooper & William E. Kovacic, *Behavioral Economics and Its Meaning for Antitrust Agency Decision Making*, 8 J.L. ECON. & POL'Y 779, 782–83 (2012) (discussing behavioral explanations for regulators' uses of rules "whose conceptual foundations ha[ve] significantly eroded").

[22] *But see* Broad. Music, Inc. v. Columbia Broad. Sys., Inc. (*BMI*), 441 U.S. 1, 19–20 (1979) (requiring some initial inquiry into the appropriateness of the per se rule for a case).

IV. ILLUSTRATIVE EXAMPLES

Below, we present four examples that illustrate the potential for even apparently reasonable applications of the per se rule to generate perverse outcomes.

A. Example 1: Merger Featuring an Asset Swap

Suppose that, in the course of reviewing a proposed merger, government antitrust enforcers come to believe that the transaction is anticompetitive, but also that it will be challenging to demonstrate that it violates § 7 of the Clayton Act.[23] For example, it might be difficult to establish that there is a well-defined relevant product market in which the transaction is presumptively anticompetitive.[24] Or the merging parties might have a convincing competitive effects argument so that the outcome of a § 7 challenge would be uncertain.[25]

In either situation, an antitrust enforcer who is convinced that the merger is anticompetitive could be tempted to find a way to characterize the transaction as an illegal scheme to allocate markets, which could convince a court to view the transaction as a per se violation of § 1 of the Sherman Act.[26] The legal inquiry into a per se violation would be abbreviated and less susceptible to the exposure of potential infirmities in market definition or competitive effects.

In this example, the enforcer would not be invoking the per se rule in an effort to prevent the dissipation of judicial resources in an inquiry that could not possibly be fruitful. To the contrary, it would invoke the rule out of fear that such an

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[23] 15 U.S.C. § 18 (2018).

[24] *See* Brown Shoe Co. v. United States, 370 U.S. 294, 325–27 (1962) (discussing product market analysis).

[25] For the approach of the Federal Trade Commission and the Department of Justice to competitive effects analysis, see U.S. DEP'T OF JUST. & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES 2–6 (2010), https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf [https://perma.cc/AX5D-LWDQ].

[26] *See* 15 U.S.C. § 1 (prohibiting "restraint[s] of trade"); United States v. Topco Assocs., 405 U.S. 596, 607–08, 609 & n.9 (1972) (announcing a per se ban on market allocations).

inquiry would be fruitful and thereby cause the desired enforcement action to be denied. This misapplication of the legal standard can impact adversely social welfare by chilling inappropriately the underlying activity (i.e., mergers).[27] This would be a perverse outcome.

One might argue that this example is a far-fetched hypothetical that has no bearing in reality. However, in 2003 the U.S. Department of Justice's Antitrust Division challenged a proposed transaction between Village Voice Media, LLC and NT Media, LLC, in which the parties proposed to merge ownership of alternative news weeklies in Cleveland and Los Angeles.[28] What was novel about this challenge was that the complaint alleged a per se violation of § 1 of the Sherman Act.[29]

B. Example 2: Procurement Auction

Suppose that the requirements of the customer conducting a procurement auction necessitate that a manufacturer partner with a service provider. Examples include the provision of hardware along with the engineering support required to install the hardware or with ongoing maintenance services.[30] Alternatively, the customer may seek a substantial software platform (e.g., medical records or enterprise resource planning (ERP) software) along with the engineering support needed to install and migrate to that platform.[31] The

[27] *Cf.* Omnicare, Inc. v. UnitedHealth Grp., Inc., 629 F.3d 697, 709–10 (7th Cir. 2011) (explaining that overly-stringent application of the Clayton Act could chill mergers).

[28] *See* United States v. Vill. Voice Media, LLC, No. 03 CV 0164, 2003 WL 21659092, *1–2 (N.D. Ohio Feb. 12, 2003).

[29] *See* Complaint at 5, *Vill. Voice*, 2003 WL 21659092 (No. 03 CV 0164). For a discussion of the issues raised by applying the per se rule to merger matters (and this matter in particular), *see generally* Chetan Sanghvi, *In God We Trust, All Others Must Pay Cash? The Extension of the Per Se Rule to Mergers Involving Asset Swaps*, 13 TRADE PRACS. L.J. 114 (2005).

[30] *See, e.g.*, Che Consulting, Inc. v. United States, 78 Fed. Cl. 380, 381 (Fed. Cl. 2007) (describing a procurement auction "merging . . . hardware and software maintenance services into [a] single acquisition[]").

[31] *See, e.g.*, United States v. Oracle Corp, 331 F. Supp. 2d 1098 (N.D. Cal. 2004) (denying the government's challenge to Oracle's acquisition of

customer's requirements dictate that responses to its request for proposals (RFP) have to come from competing teams, with each team composed of a partnered manufacturer and service provider.[32]

The partnered manufacturer and service provider must work together to respond to the customer's stated requirements. They must coordinate in evaluating the precise contours of those requirements, estimating the costs of fulfilling those requirements, and scoping out the competition.[33] Any given manufacturer or service provider only wins if their team wins, and the team has to provide a package of two firms' services.

Now suppose further that the customer has asked manufacturers and their service partners each to submit their own bid. If the customer insists that each manufacturer and service provider submits their own bid for the entire package of both their services, it should not be surprising that the bids tendered by a teamed manufacturer and service provider are related, rather than independent.[34] An antitrust enforcer could interpret the resulting lack of independence between the bids of a teamed manufacturer and its service provider

PeopleSoft and noting that "[a]n ERP installation, because of its complexity, usually requires substantial and expensive personnel training, consulting and other services to integrate the program into the customer's pre-existing or 'legacy' software. ERP software vendors often provide some of those services, but they are typically also performed and augmented by the customer's own staff, obtained from providers other than ERP vendors or both." (citations omitted)); Springbrook Software, Inc. v. Douglas Cnty., No. 13-cv-760, 2015 WL 2248449, at *2 (W.D. Wisc. May 13, 2015) (describing a request for bids to supply and install financial software).

[32] For an example of bidders teaming to meet RFP requirements, see ProSecure, LLC v. United States, No. 20-724C, 2020 WL 7906928, at *1–2 (Fed. Cl. Nov. 23, 2020).

[33] For an example of some of these issues in practice, see generally *id.*

[34] The *Diamond Asphalt* case illustrates the logic of interdependence. Diamond Asphalt Corp. v. Sander, 700 N.E.2d 1203 (N.Y. 1998). Before adopting the alternative arrangement at issue, New York City and its utilities separately hired contractors to do intimately related street and utilities work. *Id.* at 249. As a result, each bidder designed and entered its bid for the city's project knowing that a successful bid would affect its bid to the utilities. *See id.* Bids for bundled manufacturing and servicing likewise should be interdependent.

partner as reflecting an obviously anticompetitive bid-rigging scheme, and so argue that the manufacturer and the service provider have engaged in a per se violation of § 1 of the Sherman Act.[35]

But it is important to recognize that the dependence of the bids in this example is due to the customer's own requirements. The coordination between a teamed manufacturer and service provider raises no competitive concerns because (1) the teamed manufacturer and service provider do not offer competing services, and (2) there is still competition within this hypothetical procurement framework between *teams* of partnered manufacturers and service providers.[36] Indeed, if the antitrust enforcer were to succeed in enjoining manufacturers and service providers from coordinating, the customer would receive no responses to its RFP.

If the enforcer is successful in convincing a court that the per se standard applies, the manufacturer and service provider could be foreclosed from presenting economic analysis to defend themselves. They may face difficulties even in pointing out the obvious facts (1) that they are producers of complements, not substitutes, so that their coordination never eliminated any competition,[37] and (2) that there would be no output whatsoever if they could not coordinate.

Enjoining defendants' coordination when they lack an appropriate opportunity to demonstrate the competitive benefits of that coordination would generate correspondingly

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[35] *See* United States v. Joyce, 895 F.3d 673, 677 (9th Cir. 2018) (holding, in a distinguishable case involving various schemes to depress bids, that "[b]id-rigging is . . . a per se violation of the Sherman Act").

[36] *Cf.* Rossella Mossucca, *Competition and Cooperation: How To Evaluate Joint-Bidding*, LEARLAB, https://www.learlab.com/insights/competition-and-cooperation-how-to-evaluate-joint-bidding/ [https://perma.cc/2KCS-V256] (last visited Jan. 24, 2021) (analyzing the relationship between competition and team bidding).

[37] *See* Schor v. Abbott Lab'ys, 457 F.3d 608, 612 (7th Cir. 2006) (contrasting complements and substitutes, explaining that a product benefits from cheap complements, and concluding that a firm benefits from encouraging competition in complements to its products in order to decrease their prices).

perverse outcomes: reduction of output and elimination of competition in response to the customer's RFP. These are perverse outcomes.

C. Example 3: Technical Standard

One might argue that the "bid-rigging" example does not reveal a potential problem with the practice of the per se rule because it features coordination between firms that are not horizontal competitors, and because common sense dictates that the per se rule would not apply in such circumstances.[38] With this in mind, consider a situation in which horizontal competitors coordinate.

Suppose that a set of horizontal competitors collaborate and agree to a technical standard regarding an aspect of the products that they bring to market.[39] Assume that the collaborators are undeniably horizonal competitors, and that it is equally clear that they collaborated in the adoption of the standard. On the face of it, this would appear to be naked coordination between competitors and thus a per se violation of the Sherman Act.[40]

Indeed, plaintiffs argued recently in district court that this conduct should be per se illegal.[41] In that case, Audi, BMW, Daimler, Porsche and Volkswagen (German automobile manufacturers) coordinated to adopt jointly a pollution control device for cars equipped with engines that burn diesel

[38] *See* Bus. Elecs. Corp. v. Sharp Elecs. Corp., 485 U.S. 717, 733–36 (1988) (distinguishing vertical restraints from horizontal ones, which merit greater scrutiny), *abrogated on other grounds by* Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877 (2007) (applying the rule of reason even more broadly than *Bus. Elecs.*).

[39] As subsequently discussed, a similar agreement recently generated litigation. *See In re* German Auto. Mfrs. Antitrust Litig., MDL No. 2796, 2020 WL 1542373, at *1–2 (Mar. 31, 2020).

[40] *See* Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 309 (3d Cir. 2007) ("[P]rivate standard setting—which might otherwise be viewed as a [per se illegal] naked agreement among competitors . . .—need not, in fact, violate antitrust law." (citing Allied Tube & Conduit Corp. v. Indian Head, Inc., 486 U.S. 492, 500–01 (1988))).

[41] *In re German Auto. Mfrs.*, 2020 WL 1542373, at *5.

fuel.[42] Plaintiffs argued that this was a naked agreement to eliminate competition by coordinating an aspect of the quality of defendants' cars, which would in turn affect the quantity of output that defendants manufactured.[43] Plaintiffs then argued that agreements to coordinate on output are illegal per se.[44] In support of their argument, they cited a "Statement of Objections" by the European Commission alleging that defendants' conduct constituted illegal cartel activity.[45]

Defendants did not dispute that they coordinated in adopting jointly a specific pollution control device.[46] Nor did they dispute that they were horizontal competitors.[47] Rather, the question was whether the conduct at issue had no conceivable procompetitive impact, so that it should be condemned as a per se violation of the Sherman Act.[48] The plaintiffs argued that this conduct would inevitably affect the output of the manufacturers. While this was a valid supposition, the problem was that plaintiffs leaped to the conclusion that the conduct would reduce output, but economic reasoning revealed that the opposite outcome was possible.

Equipping a car with a diesel engine requires its manufacturer to add pollution control systems in order to meet mandated environmental standards on exhaust emissions.[49] There are different approaches to engineering pollution control systems that could meet this need. Different systems utilize differing chemicals, assume differing physical configurations, and employ different hardware.[50] Importantly,

[42] *Id.* at *1.
[43] *Id.* at *5.
[44] *Id.*
[45] *Id.* at *2.
[46] *Id.* at *4.
[47] *See id.* at *7.
[48] *See id.* at *6.
[49] For one of these standards, see, e.g., Emission Standards for 2004 and Later Model Year Diesel Heavy-Duty Engines and Vehicles, 40 C.F.R. § 86.004-11 (2020).
[50] For an overview of some of the variation in diesel pollution control technology, see Z.H. Zhang et al., *Experimental Investigation on Regulated and Unregulated Emissions of a Diesel/Methanol Compound Combustion*

the chemicals within these systems deplete as the systems "clean" the exhaust emerging from the engine, so consumers need to replenish these chemicals on a regular basis.[51]

The need for regular servicing and replenishment of these systems means that networks of service facilities are necessary for consumers. Suppose that each manufacturer had adopted a proprietary system. Each manufacturer's system would now need its own service network. In this scenario, there would be different—and smaller—networks, and service stations within a given "closed" network would service just the systems made by a particular manufacturer. Alternatively, in order to belong to multiple networks, a given service station would have to purchase the hardware required to maintain each system, acquire the training and expertise to do the work on each system, and stock each of the differing consumable chemicals and parts. But this would increase the fixed costs of providing the service and so, everything else being equal, reduce the number of stations.

Thus, agreeing to a standardized pollution control system reduces the fixed costs of service stations by allowing them to purchase just one set of hardware, purchase only one system of spare parts, obtain the expertise to service just one system, and stock just one type of consumable chemical. At the same time, a standardized pollution control system enables a given service station to realize more business because it can now compete to attract the business of consumers who have

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Engine with and Without Diesel Oxidation Catalyst, 408 SCI. TOTAL ENV'T 865, 865–66 (2010); Catalytic Converters, MFRS. OF EMISSION CONTROLS ASS'N, http://www.meca.org/technology/technology-details?id=17#:~:text=Catalytic%20Converters%20%2D%20Three%2DWay%20Catalytic,vehicles%20since%20the%20early%201980s [https://perma.cc/RTL6-82KR] (last visited Jan. 29, 2021).

[51] *See, e.g.*, *Shell Diesel and AdBlue*, SHELL, https://www.shell.com.au/motorists/shell-fuels/shell-diesel-and-adblue.html [https://perma.cc/83WM-7LF9] (last visited Jan. 29, 2021) (offering replacement of AdBlue, one chemical used to reduce pollution from diesel engines); *cf.* Directory of Licensees, AM. PETROLEUM INST., https://dieselexhaust.api.org/Directory/DefSearch [https://perma.cc/B6DU-Z4H2] (enter "DEF (AUS 32)" in "Product Type") (listing a wide variety American Petroleum Institute-licensed diesel exhaust fluids).

purchased Audis, BMWs, Mercedes, Porsches and Volkswagens, rather than just one of those brands.[52]

Lower fixed costs that get depreciated over a greater volume of business have the effect, ceteris paribus, of leading to more service stations. And if more service stations are capable of servicing a consumer's car, the consumer can expect to incur lower time costs to drive to a service station and may also benefit from more competition, which could lead to lower-priced and higher-quality service. Consumers thus benefit from the wider service network that arises from the adoption of a standard pollution control device.

So do automobile manufacturers. The pollution control device, and the ongoing stream of servicing that it requires, are complements to the automobiles that they manufacture and sell.[53] As with any complementary products, a decrease in the price of one product increases the demand for both products.[54] Decreasing the cost of servicing a car increases the demand for the purchase of automobiles. Thus, coordinating on a standard for pollution control devices has the effect of increasing the demand for cars, which will tend to affect procompetitively—i.e., increase—the output of automobile manufactures.

If the court had applied the per se rule, as plaintiffs urged, to the horizontal competitors in this example, it would have lost the benefit of the economic inquiry revealing these potential procompetitive effects. The application of the per se rule would have impeded the court's understanding and its realization that the per se rule was inappropriate. In this example, applying the per se rule perversely would have directed judicial resources away from a matter to which they

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[52] The standardization of railroads reflected a similar logic: if firms could construct a rail compatible with more regional locomotives, they could compete for more business with a single fixed investment in the rail. *See* Douglas J. Puffert, *The Standardization of Track Gauge on North American Railways, 1830-1890*, 60 J. ECON. HIST. 933, 938–39 (2000).

[53] *See* Carl Shapiro, *Aftermarkets and Consumer Welfare: Making Sense of* Kodak, 63 ANTITRUST L.J. 483, 485–86 (1995) (explaining the complementarity of products and aftermarket services).

[54] *See* SHAPOOR VALI, PRINCIPLES OF MATHEMATICAL ECONOMICS 48 (Mathematics Textbooks for Sci. & Eng'g vol. 3, 2014).

should have been directed. In doing so, it would have put at risk the benefits consumers stood to obtain from the challenged conduct.

D. Example 4: Horizontal Price Coordination

While the complaint in the previous example did argue for per se condemnation of coordination between horizontal competitors, it might be argued that the example is still not a particularly good illustration of how the per se rule can go wrong in practice. While the conduct at issue was clearly an agreement between horizontal competitors, it involved coordination on something other than the price (or output level) of the product that the competitors took to market. Thus, our final example involves coordination between horizontal competitors who designated a single source from whom customers could buy their products, and who set a common price for their products. The facts come from *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.* (*BMI*).[55]

Musical artists charge royalties for the performance of their music, and one must obtain a license to perform that music.[56] Under a strict application of the per se rule, each artist would need to license their music independently of all other artists and to price their music independently of other artists. An arrangement to the contrary arguably would be a naked price-fixing agreement among competitors[57] that eliminates the pricing competition that would emerge as artists lowered their royalty rates in efforts to sell their music. For example, upon learning that Taylor Swift released a new album, Pink might lower her license fees to increase the likelihood that consumers play her music.

In fact, musical artists effectively have agreed to confer their licensing rights on Broadcast Music, Inc. (BMI) or the

[55] 441 U.S. 1 (1979).

[56] *See* 17 U.S.C. § 106(4), (6) (2018) (giving a musical work's author the exclusive right to perform publicly and transmit digitally that work).

[57] *BMI*, 441 U.S. at 8 ("[T]he blanket license involves 'price fixing' in the literal sense.").

Association of Composers, Authors and Publishers (ASCAP).[58] In turn, BMI and ASCAP offer customers only a "blanket license" under which they can perform any song by any member artist for a single fixed, flat, fee.[59] Thus, unpopular songs are sold under the same terms—including price—as popular songs of popular artists even though artists ostensibly would have the incentive to lower the prices of licenses to induce others to play their unpopular songs.

Columbia Broadcasting System (CBS), a television network and then-owner of Columbia Records, argued that the BMI/ASCAP blanket licenses were simply naked pricing restraints imposed collectively by competitors and thus illegal per se.[60] If the Supreme Court had agreed, BMI and ASCAP (and the artists they represented) might have faced a difficult time establishing that their conduct had procompetitive effects because in-depth inquiry is abbreviated in a per se matter. But if the Court allowed for such an inquiry, it would find a number of procompetitive effects that tended to increase demand and output—i.e., effects that generated incremental value for society.

By creating a "turnkey entertainment solution," the blanket licenses created a new product different from a license to perform a single particular song by a particular artist.[61] This offered a unique value proposition. Because the blanket license includes any and every song, the customer avoids the cost of negotiating and contracting with each artist who created a song that they might like to perform.[62] Furthermore, the customer obtains the freedom to play any song from the collective catalog, so that they need not plan and specify in advance the particular songs that they wish to perform. To see the value of this flexibility, consider the counterfactual, in which a DJ would be unable to change their playlist in response to changing moods, event dynamics, or requests to play songs.

[58] *Id.* at 4–5.
[59] *See id.* at 5.
[60] *Id.* at 6.
[61] *See id.* at 21–22.
[62] *See id.* at 22.

Finally, the blanket license charges the customer a simple flat fee regardless of how many songs they play at their event. Consequently, the customer faces no incremental cost to play more music. In economic terms, the marginal price (or marginal cost) to the customer of playing an incremental song is set at zero. Setting the marginal price to zero creates an incentive for the customer to play more music ("Should we?" "Why not? It's not like it's going to cost us more!"). This increases output in the short run: customers should play more songs at a given event. From the perspective of the musical artists, when people play more music, more individuals hear their music, and presumably this creates more fans of their music over the longer run.

If the Supreme Court had looked no further than whether there was a strong indication of "naked price fixing," it could well have upheld the appellate court's ruling that the per se standard applied.[63] It is undeniable that artists—competing suppliers of music that could be played at events—had turned over their pricing decisions to a single common agent, and that agent made the individual products available only collectively and only at the same price. The per se rule would have foreclosed inquiry into the level of prices, so it would have been unavailing to offer a defense that the uniform blanket price was at a "reasonable" level (though, in this case, the marginal price was zero).[64] The problem, of course, is that the underlying conduct was procompetitive, so enjoining it would have decreased social welfare. Essentially, on this ground, the Court ruled for the defendants.[65]

V. CONCLUSION

The fact patterns in all the examples we considered allow for colorable arguments that the conduct at issue was straightforward coordinated price-fixing or market allocation

[63] Columbia Broad. Sys., Inc. v. Am. Soc'y of Composers, Authors & Publishers, 562 F.2d 130, 140 (2d Cir. 1977) (applying a per se rule with a narrow "market necessity" defense), *rev'd sub nom. BMI*, 441 U.S. 1.

[64] United States v. Trenton Potteries Co., 273 U.S. 392, 401 (1927).

[65] *See BMI*, 441 U.S. at 24.

unworthy of further inquiry. If those arguments were correct, then, under the economic rationale of the per se rule, devoting substantial judicial resources to the adjudication of such matters would only waste scarce resources that should be directed instead toward matters in which the application of those resources could yield benefits to society.

But a more careful inquiry into the welfare properties of the conduct at issue in each example reveals that the conduct had significant procompetitive effects which may well have outweighed any potential anticompetitive effects.

When plaintiffs or government enforcers confront a matter in which a few simple indicia of a "naked restraint" exist but a full inquiry into the matter presents the real risk of rejecting the plaintiff's or enforcer's petition for relief, it is understandable that they would seek to invoke the per se rule. This is one manner in which even a rule that was conceived on a principled and well-intentioned basis presents the risk, in practice, of unintended consequences.

The risk posed to social welfare, and to our conceptions of justice ("let a hundred guilty men walk free before convicting one innocent man"), is particularly heightened when the application of the per se rule forecloses the accused from bringing forth the insights and analyses that are necessary to establish that the accused's conduct was benign. There is a risk that the mere allegation of misconduct will be enough to condemn the accused.

Courts created the per se rule in an effort to conserve resources and direct them fruitfully into matters in which there are live questions to be adjudicated. There are principled and defensible justifications for having such a rule. But a rule that has the effect of abbreviating inquiry also has the effect of foreclosing meritorious defenses. The resolution to this problem would appear to be prudence. The per se rule should be applied prudently, recognizing that there is a tension between the desire to direct scarce judicial resources into matters where they matter the most and the unintended consequence of starving meritorious matters of resources.