A New Structured Rule of Reason Approach for High-Tech Markets

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*"Easy cases . . . produce bad law "*¹

"Man is not capable of thought in any high degree, and even the most spiritual and highly cultivated of men habitually sees the world and himself through the lenses of delusive formulas and artless simplifications—and most of all himself."²

I. INTRODUCTION

Applying the per se illegality doctrine for years has proven to be a mistake. The challenge now is to avoid committing the same error by applying per se legality for practices related to the New Economy-notably predatory innovation. Also known as the "knowledge economy," or the "information economy," the New Economy refers to the progressive market created by contemporary channels of high-speed technologies and communications.³ Avoiding applying per se legality in the New Economy context is especially important considering the cost of litigation, time, and the difficulty of applying the doctrine to antitrust law. This Article advocates for eliminating per se legality as it relates to innovation issues that stem from ideologies rather than particular facts. Generalizing the rule of reason will allow for faster antitrust law sophistication than other developments, such as Resale Price Maintenance (RPM). As high-tech markets evolve, antitrust law should be afforded the full opportunity to improve itself as quickly as possible. To achieve this, a newly structured rule of reason, tailored for innovation issues, would considerably improve antitrust law and economic analysis in the long run, while also avoiding false positives.

We should immediately emphasize the absence of any automaticity between

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Heckler v. Chaney, 470 U.S. 821, 840 (1985) (Marshall, J., concurring).

HERMANN HESSE, STEPPENWOLF: A NOVEL 58 (Basil Creighton ed. 1963).

^{2.} HERMANN HESSE, STEPPENWOLF. A NOVEL 38 (Bash Cleighton ed. 1903).

^{3.} See Note, Antitrust and the Information Age: Section 2 Monopolization Analyses in the New Economy, 114 HARV. L. REV. 1623, 1627-28 (2001) (defining and explaining New Economy).

the rule of reason and the balancing test. To the best of my knowledge, the Supreme Court has indeed never linked the two. Additionally, a recent study analyzing over 300 court decisions proved that the balancing test had been applied in only five percent of these cases.⁴ In short, this Article understands the rule of reason as being a negation of general per se rules, and that is about it. The question of which test to apply to each practice arises after the need to implement a rule of reason is agreed upon. It could be the balancing test—that I reject for reasons related to its administrability-or for instance, the profit sacrifice test, the equally efficient rival test, or the no-economic sense test. This is exactly what is underlined by Mark S. Popofsky, who states that "the unifying principle is that each Section 2 legal test reflects a specific expression of the same underlying 'rule of reason,'"⁵ and that "Section 2's rule of reason, so understood, asks: For the type of conduct at issue, which legal test likely maximizes consumer welfare over the long run?"6 I then emphasize that this Article does not intend to take a side on which test to apply to each practice that violates antitrust law. It is only focused on the need to recognize that general per se rules are to be avoided in the first place.

Avoiding general per se rules does not mean, however, that a general rule of reason should be applied. Frank H. Easterbrook's findings demonstrate how filters can create an efficient error-cost framework. Nevertheless, Easterbrook's findings are not well suited for the practices related to the New Economy. This Article proposes implementing a newly structured rule of reason based on three filters that will suit contemporary antitrust law issues.

For the first time in the age of big data, the procompetitive effects of many unilateral practices are discernible. We should not deprive ourselves the chance to enhance these procompetitive effects by applying a per se legality rule that questions their market consequences. Antitrust scholars should not give up and simply concede that such a structured rule of reason is too complicated to implement. This Article provides some initial guidance on how to precisely shape the structured rule to suit high-tech markets and encourage free-market efficiencies.

According to John Sherman, the meaning of the Sherman Act "must be left for the courts to determine in each particular case."⁷ Despite John Sherman's

^{4.} See Daniel C. Fundakowski, *The Rule of Reason: From Balancing to Burden Shifting*, 1 PERSPECTIVES IN ANTITRUST, 1 (2013), http://www.americanbar.org/content/dam/aba/publications/antitrust_ law/at303000_ebulletin_20130122.authcheckdam.pdf [https://perma.cc/6R3T-FJV3] (explaining rule of reason's burden shifting).

^{5.} Mark S. Popofsky, *Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules,* 73 ANTITRUST L.J. 435, 437 (2006) (considering rule of reason a "foundation for courts to select among competing legal tests"). "Applicable considerations in selecting the appropriate test include not only the likely consumer harms and benefits from the conduct, but also the risks of false positives, false negatives, and the legal process costs." *Id.*

^{6.} *Id*.

^{7. 21} CONG. REC. 2455, 2460 (Mar. 21, 1890) (statement of Sen. Sherman).

suggestion, courts have long applied per se rules in which the judge does not have the ability to enforce the law in each case. Courts continue to enforce per se treatments across many different practice areas. For instance, in regard to cartels, if an agreement between competitors affects price or output, the agreement is considered "naked" and per se rules apply.⁸ In terms of monopolization, courts treat tying arrangements according to a similar per se rule.⁹

For more than thirty years, a new doctrinal trend has been developing that advocates for per se legality, particularly for all high-tech-market-related practices.¹⁰ Focusing on the New Economy, this Article demonstrates why both per se illegality and per se legality are not appropriate doctrines to apply in high-tech markets. Moreover, this Article explains how and under what circumstances monopolizations related to innovation should be judged under a more tailored and structured rule of reason.

Courts must consider antitrust law standards and limitations in their judicial analyses. For instance, antitrust law constantly shifts as new technologies emerge, most notably with the sophistication of related analyses. These advances and changes are reshuffling the cards for judicial consideration. It is now necessary for courts to eliminate automaticity—and therefore, per se standards—from all their antitrust law analyses related to high-tech markets.¹¹

In general, those supporting per se illegality often argue that this standard allows courts to issue rulings over a shorter time period, thereby saving parties money.¹² On the other hand, per se illegality creates false positives and does

^{8.} See Joshua D. Wright, *Abandoning Antitrust's Chicago Obsession: The Case for Evidence-Based Antitrust*, 78 ANTITRUST L.J. 241, 243-44, 243 n.6 (2012) (describing per se proscription against naked cartel price fixing).

^{9.} See Einer Elhauge, Typing, Bundled Discounts, and the Death of the Single Monopoly Profit Theory, 123 HARV. L. REV. 397, 478 (2009) (describing practical "quasi per se" approach by American courts). "The quasi-per se rule thus correctly condemns ties based on tying market power absent offsetting efficiencies, even without substantial tied foreclosure. However, this rule should not apply to products that have a fixed ratio and lack separate utility because those conditions generally negate anticompetitive effects absent substantial tied foreclosure." *Id.; see also* Barak D. Richman & Steven W. Usselman, *Elhauge on Tying: Vindicated by History*, 49 TULSA L. REV. 689, 711 (2014) (concluding IBM's leading authority and economic success meaningfully shaped American antitrust law). "Significant work remains in Professor Elhauge's campaign against the single monopoly theory. Nonetheless, an eye to empirics, and specifically history, should be a refreshing addition to the debate, and we hope this account adds some artillery to Professor Elhauge's broader crusade." *Id.*

^{10.} See Richard A. Posner, *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality*, 48 U. CHI. L. REV. 6, 24 (1981) (applying general per se legality "in price as well as nonprice") [hereinafter Posner, *Next Step*].

^{11.} See Bus. Elecs. Corp. v. Sharp Elecs. Corp., 485 U.S. 717, 732 (1988) (discussing individualized legality evaluations based on case). The Court noted, "The Sherman Act adopted the term 'restraint of trade' along with its dynamic potential. It invokes the common law itself, and not merely the static content that the common law had assigned to the term in 1890." *Id.*

^{12.} See generally Roger D. Blair & Jeffrey Finci, The Individual Coercion Doctrine and Tying Arrangements: An Economic Analysis, 10 FLA. ST. U. L. REV. 531 (1983) (discussing potential of parties saving money using per se legal standards); see also Barry Nalebuff, Tied and True Exclusion: Comment on

not enable courts to apply progressive antitrust law, which is most important for innovation-related issues. Applying per se legal doctrines to innovation-related issues can lead to drastically differing results. For instance, a practice formerly deemed anticompetitive could not be procompetitive under a strict per se doctrine analysis. This radical change from anticompetitive to procompetitive has to be avoided for innovation-related issues, primarily because some of these markets are a "winner-take-all" feature.¹³ Even though market shares are moving more quickly in high-tech markets than others, the judicial system must ensure that it is not creating winners by ruling unfairly.¹⁴

Furthermore, as Frank H. Easterbrook explained, a practice mistakenly condemned by a court is likely to be condemned in future cases, thus remaining illegal.¹⁵ The market, however, shows signs that it rather than the judiciary will eventually take charge of the illegal practices, similar to how a new rival takes down high prices.¹⁶ In other words, "the economic system corrects monopoly more readily than it corrects judicial errors."¹⁷ Therefore, per se illegality cannot be justified because, on balance, it creates more risk than benefits. Moreover, per se illegality has never proved to be efficient in regards to saving time and money. Those supporting per se legality essentially argue for the same benefits, adding that it makes provisions to avoid false positives.¹⁸ But what are the costs of such a policy? Can high-tech markets afford to legalize anticompetitive practices in the long run?

Nalebuff, supra, at 52-53.

13. See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION, 34 & n.8 (2007), www.usdoj.gov/atr/public/ hearings/ip/222655.pdf [https://perma.cc/F3JL-YHUH] (discussing standards war and resulting cost reduction).

Jean Tirole's "The Analysis of Tying Cases: A Primer," 1 COMPETITION POL'Y INT'L 1, 52-53 (2005), http://faculty.som.yale.edu/barrynalebuff/triedtrueexclusion_cpi2005.pdf [https://perma.cc/8E9T-KN83] (summarizing and commenting on Jean Tirole's analysis, ultimately arguing opposite proposition).

In his primer, Tirole argues for a rule of reason rather than a per se prohibition of tying by a firm with a dominant market position. I have argued the opposite case. I am suggesting that the per se rule against tying by a firm with a dominant position should be extended to cover cases where the tie is achieved via pricing. If exclusionary bundling can be established, then the firm with a dominant position has created an economic-tied sale. A violation should be found if a significant share of the tied market is foreclosed (and the firm could reasonably have understood that this would be the consequence of its pricing).

^{14.} See Posner, Next Step, supra note 10, at 20, 23-24 (suggesting even hardcore cartels have positive effect on market).

^{15.} See Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 15 (1984) (discussing systemic judicial errors deriving from per se rule use) [hereinafter Easterbrook, *Limits of Antitrust*].

^{16.} See id.

^{17.} *Id.* As Easterbrook argued, "there is no automatic way to expunge mistaken decisions of the Supreme Court. A practice once condemned is likely to stay condemned, no matter its benefits. A monopolistic practice wrongly excused will eventually yield to competition, though, as the monopolist's higher prices attract rivalry." *Id.*

^{18.} See Posner, Next Step, supra note 10, at 23 (discussing benefits of per se legality).

Finally, proponents of both per se illegality and legality also contend that the rule of reason standard, besides being costly and imprecise, often leads to a de facto per se legality. Advocates of per se illegality assert that it must evolve because the court has a more important role to play, while those who support per se legality argue that the regulator should ratify a de facto situation to enhance the level of legal certainty, and, therefore, spur innovation.

As Justice Holmes explained, "the life of the law has not been logic, it has been experience."¹⁹ Both the Sherman Act and the Treaty on the Functioning of the European Union (TFEU) are indeed experimental, and more litigation is necessary in order to shine a light on the rules they contain. To refine the rules, more judicial experience is necessary.²⁰ Without it, antitrust law is inefficient and, as a result, ineffective as governing law in the New Economy.

This Article does not recommend the elimination of all safe harbors for high-tech related practices.²¹ Rather, this Article argues for removing per se legality whenever the effects of a practice implemented in these markets vary in each particular case. In other words, this Article urges courts not to apply per se legality for *all* practices related to innovation—notably predatory innovation—when arguments support the cost of litigation, the gain of time, or the difficulty in applying antitrust law.

The law should uphold the elimination of per se legality for innovationrelated issues that are not based on particular facts, but occur because of ideological reasons. The application of a new, structured rule of reason, tailored for innovation issues, should be applied whenever it is likely to create efficiencies. Such a standard allows for improvement in antitrust law in the long run, while creating the benefit of per se treatment in the immediate future.

This Article discusses why the definition of the applicable standard is vital to antitrust law and businesses.²² Next, this Article emphasizes that per se legality is not an effective antitrust law standard for high-tech practices.²³ Lastly, this Article proposes a more desirable alternative to a new structured rule of reason.²⁴

^{19.} William J. Michael, Holmes and the Bald Man: Why Rule of Reason Should Be the Standard in Sherman Act Section 2 Cases, 4 PIERCE L. REV. 359, 379 (2006) (arguing courts should refocus on Sherman Act fundamentals).

^{20.} See John E. Lopatka & William H. Page, *Economic Authority and the Limits of Expertise in Antitrust Cases*, 90 CORNELL L. REV. 617, 621 (2005) (outlining economic authority and impact on antitrust).

^{21.} See Mark S. Popofsky, Section 2, Safe Harbors, and the Rule of Reason, 15 GEO. MASON L. REV. 1265, 1266-69 (2008) (describing challenges in knowing when to apply per se rules in any certain case) [hereinafter Popofsky, Safe Harbors].

^{22.} See infra Part II.

^{23.} See infra Part III.

^{24.} See infra Part IV.

II. THE DEFINITION OF THE APPLICABLE STANDARD AND WHY IT IS CRUCIAL

A. The Applicable Standard: Antitrust Law Cornerstone

Each standard carries different objectives for antitrust law.²⁵ The applicable standard in antitrust applies to all aspects of antitrust law and litigation as it encompasses the overarching goals of antitrust law.²⁶ Depending on the objectives and the priorities we assign to antitrust law, the applicable standard varies. The purpose and application of antitrust law is still a subject of debate. Some argue that antitrust laws should seek to ensure consumer wealth only, while others advocate for a body of antitrust law that accommodates numerous other objectives, such as industrial policy and the protection of employment.²⁷

The issue of false positives is also a divided one.²⁸ Scholars who do not consider false positives a real danger might favor applying a pure rule of reason for high-tech and other markets. Many scholars, however, seem to agree that false positives are one of the most significant threats to antitrust law.²⁹ Nevertheless, such scholars do not intend to fight against false positives the same way. Some assert that courts should avoid any possible false positives on principle.³⁰ Others contend that courts should avoid false positive on a larger scale.³¹ These theories that imply antitrust law should be maximized in the long run.

In fact, a balance between avoiding false positives and maximizing the costs of the legal process appears in most analyses.³² Applying a per se treatment or rule of reason analysis shifts the focus on which objectives are privileged.

^{25.} See Adam I. Muchmore, Jurisdictional Standards (and Rules), 46 VAND. J. TRANSNAT'L L. 171, 176-77 (2013) (outlining various conceptualizations of standards). The primary distinction that separates rules from standards is that "rules are legal commands that seek to determine an outcome on a particular fact situation ex ante." See id. Conversely, standards "seek to determine an outcome on a particular situation ex post." Id.

^{26.} See Robert H. Lande, Chicago's False Foundation: Wealth Transfers (Not Just Efficiency) Should Guide Antitrust, 58 ANTITRUST L.J. 631, 632 (1989) (elaborating upon antitrust goals and objectives).

^{27.} See Maurice E. Stucke, Should Competition Policy Promote Happiness?, 81 FORDHAM L. REV. 2575, 2643 (2013) (asserting courts should not apply antitrust law to only accomplish economic goals); Maurice E. Stucke, *Reconsidering Antitrust's Goals*, 53 B.C. L. REV. 551, 558-60 (2012) (emphasizing antitrust law integrates various policy objectives).

^{28.} See Jonathan B. Baker, *Taking the Error Out of "Error Cost" Analysis: What's Wrong with Antitrust's Right*, 80 ANTITRUST L.J. 1, 37 (2015) (explaining and cautioning against Supreme Court's traditionally conservative stance on antitrust arguments).

^{29.} See id. at 31-32 (presenting various conservative arguments against false positives); C. Paul Rogers III, *The Incredible Shrinking Antitrust Law and the Antitrust Gap*, 52 U. LOUISVILLE L. REV. 67, 87-88 (2013) (discussing shrinking of antitrust due to conduct Court considers exclusionary).

^{30.} See Geoffrey A. Manne & Joshua D. Wright, *Innovation and the Limits of Antitrust*, 6 J. COMPETITION L. & ECON. 153, 196 (2010), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1490849 [https://perma.cc/NKR6-FRJZ] (offering solutions to reduce false positives in some circumstances).

^{31.} See *id.* at 158 (presenting argument stating false positives "are no longer . . . concept[s] capable of contributing to . . . antitrust policy").

^{32.} See Easterbrook, *Limits of Antitrust, supra* note 15, at 15 (highlighting "[o]ne cannot have . . . savings of decision by rule without accepting the costs of mistakes").

Because of its high importance, the emergence of the New Economy created the occasion to revitalize the debate regarding which standard to apply for innovation-related issues.³³ As Geoffrey Manne and Joshua Wright inquired, "what is the appropriate role of antitrust, and monopolization law in particular" in the New Economy?³⁴ Depending on the applicable standard, the role of antitrust law directly influences both companies and consumers.

None of these popular proposals for modeling antitrust law ostensibly consider innovation. Advocates should seek long-term efficiencies in terms of innovation, as opposed to merely cultivating short-term benefits. This Article argues that maximizing the cost of the legal system is compatible with effectively punishing monopolization on high-tech markets.

B. The Distinction Between the Rule of Reason and Per Se Rules

There are two primary standards for antitrust law: the rule of reason and per se rules. When applying per se rules, the agreement is commonly condemned or exonerated without investigation into purpose or effect.³⁵ To the contrary, the rule of reason is used when per se rules are not applicable.³⁶ The distinction seems to be relatively clear; however, the differentiation between per se rules and the rule of reason is not so obvious because the burden of proof often varies with circumstances.³⁷ This small differentiation is illustrated in *California Dental Ass'n. v. Federal Trade Commission.*³⁸

The "quick look" rule of reason analysis also lessens the importance of the distinction. Under this modified rule of reason standard, the initial burden of proof shifts from the plaintiff to the defendant.³⁹ Additionally, as Justice Breyer indicated, "there is a 'sliding scale' for appraising reasonableness" where an agreement has strong anticompetitive properties at first glance and no (or no important) obvious procompetitive properties.⁴⁰ In such cases, the burden, therefore, shifts to the defendant to demonstrate procompetitive aspects.⁴¹

^{33.} See generally Richard A. Posner, Antitrust in the New Economy, 68 ANTITRUST L.J. 925 (2001) (discussing New Economy through three industries) [hereinafter Posner, Antitrust].

^{34.} Manne & Wright, supra note 30, at 156 (questioning role of antitrust in New Economy).

^{35.} See California Dental Ass'n v. FTC, 526 U.S. 756, 762-63 (1999) (describing differences between per se and rule of reason analyses).

^{36.} See *id.* at 770 (noting appropriate situation for quick-look, rule of reason analysis rather than per se rule analysis).

^{37.} *See* Edlin et al., *Activating* Actavis, AMERICAN BAR ASSOC. 17 (2013), http://faculty.haas.berkeley. edu/shapiro/actavis.pdf [https://perma.cc/XC5C-DC57] (noting both standards exist on sliding scale).

^{38. 526} U.S. 756 (1999). In *California Dental*, the Supreme Court notes that ascertaining reasonableness using a sliding scale burden of proof frequently suggests an inflated sense of precision. *See id.* at 780.

^{39.} See Nicole McGuire, Article, An Antitrust Narcotic: How the Rule of Reason Is Lulling Vertical Enforcement to Sleep, 45 LOY. L.A. L. REV. 1225, 1230-31 (2012) (explaining plaintiff not required to define property market while defendant must show procompetitive restraint benefits).

^{40.} Edlin et al., supra note 37, at 17 (explaining "rule of reason" and "quick look" approaches).

^{41.} See id. at 18 (explaining process of burden shifting in determining reasonableness).

Some scholars argue that there is no distinction between the rule of reason and per se treatments because "[p]roperly understood, a per se rule supplies a 'conclusive presumption' that the conduct violates the rule of reason," which is especially important when analyzed under Section 2 of the Sherman Antitrust Act (Section 2).⁴² In other words, they contend "Section 2 safe harbors are not some exception to the [r]ule of [r]eason, but rather applications of the [r]ule of [r]eason for the conduct in question."⁴³ Because the distinction between the rule of reason and per se rules is less than distinctive, several scholars have argued for abandoning the rule. They contend that frozen categories should be set aside, and instead, courts should rely on empirical evidence to develop a modern standard.⁴⁴ Alternatively, courts apply rules requiring the plaintiff to prove the defendant's market power in tying arrangements, albeit under a lesser standard of proof.⁴⁵ However, even if the distinction between the two standards is not always evident, some differences justify the dichotomy.

C. The Rule of Reason Does Not Equal Per Se Legality

Several scholars have argued that the rule of reason is equal to a de facto per se legality, primarily using restraints as an example; yet such an affirmation is misleading as applied to innovation-related issues. In 1991, Douglas H. Ginsburg described how, at that time, defendants were prevailing in over ninety percent of cases involving nonprice vertical restraints.⁴⁶ Additionally, very few private plaintiffs have successfully challenged vertical nonprice restraints since the *Continental T.V., Inc. v. GTE Sylvania, Inc.*⁴⁷ decision in 1977.

Judge Posner has also explained the rule of reason as a euphemism for nonliability.⁴⁸ The theory that the rule of reason constitutes de facto per se legality

^{42.} See Mark S. Popofsky, *Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules*, 73 ANTITRUST L.J. 435, 454 (2006) (highlighting rule of reason to "maximiz[e] long-run consumer welfare") [hereinafter Popofsky, *Defining Exclusionary Conduct*].

^{43.} See Popofsky, Safe Harbors, supra note 21, at 1272 (arguing for Section 2's flexibility).

^{44.} See Mark A. Lemley & Christopher R. Leslie, *Categorical Analysis in Antitrust Jurisprudence*, 93 IOWA L. REV. 1207, 1210 (2008) (stressing consequences of rigid antitrust categorization). More particularly, "in law, categories have real consequences. . . . [C]alling a particular competitive practice by one name or another often has dramatic consequences for whether or not the law permits it." *Id*.

^{45.} See HERBERT J. HOVENKAMP, ANTITRUST: POLICY AND PROCEDURE: CASES, MATERIALS, PROBLEMS 199 (5th ed. 2003) (exploring tying arrangement litigation burdens for plaintiffs).

^{46.} See Douglas H. Ginsburg, Vertical Restraints: De Facto Legality Under the Rule of Reason, 60 ANTITRUST L.J. 67, 67 (1991) (concluding "non-monopolists have been effectively freed from antitrust regulation").

^{47. 433} U.S. 36, 51-52 (1977) (explaining complexity of vertical restrictions).

^{48.} See Richard A. Posner, *The Rule of Reason and the Economic Approach: Reflections on the* Sylvania *Decision*, 45 U. CHI. L. REV. 1, 14 (1977) (explaining rule of reason content uncertainty). Judge Posner observed, "[t]he content of the [r]ule of [r]eason is largely unknown; in practice, it is little more than a euphemism for nonliability." *Id.* Such ambiguity has caused some to argue that the "presumptively legal rule of reason in combination with procedural rules that benefit defendants brings certain antitrust conduct closer to ... per se legality for vertical restraints." D. Daniel Sokol, *The Transformation of Vertical Restraints: Per Se Illegality, the Rule of Reason, and Per Se Legality*, 79 ANTITRUST L.J. 1003, 1016 (2014).

became stronger after *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*⁴⁹ Scholars have argued that the Court has chosen "to favor defendants, competitors, big businesses, and their own political platforms," because judges refuse to provide sufficient guidance on how to apply the rule of reason.⁵⁰ Applying the rule of reason only implies that the practices are subject to antitrust law. Courts can implement several tests to determine whether the practices are in fact anticompetitive.

The theoretical difference between the rule of reason and per se legality is quite clear, and the facts tend to show that they are not similar legal concepts. Recent cases show why using an analogy between per se legality and the rule of reason is not appropriate. Federal Trade Commission v. Actavis, Inc.⁵¹ demonstrates why the rule of reason does not equal de facto per se legality in the context of pay-for-delay agreements. In Actavis, the Court held that reverse payment settlements in patent infringement cases should be determined on a case-by-case basis rather than under a presumptive, per se rule.⁵² Since Actavis, pay-for-delay agreements are now reviewed under a pure rule of reason. More recently, the Federal Trade Commission reached a \$1.2 billion settlement with Cephalon to reimburse consumers for anticompetitive pay-fordelay settlements.⁵³ When implementing the rule of reason, there is no justification for the belief that a de facto per se legality treatment operates. Pay-for-delay agreements are, indeed, a hot topic, and the fact that the courts and agencies are condemning companies indicates that this judgment will be extended to apply to high-tech markets.

III. THE INADEQUACY OF PER SE LEGALITY FOR SECTION 2 PRACTICES ON HIGH-TECH MARKETS

Those arguing for per se legality treatment of innovation-related issues often support their claims by citing the efficiency of such a standard. This Article shows why the main characteristics of high-tech markets frustrate this approach.

A. Arguments for Per Se Legality: Appearance of Efficiency

Per se rules have narrowed in Sherman Act Section 1 analyses and are rarely

^{49.} See 551 U.S. 877, 878 (2007) (concluding "justifications for vertical price restraints are similar to those for other vertical restraints").

^{50.} McGuire, *supra* note 39, at 1248, 1294 (describing direction of case law in absence of court guidance).

^{51. 133} S. Ct. 2223 (2013).

^{52.} See id. at 2223 (describing holding).

^{53.} See Press Release, FTC Settlement of Cephalon Pay for Delay Case Ensures \$1.2 Billion in Ill-Gotten Gains Relinquished; Refunds Will go to Purchasers Affected by Anticompetitive Tactics, FED. TRADE COMMISSION (May 28, 2015), https://www.ftc.gov/news-events/press-releases/2015/05/ftc-settlement-cephalon -pay-delay-case-ensures-12-billion-ill [https://perma.cc/5TX7-YFPU] (discussing release settlement).

used in monopolization or exclusion cases. However, some make a case for per se legality for issues on innovation using three main arguments. First, they argue that applying per se legality is cheaper than applying a rule of reason. In other words, they balance the costs of processing a trial with possible false negatives for justifying per se legality from it. Second, they contend that applying per se legality raises the level of legal certainty, which is an effective trigger for business managers. Lastly, they argue that applying the rule of reason is too complicated for judges.

1. Applying Per Se Rules Is Less Expensive

Scholars arguing for per se legality implementation assert that such a standard is less expensive than the rule of reason. Under this theory, the conclusive presumption is that going through a rule of reason analysis "is not worth the error and legal process costs." ⁵⁴ For some, per se rules "can be expected to produce a lower error and enforcement costs" than other legal tests.⁵⁵ Per se rules proponents emphasize that "the social costs resulting from potential false convictions under a broader liability rule would overwhelm the social costs from false acquittals" resulting from per se legality doctrines.⁵⁶ For instance, in Verizon Communications Inc. v. Law Offices of Curtis v. Trinko, LLP,⁵⁷ the Court stressed: "[t]he cost of false positives counsels against an undue expansion of [Section 2] liability."58 Furthermore, Posner added, "because a [r]ule of [r]eason case is more costly to try than a per se case, fewer cases will be brought."59 Lastly, supporters maintain that "[i]f the court errs by condemning a beneficial practice, the benefits may be lost for good."⁶⁰ The aforementioned financial reasons support the notion that courts should apply per se legality, especially for high-tech markets in which technology and business practices evolve much quicker than the law.

2. Applying Per Se Rules Improves Legal Certainty

The Chicago School was among the first to argue for per se legality.⁶¹ These

^{54.} See Popofsky, Defining Exclusionary Conduct, supra note 42, at 454 (justifying per se legality approach over rule of reason).

^{55.} See Popofsky, Safe Harbors, supra note 21, at 1272 (explaining further tests under Section 2).

^{56.} See Thom A. Lambert, *Have Elhauge and Wickelgren Undermined the Rule of Per Se Legality for Above-Cost Loyalty Discounts?*, TRUTH ON MARKET (Sept. 12, 2012), http://truthonthemarket.com/2012/09/12 /have-elhauge-and-wickelgren-undermined-the-rule-of-per-se-legality-for-above-cost-loyalty-discounts [https://perma.cc/9MVB-AAU8] (weighing social cost of false convictions and false acquittals between various rules)

^{57. 540} U.S. 398 (2004).

^{58.} Id. at 414.

^{59.} Posner, Next Step, supra note 10, at 15 (analyzing purported high cost for rule of reason analyses).

^{60.} Easterbrook, *Limits of Antitrust, supra* note 17, at 2 (highlighting economic differences between tests and resulting policy implications).

^{61.} See Lopatka & Page, supra note 20, at 640 (describing Chicago scholars' urging for default legality

scholars stress that a per se legal doctrine should apply to reduce competition and all novel and complex practices, including issues related to the New Economy.⁶² In fact, some scholars focusing on innovation have argued that per se legality applies to all practices related to innovative industries.⁶³ This idea is rooted in the belief that antitrust law should be simple enough that entrepreneurs can act with legal certainty in making business decisions.⁶⁴ These scholars highlight that "the [r]ule of [r]eason standard lacks content and . . . does not guide judges, juries, or the Federal Trade Commission."⁶⁵

3. Complexity in Applying the Rule of Reason

As discussed, the choice of a standard for antitrust law is in part a matter of prioritizing different interests.⁶⁶ In short, scholars in favor of per se legality for high-tech industries stress that the complexity of antitrust law should encourage adopting foreseeable rulings.⁶⁷ They argue, "the rule of reason imposes upon judges and juries complex economic issues and volumes of economic data which they are incapable of comprehending so as to produce a rational result."⁶⁸

With the rapid growth of new technologies and business practices, scholars contend that the judges do not have all the necessary skills to deal appropriately with antitrust issues.⁶⁹ Peter Nealis added that, under the rule of reason, the burden of proof on the plaintiff is too heavy due to antitrust law's sheer complexity.⁷⁰ Because antitrust law relates to economic issues, legal analyses are especially complex because they demand mastery of both legal rules and economic concepts.

B. Arguments Against Per Se Legality

Over the long-term, the best way to enact the three primary arguments

rule).

^{62.} See id. (arguing for "default rule of legality for novel or complex practices").

^{63.} See generally Giovanni Immordino and Michele Polo, Antitrust in Innovative Industries: The Optimal Legal Standards (Innocenzo Gapatini Inst. for Econ. Research, Working Paper No. 434, 2012) (advocating for ideal legal doctrine standard for New Economy).

^{64.} See Posner, Next Step, supra note 10, at 14 (describing rules' sophistication).

^{65.} *Id.* at 8 (emphasizing rule of reason's lack of clarity).

^{66.} See generally Thomas A. Lambert & Alden F. Abbott, *Recognizing the Limits of Antitrust: The Roberts Court Versus the Enforcement Agencies*, 11(4) J. COMPETITION L. & ECON. 791, 25 n.127 (2015), http://ssrn.com/abstract=2596660 [https://perma.cc/8G3U-ASKE] (discussing balancing considerations).

^{67.} See Richard J. Pierce, Jr., *Is Post-Chicago Economics Ready For the Courtroom? A Response to Professor Brennan*, 69 GEO. WASH. L. REV. 1103, 1125 (2001) (reviewing Chicago economics' position). Pierce notes that "[i]t is difficult, perhaps even impossible, for anyone to know each of [the] characteristics of a firm and a market." *Id.* at 1108.

^{68.} Peter Nealis, Note, *Per Se Legality: A New Standard in Antitrust Adjudication Under the Rule of Reason*, 61 OHIO ST. L.J. 347, 371 (2000) (highlighting complicated analysis required in using rule of reason).

^{69.} See id. at 370-71 (discussing cost associated with heavy burden of proof in antitrust).

^{70.} See id. at 368-69 (discussing per se legality in modern terms).

praising per se legality is to implement the rule of reason. Most analyses focus on short-term effects, but it is imperative for the judicial system to seek longterm improvements while maximizing short-term decisions. The rule of reason is already the basic tool for the analysis of most anticompetitive agreements, and a version of the same analysis applies in monopolization and abuse of dominance.

1. Antitrust Law Is a Matter of Economics

Antitrust law governs economic relationships. It should, therefore, embody economic results and improvements. For example, when dealing with tie-ins, use of some procompetitive practices in one particular case does not mean that procompetitive practices should be used in every tie-in case.⁷¹ In other words, even when a majority of practices are anti or procompetitive, forbidding or legalizing all of its implementations is not justified. Antitrust law should remain focused on economic efficiencies and effects on the market.

Per se rules represent a bias, and only the rule of reason can adequately enable courts to make an appropriate decision in every case.⁷² If the standard of per se legality applies, what should judges do when a plaintiff can precisely show why the practice is anticompetitive? Should they neglect its argumentation and apply per se legality anyhow? Moreover, per se rules are subject to many variables, such as private industrial objectives. Antitrust law should only be a question of protecting consumers, and the rule of reason is the sole proper standard to achieve this goal. The rule of reason allows the court to balance economic interests, whereas per se rules disconnect from consumer interests. Because high-tech markets are subject to such intensive lobbying activities, it is necessary to keep the power in judges' hands to protect our free-market systems.⁷³ Only the rule of reason can ensure this protection, especially in high-tech markets where disruptive business practices and products are continuously emerging.

2. Per Se Rules Do Not Save Time or Reduce Legal Process Costs

Many argue that applying per se rules results in less cost than applying rules of reason without any statistical support. The same financial argument is often made in Europe for the use of restrictions by "object" rather than restrictions by

^{71.} See Einer R. Elhauge, *Rehabilitating Jefferson Parish: Why Ties Without a Substantial Foreclosure Share Should Not Be Per Se Legal*, 80 ANTITRUST L.J. 463, 466-67 (2016) (discussing economics and procompetitive impact).

^{72.} See Barak Orbach, *The Durability of Formalism in Antitrust*, 100 IOWA L. REV. 2197, 2200 (2015) (discussing antitrust formalism and the rule of law).

^{73.} See Center for Responsive Politics, *Electronics Mfg & Equip*, OPENSECRETS.ORG, https://www.opensecrets.org/lobby/indusclient.php?id=B12&year=a (last visited Oct. 10, 2016) [https://perma.cc/FYV8-Q9BH] (listing industry totals, demonstrating significant lobbying activity in high-tech markets).

"effect."⁷⁴ Even though it is impossible to assess whether per se treatment reduces legal process costs, it can be shown that restrictions by "object" do not produce such results.⁷⁵ Indeed, statistics reveal that the average duration of a trial opened under Article 102 TFEU is 952 days when the standard is a restriction by "effect," verses 946 days when the standard is a restriction by "object."⁷⁶ The difference between the two types of restrictions is minor. The European Commission recognizes that "the duration of cartel investigations varies according to the complexity of the case, the number of markets and companies involved and the extent to which they cooperate with the Commission," making no mention regarding the type of restrictions.⁷⁷ The analogy between the European treatment of restriction by "object" and per se rules under American law is imperfect. This analogy does demonstrate the important lesson that simplified standards do not result in a faster, more efficient justice system, which is especially true in the context of high-tech markets.

3. The Rule of Reason Better Protects Innovation

The rule of reason better protects innovation than per se treatment for three main reasons. First, as described above, some scholars argue that applying per se legality tends to raise the level of legal certainty, and in turn, enhances innovation. While this is true in the short term, innovation rises if companies are confident that courts will protect them if there are any anticompetitive practices implemented against them. If the application of per se rules enhances innovation because it increases the level of legal certainty, it follows then that applying per se illegality will do so as well. This logic, however, fails to take into account the importance of false positives and

^{74.} See Daivis Švirinas, Leegin Case and Its Impact on European Community Competition Policy in Regard to Vertical Minimum Price-Fixing, JURISPRUDENCE 158-61 (2009), http://www.sorainen.com (follow the perma.cc URL to access) [https://perma.cc/HJ94-F99F] (drawing connection between economic arguments supporting American and European per se rule use).

^{75.} Of all the decisions published since 2009 by Article 102 TFEU, when the restriction is characterized by object, the length of the procedure is approximately 946 days. When the restriction is characterized by effect, the length of the procedure is approximately 952 days. The length of the procedure depends on more than just whether the restriction is characterized by object or effect. This table does not show that restrictions by object are judged faster than restrictions by effect. This demonstrates the uselessness of maintaining a distinction between these two types of restrictions, as restrictions by object do not allow the expected time savings. *See* Thibault Schrepel, https://perma.cc/FN6F-SXVF. This empirical study includes all of the European Commission's decisions over the past ten years. I did not take the decision of reject into account. The length of the procedure depends on elements other than whether the restriction is characterized by object or effect. In any case, this table does not show that restrictions by object are judged faster than restrictions by effect.

^{76.} See id.

^{77.} See European Commission Press Release IP/12/1044, Antitrust: Commission Sends Statement of Objections to Suspected Participants in Retail Food Packaging Cartel, (Sept. 28, 2012), http://europa.eu/rapid /press-release_IP-12-1044_en.htm [https://perma.cc/4M7A-P8G6] (outlining issues with food cartel without considering differences between "effect" and "object" restrictions).

negatives in analyses. As a result of speedy innovation and the cardinal importance of protecting this innovation, antitrust law plays an essential role in preventing anticompetitive practices. Additionally, per se rules allow private interests to weigh against consumer interests. Per se rules can be designed to protect an industry and prevent new and disruptive competitors by allowing the incumbent to implement anticompetitive practices.

The rule of reason is the best and only way to ensure a free market because it allows companies to develop new products without the threat of undue influence from anticompetitive interests on the process. Lastly, there is no proof that per se rules accelerate the legal process. Notably, rather, applying per se rules may actually slow the legal process. Innovations are developing and evolving faster than the law can keep up with, and per se rules do not offer a solution for fixing this problem.⁷⁸

4. Safe Harbors' Inefficiency

When adopting a safe harbor specifically for per se legality, courts must consider five different factors.⁷⁹ The first factor is whether the conduct under review is heterogeneous or discrete.⁸⁰ The second question is if a court can reach a categorical judgment that assesses the "impact on competition and consumer welfare."⁸¹ The third factor considers if the proposed per se legality is administrable.⁸² The fourth factor is whether the adopted per se legality would spill over to closely related conduct.⁸³ Finally, the last factor to consider is whether the application of the safe harbor is likely to reduce false positives.⁸⁴

Business practices are constantly evolving in the New Economy. The creation of a safe harbor cannot be justified considering the courts have less visibility of the long-term effects of such a rule. Moreover, the changing nature of technology markets is accompanied by new practices whose forms are difficult to anticipate. This makes it very difficult for judges to create a safe harbor on such markets that could meet these five criteria, which demonstrates that they should not be multiplied.

5. Ideology Should Be Separated from Antitrust Law

As Judge Posner argued, "[t]he same considerations of judicial economy and legal certainty that justify the use of per se rules of illegality in some cases

^{78.} See Posner, Antitrust, supra note 33, at 939 (discussing slow-moving, "law time").

^{79.} See Popofsky, Safe Harbors, supra note 21, at 1272-73 (describing factors courts contemplate before granting safe harbor).

^{80.} See id. at 1272 (describing first factor in granting safe harbors).

^{81.} See id. (highlighting importance of second factor).

^{82.} See id. (outlining third factor's impact on safe harbor).

^{83.} See Popofsky, Safe Harbors, supra note 21, at 1272 (proposing fourth factor).

^{84.} See id. at 1272-73 (presenting final "false positive" factor).

justify the use of rules of per se legality in others.³⁸⁵ Post-Chicago School scholars did not advocate for per se rules because they aimed at rejecting previous ideologies from other groups like the Harvard School and the Chicago School.⁸⁶ Per se legality, on the other hand, is a matter of principle that should be taken apart from antitrust law. This is especially true for innovation-related issues that challenge key concepts of antitrust law.⁸⁷ If a court legalizes a particular practice under per se legality, some doubt will exist as to the actual effects of that decision on the market. Therefore, if a court utilizes per se legality, there will be doubt as to the procompetitive nature of the practice, even if the practice truly is procompetitive. Doubting a practice's procompetitive nature, in turn, leads to doubt about judges' true intentions in protecting the consumer.

6. The Best Way to Improve Antitrust Law Is by Applying the Rule of Reason

Courts must apply antitrust law in a way that enhances their analyses and allows them to avoid Type I and II errors.⁸⁸ This necessity is accentuated in high-tech markets because these markets evolve so much faster than others.⁸⁹ As Judge Posner famously wrote, "[t]he real problem lies on the institutional side: the enforcement agencies and the courts do not have adequate technical resources" to deal with antitrust issues in the New Economy.⁹⁰ Only the rule of reason allows the enforcement agencies and courts to stay up-to-date by confronting their reasoning with the reality of the markets.

The Legal Process School of Jurisprudence considered this very idea and highlights the role of "institutional competence" and the "allocation of institutional responsibilities."⁹¹ This school agrees that the market has an

88. See What Are Type I and Type II Errors?, MINITAB.COM, http://support.minitab.com/en-us/minitab/17 /topic-library/basic-statistics-and-graphs/hypothesis-tests/basics/type-i-and-type-ii-error/ (last visited Oct. 10, 2016) [https://perma.cc/HEQ6-UJYP] (describing Type I and Type II errors). Type I errors occur when a researcher incorrectly rejects a null hypothesis that is true. *Id.* On the other hand, Type II errors occur when a researcher *fails* to reject a null hypothesis when the hypothesis is in fact true. *Id.*

89. See Miguel Rato & Nicolas Petit, Abuse of Dominance in Technology-Enabled Markets: Established Standards Reconsidered, 9 EUROPEAN COMPETITION J. 1, 6 (2013), http://papers.ssrn.com/sol3/papers.cfm? abstract_id=2387357 [https://perma.cc/8MY3-5PSW] (emphasizing fast evolving high-tech market justifies antitrust reform).

^{85.} Posner, *Next Step*, *supra* note 10, at 23 (highlighting inconsistent ideological considerations between per se rules and rules of reason).

^{86.} See Daniel A. Crane, Chicago, Post-Chicago, and Neo-Chicago, 76 U. CHI. L. REV. 1911, 1913-14, 1918-20 (2009) (providing overview of Chicago School and Harvard School's antitrust stances).

^{87.} See Daniel F. Spulber, Unlocking Technology: Antitrust and Innovation, 4 J. COMPETITION L. & ECON. 915, 915 (2008), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1146447 [https://perma.cc/H2LU-LC3Y] (criticizing policy argument behind antitrust law). "Antitrust policy founded on technology lock-in arguments is misguided and is likely to damage incentives for innovation." *Id.*

^{90.} See Posner, Antitrust, supra note 33, at 925 (2001) (arguing antitrust law too stagnant).

^{91.} See Lopatka & Page, *supra* note 20, at 698. "Just as courts may be receptive to the viewpoint that markets have important advantages over courts in eroding monopolistic practices, they also recognize the institutional demands of precedent and the fact-finding process." *Id.*

advantage over courts in fighting against anticompetitive practices, but also emphasizes that precedent and court rulings have a role to play because "antitrust knowledge can grow" with trials.⁹² In practice, the result is "to increase the burden on a party seeking to establish an anticompetitive effect," and use the rule of reason to improve antitrust law.⁹³ Echoing the Supreme Court's notion that the rule of reason allows courts to improve their antitrust analyses, Abbott B. Lipksy articulated the improvement as "the ability to understand, apply, and explain microeconomics and industrial organization theory."⁹⁴ Additionally, the Court expressly rejected implementing a per se legality standard in *Cargill, Inc. v. Monfort of Colorado, Inc.*⁹⁵ The Court held that it would not "adopt in effect a *per se* rule 'denying competitors standing to challenge acquisitions [under the Clayton Act] on the basis of predatory pricing theories."⁹⁶ It follows that applying the rule of reason stimulates the debate, as shown in the recent *Actavis* ruling.⁹⁷

Moreover, per se rules do not allow economic progress to be a part of a case's consideration under antitrust law.⁹⁸ If a practice is found to be procompetitive in many previous instances, courts will continue to apply per se standards that negate any outside factors countering a practice's per se legal status. In *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*,⁹⁹ the Court held that courts only classify them as per se violations following a large amount of experience with particular business relationships.¹⁰⁰ In short, applying the rule of reason tends to stimulate academic and legal debates, and also promotes the consideration of resulting progress. As Milton Friedman once said, "One of the great mistakes is to judge policies and programs by their intentions rather than their results."¹⁰¹ If the intention of per se legality appears to be a legitimate means of improving the process in the short-run, courts should adopt a different standard to achieve long-term results.

^{92.} See id. (discussing courts' ability to guide economic authority).

^{93.} See id. at 698-99 (discussing economic authority and its impact on juries).

^{94.} See generally Abbott B. Lipsky Jr., Improving Competitive Analysis, 16 GEO. MASON L. REV. 805 (2009) (justifying antitrust reform using rule of reason).

^{95.} See 479 U.S. 104, 121 (1986) (declining to apply per se rule).

^{96.} See id. at 120-21 (citation omitted).

^{97.} Edlin et al., *supra* note 37, at 17 (exemplifying debate surrounding rule of reason verses per se approaches).

^{98.} *Cf.* Easterbrook, *Limits of Antitrust, supra* note 15, at 19 (describing "value" in utilizing per se rules that decline defendants opportunity for conduct justification).

^{99. 441} U.S. 1 (1979).

^{100.} See id. at 9-10, 19 (explaining and justifying decision not to apply per se treatment).

^{101.} *Milton Friedman in His Own Words*, BECKER FRIEDMAN INST. FOR RES. ECONOMICS, https://bfi.uchicago.edu/news/post/milton-friedman-his-own-words (last visited Oct. 10, 2016) [https://perma.cc/U7Q4-EJQR] (highlighting Friedman's famous quotes).

7. Scholars Should Not Avoid Their Responsibility to Develop the Law

Finally, scholars should not capitulate and abdicate the great role they have to play. Antitrust law is not a Codex Seraphinianus, so if scholars can develop precise standards for applying the rule of reason, courts can then implement them efficiently.¹⁰² Whenever jurisprudence does not exist for a particular subject or is too limited, academics have the responsibility of publishing guidance for the courts. Judge Posner's article, *Antitrust in the New Economy*, generated considerable debate surrounding whether antitrust law should give particular consideration to high-tech markets.¹⁰³ Because few scholars have argued for removing antitrust law from the New Economy, much debate remains on how antitrust law applies to the New Economy.

Per se rules are a form of renunciation because their adoption implies that antitrust law is too complicated for judges, and, therefore, should not be in their hands. In reality, the complexity of antitrust law should encourage judges to work harder to perfect antitrust jurisprudence and not avoid it by creating general safe harbors such as per se legality. Only the development of a working structured rule of reason can further meaningful growth in antitrust jurisprudence.

IV. CREATING A NEW STRUCTURED RULE OF REASON FOR THE NEW ECONOMY

Per se rules do not facilitate improving antitrust law in the long run. Nevertheless, the weaknesses surrounding pure rule of reason remains a legitimate problem that courts must face in the short term, especially for practices relating to the New Economy where judges have little precedential guidance. Courts should implement a structured rule of reason for all practices related to innovation and high-tech markets where the practice has not been proven to be procompetitive in every single case.¹⁰⁴ In doing so, defendants are protected from false positives, and the opportunity remains for antitrust law to improve in the long run.¹⁰⁵ In the alternative, some scholars advocate for the use of the "quick look" standard instead of a pure rule of reason, viewing it as the best way to address per se rules issues.¹⁰⁶

^{102.} See Steven C. Salop et al., *The Appropriate Legal Standard and Sufficient Economic Evidence for Exclusive Dealing under Section 2: The FTC's* McWane Case 26, 31, 34-38 (Georgetown L. Faculty Pub., Draft Paper No. 1365, 2014), http://papers.srm.com/sol3/papers.cfm?abstract_id=2477448 [https://perma.cc/9JEE-4U77] (discussing precise, "clear evidence" approach to antitrust).

^{103.} See Spulber, *supra* note 87, at 966 (discussing role of government in new technologies). See generally Posner, Antitrust, supra note 33, (describing the new economy in antitrust and different industries).

^{104.} See Thomas A. Lambert, Dr. Miles Is Dead. Now What?: Structuring a Rule of Reason for Evaluating Minimum Resale Price Maintenance, 50 WM. & MARY L. REV. 1937, 1989-92 (2009) (discussing "empirical evidence on RPM's competitive effects").

^{105.} See Easterbrook, *Limits of Antitrust, supra* note 15, at 1-2 (highlighting competition and cooperation in antitrust).

^{106.} See Maurice E. Stucke, Does the Rule of Reason Violate the Rule of Law?, 42 U.C. DAVIS L. REV.

[Vol. L:103

A. The Rejection of the "Quick Look" As an Intermediary Standard

The "quick look" standard shifts the burden of proof to defendants who must either demonstrate insufficient market power or prove their practices produce procompetitve effects.¹⁰⁷ Supporters of the "quick look" approach argue that if it is obvious that a restraint of trade impairs competition, the burden should then shift to the defendants to establish the procompetitive effects.¹⁰⁸ They argue for the implementation of such a standard instead of a pure rule of reason. This presumption of culpability appears to be incompatible with the objective to fight against false positives. As Leegin demonstrated, restraint of trade for 100 years can be deemed to be procompetitive.¹⁰⁹ Additionally, from a European perspective, a "quick look" standard is incompatible with the idea of presumption of innocence. Lastly, with the emergence of fast-growing high-tech markets and new business practices, the "quick look" approach is particularly dangerous because it would be very hard for defendants to convince courts that their practices are procompetitive. Indeed, many practices are not considered procompetitive until after years of implementation. To condemn these practices on a theoretical basis is contrary to the objective of enhancing innovation. Ultimately, the "quick look" standard does not address the critics of either per se rules or a pure rule of reason.

B. The Implementation of New "Structured Rule of Reason" for All Practices Related to High-Tech Markets

In the New Economy, the need is great for an efficient new structured rule of reason—or modified per se legality—where automaticity is eliminated and designed for high-tech practices.¹¹⁰ Fortunately, some scholars have already begun developing a structured rule of reason, even though very few have focused their analyses on the New Economy.¹¹¹ Easterbrook has notably developed the most in-depth analysis on the subject, and modern scholars should address new empirical evidence and innovation.

^{1375, 1410 (2009) (}reviewing rule of reason and lack of "extensive detailed market analysis").

^{107.} See id. (describing "quick look" approach).

^{108.} See id. at 1385 (explaining burden shifting).

^{109.} See id. at 889 (choosing "procompetitive justifications for a manufacturer's use of resale price").

^{110.} See David S. Evans and A. Jorge Padilla, *Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach*, 72 U. CHI. L. REV. 73, 94-95 (2005) (discussing need for new legal standard).

^{111.} See Suzanne Van Arsdale & Cody Venzke, *Predatory Innovation in Software Markets*, 29 HARV. J. L. TECH. 243, 284 (2015) (discussing "structured rule of reason test for software products").

1. The Need to Build a Standard Based on Empirical Evidence and Innovation

a. The Importance of Empirical Evidence

In 1987, Professor Eleanor M. Fox stated, "There is, today, a battle for the soul of antitrust[;]" today this battle continues.¹¹² Different schools of thought have shaped antitrust law.¹¹³ But where do standing, per se legality, and a structured rule of reason fit in this battle? Which supporters are likely to defend or reject these doctrines depending on with which school they affiliate? In reality, these two standards transcend the various schools' concerns. In any case, the need for strong empirical reasoning should primarily win over ideological debates.¹¹⁴ High-tech markets, in particular, highlight this necessity.

One reason supporting empirical reasoning over ideologies is that it is unclear if perfect competition or oligopoly better enhances innovation; therefore, judges should not seek to achieve any market structure.¹¹⁵ The lifetime of monopolies in high-tech markets is shorter for the New Economy than any other market, indicating that the structure is not as determinable as the Harvard School may think.¹¹⁶ Also, because market shares evolve quickly in high-tech markets, false negatives are more preventable in the New Economy than other markets. Furthermore, "the negative consequences of over-enforcement will be more pronounced in technology-enabled markets, in particular in information and communications technologies, than in other markets."¹¹⁷

Another important idea is that Congress should "allow courts to continue to develop substantive norms in a common law fashion rather than attempt to specify substantive norms legislatively."¹¹⁸ This line of reasoning goes along with the creation of a new structured rule of reason. Indeed, courts should design this new standard by integrating the experience from past trials. In contrast, legislators are more removed from the practical concerns of economic agents and, therefore, should not be involved in the process of guiding the

^{112.} Eleanor M. Fox, *The Battle for the Soul of Antitrust*, 75 CALIF. L. REV. 917, 917 (1987) (discussing current problems regarding antitrust laws).

^{113.} See Joshua H. Soven, Afterword: Does Antitrust Need More Schools?, 78 ANTITRUST L.J. 273, 273-74 (2012) (explaining influences that shaped antitrust law).

^{114.} See id. at 276-77 (supporting empirical reasoning rather than ideological debates).

^{115.} See Joshua D. Wright, Antitrust, Multi-Dimensional Competition, and Innovation: Do We Have an Antitrust-Relevant Theory of Competition Now? 22 (Geo. Mason Uni. L. and Econ. Res. Paper Series, No. 09-44, 2011), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1463732 [https://perma.cc/HP4U-BZHM] (discussing complex relationship between innovation and high-tech market).

^{116.} See Thibault Schrepel, L'innovation de rupture: de nouveaux défis pour le droit de la concurrence, 42 RLC 141, 147 (2015) [hereinafter Schrepel, L'innovation].

^{117.} See Rato & Petit, supra note 89, at 10 (highlighing markets focusing on technology).

^{118.} See Daniel A. Crane, A Neo-Chicago Perspective on Antitrust Institutions, 78 ANTITRUST L.J. 43, 62 (2012) (highlighting role of "judicial supremacy" in "Neo-Chicagoan institutionalism").

courts.

b. The Importance of Considering Innovation in a New Way

Innovation must become a primary focus of all analyses related to high-tech markets. As Judge Posner noted, "the Chicago School has largely prevailed with respect to its basic point: that the proper lens for viewing antitrust problems is price theory."¹¹⁹ Prices do not always control the competition among companies in the New Economy where innovation is a central element.¹²⁰ If courts do not consider innovation to be a legitimate antitrust standard, empirical analyses will fail to demonstrate the benefit of free markets. Many courts have not integrated innovation into their antitrust analyses because the concept is deemed too complex.¹²¹

Giving innovation such a significant role in antitrust analyses means lowering the weight ascribed to network effects, lock-ins, and switching costs where disruptive competition can appear.¹²² Stated differently, while these other concepts are helpful in determining whether a company holds a dominant position, they are not the only elements that should be proven. In addition, the emergence of disruptive technologies has shown that market structures are not central in these markets.

High-tech markets are characterized by the spontaneous apparition of disruptive technologies and permissionless innovations. These disruptive technologies create new markets, on which dominant companies have no control. New battles start every day, and market shares are moving as fast as it never was. The Internet allows the challengers to quickly spread their innovations. Network effects of an existing market become in part irrelevant when a new network is created, which is mostly the case when a new technology appears. For these reasons, high-tech markets are closer to spontaneous order than other markets.¹²³

Recognizing innovation as a keystone of a structured rule of reason encourages agencies and courts to protect innovation and charge companies for naked anticompetitive practice.

Lastly, this practice suggests that legal certainty is very low for companies that are creating a new market where unknown rules will eventually apply. It is

^{119.} Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PENN. L. REV. 925, 932 (1979) (explaining Chicago School's approach to "price theory").

^{120.} See ANDREJ FATUR, EU COMPETITION LAW AND THE INFORMATION AND COMMUNICATION TECHNOLOGY NETWORK INDUSTRIES 117 (Hart Publishing, 2012) (describing significance of network effects in New Economy).

^{121.} See Tim Wu, Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most, 78 ANTITRUST L.J. 313, 313-14 (2012) (discussing importance of innovation and antitrust relationship).

^{122.} See Schrepel, L'innovation, supra note 116.

^{123.} Thibault Schrepel, *Friedrich Hayek's Contribution to Antitrust Law and its Modern Application* 211 (Global Antitrust Rev., 2014), http://papers.ssm.com/sol3/papers.cfm?abstract_id=2548420 [https://perma.cc/4 VDA-XVY5] (reviewing barriers to antitrust policy).

appropriate to differentiate situations in which companies try to obtain a dominant position from those in which companies seek to maintain such a position. The former must lead authorities to more leniency than the latter.¹²⁴

Furthermore, holding innovation as a standard could result in reduced fines when practices support a disruptive product.¹²⁵ The analysis must also consider the uncertainty that companies face in such a market and the massive investments they make. For example, fine reductions apply whenever one can demonstrate that a price policy has low effects on the market. The same should apply whenever consumer welfare raises an issue with the introduction of a new or improved product.

2. Easterbrook's Structured Rule of Reason and Limits for High-Tech Markets

Easterbrook was one of the first scholars to propose the creation of a structured rule of reason—his findings remain unmatched.¹²⁶ Easterbrook implemented a filter, outlining a set of presumptions that any case must satisfy to go to court.¹²⁷ This filter is intended to evaluate the "(1) market power; (2) whether the defendant is enriching him or herself at the expense of consumers; (3) the widespread adoption of the same business practices by competitors; (4) the effect of this business practice upon output and survival; and (5) the identity of the plaintiff."¹²⁸

Easterbrook then proposed that "[t]he legal system should be designed to minimize the total costs of (1) anticompetitive practices that escape condemnation; (2) competitive practices that are condemned or deterred; and (3) the system itself."¹²⁹ According to Easterbrook, "unless there is a strong reason to suspect that a monopoly or monopolistic practice can survive the attempts of other firms to undermine it, then the costs of inaction (excusing harmful conduct) are low."¹³⁰

One criticism of Easterbrook's filters is that the filters depend on the

^{124.} See Spencer Weber Waller & Matthew Sag, *Promoting Innovation*, 100 IOWA L. REV. 2223, 2229 (2015) (highlighting need for nuanced approach). When discussing adding an innovation aspect to antitrust policy, Waller and Sag noted, "It may require somewhat more leniency in attempted monopolization cases but it definitely will demand continued vigilance in monopoly maintenance cases and other competition cases in which future innovation is threatened." *Id.*

^{125.} See Keith N. Hylton & Haizhen Lin, Innovation and Optimal Punishment, with Antitrust Implications, 10 J. COMPETITION L. & ECON. 1, 2 (2014), http://www.masonlec.org/site/rte_uploads/files/

Hylton_InvestmentPenalties6-1.pdf [https://perma.cc/Y32E-VGHU] (discussing "offender-investment model"). "[I]n light of the benefits from innovation, the optimal policy will punish monopolizing firms more leniently than suggested by the static model." *Id.*

^{126.} See Easterbrook, Limits of Antitrust, supra note 15, at 1 (outlining appropriate degree of integration).

^{127.} See id. at 17-18 (highlighting role of filer rules in competitive effects).

^{128.} Nealis, *supra* note 68, at 376–77 (identifying filters proposed by Easterbrook).

^{129.} See Easterbrook, Limits of Antitrust, supra note 15, at 16 (listing role of antitrust rules in competition).

^{130.} See Frank H. Easterbrook, *Does Antitrust Have a Comparative Advantage?*, 23 HARV. J.L. & PUB. POL'Y 5, 8 (1999) (describing impact of "false positives").

application of previous court decisions.¹³¹ Other scholars have argued that Easterbrook filters are still too expensive to be applied, even though this criticism, like most of the criticisms related to the structured rule of reason, is focused on the short term. Indeed, once adopted by a court, Easterbrook's filters can raise the level of legal certainty, thereby reducing the cost of the entire judicial process.

Nevertheless, there are legitimate criticisms to Easterbrook's filters. As Easterbrook admitted himself, the filter system may have been too stringent, stressing that "[i]t is hard to compile a list of ten cases in the history of antitrust that would proceed past [the third] filter [without getting dismissed]."¹³² Moreover, some of Easterbrook's notions are outdated when applied to high-tech markets. For instance, his fourth filter, evaluating the "effect on output and survival" provides that "if arrangements are anticompetitive, the output and market share of those using them must fall."¹³³ Easterbrook observed that "if a firm raises the effective price of a product of given quality, it will sell less."¹³⁴

There are many examples where a company can implement anticompetitive practices without having to raise its costs, lower the quality of its products, or lose any market shares. For instance, when a company is guilty of bold predatory innovation by designing its product in a way that suppresses any compatibility with third companies without adding any improvements, the company can raise its profits by selling more of its compatible devices.

Analyzing Easterbrook's filters not only sheds light on his model's efficiency, but also points out that these filters are not suited for all innovation-related issues. Additionally, the way judges apply Easterbrook's error-cost analysis is quite unclear. It is difficult to find a case that attempts to estimate the costs of Type I and Type II errors within the case's particular set of facts. Some rulings are consistent with Easterbrook's analysis in considering the possibility of Type I errors, but empirical evidence and statistics are lacking.¹³⁵ Therefore, strictly applying Easterbrook's filters is more a political act than an empirically based one.

3. A Modern Rule of Reason Structured for High-Tech Markets Based on Three Filters

Economic models can be used to demonstrate any outcome. As Peter Nealis wrote, "[n]o one is able to agree as to what economic model most closely

^{131.} See Lopatka & Page, supra note 20, at 660-62 (presenting critique of Easterbrook's theory).

^{132.} See Nealis, supra note 68, at 377 n.170 (discussing various filters for antitrust) (internal quotes omitted).

^{133.} Easterbrook, *Limits of Antitrust, supra* note 15, at 31 (defining anticompetitive effects on output of firms).

^{134.} Id. (arguing for tests in antitrust cases).

^{135.} See Bruce H. Kobayashi & Timothy J. Muris, *Chicago, Post-Chicago, and Beyond: Time to Let Go of the 20th Century*, 78 ANTITRUST L.J. 147, 171 (2012) (poking holes in Easterbrook's argument).

represents reality, and economists are in constant disagreement over economic policy."¹³⁶ When some practices' anticompetitive natures rise, false positives may no longer be appropriate. This emphasizes the need to adopt a structured rule of reason that answers modern issues. Indeed, as described, the application of the rule of reason should promptly improve both antitrust law and economic analyses in the long run.

Courts must adopt a structured rule of reason to avoid false positives that are particularly critical in markets where competition between companies is exacerbated.¹³⁷ High-tech markets raise new concerns and create new challenges for antitrust law. For these markets, the court should apply a structured rule of reason where the plaintiff has to demonstrate strong evidence of anticompetitive effects. Based on the need to build a standard rooted in empirical evidence and innovation, a structured rule of reason for high-tech related practices must contain three filters—in Easterbrook's fashion—expressly designed for the field.

a. Market Equilibrium

First, the market equilibrium can better address the issue of market power in high-tech markets.¹³⁸ Market shares could be one of the several useful criteria to assess market power, but it has been proven that market shares alone are not accurate criteria. If the equilibrium is stable, it may imply high network effects, high switching costs, or high barriers to entry into the market.¹³⁹ In turn, anticompetitive practices may have a greater impact on the market.¹⁴⁰ On the contrary, if the equilibrium is unstable, it means that the market will be more likely to correct the effect of any anticompetitive strategy.¹⁴¹ This new step integrates the concept of disruptive innovation, which evaluates the

^{136.} Nealis, supra note 68, at 372 (discussing economic models).

^{137.} See Luc Peeperkorn and Katja Viertiö, *Implementing an Effects-Based Approach Under Article* 82, COMPETITION POL'Y NEWSL. (European Commission), 2009, at 17, http://ec.europa.eu/competition/publications /cpn/2009_1_5.pdf [https://perma.cc/D5WC-BMWG]. This general definition for an analytical framework gives us useful guidance on the principles to apply to all structured rules of reasons. However, such a rule of reason must be structured on a tailor-made basis depending on the type of markets where it is applied. For instance, markets where competition is made though innovation more than price require a different set of criteria.

^{138.} See Easterbrook, *Limits of Antitrust, supra* note 15, at 21 (asserting market's ability to decipher benefits from detriments).

^{139.} See Fiona Scott-Morton, Deputy Assistant Att'y Gen., Remarks Prepared for the 2012 NYSBA Annual Antitrust Forum, Antitrust in High-Tech Markets—Intervention or Restraint, (Dec. 7, 2012), *in* JUSTICE.GOV, Dec. 2012, at 2-3, https://www.justice.gov/atr/file/518956/download [https://perma.cc/XNH6-2SDV] (discussing various efficiencies in antitrust).

^{140.} See Daniel A. Crane, Market Power Without Market Definition, 90 NOTRE DAME L. REV. 31, 77 (2014) (discussing market barriers and competition effects).

^{141.} *See* Kenneth J. Arrow, U.S. v. Microsoft, *Declaration of Economist Kenneth Arrow*, CRUEL.ORG (Jan. 17, 1995), http://cruel.org/econthought/texts/misc/arrow_on_ms.html [https://perma.cc/DL5B-JJ8X] (asserting potential for equilibrium instability in high-tech markets).

possibility of anticompetitive practices' emergence because it tends to create unstable equilibrium when companies do not know the direction to take to prevent anticompetitive practices from appearing.¹⁴² In other words, taking the market's equilibriums into account is an excellent way to improve a market-shares analysis in high-tech markets.

b. Power to Discriminate

The second filter concerns the power to discriminate, which notably includes the ability to assess the amount of intellectual property rights on the market. This filer is about evaluating the possibility for a company to abuse its power rather than to abuse its dominate position. Indeed, the power to discriminate is different than market power in the sense that a company can hold certain assets that are essential to the innovative process without necessarily holding great market shares.

The power to discriminate is then about a company's ability to implement anticompetitive strategies, which are particularly harmful and can cause the total exclusion of a competitor. Conversely, a market in which the power to discriminate is low—insofar as there are few essential facilities—tends to alter judges' considerations about a company's low capacity to implement anticompetitive measures with lasting adverse effects.

c. False Positives and Incentives to Innovate

For the third filter, courts must consider the relationship between false positives and incentives to innovate by evaluating the risk of innovation and the welfare created by the innovation. As stressed by Spencer Weber Waller and Matthew Sag, courts should be particularly aware of the importance of false positives in innovative markets, noting that "[i]t may require somewhat more leniency in attempted monopolization cases but it definitely demands continued vigilance in monopoly maintenance cases and other competition cases in which future innovation is threatened."¹⁴³

In situations where a practice passes three filters, courts should specifically analyze the practice in question, utilizing the most appropriate test.¹⁴⁴ The

^{142.} See Schrepel, L'innovation, supra note 116, at 143-44.

^{143.} Waller & Sag, *supra* note 124, at 2229 (arguing "innovation lens to competition policy will not affect all facets" of antitrust).

^{144.} See Popofsky, Defining Exclusionary Conduct, supra note 42, at 436-37 (defining ways courts construe Section 2). These tests recognize different types of tests, including the "no economic sense," the "profit-sacrifice test," and the "equally efficient rival test." See id. Applying the rule of reason should not mean that antitrust law should be expensive and neglect the high importance of false positives. The fact is that enforcing the rule of reason does not necessarily imply performing a balancing test. See United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (refusing to balance long-term competitive harm). The court admitted that applying the rule of reason does not automatically imply going through a balancing test. See id. Overall, "[i]n the first decade of the twenty-first century, courts have continued their use of a burden-shifting

result is the same when applying either a structured rule of reason or modified per se legality standard: these three filters promote avoiding false positives and raise the level of legal certainty that a pure rule of reason cannot provide. Also, under either standard, the plaintiff retains the possibility of demonstrating its anticompetitive nature.

Without this ability, the fulfillment of the role of antitrust law does not occur. As former Supreme Court nominee, Robert Bork, stated, "only a kneejerk conservative would say that there's never a case for antitrust."¹⁴⁵ A modern structured rule of reason should apply antitrust law when necessary while giving room to judges to avoid false positives.

4. Empirical Applications

This Article has proposed an outline for a new structured rule of reason geared towards high-tech antitrust issues. It appears that this outline's implementation in the real world could lead to different results than Easterbrook's filters.

a. When the Three Filters Are Topped

Easterbrook presumed that "if arrangements are anticompetitive, the output and market share of those using them must fall."146 But high-tech markets disprove this theory, at least in certain circumstances. For the sake of proving that Easterbrook's filters are too narrow and inefficient for the New Economy, let us imagine that a company, called APL, releases the new version of one of its product and obtains several essential patents that protect all changes made to it. If APL has a monopoly on this market for a long time, there would be barriers to entry into the market, and APL would likely intend to destroy its competitors in related compatible markets without at all improving its product. Let us presume that, due to the development of a new version, APL's product becomes more expensive, works less efficiently, and as a result, APL's customers are worse off. Consequently, APL's competitors, here named MICR and GOG, will lose all of their market shares on interoperable products, causing APL to sell more of its interoperable products. This example, which is clearly anticompetitive, demonstrates how the output and market shares of APL will increase, at least until another company can challenge APL in its core market.

Applying the three filters could potentially result in APL's conduct being subject to antitrust law, whereas, under Easterbrook's filters, APL would not be

framework in applying the rule of reason." Michael A. Carrier, *The Rule of Reason: An Empirical Update for the 21st Century*, 16 GEO. MASON L. REV. 827, 837 (2009) (discussing conclusion on rule of reason in antitrust). Courts employ balancing in merely four percent of cases. *See id.* at 827.

^{145.} See Robert Bork: Antitrust Case Strong Against Microsoft, CNN (Apr. 26, 1998), http://edition.cnn.com/TECH/computing/9804/26/ms.bork/ [https://perma.cc/EUY9-HS4Q].

^{146.} Easterbrook, Limits of Antitrust, supra note 15, at 31.

subject to antitrust law. Indeed, it proves that the market equilibrium is very stable, thereby easily satisfying our first filter. In this scenario, APL also has a true power to discriminate as it holds essential patents. Lastly, false positives appear to be very unlikely, if not impossible, because there is no improvement in the product and because every party, including consumers, are worse off. Here, APL's conduct would be subject to the application of antitrust law under our structured rule of reason analysis because real anticompetitive effects exist, contrary to what Easterbrook's filters indicate.

b. When the Three Filters Are Not Satisfied

The structured rule of reason may not apply to certain cases involving antitrust law, contrary to past decisions on the matter. For instance, in 1999, Microsoft began integrating Windows Media Player (WMP) into Windows's Operating System (OS) and subsequently bundled it in all subsequent versions; The European Commission alleged that this integration constituted "tying" under Article 102 TFEU.¹⁴⁷ The Commission predicted that Microsoft's Media Player would dominate other forms of players because of the competitive advantage that this integration was giving to Microsoft.¹⁴⁸

The Commission found that even though consumer choices do not result in entire stifling, the elimination of potential competition could still be possible. The Commission ruled that Article 102 TFEU applied to Microsoft, even though the practices only directly affected stakeholders such as original equipment manufacturers, content providers, and software developers.

Under my three filter analysis, Microsoft's practices were not anticompetitive enough to apply Article 102 TFEU scrutiny. Applying the first filter, considering the market equilibrium, the European Commission did notice high network effects, stressing that "the more content available for a given media player, the higher the consumer demand for this media player would be. Network effects were, thus, considered to play a significant role in content providers' choice of technology."¹⁴⁹ The Commission added that "content providers and software developers look to installation and usage shares of media players when deciding—under resource constraints—on the basis of

^{147.} See Case COMP/C-3/37.792—Microsoft Corp., Comm'n Decision, 4-6, 293 (Mar. 24, 2004), http://ec.europa.eu/competition/antitrust/cases/dec_docs/37792/37792_4177_1.pdf [https://perma.cc/LW79-ELY8] [hereinafter Commission Decision] (outlining facts and procedural posture and arguing Microsoft's "starting point for the tying abuse is doubtful").

^{148.} See id. at 20-22 (describing media player).

^{149.} See Maria Lillà Montagnani, Predatory and Exclusionary Innovation: Which Legal Standard for Software Integration in the Context of the Competition v Intellectual Property Rights Clash? 26 (UNIV. OF BOCCONI—INST. OF COMPARATIVE L., Working draft, 2005), http://bileta.nsdesign7.net/content/files/conference%20papers/2005/PREDATORY%20AND%20EXCLUSIONARY%20INNOVATION.doc

[[]https://perma.cc/ARFW-MDQH]. The Commission also stated that "the network effects characterizing the media software market . . . translate into entry barriers for new entrants." Commission Decision, *supra* note 147, at 115.

which technology to develop their complementary software."¹⁵⁰

The Commission, however, did not adequately consider the fact that all media players were available for free, were easy to download on the Internet, and not mutually exclusive.¹⁵¹ Any computer could download any media player and translate any particular file in multiple formats.¹⁵² The network effects, in reality, were not as legitimate as the Commission's assessments indicated. In addition, the switching costs were low so a consumer could have easily downloaded a new player and read its files without any extra costs.

Lastly, the equilibrium in the end was unstable in media player markets given the prominent emergence of numerous players like Apple iTunes, Adobe Flash Player, QuickTime, and VLC media player. Many of these other brands already existed at the time, but the European Commission nevertheless focused on Microsoft's position in the market without considering the volatility of market shares. In applying the second filter related to the power to discriminate, one must consider the significant number of patents related to the software industry.

Applying the second filter, we must consider that Microsoft has had several competitive advantages in addition to high market shares, including great branding and the capacity to invest significant sums of money. But the evolution of media players, even at the time of the litigation, had already

While in classical tying cases, the Commission and the Courts considered the foreclosure effect for competing vendors to be demonstrated by the bundling of a separate product with the dominant product, in the case at issue, users can and do to a certain extent obtain third party media players through the Internet, sometimes for free. There are therefore indeed good reasons <u>not</u> to assume without further analysis that tying WMP constitutes conduct which by its very nature is liable to foreclose competition.

MICROSOFT ON TRIAL LEGAL AND ECONOMIC ANALYSIS OF A TRANSATLANTIC ANTITRUST CASE, 143 (Luca Rubini, ed., 2010) (citation omitted). The Commission simply answered,

Microsoft and alternative vendors seek to have content providers and software developers target their content and applications to them. The guaranteed distribution and installment of a given media player on a user's PC assumes particular importance in a situation of limited resources and cost constraints. In other words, what is critical in a market characterized by network effects is not so much whether downloading allows for widespread distribution of competitors' media players, but whether downloading allows for distribution of the competing products which is approximately equal to WMP's. Downloading does not achieve this.

^{150.} See Commission Decision, supra note 147, at 235 (outlining effects on "content providers and software developers").

^{151.} See id. at 822. The Commission stressed,

Commission Decision, *supra* note 147, at 229 (outlining Microsoft's role with developers). The focus was on, supposedly, how Microsoft's market shares were too strong to be lessened by competitors.

^{152.} See Commission Decision, supra note 147, at 299 (describing various formats for files on computers).

transformed exponentially.¹⁵³ In other words, intellectual property rights were quickly becoming obsolete due to the emergence of disruptive technologies.¹⁵⁴ Moreover, no substantive proof ever emerged that media players were a determinant factor when choosing one OS over another. The power to discriminate also needed to be mitigated because of the low importance given to the market in question within the broader market for computer sales.¹⁵⁵ In short, though the power to discriminate existed, in actuality it was not particularly strong.

In applying the third filter related to false positives, it is necessary to remember that software market shares were moving very quickly. Following this litigation, Microsoft's Media Player did not dominate the market, and the company even stopped developing WMP for other systems. Because this was the first high-tech market case heard by the European Commission, they were walking on unknown quicksand. As such, the risk of false positives was very high. The three-filter approach could have effectively been applied to Microsoft's conduct, and the Article 102 TFEU analysis was not necessarily applicable.¹⁵⁶

V. CONCLUSION

To address antitrust concerns, some have called for a pendulum movement from per se illegality, through the rule of reason, to per se legality. It is imperative that the system avoids going from one extreme to the other. The application of per se illegality has proven to be a mistake at many levels. The challenge is to avoid committing the same mistake of applying per se legality to practices related to the New Economy.

Certainly, generalizing the rule of reason would foster the evolution and sophistication of antitrust law faster than we have previously seen with other methods. High-tech markets evolve faster than others; antitrust law should have the full opportunity to evolve as much and as quickly as possible. The rule of reason can directly improve antitrust law and economic analyses in the long run, and a structured version of the rule of reason, while preserving this benefit, also has the benefit of decreasing the prevalence of false positives. Meanwhile, a general rule of reason suffers from several flaws, which underlies

^{153.} See The Evolution of the Modern Digital Media Player: Software, INDUSTRY CONVERGENCE, http://www.industryconvergence.com/home/the-evolution-of-the-modern-digital-media-player/software (last visited Oct. 10, 2016) [https://perma.cc/4FP4-GQSY] (listing history of media player software).

^{154.} See id. (describing Microsoft software capabilities).

^{155.} See Commission Decision, *supra* note 147, at 106. The European Commission devotes an entire section on the "importance of interoperability with the client PCs," but seems to avoid purposely taking a stand about the importance of media players at the time. *See id.*

^{156.} See European Commission Press Release IP/15/470, Commission Sends Statement of Objections to Google on Comparison Shopping Service (Apr. 15, 2015), http://europa.eu/rapid/press-release_IP-15-4780_en.htm [https://perma.cc/PMC8-EUZY] (describing objections to Google's shopping service).

why I argue for the creation of a structured rule of reason.

Frank H. Easterbrook's findings show how filters can create an efficient error-cost framework. Nevertheless, his findings are not well suited for the practices related to the New Economy. Instead, there must be an implementation of a new structured rule of reason that can adapt to modern antitrust law issues, and demonstrate free high-tech market efficiencies without dogma. For the first time in the age of big data, the procompetitive effects of many unilateral practices can be demonstrated. Let us not deprive ourselves of this chance to evolve by applying a per se legality that cannot evaluate the effects of practices with certainty, even if they are truly procompetitive.

By no means should antitrust scholars give up and accept that such a structured rule of reason is too complicated to implement. This Article aims to give some primary guidance for how to shape a new structured rule of reason for high-tech markets. From this guidance, there is a requirement for further research and development.