

PROCOMPETITIVE JUSTIFICATIONS IN ANTITRUST CASES RELATED TO COMPANIES' COORDINATION ON TECHNOLOGY DEVELOPMENT THAT CAN BENEFIT CONSUMERS AND THE ENVIRONMENT

*ANNIE SOO YEON AHN**

ABSTRACT

This Article suggests that antitrust enforcement agencies and courts should carefully consider procompetitive justifications in antitrust cases concerning companies' coordination on technology development. Agencies and courts should carefully consider procompetitive justifications when determining whether to apply the per se analysis or the rule of reason analysis and when reviewing procompetitive justifications under the rule of reason analysis. This Article also considers how consumers' quality preferences might influence antitrust enforcement agency and court decisions related to procompetitive justifications. As consumers' quality preferences develop, companies may increasingly compete in areas such as environmental and privacy protection.

INTRODUCTION

As concerns about the environment increase, governments are establishing laws and regulations to address climate change, protect air quality, and promote energy conservation.¹ Consumers are also reportedly becoming more willing to purchase environmentally-friendly products and services.² Accordingly, many companies are developing

* Attorney (Bar Admissions: California and Minnesota), Shin & Kim LLC. J.D. 2015, University of Minnesota Law School; B.A. 2012, Ewha Womans University. Thank you to Changhun Lee, John H. Choi, Jooyoung Park, Chang-Young Cho, Daeyong Baek, Derek Dongryul Lee, Sangdon Lee, Geun-Bae Seok, Joo Yun Kim, Hyun-Jeong Ahn, and Young Chul Yim for the opportunity to work on significant antitrust cases. Thank you also to editor Eleanor Kim of *Denver Law Review*. The views stated in this Article are my own and do not necessarily reflect the views of Shin & Kim LLC or its clients. This Article is for general information purposes and should not be taken as legal advice.

¹ See, e.g., 26 U.S.C. § 30D(a) (clean vehicle tax credit).

² See OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, COMPETITION COMMITTEE DISCUSSION PAPER 10 (2021) [hereinafter OECD,

environmentally-friendly technology.³ In the automobile industry for example, fossil fuels are used to power internal combustion engines and to generate electricity.⁴ When burned, fossil fuel releases carbon dioxide (CO₂), which may negatively affect the environment and the climate.⁵ Gasoline and diesel vehicles also release particulate matter and nitrogen oxide (NO_x), which are harmful to the environment and air quality.⁶ Automobile companies are working on developing technology that can reduce vehicle emissions.⁷ Such development might involve coordination among several companies with the same goal.⁸

However, antitrust enforcement agencies may raise issues related to antitrust law when they suspect that companies' coordination on technology development limits improvements or decreases quality.⁹ In analyzing

ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT], <https://www.oecd.org/daf/competition/environmental-considerations-in-competition-enforcement-2021.pdf>.

³ See, e.g., MERCEDES-BENZ GROUP, SUSTAINABILITY REPORT 155 (2021), <https://group.mercedes-benz.com/documents/sustainability/other/mercedes-benz-sustainability-report-2021.pdf> (“These emission limit values have become ever more stringent over the past few years. We are continuously developing our technologies in order to remain below these limit values today and in the future.”); VOLKSWAGEN AG, SUSTAINABILITY REPORT 28 (2021), https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2021/Nonfinancial_Report_2021_e.pdf; BMW GROUP, BMW GROUP REPORT 23 (2021), https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup_com/ir/downloads/en/2022/bericht/BMW-Group-Report-2021-en.pdf.

⁴ *Oil and Petroleum Products Explained: Use of Oil*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/energyexplained/oil-and-petroleum-products/use-of-oil.php> (last updated July 1, 2022).

⁵ *Energy and the Environment Explained: Where Greenhouse Gases Come From*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php> (last updated June 24, 2022).

⁶ *NO_x Emissions – Formation, Reduction and Abatement*, CLEAN-CARBONENERGY, <https://clean-carbonenergy.com/nox-emissions.html> (last visited Nov. 6, 2022).

⁷ See, e.g., MERCEDES-BENZ GROUP, *supra* note 3, at 155; VOLKSWAGEN AG, *supra* note 3, at 28; BMW GROUP, *supra* note 3, at 23.

⁸ OECD, POLICY ROUNDTABLES: THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS 8 (2013) [hereinafter OECD, POLICY ROUNDTABLES: THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS], <https://www.oecd.org/competition/Quality-in-competition-analysis-2013.pdf>.

⁹ See *id.* at 5; see also OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, *supra* note 2, at 25 (“[Environmental standardisation agreements] may lead to increased prices, prevent effective access to the standard and may be problematic when they correspond to fixing the level of quality of innovation brought to the market by competitors in a specific industry, which may slow down investment, innovation or quality improvements.”).

coordination among companies, antitrust enforcement agencies and courts decide whether to apply the per se analysis or the rule of reason analysis. The per se analysis presumes there is anticompetitive effect and precludes attempts to show the conduct is reasonable.¹⁰ The rule of reason analysis considers the agreement's overall effect on competition and allows a defendant to put forth procompetitive justifications.¹¹ Procompetitive justifications for coordination on technology development may include promotion of competition through "economies of scale and integrations of complementary capacities that reduce costs, facilitate innovation, eliminate duplication of effort and assets, and share risks that no individual member would be willing to undertake alone."¹² Scholars note that procompetitive justifications have two roles in antitrust analysis.¹³ First, antitrust enforcement agencies and courts make an initial determination about whether to apply the per se analysis or the rule of reason analysis based on procompetitive justifications.¹⁴ Second, under the rule of reason analysis, if the plaintiff shows anticompetitive effect, then the defendant may put forth procompetitive justifications as a defense.¹⁵

Ongoing discussion about procompetitive justifications includes when justifications related to environmentally-friendly products and services may be cognizable and valid.¹⁶ Currently, the argument that restricting competition is necessary for a noneconomic purpose, such as preventing harm to the environment, is unlikely to influence the outcome in antitrust cases.¹⁷ Courts say the Sherman Act reflects legislative judgment that competition will lead to lower prices and better products and services.¹⁸

¹⁰ ANDREW I. GAVIL, WILLIAM E. KOVACIC & JONATHAN B. BAKER, ANTITRUST LAW IN PERSPECTIVE: CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY 104 (2d ed. 2008).

¹¹ FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS 3–4 (2000) [hereinafter FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS].

¹² *Princo Corp. v. Int'l Trade Comm'n*, 616 F.3d 1318, 1335 (Fed. Cir. 2010).

¹³ See, e.g., John M. Newman, *Procompetitive Justifications in Antitrust Law*, 94 INDIANA L.J., 501, 506 (2019).

¹⁴ *Id.* at 508.

¹⁵ *Id.*

¹⁶ See, e.g., OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT 3 (2010) [hereinafter OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT], <https://www.ftc.gov/sites/default/files/attachments/us-submissions-oecd-and-other-international-competition-fora/1010horizontalagreements.pdf>.

¹⁷ See *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679, 695 (1978).

¹⁸ *Id.*

However, scholars have noted that environmental-friendliness of products and services may also be a factor of competition.¹⁹

This Article suggests that antitrust enforcement agencies and courts should carefully consider procompetitive justifications in antitrust cases related to companies' coordination on technology development. Agencies and courts should carefully consider procompetitive justifications when determining whether to apply the per se analysis or the rule of reason analysis and when reviewing procompetitive justifications in the rule of reason analysis. Part I explains the per se analysis and the rule of reason analysis. Part II discusses the case-specific approach for determining whether the per se analysis or the rule of reason analysis should apply and the cognizability of procompetitive justifications. Part III suggests that antitrust enforcement agencies and courts should carefully consider procompetitive justifications that may increase competition and benefit consumers under changing market conditions in antitrust cases. Part III also considers how consumers' preferences related to quality might influence antitrust enforcement agency and court decisions.

I. PER SE ANALYSIS AND RULE OF REASON ANALYSIS

This Part explains the per se analysis and the rule of reason analysis used in antitrust cases. Section 1 of the Sherman Act provides, "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal."²⁰ Antitrust enforcement agencies and courts may analyze an agreement subject to a claim based on Section 1 of the Sherman Act under the per se analysis and the rule of reason analysis.²¹ In this Part, Section A explains the per se analysis, Section B discusses the rule of reason analysis, and Section C describes the burden-shifting frameworks of the rule of reason analysis and the quick look analysis.

¹⁹ See, e.g., OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, *supra* note 2, at 10; OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 3 ("[T]he development of renewable energy resources has the potential not only to reduce environmental harm, but also to help deconcentrate wholesale-power markets.").

²⁰ 15 U.S.C. § 1.

²¹ FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS, *supra* note 11, at 3.

A. *Per Se Analysis*

The per se analysis applies to certain agreements that are “so likely to harm competition and to have no significant procompetitive benefit that they do not warrant the time and expense required for particularized inquiry into their effects.”²² In contrast, if the per se analysis does not apply, and the rule of reason analysis applies, agencies and courts consider an agreement’s overall effect on competition.²³ Courts have held the following as per se illegal agreements: “agreements among competitors to fix prices or output, rig bids, or share or divide markets by allocating customers, suppliers, territories, or lines of commerce.”²⁴ For example, in *United States v. Socony-Vacuum Oil Co.*,²⁵ the Supreme Court explained, “[T]he machinery employed by a combination for price-fixing is immaterial. Under the Sherman Act a combination formed for the purpose and with the effect of raising, depressing, fixing, pegging, or stabilizing the price of a commodity in interstate or foreign commerce is illegal per se.”²⁶ Also, in *Catalano, Inc. v. Target Sales, Inc.*,²⁷ competing wholesalers of beer allegedly made an agreement to stop giving trade credit to retailers and required retailers to pay in cash upon delivery of beer or earlier; the Supreme Court held this is an agreement to stop giving discounts and is subject to the per se analysis against price fixing.²⁸

In addition, scholars explain that case law on the reach of the per se analysis is continuing to develop.²⁹ For example, in *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*,³⁰ the Supreme Court reviewed whether blanket licenses issued by the American Society of Composers, Authors and Publishers (ASCAP) and Broadcast Music, Inc. (BMI) for copyrighted musical compositions constituted per se illegal price fixing.³¹

²² *Id.* See generally LEGAL INFORMATION INSTITUTE, https://www.law.cornell.edu/wex/per_se (last visited Nov. 21, 2022) (“[P]er se [is] Latin for ‘by itself,’ in other words, inherently.”).

²³ FED. TRADE COMM’N & U.S. DEP’T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS, *supra* note 11, at 3.

²⁴ *Id.*; see also GAVIL, KOVACIC & BAKER, *supra* note 10, at 153.

²⁵ *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150 (1940).

²⁶ *Id.* at 223; see GAVIL, KOVACIC & BAKER, *supra* note 10, at 103 (“It did not matter that the mechanism was restriction of output, as opposed to fixing a price, because . . . lower industry output and higher industry prices go hand in hand.”).

²⁷ *Catalano, Inc. v. Target Sales, Inc.*, 446 U.S. 643 (1980).

²⁸ *Id.* at 644–45, 648, 650 (“[C]redit terms must be characterized as an inseparable part of the price.”).

²⁹ GAVIL, KOVACIC & BAKER, *supra* note 10, at 92.

³⁰ *Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1 (1979).

³¹ *Id.* at 4.

Since the blanket licenses included individual musical compositions and the aggregating service, the Supreme Court said, “Here, the whole is truly greater than the sum of its parts; it is, to some extent, a different product.”³² The Supreme Court also noted that the blanket licenses were “quite different from anything any individual owner could issue.”³³ Therefore, the Supreme Court reversed the judgment of the Court of Appeals and remanded for assessment under the rule of reason standard.³⁴

B. Rule of Reason Analysis

If the per se analysis does not apply, then the rule of reason analysis applies to determine an agreement’s overall effect on competition.³⁵ The rule of reason analysis inquires as to whether an agreement at issue “likely harms competition by increasing the ability or incentive profitably to raise price above or reduce output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement.”³⁶ In *Standard Oil Co. v. United States*,³⁷ the Supreme Court stated that Section 1 of the Sherman Act was intended to protect interstate and foreign commerce from undue restraints and that the “the standard of reason which had been applied at the common law” should be the measure for determining whether there had been a violation.³⁸ Scholars thus say that Justice White read into Section 1 of the Sherman Act the “rule of reason.”³⁹ Later in *Chicago Board of Trade v. United States*,⁴⁰ Justice Brandeis further explained and applied the rule of reason.⁴¹

In *Chicago Board of Trade*, the Board of Trade adopted a rule that prohibited members from purchasing grain to arrive at a different price than the special session’s closing bid after the special session closed and before

³² *Id.* at 21–22. See generally *Texaco Inc. v. Dagher*, 547 U.S. 1, 5–6 (2006) (explaining that the joint venture agreement between Texaco and Shell Oil, approved by consent decree by the Federal Trade Commission, did not present a per se illegal price fixing agreement because the two companies “did not compete with one another in the relevant market—namely, the sale of gasoline to service stations in western United States—but instead participated in that market jointly through their investments in Equilon”).

³³ *Broad. Music, Inc.*, 441 U.S. at 23.

³⁴ *Id.* at 24–25.

³⁵ FED. TRADE COMM’N & U.S. DEP’T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS, *supra* note 11, at 10.

³⁶ *Id.*

³⁷ *Standard Oil Co. v. United States*, 221 U.S. 1 (1911).

³⁸ *Id.* at 60.

³⁹ GAVIL, KOVACIC & BAKER, *supra* note 10, at 154; see *Standard Oil Co.*, 221 U.S. at 60.

⁴⁰ *Chi. Bd. of Trade v. United States*, 246 U.S. 231 (1918).

⁴¹ See *id.* at 238; see also GAVIL, KOVACIC & BAKER, *supra* note 10, at 154.

the regular session opened on the following business day.⁴² The Supreme Court explained the rule of reason as follows:

The true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition. To determine that question the court must ordinarily consider the facts peculiar to the business to which the restraint is applied, its condition before and after the restraint was imposed, the nature of the restraint and its effect, actual or probable. The history of the restraint, the evil believed to exist, the reason for adopting the particular remedy, the purpose or end sought to be attained, are all relevant facts. This is not because a good intention will save an otherwise objectionable regulation or the reverse; but because knowledge of intent may help the court to interpret facts and to predict consequences.⁴³

Accordingly, the Supreme Court considered the nature, scope, and effects of the Board of Trade's rule and determined it improved market conditions and was reasonable.⁴⁴

Scholars say the rule of reason was also discussed in an earlier case in *United States v. Addyston Pipe & Steel Co.*⁴⁵ They describe the approach in *Addyston Pipe* as the "limited" rule of reason because it allows inquiry about reasonableness "only under limited circumstances, and even then only as to particular questions—economic necessity and duration of the restraint"⁴⁶:

[N]o conventional restraint of trade can be enforced unless the covenant embodying it is merely ancillary to the main purpose of a lawful contract, and necessary to protect the covenantee in the full enjoyment of the legitimate fruits of the contract, or to protect him from the dangers of an unjust use of those fruits by the other party.⁴⁷

⁴² *Chi. Bd. of Trade*, 246 U.S. at 236–37, 239–41.

⁴³ *Id.* at 238.

⁴⁴ *Id.* at 239–41.

⁴⁵ 85 F. 271 (6th Cir. 1898), *aff'd*, 175 U.S. 211 (1899).

⁴⁶ GAVIL, KOVACIC & BAKER, *supra* note 10, at 92–93.

⁴⁷ *Addyston Pipe*, 85 F. at 282.

In *Addyston Pipe*, manufacturers and sellers of cast-iron pipe agreed that a central committee would fix the price of their bids.⁴⁸ The United States Court of Appeals for the Sixth Circuit determined that this constituted an illegal conspiracy.⁴⁹ Scholars say that, although Judge Taft’s discussion of ancillary restraints is dicta, *Addyston Pipe*’s “ancillary restraints analysis” can be viewed as demonstrating the “desire to protect restraints that have sufficiently procompetitive virtues”⁵⁰ and as bringing about “greater attention to economic values” because restraints on trade “only as a means” to expand trade were considered reasonable.⁵¹

C. Burden-Shifting Frameworks of the Rule of Reason Analysis and the Quick Look Analysis

This Section describes the burden-shifting framework of the rule of reason analysis discussed above. In *Ohio v. American Express Co.*,⁵² when determining whether an agreement violated Section 1 of the Sherman Act, the Supreme Court discussed the burden-shifting framework of the rule of reason.⁵³ First, “[T]he plaintiff has the initial burden to prove that the challenged restraint has a substantial anticompetitive effect that harms consumers in the relevant market.”⁵⁴ Second, “If the plaintiff carries its burden, then the burden shifts to the defendant to show a procompetitive rationale for the restraint.”⁵⁵ Third, “If the defendant makes this showing, then the burden shifts back to the plaintiff to demonstrate that the procompetitive efficiencies could be reasonably achieved through less anticompetitive means.”⁵⁶ In addition, the Federal Trade Commission and the U.S. Department of Justice issue the Antitrust Guidelines for Collaborations Among Competitors which provides, “If the relevant agreement is reasonably necessary to achieve cognizable efficiencies, the

⁴⁸ *Id.* at 291–92.

⁴⁹ *Id.* at 294.

⁵⁰ GAVIL, KOVACIC & BAKER, *supra* note 10, at 168–69.

⁵¹ *Id.* at 92, 171–73.

⁵² *Ohio v. Am. Express Co.*, 138 S.Ct. 2274 (2018).

⁵³ *Id.* at 2284. *See generally* United States v. Microsoft Corp., 253 F.3d 34, 58–59 (D.C. Cir. 2001) (discussing burden shifting when analyzing a claim under Section 2 of the Sherman Act); Herbert Hovenkamp, *The Rule of Reason*, 70 FLA. L. REV. 81, 118 (2018) (explaining that the rule of reason seeks to “assess whether the challenged restraint reduces output or increases price from the non-restraint level” and that this approach “is consistent with antitrust’s consumer welfare principle, which identifies antitrust’s goal as competitively low prices and high output, whether measured by quantity or quality”).

⁵⁴ *Am. Express Co.*, 138 S.Ct. at 2284.

⁵⁵ *Id.*

⁵⁶ *Id.*

Agencies assess the likelihood and magnitude of cognizable efficiencies and anticompetitive harms to determine the agreement's overall actual or likely effect on competition in the relevant market."⁵⁷

Scholars explain that courts began to search for "a middle ground between abrupt per se condemnation and full rule of reason inquiry."⁵⁸ In *Polygram Holding, Inc. v. FTC*,⁵⁹ the agreement at issue, between PolyGram and Warner Communications, concerned the distribution of a concert recording of The Three Tenors in 1998.⁶⁰ The two companies separately agreed that for ten weeks, they would suspend the advertisements and discounts for two previous Three Tenors concert albums.⁶¹ The United States Court of Appeals for the District of Columbia Circuit said that because it may be necessary to engage in "considerable inquiry into market conditions" before applying the per se analysis, there is often "no bright line" between the per se analysis and the rule of reason analysis.⁶² The court explained the "quick look" inquiry that may apply in some cases as follows⁶³:

If, based upon economic learning and the experience of the market, it is obvious that a restraint of trade likely impairs competition, then the restraint is presumed unlawful and, in order to avoid liability, the defendant must either identify some reason the restraint is unlikely to harm consumers or identify some competitive benefit that plausibly offsets the apparent or anticipated harm.⁶⁴

⁵⁷ FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS, *supra* note 11, at 24–25 ("The Agencies consider only those efficiencies for which the relevant agreement is reasonably necessary."). See generally Harry First, American Express, *the Rule of Reason, and the Goals of Antitrust*, 98 NEB. L. REV. 319, 330 (2019) (stating that the rule of reason has four steps because courts should "net pro- and anti-competitive effects"); Gregory J. Werden, *Cross-Market Balancing of Competitive Effects: What Is the Law, and What Should It Be?* 43 J. CORP. L. 119, 141 (2017) (suggesting that a defendant must show that a procompetitive benefit "is substantial in relation to the competitive harm the plaintiff has shown" but that cross-market balancing "should be feasible when required because the rule-of-reason requires only that a court determine which competitive effect predominates in a qualitative sense").

⁵⁸ GAVIL, KOVACIC & BAKER, *supra* note 10, at 175 ("This development also continues especially as the cost of complex litigation such as antitrust cases has become an increasing concern of courts, commentators and enforcers.").

⁵⁹ *Polygram Holding, Inc. v. FTC*, 416 F.3d 29 (D.C. Cir. 2005).

⁶⁰ *Id.* at 31.

⁶¹ *Id.*

⁶² *Id.* at 35 (citing *Cal. Dental Ass'n v. FTC*, 526 U.S. 756, 779 (1999)).

⁶³ *Id.* (citations omitted).

⁶⁴ *Id.* at 36.

The court held that the agreement in *Polygram Holding* was “presumptively unlawful and PolyGram failed to rebut that presumption.”⁶⁵ Some argue that although the quick look analysis shifts the burden of production to the defendant, it invites “early consideration of plausible efficiencies” and can alleviate “the harsh consequences” of applying the per se analysis.⁶⁶

II. CASE-SPECIFIC APPROACH FOR DETERMINING WHETHER TO APPLY THE PER SE ANALYSIS OR THE RULE OF REASON ANALYSIS AND THE COGNIZABILITY OF PROCOMPETITIVE JUSTIFICATIONS

This Part discusses the Supreme Court’s case-specific approach for determining whether to apply the per se analysis or the rule of reason analysis⁶⁷ and the cognizability of procompetitive justifications.⁶⁸ Section A explains *California Dental Ass’n v. FTC*,⁶⁹ where the Supreme Court reviewed whether it was appropriate to apply the quick look analysis to alleged restriction of advertising in a market for professional services.⁷⁰ Section B discusses *National Society of Professional Engineers v. United States*,⁷¹ where the Supreme Court addressed whether the procompetitive justification put forth in the case was cognizable.⁷² Section C notes that in some cases, economic and noneconomic goals can be complementary.⁷³

⁶⁵ *Id.* at 31.

⁶⁶ GAVIL, KOVACIC & BAKER, *supra* note 10, at 206. *See generally* Edward D. Cavanagh, *Whatever Happened To Quick Look?*, 26 U. MIAMI BUS. L. REV. 39, 40 (2017) (“Quick look is tailor-made for restraints that bear a close family resemblance to price-fixing but are of the type with which courts have little experience or are idiosyncratic in nature.”).

⁶⁷ *See* Cal. Dental Ass’n v. FTC, 526 U.S. 756, 780–81 (1999); Max R. Shulman, *The Quick Look Rule of Reason: Retreat from Binary Antitrust Analysis*, 2 SEDONA CONF. J. 89, 94 (2001) (“[R]ecent Supreme Court decisions reflect a retreat from the traditional binary approach to antitrust issues—*i.e.*, an analysis that categorizes challenged behavior as either *per se* or rule of reason.”).

⁶⁸ *See* GAVIL, KOVACIC & BAKER, *supra* note 10, at 33.

⁶⁹ Cal. Dental Ass’n, 526 U.S. 756.

⁷⁰ *Id.* at 762, 769.

⁷¹ Nat’l Soc’y of Prof’l Eng’rs v. United States, 435 U.S. 679 (1978).

⁷² *Id.* at 695.

⁷³ OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 3.

A. Case-Specific Approach for Determining Whether to Apply the Per Se Analysis or the Rule of Reason Analysis

In *California Dental Ass'n v. FTC*, the Supreme Court reviewed whether it was appropriate to apply the quick look analysis in a case where the FTC alleged that California Dental Association, a nonprofit professional association of local dental societies, unreasonably restricted “price advertising, particularly discounted fees, and advertising relating to the quality of dental services” through advertising guidelines related to a code of ethics.⁷⁴ The FTC alleged that California Dental Association’s advertising restrictions violated Section 1 of the Sherman Act and thus violated Section 5 of the FTC Act.⁷⁵ The Supreme Court said that in a professional services market, it is difficult for customers to find and verify information about price and service availability.⁷⁶ The Supreme Court determined that the challenge for customers of making an informed decision about professional services suggests that restrictions on advertising that arguably could protect customers from misleading or irrelevant information in some advertisements “call for more than cursory treatment as obviously comparable to classic horizontal agreements to limit output or price competition.”⁷⁷

In addition, the Supreme Court said, “[O]ur categories of analysis of anticompetitive effect are less fixed than terms like ‘*per se*,’ ‘quick look,’ and ‘rule of reason’ tend to make them appear” and that market conditions should be carefully considered.⁷⁸ The Supreme Court also explained, “[T]here is generally no categorical line to be drawn between restraints that give rise to an intuitively obvious inference of anticompetitive effect and those that call for more detailed treatment,” and “an enquiry meet for the case” should be used by taking into account “the circumstances, details, and logic of a restraint.”⁷⁹ Therefore, the Supreme Court remanded the case for

⁷⁴ *Cal. Dental Ass'n*, 526 U.S. at 759–65.

⁷⁵ *Id.* at 762–63; *Cal. Dental Ass'n*, 121 F.T.C. 190, 321 (1996). The Supreme Court explains, “The FTC Act’s prohibition of unfair competition and deceptive acts or practices, 15 U.S.C. § 45(a)(1), overlaps the scope of § 1 of the Sherman Act, 15 U.S.C. § 1, aimed at prohibiting restraint of trade, and the Commission relied upon Sherman Act law in adjudicating this case.” *Cal. Dental Ass'n*, 526 U.S. at 762 n.3 (citation omitted). *See generally* 15 U.S.C. § 45(a)(1) (“Unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are hereby declared unlawful.”).

⁷⁶ *Cal. Dental Ass'n*, 526 U.S. at 772.

⁷⁷ *Id.* at 773.

⁷⁸ *Id.* at 779.

⁷⁹ *Id.* at 780–81.

closer analysis of “anticompetitive tendencies” of restrictions on professional advertising.⁸⁰

Legal scholars explain that the Supreme Court’s decision in *California Dental Ass’n* suggests a move away from “rigid categorization” into per se analysis, rule of reason analysis, and quick look analysis and “advocates an analytic continuum commensurate with the overall factual context of the particular market restraint” for analyzing antitrust issues.⁸¹ Some have raised the concern that taking a “step toward remaking antitrust rules on an industry-specific basis” may lead to uncertainty.⁸² However, others argue that the case “urges courts to embrace that uncertainty” and to consider the specific facts and circumstances in the case.⁸³

B. Cognizability of Procompetitive Justifications

In addition to the considerations in applying the per se analysis or the rule of reason analysis, another important issue in antitrust cases is whether a procompetitive justification is cognizable.⁸⁴ Modern antitrust jurisprudence in the United States focuses on achieving economic efficiency.⁸⁵ Values such as “fairness, protection of small businesses, social justice, equity, and political stability” are said to be noneconomic goals “because they are concerned with values other than the economic well-being of consumers or the economy as a whole.”⁸⁶ Supporters of an approach focusing on achieving economic goals in antitrust cases argue that an approach influenced by noneconomic goals would “impose significant aggregate costs on consumers” and is “prone to over-deterrence.”⁸⁷

Accordingly, it is unlikely that courts and agencies will accept companies’ claim that restriction of competition is necessary for a noneconomic purpose, such as preventing harm to the environment, as a cognizable procompetitive justification in antitrust cases.⁸⁸ In *National Society of Professional Engineers*, the United States brought suit to nullify a canon of ethics from the National Society of Professional Engineers (“The

⁸⁰ *Id.* at 781.

⁸¹ Shulman, *supra* note 67, at 94–95 (stating that, based on *California Dental Ass’n*, courts will take “a more active role in gauging the anticompetitive effect of market restraints”).

⁸² Jesse W. Markham Jr., *Sailing a Sea of Doubt: A Critique of the Rule of Reason in U.S. Antitrust Law*, 17 *FORDHAM J. CORP. & FIN. L.* 591, 619 (2012).

⁸³ Shulman, *supra* note 67, at 95.

⁸⁴ *See, e.g.*, Newman, *supra* note 13, at 502–03.

⁸⁵ GAVIL, KOVACIC & BAKER, *supra* note 10, at 33.

⁸⁶ *Id.* at 32.

⁸⁷ *Id.* at 39.

⁸⁸ *Nat’l Soc’y of Prof’l Eng’rs v. United States*, 435 U.S. 679, 695 (1978).

Society”) which prohibited members from negotiating or discussing fees “until after a prospective client has selected the engineer for a particular project.”⁸⁹ The Society claimed that the restraint it imposed on price competition benefits the public by encouraging better work quality and ethical behavior.⁹⁰ However, the Supreme Court stated that the Society’s attempt to justify the restraint by claiming competition would pose a threat to public safety and to ethical behavior “is nothing less than a frontal assault on the basic policy of the Sherman Act.”⁹¹

The Supreme Court explained, “The Sherman Act reflects a legislative judgment that ultimately competition will produce not only lower prices, but also better goods and services.”⁹² The Supreme Court further stated, “Even assuming occasional exceptions to the presumed consequences of competition, the statutory policy precludes inquiry into the question whether competition is good or bad.”⁹³ Therefore, the Supreme Court held that the rule of reason analysis “does not support a defense based on the assumption that competition itself is unreasonable.”⁹⁴ The next section discusses situations where economic and noneconomic goals can be complementary and how this can impact arguments about the cognizability of procompetitive justifications.

C. Economic and Noneconomic Goals

Economic efficiency and noneconomic goals can sometimes align.⁹⁵ Scholars have said that “An additional argument against devising antitrust rules to pursue non-economic goals explicitly is that relying on economic rules of decision often may also serve non-economic goals, albeit indirectly or incompletely.”⁹⁶ For example, in *United States v. Brown University*,⁹⁷ the Department of Justice alleged that several schools violated Section 1 of

⁸⁹ *Id.* at 681–83.

⁹⁰ *Id.* at 693–94.

⁹¹ *Id.* at 695.

⁹² *Id.* (“The assumption that competition is the best method of allocating resources in a free market recognizes that all elements of a bargain—quality, service, safety, and durability—and not just the immediate cost, are favorably affected by the free opportunity to select among alternative offers.”).

⁹³ *Id.*

⁹⁴ *Id.* at 696.

⁹⁵ OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 3.

⁹⁶ GAVIL, KOVACIC & BAKER, *supra* note 10, at 39. *See generally* Amelia Miazad, *Prosocial Antitrust*, 73 HASTINGS L.J. 1637, 1645 (2022) (suggesting use of the “universal consumer standard” which “accounts for harms on future consumers”).

⁹⁷ *United States v. Brown Univ.*, 5 F.3d 658 (3d Cir. 1993).

the Sherman Act when they agreed “to distribute financial aid exclusively on the basis of need and to collectively determine the amount of financial assistance commonly admitted students would be awarded.”⁹⁸

In *Brown University*, the United States Court of Appeals for the Third Circuit reviewed whether the district court erred by not adequately considering “procompetitive justifications and social welfare justifications” put forth by the Massachusetts Institute of Technology (MIT) and by applying the quick look analysis.⁹⁹ The Third Circuit accepted MIT’s procompetitive justification that the agreement at issue improves the quality of education that colleges and universities offer.¹⁰⁰ The Third Circuit stated, “The Supreme Court has recognized improvement in the quality of a product or service that enhances the public’s desire for that product or service as one possible procompetitive virtue.”¹⁰¹

The Third Circuit also accepted MIT’s procompetitive justification that the agreement enhances consumer choice because it provides some students with the education they could not afford otherwise.¹⁰² In distinguishing this case from *National Society of Professional Engineers*, the Third Circuit reasoned that the agreement in *Brown University* may not only achieve social benefits but also increase competition.¹⁰³ The Third Circuit explained that the agreement in the case “may in fact merely regulate competition in order to enhance it, while also deriving certain social benefits.”¹⁰⁴ Therefore, the Third Circuit said that the district court should have considered the procompetitive and noneconomic justifications that MIT proffered more fully; the Third Circuit remanded the case and instructed the district court to analyze the agreement using the full-scale rule of reason analysis.¹⁰⁵

The next Part discusses coordination among companies regarding technology development that can benefit both consumers and the environment by promoting competition.

⁹⁸ *Id.* at 661.

⁹⁹ *Id.* (referring to the quick look analysis as the “abbreviated” rule of reason analysis).

¹⁰⁰ *Id.* at 674.

¹⁰¹ *Id.*

¹⁰² *Id.* at 675.

¹⁰³ *Id.* at 677.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 678.

III. COMPANIES' COORDINATION ON TECHNOLOGY DEVELOPMENT CAN BENEFIT CONSUMERS AND THE ENVIRONMENT

In this Part, Section A suggests that antitrust enforcement agencies and courts should carefully consider procompetitive justifications that may result in an increase of competition and benefits to consumers under changing market conditions in antitrust cases related to the coordination among companies on technology development. Agencies and courts should carefully consider procompetitive justifications (1) when determining which analysis to apply, the per se analysis or the rule of reason analysis, and (2) if the rule of reason analysis is applied, when reviewing procompetitive justifications in such analysis. Section B considers how consumers' quality preferences might influence antitrust enforcement agency and court decisions.

A. Careful Consideration of Procompetitive Justifications in Determining Whether to Apply the Per Se Analysis or the Rule of Reason Analysis in Antitrust Cases Related to Companies' Coordination on Technology Development

As consumers increasingly consider purchasing and using environmentally-friendly products, plaintiffs might bring antitrust cases arguing that companies' coordination on technology development decreases or limits improvements to quality because it led to the production of less environmentally-friendly products and violates antitrust law.¹⁰⁶ Courts in the United States hold that "harm to the environment is not a harm cognizable under the antitrust laws."¹⁰⁷ However, when competitors agree to refrain from developing a current product's environmentally-friendly alternative, such an agreement "would harm both consumers and the environment."¹⁰⁸

Accordingly, if plaintiffs believe that companies' coordination led to less environmentally-friendly products and services, they might argue that the coordination led to a decrease in quality and innovation, that consumers

¹⁰⁶ OECD, POLICY ROUNDTABLES: THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS, *supra* note 8, at 8 ("Co-ordinated efforts between competitors to limit quality improvements or to degrade existing quality are generally most appropriately treated as equivalent to a cartel.").

¹⁰⁷ OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 3.

¹⁰⁸ *Id.*

were harmed, and that the per se analysis should be applied.¹⁰⁹ In antitrust cases challenging companies' coordination on technology development, companies would have to convince the courts *as early as possible* that they did not violate antitrust law¹¹⁰ and that the court should apply the rule of reason analysis, considering procompetitive justifications. In such cases, companies' preparation of evidence in advance that emphasize their conducts' procompetitive nature may be helpful for convincing the courts.¹¹¹

Antitrust enforcement agencies and courts should review procompetitive justifications that increase competition and benefit consumers under changing market conditions in antitrust cases concerning coordination among companies on technology development. Agencies and courts should carefully consider procompetitive justifications in determining which analysis to apply. Courts have noted that collaboration to develop technology can lead to innovation and promote competition.¹¹² Courts have also said that R&D joint ventures to develop technology standards can have procompetitive effects such as "greater product interoperability, including the promotion of price competition among interoperable products; positive network effects, including an increase in the value of products as interoperable products become more widely used; and incentives to innovate by establishing a technical baseline for further product improvements."¹¹³ Accordingly, the National Cooperative Research and Production Act, amended by the Standards Development Organization Advancement Act of 2004, provides that the rule of reason analysis applies in antitrust cases that review a covered joint venture or standard development organization's effects on competition.¹¹⁴

¹⁰⁹ See, e.g., *id.* at 4 ("Section 1 has been used to prohibit an agreement to suppress the development of environmentally friendly technology.").

¹¹⁰ Cf. Michael A. Carrier, *An Antitrust Framework for Climate Change*, 9 NW. J. TECH. & INTELL. PROP. 513, 514 (2011) ("Although collaborative activities between rival companies may raise concern, the courts and government enforcement agencies should be cautious in finding market power in such nascent technologies.").

¹¹¹ See OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, *supra* note 2, at 40.

¹¹² *Princo Corp. v. Int'l Trade Comm'n*, 616 F.3d 1318, 1335 (Fed. Cir. 2010).

¹¹³ *Id.*; see OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 2 ("[C]ompetitors are free to enter into an agreement designed to promote a cleaner environment—for example, a joint venture among manufacturers to develop a 'greener' technology—so long as the net effect of that agreement is not to restrain competition among those competitors or with others in the marketplace.").

¹¹⁴ U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR INTERNATIONAL ENFORCEMENT AND COOPERATION 11 (2017); see 15 U.S.C. § 4302. See generally Dailey C. Koga, Comment, *Teamwork or Collusion? Changing Antitrust Law to*

The following Section discusses how consumers' preferences might influence defendants' arguments about procompetitive justifications in antitrust cases.

B. How Consumers' Preferences for Products that Are Environmentally-friendly Might Influence Decisions by Antitrust Enforcement Agencies and Courts Related to Procompetitive Justifications

If the rule of reason analysis applies, defendants may provide a reason why “the restraint is unlikely to harm consumers” or a procompetitive benefit that “plausibly offsets the apparent or anticipated harm” to rebut plaintiffs' argument about an anticompetitive effect.¹¹⁵ Procompetitive justifications generated through competitor collaborations should be verifiable and cognizable.¹¹⁶ Cognizable procompetitive justifications are those that “can enhance the ability and incentive of the collaboration and its participants to compete, which may result in lower prices, improved quality, enhanced service, or new products.”¹¹⁷ Courts have also described a procompetitive justification as “a nonpretextual claim that its conduct is indeed a form of competition on the merits because it involves, for example greater efficiency or enhanced consumer appeal.”¹¹⁸

Quality is “the flow of service, or the level of value, that consumers derive from a product.”¹¹⁹ Quality can include various factors such as “workmanship, materials, design, reliability, durability, aesthetics, location, and performance.”¹²⁰ For example, according to a passenger survey, items related to airport service quality include security search time, baggage handling systems, flight information screens, cleanliness, and courteous and helpful staff.¹²¹ Quality is a “subjective concept” because consumers may perceive and value specific quality attributes differently.¹²²

Permit Corporate Action on Climate Change, 95 WASH. L. REV. 1989, 2021 (2020) (suggesting passage of “an exemption to antitrust law for sustainability agreements”).

¹¹⁵ OECD, POLICY ROUNDTABLES: THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS, *supra* note 8, at 36.

¹¹⁶ FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS, *supra* note 11, at 23.

¹¹⁷ *Id.*

¹¹⁸ *United States v. Microsoft Corp.*, 253 F.3d 34, 59 (D.C. Cir. 2001).

¹¹⁹ OECD, POLICY ROUNDTABLES: THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS, *supra* note 8, at 5. “[I]n the vast majority of cases, prices will reflect consumers' preferences and will, as such, reflect the value that consumers attach to the quality of products.” *Id.* at 129.

¹²⁰ *Id.* at 12.

¹²¹ *Id.* at 13.

¹²² *Id.* at 5.

As consumers increasingly consider purchasing environmentally-friendly products and services, “the green quality . . . increasingly becomes a parameter of competition and consumers’ demand increasingly drives competition.”¹²³ Courts are unlikely to allow a party to defend a horizontal agreement that restrains trade “solely on the ground that it has environmental benefits.”¹²⁴ However, “goals of a competitive economy and environmental preservation can be complementary,” and an agreement could increase competition, resulting in benefit to both consumers and the environment.¹²⁵

Thus, it will be important for parties in antitrust cases to prepare evidence related to the “effects on quality, choice and innovation”¹²⁶ of collaboration and coordination early on.¹²⁷ Evidence related to “quality, choice and innovation” may include the following: documents related to R&D, sustainability, and privacy; internal communications related to recruiting engineers and research staff; and consumer surveys.¹²⁸ As consumers’ quality preferences change and develop, competition among companies may increase with respect to environmental and privacy

¹²³ OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, *supra* note 2, at 7, 10 (“A recent survey conducted in 17 wealthy economies across North America, Asia Pacific and Europe showed that consumers are willing to adapt the way they live and work to minimize the negative impact of global warming.”); *see* OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 2 (explaining that market conditions “are relevant circumstances to be considered when applying standard antitrust analysis”). *See generally* Robert H. Bork, *The Rule of Reason and the Per Se Concept: Price Fixing and Market Division*, 74 YALE L.J. 775, 831 (1965) (“[I]n economic analysis competition is most admired as one means of assisting in the creation of wealth, or, to say the same thing, the maximization of the satisfaction of consumer wants.”).

¹²⁴ OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 3. Courts also reject the argument that a restraint is justified because competition may lead to decreased quality on grounds that it is a “frontal assault on the basic policy of the Sherman Act.” OECD, POLICY ROUNDTABLES: THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS, *supra* note 8, at 119 (citing *Nat’l Soc’y of Prof’l Eng’rs v. United States*, 435 U.S. 679, 695 (1978)).

¹²⁵ OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 2–3.

¹²⁶ OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, *supra* note 2, at 39.

¹²⁷ *See* FED. TRADE COMM’N, POLICY STATEMENT REGARDING THE SCOPE OF UNFAIR METHODS OF COMPETITION UNDER SECTION 5 OF THE FEDERAL TRADE COMMISSION ACT 11, n.65 (Nov. 10, 2022) (“Pretextual justifications include those that are not set forth in documents prior to, or contemporaneous with, the introduction of the conduct, or not plausibly based on the known facts.”).

¹²⁸ OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, *supra* note 2, at 39–40.

protection.¹²⁹ It will be important for parties in antitrust cases to observe how consumers' preferences might influence antitrust and enforcement agency and court decisions related to procompetitive justifications.¹³⁰

CONCLUSION

As concerns about the environment increase, companies are developing environmentally-friendly technology. However, coordination among the companies related to technology development may raise antitrust law issues.¹³¹ In analyzing such coordination, antitrust enforcement agencies and courts decide whether to apply the per se analysis or the rule of reason analysis. The per se analysis presumes there is anticompetitive effect and precludes attempts to show the conduct is reasonable,¹³² while the rule of reason analysis considers the agreement's overall effect on competition and

¹²⁹ *Id.* at 10; see Michael Scarborough, David Garcia & Kevin Costello, *Privacy Now Looms Large in Antitrust Enforcement*, LAW360 at 5 (2021) https://www.sheppardmullin.com/media/publication/1951_Privacy%20Now%20Looms%20LargL%20In%20Antitrust%20Enforcement.pdf (“Privacy seems poised to play an increasingly important role in antitrust litigation, both as a justification used to defend against allegations of anti-competitive conduct, and as an element of product quality that can be restricted or diminished as a result of anti-competitive conduct.”).

¹³⁰ See OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT *supra* note 2, at 14 (“Competition authorities can take into account environmental consideration in the context of their traditional competitive assessment focused on economic efficiency and consumer welfare standard.”); cf. Brief of Amici Curiae 38 Law, Economics, and Business Professors in Support of Appellant/Cross-Appellee at 13, *Epic Games, Inc. v. Apple Inc.*, Nos. 21-16506 & 21-16695 (9th Cir. Jan. 27, 2022) (“Apple’s interest in security and privacy might have been relevant if Apple had shown that restricting the product quality and distribution choices of competing app developers is necessary to enable *Apple* to compete effectively with Android or other rivals.”); James C. Cooper, *Antitrust and Privacy*, in THE GLOBAL ANTITRUST INSTITUTE REPORT ON THE DIGITAL ECONOMY 1188, 1213 (Joshua D. Wright & Douglas H. Ginsburg eds., 2020) (“The important takeaway is that the benefits and costs of data collection are inexorably intertwined, and consumer tastes for privacy, data-driven customizations, and targeted ads are heterogenous and correlated in potentially complex ways.”); Newman, *supra* note 13, at 504, 509 (suggesting that a valid justification should alleviate an inefficiency in the market and increase consumer welfare); Erika M. Douglas, *Data Privacy as a Procompetitive Justification: Antitrust Law and Economic Analysis*, 97 NOTRE DAME L. REV. REFLECTIONS 430, 433 (2022) (“[P]rivacy protections are cognizable as such a justification in antitrust law when—and only when—their effect is to improve competition.”).

¹³¹ See OECD, POLICY ROUNDTABLES: THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS, *supra* note 8, at 8; see also OECD, ENVIRONMENTAL CONSIDERATIONS IN COMPETITION ENFORCEMENT, *supra* note 2, at 25.

¹³² GAVIL, KOVACIC & BAKER, *supra* note 10, at 104.

allows a defendant to put forth procompetitive justifications.¹³³ Ongoing discussion about the cognizability of such procompetitive justifications includes when these procompetitive justifications related to environmentally-friendly products and services may be cognizable and valid.¹³⁴

This Article suggests that antitrust enforcement agencies and courts should carefully consider procompetitive justifications that may increase competition and benefit consumers under changing market conditions in antitrust cases concerning companies' coordination on technology development. Agencies and courts should carefully consider procompetitive justifications when determining whether to apply the per se analysis or the rule of reason analysis and when reviewing procompetitive justifications under the rule of reason analysis. This Article also considers how consumers' quality preferences might influence antitrust enforcement agency and court decisions related to procompetitive justifications. As consumers' quality preferences develop, companies may increasingly compete in areas such as environmental and privacy protection. It will be important for parties to observe how consumers' preferences might influence antitrust enforcement agency and court decisions.

¹³³ FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS, *supra* note 11, at 3–4.

¹³⁴ *See, e.g.*, OECD, ROUNDTABLE ON HORIZONTAL AGREEMENTS IN THE ENVIRONMENTAL CONTEXT, *supra* note 16, at 3.