

Promoting Access over Ownership: Realigning Antitrust and Intellectual Property Law to Usher in an Era of Collaborative Consumption

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ABSTRACT

Following the US Supreme Court's endorsement of the promotion of consumer welfare as the single goal of antitrust and intellectual property laws, many courts have reasserted their commitment to the market access doctrine for antitrust and intellectual property law liability. These courts have rejected the Court's submission in GTE Sylvania to adhere to a strict output/profitability test concentrating predominantly on the positive and negative welfare effects regarding allegedly infringing conduct. This Article examines several important antitrust and intellectual property law decisions and locates within them a common flaw to express an intelligible, distinct doctrinal function for giving precedence to market access, despite the courts' implied ambition to do so. Courts following the market access framework rightly intuit that the conventional output/profitability test offers an inadequate foundation for assessing innovation or the promotion of progress in antitrust and intellectual property law cases. The contentious alternative approach of providing market actors with equal economic opportunities to participate in the competitive process that courts have proposed as a substitute, however, merely provides a

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formless and ill-justified doctrinal construction that frequently appears to coincide with the very same output/profitability framework it claims to discard. This Article seeks to transcend these deficiencies of the market access doctrine by finding a conceptually separate, normatively appealing function for the doctrine to be utilized within antitrust and intellectual property law: the market access doctrine should be based on important insights from cognitive psychological research with respect to the ways in which ordinary consumers evaluate innovation and progress.

TABLE OF CONTENTS

I.	INTRODUCTION.....	475
II	THE CONSUMER WELFARE MAXIMIZATION DEBATE	484
	A. <i>The Output/Profitability Test</i>	486
	1. Output/Profitability Thinking in Antitrust Law	486
	2. Output/Profitability Thinking in Intellectual Property Law.....	490
	B. <i>Dissatisfaction with the Market Access Test</i>	494
III.	THE PUZZLING PERSISTENCE OF THE MARKET ACCESS PARADIGM	497
	A. <i>The Enduring Presence of the Market Access Doctrine in the Courts</i>	498
	B. <i>The Failure of Courts to Admit the Importance of Market Access</i>	501
	C. <i>Possible Explanations for the Enduring Presence of the Market Access Doctrine</i>	506
	1. Pragmatic Justifications	507
	2. The Indeterminacy Problem	511
	D. <i>An Independent Function for Market Access</i>	513
	1. The Indeterminacy Problem Revisited	513
	2. A Three-Step Inquiry into Evaluating Market Access ..	515
IV.	A REINVIGORATED ROLE FOR MARKET ACCESS	519
	A. <i>Why A Distinct Market Access Paradigm Fails to Emerge</i> ..	519
	1. (Non-)Availability and Spillover Effects	521
	2. Decision Making Under Uncertainty	524
	B. <i>Collaborative Consumption Preferences</i>	528
	C. <i>Process Preferences</i>	532
	D. <i>Government-Regulated Preferences</i>	534
	E. <i>Normative Preferences</i>	538
	F. <i>Legal Implications</i>	541
V.	CONCLUSION	543

I. INTRODUCTION

Both antitrust and intellectual property laws protect markets in order to maintain and, where necessary, restore competition. To fulfill this role, theorists offer several economic and social goals that serve to define and limit the contractual and intellectual property rights that incentivize competition and innovation. Scholars have argued that these goals include the protection of the market mechanism as such to allocate resources among market actors and consumers.¹ Others have expressed concern with protecting particular non-consumer interest groups such as small firms or individual competitors.² Still others have held that the preservation of economic efficiency was the sole guiding concern of those who drafted the Sherman Act and the Progress Clause.³ Assuming a universal agreement on one single goal—the promotion of an efficient allocation of society’s available goods and services—academics would still disagree on whether this aim is best achieved through the prevention of wealth transfers to participants with market power, the preservation of consumer choice, the promotion of technological progress, or the maintenance of decentralized economic control.⁴

Commentators who disagree with the idea that markets should be regulated solely to maintain allocative efficiency have proposed an alternative standard: the protection of equal economic opportunities to compete. That is, to the extent that monopolistic conduct significantly inhibits the ability of rivals to engage in fair competition, and where circumstances suggest that courts cannot practically determine if allocative efficiency is increased, courts should give market actors a meaningful chance to compete with incumbent actors.⁵ This doctrine, however, has become the antitrust and intellectual property law

1. See, e.g., Robert H. Bork, *Legislative Intent and the Policy of the Sherman Act*, 9 J.L. & ECON. 7 (1966).

2. WILLIAM F. SHUGHART, ANTITRUST POLICY AND INTEREST-GROUP POLITICS 11–12 (1990); George J. Stigler, *The Origin of the Sherman Act*, 14 J. LEGAL STUD. 1 (1985); see also Robert H. Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 34 HASTINGS L.J. 65, 67–68 (1982).

3. See Lande, *supra* note 2, at 68.

4. See Robert H. Lande, *The Rise and (Coming) Fall of Efficiency as the Ruler of Antitrust*, 33 ANTITRUST BULL. 429 (1988).

5. Harry First, *Microsoft and the Evolution of the Intellectual Property Concept*, 2006 WIS. L. REV. 1369, 1420 (2006); Eleanor M. Fox, *What Is Harm to Competition? Exclusionary Practices and Anticompetitive Effect*, 70 ANTITRUST L.J. 371 (2002); Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051 (1979); Stephen F. Ross, *Network Economic Effects and the Limits of GTE Sylvania’s Efficiency Analysis*, 68 ANTITRUST L.J. 945 (2000).

version of unfair competition law's prohibition against price discrimination contained within the Robinson-Patman Act⁶—a doctrine almost unanimously scorned but inscrutably persistent.⁷ Purporting to emanate from the basic notion of liberty and pursuit of happiness at the heart of American political culture⁸ and its “long-cherished” American ideal of equal opportunity—the ability of an individual to choose to be an entrepreneur rather than an employee without her options being restricted by unnecessary barriers to entry or exclusionary practice⁹—the doctrine actually seems to be a grotesque misinterpretation of the Sherman Act and the Constitution's Progress Clause.¹⁰ As most commentators criticize, the market access doctrine rose to fame during the activist period of antitrust enforcement that lasted into the 1960s.¹¹ Even at the doctrine's peak success, commentators articulated opposition to its attempt to rest legal market regulatory paradigms on the simple, but fundamentally unstructured, determination of whether a business practice violated the competitive process in this way.¹²

Indeed, by the 1980s, a consensus view materialized that the market access doctrine was both unjustifiable in theory and unusable in practice.¹³ In its place, scholars favored the perspicuous

6. 15 U.S.C. § 13 (2012); see, e.g., Mark A. Glick, David G. Mangum & Lara A. Swensen, *Towards a More Reasoned Application of the Robinson-Patman Act: A Holistic View Incorporating Principles of Law and Economics in Light of Congressional Intent*, 60 ANTITRUST BULL. 279 (2015); John B. Kirkwood, *Reforming the Robinson-Patman Act to Serve Consumers and Control Powerful Buyers*, 60 ANTITRUST BULL. 358 (2015).

7. See JOSEPH E. STIGLITZ, *THE PRICE OF INEQUALITY: HOW TODAY'S DIVIDED SOCIETY ENDANGERS OUR FUTURE* xv–xxiii, 17, 30–50 (2013); Eleanor M. Fox & Lawrence A. Sullivan, *Antitrust - Retrospective and Prospective: Where Are We Coming from - Where Are We Going*, 62 N.Y.U. L. REV. 936 (1987); Edwin J. Hughes, *The Left Side of Antitrust: What Fairness Means and Why It Matters*, 77 MARQ. L. REV. 265 (1993); Ross, *supra* note 5, at 945.

8. HANS B. THORELLI, *THE FEDERAL ANTITRUST POLICY: ORIGINATION OF AN AMERICAN TRADITION* 1 (1955).

9. Harlan M. Blake & William K. Jones, *In Defense of Antitrust*, 65 COLUM. L. REV. 377, 384 (1965).

10. The Sherman Antitrust Act's provisions are laid down in 15 U.S.C. §§ 1–7 (1970). The Progress Clause is contained within Article I, Section 8, Clause 8 of the US Constitution. U.S. CONST. art. I, § 8, cl. 8. As the US Supreme Court recognized, “[t]he economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in ‘Science and useful Arts.’” *Mazer v. Stein*, 347 U.S. 201, 219 (1954).

11. *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 427 (2d Cir. 1945). *But see* *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962).

12. See, e.g., Edmund W. Kitch, *The Fire of Truth: A Remembrance of Law and Economics at Chicago, 1932-1970*, 26 J.L. & ECON. 163 (1983).

13. Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925, 933–34 (1979).

cost-benefit balancing method of the basic alternate doctrine that economists at the University of Chicago in the 1950s and later had developed for determining the workings and dysfunctions of the market system, the output/profitability test.¹⁴ Ultimately, as antitrust law entered its ninth decade of confusion regarding the choice and meaning of its goals, Robert Bork published a much acclaimed account of an argument produced by Aaron Director and other economists from the University of Chicago. This account supported the political authority of “consumer welfare” as the only legitimate objective of the laws that regulate the conduct and organization of business corporations and that establish and enforce the rules of a competitive marketplace.¹⁵ The crucial passage in Bork’s influential book, *The Antitrust Paradox: A Policy at War with Itself*, sent echoes and reverberations through later interpretations of antitrust laws and—although Bork never made an effort to extend its scope to other areas of the law—reached its pinnacle of recognition in the ways academics and practitioners apprehend the theory and practice of promoting innovation and growth through intellectual property laws today. In explaining the term “consumer welfare,” Bork described the reasons for the concept’s appeal in regulating modern market economies:

Consumer welfare is the greatest when society’s economic resources are allocated so that consumers are able to satisfy their wants as fully as technological constraints permit. Consumer welfare, in this sense, is merely another term for the wealth of the nation. . . . Consumer welfare . . . has no sumptuary or ethical component, but permits consumers to define by their expression of wants in the marketplace what things they regard as wealth. [Consumer welfare] can only increase collective wealth by requiring that any lawful products . . . be produced and sold under conditions most favorable to consumers.¹⁶

Similar accounts had appeared before,¹⁷ but Bork’s was far and away the broadest and most refined, and has continued to inspire

14. The standard definition equates market power with the power to raise or maintain prices above the competitive level. *Id.* at 928–32. Many theorists criticize this definition because it is based upon a model of perfect competition that does not reflect real-world markets, it could suppress a wide variety of procompetitive behavior, and it is incompatible with antitrust jurisprudence. See, e.g., Thomas C. Arthur, *The Costly Quest for Perfect Competition: Kodak and Nonstructural Market Power*, 69 N.Y.U. L. REV. 1 (1994); Benjamin Klein, *Market Power in Aftermarkets*, 17 MANAGERIAL & DECISION ECON. 143 (1996); Benjamin Klein & John Shepard Wiley Jr., *Competitive Price Discrimination as an Antitrust Justification for Intellectual Property Refusals to Deal*, 70 ANTITRUST L.J. 599 (2002).

15. See generally ROBERT H. BORK, *THE ANTITRUST PARADOX* (2d ed. 1993).

16. *Id.* at 90–91.

17. See e.g., Aaron Director, *The Parity of the Economic Market Place*, 7 J.L. & ECON. 1 (1964); Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 17 MISS. C. L. REV. 7 (1996); Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18 (1968).

scholars and practitioners of antitrust, intellectual property, and other areas of market regulation alike. Certain aspects remain doubtful: for instance, whether the term “consumer welfare” refers to consumer or total welfare,¹⁸ or the assumption that Bork really referred to consumer surplus rather than to “the wealth of the nation.”¹⁹ But the three implicit core claims that followed from Bork’s influential paradigm are widely accepted. First, a consumer’s maximization of utility is revealed by his own purchasing behavior.²⁰ Second, the consumer welfare approach rests on a “neutral” principle to promote progress to the extent that it ensures that the market itself caters to consumers’ tastes truly and well.²¹ Third, a market actor’s contribution to productive activity is induced primarily through outside incentives which warrant recoupment of the costs of innovation and allow—through exclusive control of production and distribution—goods and services to be created that consumers actually find valuable.²²

Application of these three principles has led the output/profitability test to emphasize, almost exclusively, the importance of what this Article refers to as “intertype competition.” Such competition occurs between competitors “of the same type” as an incentive to innovate. However, output/profitability thinking has often disregarded another form of competition, which, for want of a better term, will be called “intratype competition”: an action or process which takes place “with regard to, based on, or within a particular type.” Both categories of competition, in the modern economy, take many forms: if branded goods are involved, scholars and courts speak of the possibility of inter- versus intrabrand competition (e.g., competition between product manufacturers A and B, as opposed to

18. See, e.g., Herbert Hovenkamp, *Distributive Justice and the Antitrust Laws*, 51 GEO. WASH. L. REV. 1 (1982); Robert H. Lande, *Chicago’s False Foundation: Wealth Transfers (Not Just Efficiency) Should Guide Antitrust*, 58 ANTITRUST L.J. 631 (1989); Alan J. Meese, *Debunking the Purchaser Welfare Account of Section 2 of the Sherman Act: How Harvard Brought Us a Total Welfare Standard and Why We Should Keep It*, 85 N.Y.U. L. REV. 659 (2010); Barak Y. Orbach, *The Antitrust Consumer Welfare Paradox*, 7 J. COMPETITION L. & ECON. 133 (2011); Steven C. Salop, *Question: What Is the Real and Proper Antitrust Welfare Standard - Answer: The True Consumer Welfare Standard*, 22 LOY. CONSUMER L. REV. 336 (2009).

19. N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 321, 328 (6th ed. 2011).

20. P.A. Samuelson, *A Note on the Pure Theory of Consumer’s Behaviour*, 5 *ECONOMICA* 61, 61 (1938).

21. Douglas H. Ginsburg, *Originalism and Economic Analysis: Two Case Studies of Consistency and Coherence in Supreme Court Decision Making*, 33 HARV. J.L. & PUB. POL’Y 217, 223 (2010) (arguing that Bork’s work “brought order to antitrust law,” and praising the superiority and robustness of the consumer welfare standard).

22. WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 11 (2003).

competition between independent distributors or sellers of the same branded goods produced by A or by B); if markets for products (“secondary goods”) that are complementary to other products (“primary goods”) are involved, scholars and courts refer to inter- versus intrasystem competition (e.g., competition between one branded ink cartridge/printer combination competing against another branded ink cartridge/printer combination versus competition between different brands of ink cartridges for a particular printer or independent providers of repair parts and services for a particular printer);²³ if networks are concerned, a distinction may be made between inter- versus intranetwork competition (e.g., competition between computer operating systems manufacturers A and B as against competition between independent software developers that create their own applications for one of those systems).²⁴ The standard test has come to expect that the most important incentives for innovation are sufficiently, or perhaps exclusively, made available through intertype competition, an explanation that is based on the theoretical construct of perfect competitive conditions²⁵—conditions that, in the real world, are at most nearly approximated in agricultural commodity trades or stock markets where long-term ownership or the exchange of homogeneous goods is essential to the working of the economy.²⁶ Intertype competition is identified in contemporary legal and economic theory as the mechanism that promotes progress by inducing lower costs and prices for competing (primary) products.

The possibility of promoting intratype competition, on the other hand, entails that market actors must provide competitors with access to their production output, at least at the stage of distribution or after the first sale has been made. This is often thought to reduce the incentive to invest in the production of goods and services in the first place, in the same way that successful investors would have to share their economically beneficial facilities with rivals who have refrained from making such an investment. This view has proved to be

23. Gregory T. Gundlach & Albert A. Foer, *The Future of Aftermarkets in Systems Competition: An Overview of the American Antitrust Institute’s Invitational Symposium*, 52 ANTITRUST BULL. 1 (2007).

24. Marina Lao, *Networks, Access, and ‘Essential Facilities’: From Terminal Railroad to Microsoft*, 62 SMU L. REV. 557, 561 (2009).

25. *But see generally* GEORGE A. AKERLOF & ROBERT J. SHILLER, ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM (2009); RANDALL S. KROSZNER & ROBERT J. SHILLER, REFORMING U.S. FINANCIAL MARKETS: REFLECTIONS BEFORE AND BEYOND DODD-FRANK (Benjamin M. Friedman ed., 2013).

26. EDWARD HASTINGS CHAMBERLAIN, THE THEORY OF MONOPOLISTIC COMPETITION: A RE-ORIENTATION OF THE THEORY OF VALUE 7–8 (8th ed. 1962).

particularly threatening in light of the fear of free riding because “[c]ompelling . . . firms to share the source of their advantage is in some tension with the underlying purpose of [a competitive economy.] [I]t may lessen the incentive for the monopolist, the rival, or both to invest in . . . economically beneficial facilities.”²⁷ The provision of access can impair innovation because it deprives market actors of their “legitimate rewards”²⁸ and therefore necessarily contradicts competition, because “to provide the benefits of the market system, firms should compete, not collude. When firms deviate from the rivalry of the marketplace to declare peace, antitrust law is rightly concerned.” And “[w]hen the victor has emerged through vigorous rivalry, as opposed to collaborative activity . . . antitrust [and intellectual property laws] normally refrain [] from turning upon the winner.”²⁹

When the Supreme Court adopted the results of Bork’s staggering efforts, it espoused a series of black-letter statements that conclusively and categorically rejected the market access doctrine as what some commentators had come to see as an independent market regulatory paradigm in favor of the more analytically sound output/profitability test.³⁰ In the years following endorsement of the output/profitability test’s intertype competition framework, however, several courts, including the US Supreme Court itself, delivered opinions revealing varying degrees of judicial acquiescence to the market access doctrine.³¹ Indeed, occasionally courts have seemed

27. *Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407–08 (2004).

28. *Local 1330, United Steel Workers v. U.S. Steel Corp.*, 631 F.2d 1264, 1265 (6th Cir. 1980).

29. Timothy J. Muris, *The FTC and the Law of Monopolization*, 67 ANTITRUST L.J. 693 (2000). In *Law Offices of Curtis V. Trinko*, 540 U.S. 408, the Court warned that forced sharing can “facilitate the supreme evil of antitrust: collusion” (citing *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919)).

30. Bork was quoted by the Supreme Court in some of the most influential antitrust cases, including *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 551 U.S. 877, 889, 897, 913–14 (2007); *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 549 U.S. 312, 318 (2007); *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 221, 233 (1993); *FTC v. Superior Court Trial Lawyers Ass’n*, 493 U.S. 411, 430–31 (1990); *Business Electronics Corp. v. Sharp Electronics Corp.*, 485 U.S. 717, 758 (1988); *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, 475 U.S. 574, 589 (1986); *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 602–03 (1985); *NCAA v. Board of Regents of University of Oklahoma*, 468 U.S. 85, 101 (1984); *National Society of Professional Engineers v. United States*, 435 U.S. 679, 692 (1978); *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 56 (1977).

31. These cases are discussed *infra* notes 119–58 and accompanying text. They include: *Lotus Development Corp. v. Borland International, Inc.*, 516 U.S. 233, 233 (1996); *Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. 451, 487 (1992); *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 601–02 (1985); *Sony Computer Entertainment, Inc. v.*

profoundly apprehensive of the standard test's recommendation to promote consumer welfare based on the view that enhanced producer output will almost always lead to pro-competitive results. These judicial demurrals are perplexing in light of the previously discussed consensus among observers that the market access doctrine may in one way or another be harmful to plaintiffs, defendants, and the welfare of consumers. They are even more perplexing given that, as critics have cautiously explicated, judicial opinions that purport to apply the market access doctrine generally fail in practice to articulate or apply anything beyond cloaked protection of competitors (notably "small business" and the "underdog") instead of competition.³² Importantly, even post-Bork market access opinions, which proclaim an unyielding inclination to preserve an independent function for the market access doctrine, have a tendency to conform to this pattern. From the vantage point of apologists of the Chicago and post-Chicago schools, therefore, sustained emphasis by observers on depicting the courts' decisions as something outside of the standard test's consumer welfare paradigm raises redundant metaphorical embellishments.³³ It propagates a false belief that the output/profitability doctrine's intertype competition framework is unsettled and ambiguous when as a matter of fact judicial consensus has been reached.³⁴

This Article studies the disjunction between language and reality in post-Chicago antitrust and intellectual property law decisions. It aims to demonstrate, first, that the doctrinal framework established by the Chicago and post-Chicago schools is indeed an accurate depiction of antitrust and intellectual property law litigation in spite of the enduring presence of the market access doctrine. Where courts have invoked the market access doctrine, they typically express concern that the output/profitability test imposes an undue burden on injured plaintiffs, particularly when such analysis is read to require full-blown rule of reason analysis. They are also apprehensive that the output/profitability test's intertype competition framework fails to capture the entire spectrum of concerns relevant to antitrust and intellectual property law and their goals of "promoting

Connectix Corp., 203 F.3d 596, 609–10 (9th Cir. 2000); *Sega Enterprises Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1527 (9th Cir. 1992); *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, 15 (D.D.C. 1999) (findings of fact), *aff'd in part and rev'd in part*, 87 F. Supp. 2d 30, 40 (D.D.C. 2000) (conclusions of law).

32. *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962); BORK, *supra* note 15, at 50–89.

33. DAVID EVANS, FRANKLIN M. FISHER, DANIEL L. RUBINFELD & RICHARD L. SCHMALENSEE, DID MICROSOFT HARM CONSUMERS? TWO OPPOSING VIEWS 46 (2000).

34. *Id.*

progress.”³⁵ As this Article will underscore, notwithstanding the power of these critiques, courts applying the market access doctrine have offered in the alternative only an ill-defined doctrinal edifice. Whenever they apply the market access doctrine, this same concept appears to collapse into the very output/profitability framework that these courts purport to reject.

Second, this Article seeks to illuminate and explain the market access doctrine’s enduring presence, eventually suggesting a reinvigorated interpretation of the doctrine that accomplishes its function of making available a normatively desirable alternative to the output/profitability test’s intertype competition framework. The choice between market access and output/profitability considerations for market regulatory rulemaking represents the current debate in regulating innovation regarding the respective roles of consumer demands, which often pivot around qualitative aspects of progress rather than rigorous output/profitability analysis.³⁶ In order to preclude the market access doctrine from working as a formless or unstructured doctrine, as it has in the past, the focus ought to be directed toward the manner in which consumer attitudes about innovation and progress are likely to depart from the accepted test’s intertype competition approach.

Recent findings from cognitive psychological research point to two general conclusions. First, a consumer’s response to new innovation often differs significantly from that of market regulators and other expert observers. Second, while such divergence between market regulators and consumer modes of assessing innovation may be ascribed to different notions of “progress,” a significant residual core of divergence appears to spring from the failure of expert output/profitability assessment models to accommodate areas of important, sincere public concern. Given these two findings, this Article concludes that antitrust and intellectual property law courts should adopt a dual-test approach to include market access considerations, resting antitrust and intellectual property law liability either on a defendant’s failure to pass output/profitability analysis or on its failure to comport with a firmly established three-step test to provide equal economic opportunities to compete. Such a construction would help give effect to important consumer values that appear unlikely to reveal themselves in the more narrowly delimited intertype competition framework of the standard account’s

35. See *infra* notes 119–58 and accompanying text.

36. See, e.g., Howard A. Shelanski, *Information, Innovation, and Competition Policy for the Internet*, 161 U. PA. L. REV. 1663 (2012); Christina Bohannon & Herbert Hovenkamp, *IP and Antitrust: Reformation and Harm*, 51 B.C. L. REV. 905 (2010).

output/profitability test. At the same time, the dual-test approach would acknowledge the fallibility of expert observers' perceptions of what constitutes "progress" by including market access analysis as an additional, less technically oriented standard for determining antitrust and intellectual property law liability.

While the main argument of this Article is that market access considerations are critical where the promotion of innovation is a substantial concern, it refrains from making a claim as to the number of possible relationships between market access considerations and consumer welfarism (output/profitability) analysis generally. As will be seen, market access considerations can be critical because output/profitability analysis, properly done, gives substantial weight to such considerations (these considerations could effectively be a partial proxy for welfare) or because output/profitability analysis is partly flawed. But failure to call a spade a spade—to admit the importance of market access considerations as opposed to obscuring or obfuscating them—runs the risk of producing erroneous decisions.

This Article will proceed as follows. Part II offers a brief synopsis of antitrust and intellectual property law's long battle to develop a satisfactory test for the promotion of "progress," beginning with the revolutionary but problematic consumer welfare language by Chicago and post-Chicago school theorists and culminating in the Supreme Court's unequivocal doctrine in *GTE Sylvania*. It further references the spread of output/profitability thinking to intellectual property law. Part III then reviews a series of court rulings issued after the Supreme Court's adoption of the output/profitability test's intertype competition framework, each of which expresses some degree of hesitancy to renounce market access as an independent means for finding antitrust and intellectual property law liability but which nevertheless have failed to acknowledge the importance of market access considerations and instead have disguised or concealed them.

Despite the apparent ambitions but overall lack of success of many courts to delineate a conceptually distinct function for providing market access, Part IV submits that antitrust and intellectual property law scholars should reexamine the much maligned market access doctrine to ascertain what exactly courts are struggling to achieve through its retention. It discusses more auspicious findings that emerge from cognitive psychological literature addressing how individuals assess innovation. Researchers in these fields have discovered various insights in recent years regarding the fashion in which consumers identify and deal with aspects of innovation and progress that largely have been ignored in contemporary market regulatory doctrine. Consequently, Part V arrives at the conclusion

that the market access doctrine should be readdressed toward these vital observations that are not as effortlessly incorporated within the standard test's intertype competition formula. Such doctrinal appreciation of the way consumers' assessments differ from those of apologists of the conventional approach would help supplement the growing technical orientation of antitrust and intellectual property law by identifying particular areas in which output/profitability analysis likely discounts or misses essential welfare-related variables. Furthermore, since these consumer evaluations have been well explained empirically, the approach recommended in this Article would support courts in their ambitions to defend the interests of ordinary consumers without resulting in the extent of arbitrariness and ambiguity in application that earlier manifestations of the market access doctrine have represented.³⁷ In reality, a doctrine that aims to defend market access would be premised on well supported, distinctive notions of what it is that consumers actually expect from the modern marketplace, and why it is that those expectations should ground a standard of antitrust and intellectual property law liability.

II. THE CONSUMER WELFARE MAXIMIZATION DEBATE

Consider the following diverse arguments against servicing, repairing, improving, reproducing, or copying a defendant's good, service, or facility—some more refined, others distinctly less so.

First, in the late 1980s, independent service organizations (ISOs) began servicing photocopiers and micrographic equipment produced by Eastman Kodak Co.³⁸ In response, Kodak adopted policies to limit the availability of replacement parts for its equipment to ISOs and to make it more difficult for them to compete with Kodak in servicing such equipment. Kodak claimed that its policies prevented ISOs from “exploiting the investment Kodak ha[d] made in product development, manufacturing, and equipment sales in order to take away Kodak's service revenues.”³⁹

37. Several scholars have been skeptical of increasing antitrust and intellectual property law's sensitivity to social science understandings of consumer perceptions. See Joshua D. Wright & Judd E. Stone II, *Misbehavioral Economics: The Case Against Behavioral Antitrust*, 33 CARDOZO L. REV. 1517 (2011); Joshua D. Wright & Judd E. Stone II, *Still Rare Like a Unicorn—The Case of Behavioral Predatory Pricing*, 8 J.L. ECON. & POL'Y 859, 860 (2011). But see Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L.J. 1527, 1531 (2011); Avishalom Tor, *Understanding Behavioral Antitrust*, 92 TEX. L. REV. 573, 578 (2013).

38. Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451, 451 (1992).

39. Brief for Petitioner at 15, Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451 (1992) (No. 90-1029).

Second, in the years following the US government's 1998 case against Microsoft,⁴⁰ David S. Evans and Richard L. Schmalensee—two prominent American antitrust law scholars—assessed the economic effects and policy issues underlying the case, and were highly critical of the requirement that Microsoft share server technology, suggesting an inappropriate condemnation of a simple refusal to deal. Why should Microsoft, they asked, be required to assist rivals by providing them with protocols which it had developed that work with its own Windows operating system?⁴¹

Third, in *Castle Rock Entertainment, Inc. v. Carol Publishing Group, Inc.*,⁴² the defendant produced trivia books about episodes and characters from the Seinfeld television show. Despite the fact that the producers of Seinfeld had no intent on entering the trivia book market, the court found that the defendant illicitly reproduced the plaintiff's copyrighted material because the plaintiff was entitled to control any and all copying of its work, even if the defendant's copying did not harm the copyright holder.⁴³

Fourth and finally, in a publisher's challenge to photocopied college course packs—an instance that clearly seemed to fall under copyright law's fair use doctrine because the purpose of the copying was educational and because there was no appreciable harm to the copyright holders—the Sixth Circuit found infringement of the copyrighted works, concluding that publishers would cease to continue publishing marginally profitable books if they were unable to look forward to receiving permission fees and that artistic creativity would be stifled if reduced economic incentives for publishers to publish academic works meant that fewer academic works would be published.⁴⁴

Each of these examples involves some implicit argument of denying access to a defendant's production output, and each supports, in its own way, the classic idea that the production, creation, or innovation of something new is stimulated by providing market actors with the full revenue stream of foreseeable and unforeseeable profits derived from the sale of permissions to use their goods, services, works, or "inventions."⁴⁵ When using the terms "producing,"

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

41. EVANS, FISHER, RUBINFELD, & SCHMALENSSEE, *supra* note 33, at 45–86.

42. Castle Rock Entm't, Inc. v. Carol Publ'g Grp., Inc., 150 F.3d 132, 135 (2nd Cir. 1998).

43. *Id.* at 143, 146.

44. Princeton Univ. Press v. Mich. Document Servs., Inc., 99 F.3d 1381, 1392, 1393 (6th Cir. 1996).

45. Stanley M. Besen & Leo J. Raskind, *An Introduction to the Law and Economics of Intellectual Property*, 5 J. ECON. PERSP. 3 (1991).

“creating,” or innovating something new, this Article refers to the distribution, maintenance and repair, reproduction or improvement, or reuse and redevelopment of goods and services, tangible or intangible, *including* goods, works, and inventions that serve as “platforms,” i.e., “things allowing something else,” such as equipment that requires a combination of goods. In conceiving of tangible or intangible goods as “platforms,”⁴⁶ it will be possible to grasp why antitrust and intellectual property laws have come to stress almost exclusively the importance of “intertype competition”—the battle among competitors “of the same type” as an incentive to innovate—but often disregard “intratype competition”—an action or process which takes place “with regard to, based on, or within a particular type.”⁴⁷

Despite frequent academic support for the promotion of intratype competition,⁴⁸ American courts invariably have stopped short of requiring defendants to grant access to their production outputs irrespective of the implications that this will have for new innovation.⁴⁹ Consequently, courts have been tasked with fashioning various doctrinal tests for ascertaining when such exclusionary practices will be considered procompetitive so that its initiator bears no responsibility for the costs of ensuing harm. This part traces the development of the output/profitability concept that commentators and courts have developed to justify such results, from its early twentieth-century origins to its most recent incarnations in intellectual property law jurisprudence.

A. The Output/Profitability Test

1. Output/Profitability Thinking in Antitrust Law

Antitrust law was much simpler prior to the US Supreme Court’s landmark decision in *Continental T.V., Inc. v. GTE Sylvania, Inc.*⁵⁰ Vertical restrictions other than mergers were not governed by

46. See Henry E. Smith, *Property as Platform: Coordinating Standards for Technological Innovation*, 9 J. COMPETITION L. & ECON. 1057 (2013).

47. See *supra* notes 23–26 and accompanying text.

48. See e.g., DANIEL L. RUBINFELD, HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST 51, 57 (Robert Pitofsky ed., 2008); Warren S. Grimes, *Dynamic Analysis of Resale Price Maintenance: Inefficient Brand Promotion, Higher Margins, Distorted Choices, and Retarded Retailer Innovation*, 55 ANTITRUST BULL. 101 (2010) [hereinafter Grimes, *Dynamic Analysis*]; Warren S. Grimes, *Brand Marketing, Intra-brand Competition, and the Multibrand Retailer: The Antitrust Law of Vertical Restraints*, 64 ANTITRUST L.J. 83 (1995) [hereinafter Grimes, *Brand Marketing*]; Marina Lao, *Resale Price Maintenance: The Internet Phenomenon and Free Rider Issues*, 55 ANTITRUST BULL. 473 (2010).

49. See *infra* notes 50–100 and accompanying text.

50. See *Continental T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 49 (1977).

the “rule of reason,” and the content of the rule of reason was largely unknown.⁵¹ Before *GTE Sylvania*, courts generally followed the goal of the framers of the Sherman Act to be to protect the right of any person to enter and pursue a line of work or business.⁵² In *GTE Sylvania*, the Supreme Court dismantled this goal of antitrust law by popularizing what Bork and Chicago School economists had produced.

Given that the expansion and modernization of retail markets meant that few products were purchased directly from their makers, product manufacturers began to “plan” the promotional activities of their dealers—⁵³much in the same way as a firm “plans” the activities of its employees—at the same time endorsing reliance upon the market as a central mechanism to distribute goods and allocate resources.⁵⁴ Such restraints may be “vertical” or “horizontal.” The former involve the establishment of minimum resale prices or exclusive territories to dealers;⁵⁵ the latter exist if a joint venture between competitors imposes the same kinds of restrictions on members that distribute the venture’s product.⁵⁶

For a long time, many of these restraints were considered to be anticompetitive per se because they gave manufacturers a means of controlling their goods “on the market” after they had already been sold.⁵⁷ Established to promote consumer welfare, antitrust laws conventionally championed the idea that free competition and market access are the norm and property rights—typically in the form of

51. The Court’s only effort to provide some content to the rule of reason can be found in *Chicago Board of Trade v. United States*, 246 U.S. 231, 238 (1918) and in *United States v. Columbia Steel Co.*, 334 U.S. 495, 527–28 (1948).

52. *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 97 (1977); *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962). See generally WILLIAM ESKRIDGE & JOHN A. FERREJOHN, *A REPUBLIC OF STATUTES* 119–64 (2010) for an illustrative analysis of the historical evolution of the various interpretations of the Sherman Act.

53. Alan J. Meese, *Property Rights and Intra-brand Restraints*, 89 *CORNELL L. REV.* 553, 554 (2003).

54. HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* 460 (4th ed. 2011) (“These restraints are described as ‘intra-brand,’ because they regulate a dealer’s sales of a single brand without creating limitations on sales of brands made by other suppliers.”).

55. *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752, 765 (1984); *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365, 381 (1967), *overruled in part by Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 58–59 (1977).

56. See, e.g., *United States v. Topco Assocs., Inc.*, 405 U.S. 596 (1972); see also *Chi. Prof'l Sports Ltd. P'ship v. Nat'l Basketball Ass'n*, 95 F.3d 593, 602–03 (7th Cir. 1996); *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 212 (D.C. Cir. 1986) (evaluating a joint venture’s imposition of minimum resale prices on members).

57. See generally *Topco Assocs., Inc.*, 405 U.S. at 608; *Albrecht v. Herald Co.*, 390 U.S. 145, 152–54 (1968), *overruled by State Oil Co. v. Khan*, 522 U.S. 3 (1997); *Arnold, Schwinn & Co.*, 388 U.S. at 382.

contractual restraints on competition—are an exception to that norm and that they were granted only when and to the extent it was considered necessary to encourage innovation.⁵⁸ But soon afterwards, antitrust scholarship brought forward new explanations for such types of distribution restraints. As enunciated clearly in *GTE Sylvania*,⁵⁹ a case involving territorial restraints imposed in order to prevent “free riding” on a responsible dealer’s advertising investments, the Supreme Court clarified, albeit in a footnote—one that arguably became the keystone for modern market regulation—that intertype (in the present case, “interbrand”) competition is the primary concern of antitrust law. Intertype competition, in the Court’s view, provides a significant check on the exploitation of intratype (“intra-brand”) market power because of the ability of consumers to substitute a different segment (i.e., a different “brand” of the same product).⁶⁰

Even though this new rule was deceptively easy to formulate, it required courts to weigh different economic effects against each other and to determine whether the net result was competitive or anticompetitive. Vertical territorial restraints, for instance, may lessen competition among the dealers of the manufacturer imposing the restraint, but they may also increase competition among the brands of different manufacturers. While *GTE Sylvania*’s analysis left unresolved how a court should balance an increase in interbrand competition against a decrease in intrabrand competition, the case provides a key moment in the historical development of the output/profitability test.

By recognizing an implied trade-off in the sale and distribution of goods, and by refusing to condemn a manufacturer’s attempted contractual restriction on intrabrand competition, *GTE Sylvania* followed through with the early movement away from the provision of equal economic opportunities to compete—in the present case, the ability of qualified sellers to distribute, advertise and sell the defendant’s goods as they see fit—as the predominant jurisprudential paradigm to assessing anticompetitive restraints. Noting the importance of the Court’s concession, Richard Posner, in an influential 1981 article entitled *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality*,⁶¹ almost single-handedly⁶²

58. Maxwell M. Blecher, *Schwinn—An Example of a Genuine Commitment to Antitrust Law*, 44 ANTITRUST L.J. 550 (1975); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031 (2004); Pitofsky, *supra* note 5.

59. Continental T.V., Inc. v. GTE Sylvania, Inc., 433 U.S. 36, 36 n.19, 52 (1977).

60. *Id.*

61. See Richard A. Posner, *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality*, 48 U. CHI. L. REV. 6 (1981).

devised a conclusive test based on which the respective balancing had to be conducted.⁶³ According to Posner, in order to determine if a restriction on distribution has increased competition, competition must be evaluated by its “consequences,” i.e., by whether it yields “the consumer’s preferred quality-price mix of a product” rather than by “the presence or absence of a particular type of rivalry” such as price competition. This determination entails focusing on whether a restriction caused the firm’s output to rise or fall: if the firm’s output rose, consumers must have found the product to be more appealing and the increase in output must have exceeded any net reduction in price and service competition among sellers of the same brand. Taking everything else into account, increased sales demonstrate that the overall effect of the restriction must be positive.⁶⁴

Thus, while the Supreme Court in *GTE Sylvania* had recognized a basic trade-off between positive and negative efficiencies in assessing the economic effects of vertical territorial restraints, Posner firmly established a more administrable output/profitability test for assessing distribution restraints by courts. This test is based on the view, as Judge Learned Hand once stated, that “if buyers wish to be snobs, the law will protect them in their snobbery.”⁶⁵ The Supreme Court took the strict output/profitability concept and applied it, amongst other things, to the law of vertical maximum price fixing agreements in *State Oil v. Khan*,⁶⁶ to minimum resale price maintenance agreements in *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*,⁶⁷ to predatory pricing practices in *Matsushita v. Zenith Radio Corp.*,⁶⁸ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*,⁶⁹ and *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber*

62. *But see* Frank H. Easterbrook, *Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L.J. 135 (1984).

63. See Robert H. Bork, *The Rule of Reason and the Per Se Concept: Price Fixing and Market Division*, 75 YALE L.J. 373 (1965), for an earlier attempt to devise such a test.

64. Posner, *supra* note 61, at 21; *see also* Richard A. Posner, *The Rule of Reason and the Economic Approach: Reflections on the Sylvania Decision*, 45 U. CHI. L. REV. 1, 18 (1977).

65. *Benton Announcements, Inc., v. Fed. Trade Comm’n*, 130 F.2d 254, 255 (2d Cir. 1942). *But see* *Standard Brands, Inc., v. Smidler*, 151 F.2d 34, n.13 (2d Cir. 1945), wherein Judge Jerome Frank expressed doubt that this should be the law: “. . . non-economic snobbish desires of consumers . . . and the satisfaction of their desires engendered by ignorance have been said to be entitled to judicial protection, at least in the Federal Trade Commission cases It is perhaps not inappropriate to ask whether snobbism and catering to ignorance are important social interests deserving governmental assistance.”

66. 522 U.S. 3, 22 (1997).

67. 551 U.S. 877, 900 (2007).

68. 475 U.S. 574, 591 (1986).

69. 509 U.S. 209, 222 (1993).

Co.;⁷⁰ to exclusive dealings in *Tampa Electric Co. v. Nashville Coal Co.*;⁷¹ and to monopolization practices in *Verizon Communications, Inc., v. Law Offices of Curtis V. Trinko, LLP*.⁷² As a result, today, many courts hold that intratype competition cannot be lessened at all unless the manufacturer imposing restraints has market power in the traditional sense.⁷³ As long as such restrictions increase a product manufacturer's output—or even if they reduce output and increase price⁷⁴—competition has not been restrained.⁷⁵

2. Output/Profitability Thinking in Intellectual Property Law

Though observers typically associate output/profitability thinking with antitrust law, the same mode of reasoning has become common in intellectual property law to address similar concerns about the profits that intellectual property rights holders may gain from, and the incentives they may have to invest in, their creations. The 1976 Copyright Act's scope of derivative works is illustrative. Congress at that point introduced a broad derivative works right, conferring upon copyright holders the exclusive right not only to control their original works but also to control any other work in which the original work might be "modified, transformed, or adapted."⁷⁶ Though this change has been criticized by those who have advocated in favor of spurring innovation as "hopelessly overbroad" because all new works borrow and must necessarily borrow from or build on existing works to some extent,⁷⁷ it has come to be widely accepted that a derivative use will infringe the copyright owner's original work, particularly if the derivative use invades a market that

70. 549 U.S. 312, 318–19 (2007).

71. 365 U.S. 320, 327 (1961).

72. 540 U.S. 398, 407 (2004).

73. See *JBL Enters., Inc. v. Jhirmack Enters., Inc.*, 698 F.2d 1011, 1017 (9th Cir. 1983), *cert. denied*, 464 U.S. 829 (1983); *Graphic Prods. Distribs., Inc. v. ITEK Corp.*, 717 F.2d 1560, 1568 (11th Cir. 1983); *Valley Liquors, Inc. v. Renfield Imps., Ltd.*, 678 F.2d 742, 745 (7th Cir. 1982); *Muenster Butane v. Stewart Co.*, 651 F.2d 292, 297–98 (5th Cir. 1981).

74. In such a case, the conventional view holds that a balancing of intratype competition against overall efficiency must take place: if product differentiation and a smaller number of dealers permit a manufacturer to raise price above its marginal costs but the restraints improve the quality of the distribution schema, thus making the manufacturer perform better vis à vis its competitors, then the efficiency question reduces to whether the loss in allocative efficiency from reduced dealer price competition is outweighed by the increase in productive efficiency that results in "improved distribution."

75. HOVENKAMP, *supra* note 54, at 529.

76. 17 U.S.C. §§ 101, 106 (2012) (defining and granting derivative works right).

77. *Micro Star v. Formgen, Inc.*, 154 F.3d 1107, 1110 (9th Cir. 1998).

the copyright owner would likely exploit if he or she knew about it.⁷⁸ Only if the derivative work “consumes” the underlying work, that is, if the derivative use incorporates an actual copy of that work into each derivative work (as in the case of tile art where, for every piece of tile art created, the defendant must have purchased a copy of the plaintiff’s copyrighted art work),⁷⁹ the copyright owner is deemed to be already compensated for uses it should have expected when pricing the first sale of the copyrighted work.

As a result of output/profitability thinking, the logic of when the copyright owner should be entitled to compensation is no longer based on a determination of whether the derivative work is truly original or whether a permanent change to the original work has been made. Instead, the justification for such copyright protection now actually turns on the issue of whether the original copyright owner has some control in terms of reaping (even unforeseen) economic rewards. By granting a derivative work as broad a right as that described in the 1976 Copyright Act, individuals and market actors have become relatively unwilling to forgo any uncompensated economic reward, no matter how remotely linked such reward is to the original work.⁸⁰

The growing influence of the standard account’s intertype competition framework also becomes visible in the ever-expanding length of copyright duration. As traditionally construed, average copyright duration is intended to reflect a balance between a reduction of access costs for (prospective) creators and inventors, and copyright’s incentive effects, that is, the investment that they encourage with respect to the creation of new works.⁸¹ Though courts typically have not gone beyond this concern for encouraging new investment, legislators have been apprehensive about optimizing—⁸²or indeed, maximizing exploitation of—current uses of such property.⁸³

Another concern, copyright dilution,⁸⁴ is most apparent in the fourth factor of the statutorily prescribed fair use doctrine, which

78. Glynn S. Lunney Jr., *Reexamining Copyright’s Incentives-Access Paradigm*, 49 VAND. L. REV. 483, 634 (1996).

79. *C.M. Paula Co. v. Logan*, 355 F. Supp. 189, 192 (N.D. Tex. 1973).

80. See, e.g., Christina Bohannon, *Copyright Harm, Foreseeability, and Fair Use*, 85 WASH. U. L. REV. 969, 979–80, 988 (2007). But see ABRAHAM DRASSINOWER, *WHAT’S WRONG WITH COPYING?* 1 (2015) (conceptualizing copyright law as a communicative act).

81. William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 361 (1989).

82. LANDES & POSNER, *supra* note 22, at 226.

83. *Id.*

84. The basic concept can be found in the law of “trademark dilution,” which protects a trade symbol against uses that are likely to undermine a symbol’s distinctiveness, unrestrained

instructs courts to account for the impact of the defendant's unauthorized use on the market of the plaintiff's work if that use were to become widespread.⁸⁵ In several cases, courts have considered not only lost sales caused by the defendant's use to be a "harm" under this factor, but also lost opportunities to obtain licensing fees for uses that the copyright holder never contemplated.⁸⁶ Courts, in such cases, ask whether a defendant's particular use has merely deprived the copyright holder of a "potential benefit" rather than whether it also caused the copyright owner actual "harm."⁸⁷ Under this approach, fair use "excuses copying only where some instance of market failure, such as prohibitively high transaction costs or externalities, prevents the defendant from paying for what otherwise would be an economically valuable use."⁸⁸ Such a market failure approach implicitly supposes an output/profitability-oriented view of copyrights that *assumes* harm from infringement in the same manner that harm is assumed from gaining access to an antitrust defendant's production output. As with the protection of intertype competition, the copyright owner is presumed to have an "entitlement for all uses of her copyrighted work that violate her exclusive rights, whether or not such uses cause her harm,"⁸⁹ and an entitlement that allows control over all copying of their works, even if those uses fall outside their intended or foreseeable markets. Any protection that grants the copyright owner less than that is deemed to discourage socially beneficial uses of copyrighted works. As one commentator put it, "increasingly, anything less than perfect control is thought to provide creators with

by a concern for confused consumers or competition and thus broader than traditional trademark law (which is primarily concerned with the reduction of a customer's cost of collecting information about competing products and services) would have supported. This is specified in sections 43(c) and 45 of the Lanham Act, the stated purpose of which is to protect famous marks against another firm making use of a substantially similar mark likely to cause dilution by blurring or by tarnishment. Blurring, according to the statute "impairs the distinctiveness of the famous mark" while tarnishment "harms the reputation of the famous mark." See §§ 43(c)(2)(B) and (C), Trademark Dilution Revision Act, Pub. L. No. 109-312, 120 Stat. 1730 (2006), *codified at* 15 U.S.C. § 1125(c)(2) (2012).

85. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 590 (1994).

86. Shyamkrishna Balganesh, *Foreseeability and Copyright Incentives*, 122 HARV. L. REV. 1569, 1625 (2009); Bohannon, *supra* note 80, at 1569 (suggesting that the elements of the tort of copyright infringement should change to require plaintiffs to prove foreseeability); see also Wendy J. Gordon, *Trespass-Copyright Parallels and the Harm-Benefit Distinction*, 122 HARV. L. REV. F. 62 (2009); Justin Hughes, *Copyright and Its Rewards, Foreseen and Unforeseen*, 122 HARV. L. REV. 81 (2009).

87. Balganesh, *supra* note 86, at 1569; Wendy J. Gordon, *An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory*, 41 STAN. L. REV. 1343, 1384 (1989).

88. Bohannon, *supra* note 80, at 981.

89. *Id.* at 981-82.

insufficient incentive. . . . Over time, the increase of rights under copyright law creates expectations among creators . . . and creators form incentives based on those expectations.”⁹⁰

Advocates of the output/profitability view of copyright have found evidence of their approach in *Sony Corp. of America v. Universal City Studios, Inc.* Though in this case, the Supreme Court ruled that the taping of individual copies of entire television programs for the purpose of “time-shifting,” or watching the programs at a later point in time than they were broadcast, did not constitute copyright infringement but rather was noninfringing fair use,⁹¹ the Court allegedly did so only because of high transaction costs and low anticipated profits.⁹² In *Sony*, while the exact copying of complete television programs violated the copyright owners’ exclusive right of reproduction,⁹³ the Court found in favor of fair use. The Court determined that the amount home-tapers would pay to time-shift each broadcast would be insignificant compared to the transaction costs they would sustain in negotiating a license with each copyright owner.⁹⁴ Because it was improbable that these transactions would take place, the market for time-shifting would ultimately collapse.⁹⁵

Courts have adopted the standard account’s output/profitability view in *Ty, Inc. v. West Highland Publishing Inc.*, where the defendant made a collector’s book that included information about Beanie Babies stuffed animals combined with buying recommendations, price assessments, and historical essays.⁹⁶ Although there was no harm to any market that the plaintiff might sensibly have sold or entered into, as the book was unlikely to supplant sales of the Beanie Babies stuffed animals themselves or was in competition with another book of Beanie Babies photographs, the court concluded that Ty might suffer some harm in the distant future because, “by recurring shortages Ty seeks to maintain the enormous demand and popularity of Beanie Babies for as long as possible, and

90. Sara K. Stadler, *Incentive and Expectation in Copyright*, 58 HASTINGS L.J. 433, 435 (2006).

91. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 420, 443, 456 (1984).

92. Wendy J. Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 82 COLUM. L. REV. 1600, 1628 (1982).

93. 17 U.S.C. § 106 (2012).

94. Gordon, *supra* note 92, at 1628–29.

95. *Id.* But see *Campbell v. Acuff-Rose Music*, 510 U.S. 569, 593–94 (1994); *Harper & Row v. Nation Enters.*, 471 U.S. 539, 566–67 (1985); *Sony*, 464 U.S. at 450–51.

96. *Ty, Inc. v. W. Highland Publ’g, Inc.*, 98 C 4091, 1998 WL 698922, *15–16 (N.D. Ill. Oct. 5, 1998).

consequently seeks to avoid overexposure of market saturation.”⁹⁷ Similarly, in *Dr. Seuss Enterprises L.P. v. Penguin Books USA, Inc.*,⁹⁸ a case involving the portrayal of O.J. Simpson in a distinctive scrunched and somewhat shabby red and white stove-piped hat typically worn by the title character in *The Cat in the Hat*, the court noted quite explicitly that the satirical use of the work was “nontransformative and, admittedly commercial, [so that] market substitution is at least more certain and market harm may be more readily inferred.”⁹⁹ As the Seventh Circuit Court’s “Beanie Babies” cases suggest,¹⁰⁰ courts’ main concern in such cases does not revolve around providing market access, but rather, from an ex post perspective, to maximize output and profitability of what the defendant has already established.

B. Dissatisfaction with the Market Access Test

Long before courts adopted output/profitability thinking, academic commentators began noting the problems inherent in the previous market access doctrine. For instance, scholars repeatedly complained that the goal of providing equal economic opportunities to participate in the competitive process provides too amorphous a basis on which to assess antitrust (and intellectual property law) liability. Phillip Areeda and Herbert Hovenkamp note in their treatise that such values rest on an ambiguous meaning and its tests are very difficult to apply to discrete problems. Consequently, market access

97. *Id.* at *16. One might ask whether “market saturation” is the same as dilution. See Sara Stadler, *The Wages of Ubiquity in Trademark Law*, 88 IOWA L. REV. 732 (2003), for an argument that when trademark owners engage in brand extension, those marks become ubiquitous and such ubiquity destroys uniqueness. Since without uniqueness there can be no dilution by third parties, when it comes to dilution protection, ubiquitous marks need not apply. Note, this Author explains that in the “Beanie Babies” cases, the court of appeals has a much different view of the copyright status of the books based on its distinction between complements and substitutes. While not necessarily persuasive, it at least purports to reject the district court’s type of reasoning.

98. *Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc.*, 109 F.3d 1394 (9th Cir. 1997).

99. *Id.* at 1403. Note that this case also involved a successful trademark infringement claim. *Id.* at 1406. The formal copyright doctrine is that harm resulting from criticism does not count in the fourth fair use factor. Courts, however, sometimes ignore this in practice, *see, e.g.*, *Salinger v. Colting*, 607 F.3d 68 (2d Cir. 2010), in which the court was arguably upset at the crass treatment of J.D. Salinger’s original novel *The Catcher in the Rye* by a Swedish author’s release of *60 Years Later: Coming Through the Rye* that featured a ninety-year-old fictionalized Salinger character that is haunted by a seventy-six-year-old version of Salinger’s Holden Caulfield.

100. *See, e.g.*, *Ty, Inc. v. Publ’ns Int’l Ltd.*, 292 F.3d 512 (7th Cir. 2002); *Ty, Inc. v. Le Clair*, 103 F. Supp. 2d 1047 (N.D. Ill. 2000); *W. Highland Publ’g*, 1998 WL 698922; *Ty, Inc. v. GMA Accessories, Inc.*, 959 F. Supp. 936 (N.D. Ill. 1997), *aff’d*, 132 F.3d 1167 (7th Cir. 1997).

can be employed to justify almost any outcome that a court or jury chooses to obtain.¹⁰¹ In a particularly memorable critique of the doctrine's arbitrariness, Robert Bork recited a series of antitrust issues, querying whether the extent of antitrust liability really should hinge on a principle that may on the one hand preserve competition, while on the other hand suppress it.¹⁰² Bork and other commentators encapsulate the widely held view that market access provides only the most meager and insufficient guidance for factfinders charged with the difficult task of assessing the adequacy of antitrust and intellectual property law liability. Without a doubt, to many analysts the test is so elusive as to be lawless.¹⁰³

Scholars also have criticized the market access test based on the observation that it offers little help in deciding cases where the contractual or intellectual property rights holder will obtain a dominant position or a monopoly, but in so doing reduces the costs of serving the market to such an extent that the monopoly price is lower than the market price was before the conferral of such rights.¹⁰⁴ Under such circumstances, the factfinder is advised to assess liability with respect to market access that is expected to be meaningless. Similarly, for a variety of differentiated goods, consumers may not want to obtain service and repair from an independent company. In such cases, “[w]hen consumers prefer the differentiated product and hence make output restriction possible, they have shown that they prefer the higher price for that product to a lower price for a standardized product.”¹⁰⁵ To the extent that consumer preferences do take this simplistic form (“[t]he sumptuary impulse has no legitimate place in the interpretation of antitrust [and intellectual property] laws that are necessarily premised on the ideal of the maximum satisfaction of consumer wants as they exist”), the market access test threatens to become, in practice, the very antagonist of contractual and intellectual property rights holders that no American jurisdiction has appeared ready to accept.

An altogether different objection to the market access test is that the doctrine too easily works against defendants under circumstances in which antitrust and intellectual property law

101. See PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* ¶¶ 100–100c, at 1 (4th ed. 2014). For a more differentiated analysis, see Einer Elhauge, *Defining Better Monopolization Standards*, 56 *STAN. L. REV.* 253 (2003).

102. BORK, *supra* note 15, at 134–60.

103. *Id.* at 7–8 (citing Robert H. Bork & Ward S. Bowman, Jr., *The Crisis in Antitrust*, *FORTUNE*, Dec. 1963, at 138) (speaking of a “crisis in antitrust”).

104. For an overview of such critiques, see Posner, *supra* note 61, at 15.

105. BORK, *supra* note 15, at 313.

liability might further the sole interests of individual plaintiffs. For instance, because demand for market access generally derives from impressions of the existing state of the marketplace for physical and intellectual goods, less efficient market actors may request market access even though a comprehensive analysis of the costs and benefits of such access would not subject a market actor to antitrust or intellectual property law liability. Considerations such as these led the US Supreme Court in *Trinko* to provide a near-total departure from market access as a means for promoting progress. The *Trinko* Court noted that provision of market access can lead to an underprovision of incentives for market actors, particularly in cases where the monopolist created “something brand new”—in this case, “the wholesale market for leasing network elements.”¹⁰⁶ In the Court’s view, “[t]he opportunity to charge monopoly prices is what attracts ‘business acumen’ in the first place.”¹⁰⁷ Monopoly power “induces risk taking that produces innovation and economic growth.”¹⁰⁸ The imposition on monopolists of a duty to deal “can [therefore] result in ‘false positive’ mistaken inferences that chill the very conduct antitrust laws are designed to protect.”¹⁰⁹

Sharing requirements, according to the output/profitability view’s intertype competition framework, erode a monopolist’s legitimate exploitation of its own innovations and chill incentives to engage in the production of new goods and facilities in the first place.¹¹⁰ Moreover, in this view, forced dealing creates a trap. “If two firms start cooperating, the larger cannot back out without a good business purpose.”¹¹¹ “[S]uch an approach penalizes change and therefore can make firms reluctant to enter [a business] initially.”¹¹² Placing it squarely within the tradition of an incentives-based theory of promoting progress, commentators have asserted that a market access approach will not enable industry to innovate efficiently on the introduction of new products that have been responsible for the high standard of living in the industrialized world for almost a century.¹¹³ Some go so far as to claim that “legal [rules] of mandatory sharing and

106. Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004).

107. *Id.*

108. *Id.*

109. *Id.* at 399–400.

110. Keith N. Hylton, *Economic Rents and Essential Facilities*, B.Y.U. L. REV. 1243, 1245, 1260 (1991).

111. Frank Easterbrook, *On Identifying Exclusionary Conduct*, 61 NOTRE DAME L. REV. 972, 973 (1986).

112. Dennis Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal—Why Aspen and Kodak Are Misguided* 23–24 (Nat’l Bureau of Econ. Research, Working Paper No. 8105, 2001).

113. *Id.* at 19.

compulsory dealing requirements [are] inconsistent with the exclusivity that is necessary to preserve incentives to create, the core operative device of intellectual property [and antitrust] law in a market economy.”¹¹⁴ As industries now tend to depend less on physical assets than on information, they will come to a halt unless they can profit from the information they create.

III. THE PUZZLING PERSISTENCE OF THE MARKET ACCESS PARADIGM

In most respects, output/profitability analysis has been an unreserved success in the courts, for example, bringing considerable clarity to the concept of what constitutes prevention of competitive harms;¹¹⁵ exposing the fallacy of market regulatory policies based on concerns about protecting individual businesses instead of protecting competition;¹¹⁶ helping to promote the precedence of consumer interests in the analysis of markets;¹¹⁷ presenting a clear and dispassionate legal standard sorely absent in many earlier decisions;¹¹⁸ and creating a unifying legal doctrine that is compatible with the views of many economists and legal scholars alike.¹¹⁹

Commentators and courts have been less uniformly receptive, however, of the output/profitability standard’s function in promoting innovation and its concomitant demotion of the market access doctrine to a subsidiary role for purposes of antitrust and intellectual property law litigation. Although the US Supreme Court recently expanded the applicability of the output/profitability test’s doctrinal framework with respect to antitrust issues that have heretofore been treated as per se

114. Abbott B. Lipsky & Gregory J. Sidak, *Essential Facilities*, 51 STAN. L. REV. 1187, 1219 (1999).

115. BORK, *supra* note 15, at 303.

116. *Id.* at 205, 256–57.

117. For example, the Supreme Court addressed the “consumer welfare” standard in two cases involving alleged predation, *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993) and *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 549 U.S. 312 (2007). The Court noted that, although predatory practices may be undesirable from a social welfare perspective, lower prices are a “boon to customers” and are therefore lawful unless the alleged predator succeeds in excluding competition and recouping its losses by raising prices. *Weyerhaeuser*, 549 U.S. at 324 (quoting *Brooke Grp.*, 509 U.S. at 224).

118. Ginsburg, *supra* note 21, at 217–18 (“The Court had read into the Sherman Act an assortment of vague and, ironically, anti-competitive social and political goals, such as protecting small traders from their larger, impersonal (and more efficient) rivals.”).

119. George L. Priest, *The Abiding Influence of the Antitrust Paradox*, 31 HARV. J.L. & PUB. POLY 455 (2008).

illegal,¹²⁰ in several cases courts have proclaimed their continued commitment to the market access doctrine.¹²¹

This Part argues that in market regulatory domains in which innovation is a substantial concern—which become more common every day—something very similar if not essentially identical to the much maligned market access rule tends to find its way into court decisions (although these courts do not expressly renounce the standard derision directed toward the market access rule). To be sure, hardly anyone today would question that market access considerations should generally be given significant weight by courts in domains in which innovation is a substantial concern (much like the courts, many scholars, even those adhering to output/profitability analysis, would think that a sensible application of such analysis would give substantial emphasis to market access considerations), or that market access issues generally deserve significant weight in domains in which innovation is a major issue. This Part will, however, show that failure to admit the importance of market access considerations runs the risk of producing erroneous decisions: according to the courts, most market access decisions could easily have gone the other way, and yet in retrospect, many commentators have agreed that those decisions were rightly decided.

Such cases are a mystery for many antitrust and intellectual property law scholars. How does one explain the dedication of judicial authorities to a doctrine that learned observers—with considerable experience and after much deliberation—have concluded is conceptually inferior to the output/profitability test and its recognized counterparts? This Part explores that question, contemplating whether courts issuing these opinions have simply failed to rationalize market access considerations, whether commentators have missed something substantial in their reading of the case law, or whether some other aspect altogether elucidates the puzzling persistence of the market access paradigm.

A. The Enduring Presence of the Market Access Doctrine in the Courts

One of the most prominent examples in which the output/profitability view's intertype competition framework suffered a judicial rebuke is found in *United States v. Microsoft Corp.*¹²² Issued on April 3, 2000, Judge Thomas Penfield Jackson expressly declined

120. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007).

121. *See infra* notes 119–58 and accompanying text.

122. 84 F. Supp. 2d 9 (D.D.C. 1999) (findings of fact); 87 F. Supp. 2d 30 (D.D.C. 2000) (conclusions of law).

the view that access to a defendant's production output ought to be denied,¹²³ based on the underlying supposition that because Microsoft dominated its network for computer operating systems, which in turn dominated the market that it served, highly creative innovations (both intra- and inter-network) were unable to find a market as there was no easy way to make them compatible with the rest of the network. Notwithstanding the possibility that over time an alternative operating system could supplant Windows or force it to provide interoperability information, without reasonable access for rivals' server software, the resulting entrenchment directed innovation along a specific path and gravely constrained the innovations of others.¹²⁴

The *Microsoft* decision echoes earlier verdicts issued by the US Supreme Court that pronounced distrust of the output/profitability test's intertype competition framework and their strong ambition to adhere to the market access doctrine. For instance, in *Eastman Kodak Co. v. Image Technical Services, Inc.*,¹²⁵ the Supreme Court rejected Kodak's position that ISOs, which put substantial efforts into the service market, should be denied access to the equipment market to provide Kodak customers with complementary services.¹²⁶ This reasoning also is represented in *Aspen Skiing v. Aspen Highlands Skiing*,¹²⁷ where the Supreme Court decided that Ski Co., a large skiing company, violated the antitrust laws by refusing to cooperate in a joint venture with Highlands, a smaller company, to promote and advertise "All Aspen" tickets that would permit skiers to ski the entire mountain area.¹²⁸

Other courts have signaled their disagreement with the output/profitability test's intertype competition framework in intellectual property law cases. In one of the most famous copyright law opinions of this sort, the First Circuit Court ruled in *Lotus Development Corporation v. Borland International, Inc.* that Borland, a company that facilitated software deployment projects, was allowed to use the menu tree developed by Lotus—i.e., the words and structure of Lotus's software command hierarchy—to build a rival spreadsheet program and to make this program compatible with and familiar to users of Lotus's 1-2-3 software.¹²⁹ Lotus argued that Borland should

123. 87 F. Supp. 2d 30.

124. *Id.* at 39.

125. 504 U.S. 451 (1992).

126. *Id.* at 486.

127. 472 U.S. 585 (1985).

128. *Id.* at 610.

129. *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807, 819 (1st Cir. 1995), *aff'd*, 516 U.S. 233 (1996) (by an equally divided court).

not be allowed to include a “virtually identical” copy of the entire Lotus 1-2-3 menu tree in its own Quattro and Quattro Pro version 1.0 programs, even though Borland did not copy any of Lotus’s underlying computer code. Instead, Borland copied only the words and structure of Lotus’s menu command hierarchy to make its programs compatible with Lotus 1-2-3 so that spreadsheet users who were already familiar with Lotus 1-2-3 would be able to switch to the Borland programs without having to learn new commands or rewrite their Lotus macros. The court disagreed with Lotus’s argument that competition on the platform it established ought not to be allowed and that by declining to protect its user interface, its invention would become a resource in which no other market actor would have wanted to invest.¹³⁰ Instead, the court held that Borland could not compete without gaining access to Lotus’s user interface, as many consumers had already embraced it.¹³¹

In at least two further cases, the Ninth Circuit Court chose to allow access to a market actor’s production output as well. In *Sega Enterprises Ltd. v. Accolade, Inc.*,¹³² Accolade, an independent developer, manufacturer, and marketer of computer entertainment software, including game cartridges that are compatible with Sega’s “Genesis” game console, reverse engineered Sega’s video game programs to discover the compatibility requirements with Sega’s game console. Accolade then created its own games for the “Genesis,” relying solely on the interface specifications it derived from Sega’s games (i.e., without copying Sega’s program code itself). The court ruled that “intermediate copying”¹³³ of computer object code (Accolade’s reverse engineering of Sega’s computer software in order to publish games for Sega video consoles) constituted fair use when such use was necessary to obtain access to the functional elements of the copyrighted program itself.¹³⁴

In *Sony Computer Entertainment, Inc. v. Connectix Corp.*,¹³⁵ the court held that intermediate copying of a copyrighted BIOS software constituted fair use when such use involved the creation of a “wholly new product, notwithstanding the similarity of uses and functions.”¹³⁶ Connectix made and sold a software program called

130. *Id.*

131. *Id.* at 819–22 (Boudin, J., concurring).

132. 977 F.2d 1510 (9th Cir. 1992).

133. Intermediate copying refers to the copying of a work during the process of analyzing or reverse engineering. *Id.*

134. *Id.*

135. 203 F.3d 596 (9th Cir. 2000).

136. *Id.* at 606–07.

“Virtual Game Station.” The purpose of this program was to emulate on a regular computer the functioning of the Sony PlayStation console, so that computer owners who buy the “Virtual Game Station” software can play Sony PlayStation games on their computers. While the “Virtual Game Station” did not contain any of Sony’s copyrighted material, Connectix reverse engineered Sony’s BIOS in order to find out how the PlayStation worked and, ultimately, to produce the “Virtual Game Station.” Despite some commentators’ complaints that the *Connectix* approach to providing market access was less sensible than the one in *Sega*, because the purpose of providing access was to compete with the original platform, while in *Sega* the provider of the application merely created a complementary good,¹³⁷ in both instances, the court seemed to give clear priority to the idea of market access over obstinately protecting exclusive ownership to incentivize innovation.¹³⁸

B. The Failure of Courts to Admit the Importance of Market Access

While courts—including the Supreme Court—have sustained some measure of disagreement with the output/profitability test’s intertype competition framework, those that have espoused a market access approach applied it in such a manner that it became effectively indistinguishable from the doctrinal framework employed in ordinary cases and the output/profitability standard itself.¹³⁹

The *Lotus* case provides ample support for this argument. After setting out the requirements for copyright infringement, the *Lotus* court proceeded to outline the state of the law with respect to the question of whether the Lotus menu command hierarchy constituted a copyrightable “expression” or an uncopyrightable “method of operation,” a means “by which a person operates something, whether it be a car, a food processor, or a computer.”¹⁴⁰ The court held that the Lotus menu command hierarchy was an uncopyrightable method of operation because it provided the “means by which users control and operate Lotus 1-2-3,”¹⁴¹ because it “[did] not merely explain and present Lotus 1-2-3’s functional capabilities to the user,” and because it was “different from the underlying computer

137. Ivan Rothman, *From Sega to Sony and Beyond: An Alternative Legal Basis for Software Reverse Engineering*, INTELL. PROP. L. NEWSL. 1, 6–7 (2000).

138. *But see* Atari Games Corp. v. Nintendo of Am., 975 F.2d 832 (Fed. Cir. 1992) (denying market access).

139. BORK, *supra* note 15, at 134–60.

140. Lotus Dev. Corp. v. Borland Int’l, Inc., 49 F.3d 807, 816 (1st Cir. 1995).

141. *Id.*

code.”¹⁴² Apart from these observations, the *Lotus* court did not, however, expressly recognize that at least part of the issue revolved around whether (and to what extent) the establishment of a platform required competitors to gain access to it so as to enable innovation.¹⁴³ Such an inference would have been precisely the type of question that the market access doctrine required the court to investigate. Based on the court’s single analysis of whether the Lotus menu command hierarchy constituted a copyrightable “expression” or an uncopyrightable “method of operation,” the case could easily have gone the other way. Significantly, under the district court’s reasoning, the Lotus menu command hierarchy with its specific choice and arrangement of command terms constituted a copyrightable “expression” of the “idea” of operating a computer program with commands arranged hierarchically into menus and submenus.¹⁴⁴

The First Circuit, in response to this argument, held that “Lotus’ decision to employ hierarchically arranged command terms to operate its program could not foreclose its competitors from also employing hierarchically arranged command terms to operate their programs, but [that] it did foreclose them from employing the specific command terms and arrangement that Lotus had used.”¹⁴⁵ The court, however, failed to address the more intricate issue of why, and under what circumstances, Lotus’s established standard needed to be shared through some form of open access arrangement. Instead, it simply noted that given the possibility of foreclosing competitors from employing the specific command terms and arrangement that Lotus had used, “the initial inquiry is not whether the Lotus menu command hierarchy incorporates any expression [but rather the] initial inquiry is whether the Lotus menu command hierarchy is a ‘method of operation.’”¹⁴⁶ This line of reasoning fundamentally obscures the relevant market access issues at stake: the court obviously relied in its determination of eligibility for copyright protection (i.e., if the “initial inquiry” was whether the Lotus menu command hierarchy incorporates any “expression” or constitutes a “method of operation”) on a preliminary assessment of the potential foreclosure effects to intratype competition. In making this determination, the court failed to render explicit the potential (economic, incentive, or welfare) effects of copyright protection for the amount and kind of innovation it intended to promote.

142. *Id.*

143. *But see infra* notes 183–85 and accompanying text.

144. *Lotus Dev. Corp. v. Paperback Software Int’l*, 740 F. Supp. 37, 68, 70 (D. Mass.1990).

145. *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 49 F.3d 807, 816 (1st Cir. 1995).

146. *Id.* at 816.

Perhaps more strikingly, the *Sega* court failed to expressly distinguish between the conventional output/profitability test's intertype competition framework and a more flexible inquiry that would have allowed for explicit consideration of market access. In its decision, the *Sega* court employed conventional output/profitability reasoning directly, conceding under the fourth factor of the fair use doctrine that by allowing market entry to new competitors, Accolade's disassembly of Sega's software indubitably had an indirect effect on the market for Genesis-compatible games. However, since consumers, in this market, typically purchased more than one game belonging to a particular category and since Accolade's and Sega's games arguably were not "substantially similar," the court found no basis for assuming that Accolade's product had significantly affected the market for Sega's games.¹⁴⁷

Apart from the fact that the court considered the possibility of a potential market effect the defendant's use might have had on the plaintiff (required to be taken into account within the fourth prong of the fair use doctrine), it is difficult, if not impossible, to discern a consequential difference between the *Sega* court's provision of market access and the well-established doctrinal framework within which courts have employed conventional output/profitability reasoning. Even though the *Sega* court noted that "an attempt to monopolize the market by making it impossible for others to compete runs counter to the statutory purpose of promoting creative expression and cannot constitute a strong equitable basis for resisting the invocation of the fair use doctrine,"¹⁴⁸ it failed to make market access considerations explicit, with the result that the case could have turned out just the opposite. After all, the court made its determination "that the fourth statutory factor weighs in Accolade's, not Sega's, favor [. . .] notwithstanding the minor economic loss Sega may suffer."¹⁴⁹ In reaching its decision as to whether Sega's "minor economic loss" would weight in favor of or against eligibility for copyright protection, the court evidently contemplated the "[possibility] for others to compete."¹⁵⁰ Instead of explaining the importance of this consideration, the amount and kind of economic loss necessary, and its implications for innovation and consumer welfare, the court simply considered the effects of market foreclosure a contradiction "to the

147. *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1523–24 (9th Cir. 1992).

148. *Id.*

149. *Id.* at 1524.

150. *Id.* at 1524–25

statutory purpose of promoting creative expression and . . . a strong equitable basis for resisting the invocation of the fair use doctrine.”¹⁵¹

Other market access cases also support the argument regarding doctrinal confusion of market access considerations, despite their apparent support of the market access doctrine’s intratype competition approach. For instance, the Ninth Circuit Court in *Connectix* also accepted the validity of output/profitability analysis within the fourth factor of the fair use doctrine as a guide in determining the underlying issue of market access.¹⁵² As in *Sega*, the court noted “[. . .] some economic loss by Sony as a result of this competition does not compel a finding of no fair use. Sony understandably seeks control over the market for devices that play games Sony produces or licenses. The copyright law, however, does not confer such a monopoly.”¹⁵³ Thus, although the court professed to have reaffirmed its general support of the market access paradigm, it did not make market access considerations explicit (even based on conventional output/profitability reasoning, the court would at least have been required to consider the costs and benefits—to consumers, competitors and innovation—resulting from granting or denying market access).

Furthermore, even the Supreme Court’s decision in *Aspen* demonstrates some sort of a collapsing of the output/profitability and market access frameworks. Although critics contend that market access cannot possibly improve consumer welfare because monopolists will charge rivals the same supracompetitive prices for their goods and will then pass on those costs to consumers so that both output and price will remain the same,¹⁵⁴ the Supreme Court recognized that more benefits would accrue to consumers as a result of granting market access than reduced ski ticket prices and increased output, including competition for new forms of advertising and distribution based on the shared platform.¹⁵⁵ This recognition notwithstanding, *Aspen* nevertheless employed the language of numerous output/profitability cases. As one commentator noted, *Aspen* reflects the view that:

151. *Id.*

152. *Id.*

153. *Sony Comput. Entm’t, Inc. v. Connectix Corp.*, 203 F.3d 596, 607–08 (9th Cir. 2000).

154. Hylton, *supra* note 110, at 1260.

155. *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 610–11 (1985).

[u]nlike cooperative conduct that may lessen the incentive for participants to compete against one another, a properly designed all-area ticket, in addition to offering an improved service, may maintain incentives of participants to compete against one another. By attracting more skiers to its lifts, a participant can increase its share of all-area pass revenues.¹⁵⁶

Looking at the Court's ruling with the benefit of hindsight, the Court arguably recognized the beneficial effects of sharing outside of high-technology markets. Like other market access decisions, the Court's vernacular, however, lead observers to classify its verdict as a case that essentially adheres to output/profitability reasoning ("By attracting more skiers to its lifts, a participant can increase its share of all-area pass revenues"), and ultimately equates market access with output/profitability thinking.¹⁵⁷

Finally, just as the Supreme Court did in *Kodak*, the *Microsoft* court¹⁵⁸ resisted the trend to undermine the nominally independent output/profitability test.¹⁵⁹ In *Microsoft*, the court focused on Microsoft's 'dominance,' which was protected by high "application barriers to entry" (the vast libraries of existing Windows-compatible software not generally available on other systems) and the fact that there was no commercially viable alternative to Windows.¹⁶⁰ Since Microsoft decided to tie Internet Explorer to Windows rather than relying on the power of the very competitive PC market in its decision to produce what consumers really wanted, the court concluded that Microsoft "used its dominance in the Windows operating system to monopolize the browser market" and unlawfully tied purchase of its Internet Explorer to Windows.¹⁶¹ However, the relevant concerns were so complex and difficult to determine with certainty that competition authorities (expert testimony) could only guess (based on the best models and methods of extrapolation) what might have been the chain of effects set off by Microsoft's conduct. Where the plaintiff vigorously insisted that "Microsoft severely hampered Netscape in browser competition and blunted the threat that software developers,

156. Warren A. Grimes, *A Tale of Two Ski Towns: New Perspectives on a Dominant Firm's Refusal to Deal with a Rival*, in TECHNOLOGIE ET CONCURRENCE – TECHNOLOGY AND COMPETITION: MÉLANGES EN L'HONNEUR DE HANNS ULLRICH – CONTRIBUTIONS IN HONOUR OF HANNS ULLRICH 451, 453–54 (Josef Drexel ed., 2009).

157. See George L. Priest & Jonathan Lewinsohn, *Aspen Skiing: Product Differentiation and Thwarting Free Riding as Monopolization*, in ANTITRUST STORIES 229, 253–54 (Eleanor M. Fox & Daniel A. Crane eds., 2007).

158. *United States v. Microsoft Corp.*, 253 F.3d 34, 84 (D.C. Cir. 2001).

159. *Id.* at 51. For a critique of the conventional economic tests for bundling and tying, see generally Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 397–481 (2009).

160. *Microsoft*, 253 F.3d at 82–83.

161. *Id.* at 70.

writing for a browser platform, would write a platform not under Microsoft's control,"¹⁶² the defendant—which had a number of distinguished economists on its side—forcefully maintained that such assertions were nothing short of “speculation” and “conjecture.”¹⁶³

Because of a general lack of certainty pervading the market regulatory context, Microsoft's behavior could just as easily have been defended on the basis of economically sound principles. Yet retrospectively, many commentators would perhaps agree that *Microsoft* was rightly decided. It is, for instance, well recognized that Microsoft would not have been deterred from putting an effort in developing Windows had it known beforehand that it would be denied the opportunity to bend the server market by refusing to license interoperability information (note that licensing involved sharing “on market terms”) to its competitors.¹⁶⁴ Similarly, few commentators would perhaps believe today that Kodak would have refrained from manufacturing high-end printers had it known that it was not going to be allowed to exclude all original equipment manufacturers' ink cartridges to be sold on the secondary market, not just those that were supposedly inferior.¹⁶⁵ Despite the way in which those cases were ultimately resolved, courts have failed to furnish a clear test capable of capturing those attributes of progress that the provision of market access required them to consider and that resembled an affirmative defense for market actors seeking access to a dominant platform, or a mechanism for easing the evidentiary burdens of injured competitors and consumers.

C. Possible Explanations for the Enduring Presence of the Market Access Doctrine

As explained in the previous section, there is much truth to the assertion that courts have not successfully established a conceptually distinct doctrinal function for the market access paradigm. Still, a number of courts have responded with a palpable lack of sympathy to some commentators' efforts noting that, in the empire of the output/profitability's intertype competition paradigm, the king can do

162. EVANS, FISHER, RUBINFELD & SCHMALENSEE, *supra* note 33, at 3.

163. *Id.* at 46.

164. Lao, *supra* note 24, at 593.

165. See *e.g.*, *Static Control Components, Inc. v. Lexmark Int'l, Inc.*, 487 F. Supp. 2d 861, 875–76 (E.D. Ky. 2007) (describing lock-out microchip technology on printer cartridges). Such a technology excludes all competitors' cartridges, not simply those that might be inferior even if this microchip might be conceived of as a quality control mechanism to the extent that use of rivals' ink cartridges leads to inferior results. See *id.*

no wrong.¹⁶⁶ Rather than a doctrine that ultimately will be given up as a matter of pragmatic inevitability,¹⁶⁷ market access may have permanence despite its (wholly recognized) deficiencies.

This prospect causes one to look past the probability that market access merely stands for a temporary stopping place in the historical unfolding of consumer welfare analysis as the dominant standard for assessing allegedly anticompetitive restraints. In light of the above, one is tempted to conclude that importance of the market access rule ebbs and flows; while it may have made good sense historically, with advances in economic thinking, it fell into disfavor (as the US Supreme Court in *Brown Shoe* famously noted, “the legislative history [of the Sherman Act] illuminates congressional concern with the protection of competition, not competitors”),¹⁶⁸ and now, in our “new economy,” it is again ascendant.

Toward that end, this Section contemplates several alternative explanations for the enduring presence of the market access doctrine, even though courts have failed thus far to articulate a normatively distinct function of such a doctrine. First, courts may have identified practical benefits to clinging to an alternative formulation of the promotion of progress, even if they sense that this formulation largely represents the output/profitability test’s intertype competition framework. Second, courts may recognize the vagueness inherent in the output/profitability standard’s intertype competition paradigm, and yet find comparable shortcomings in the market access approach. And third, in light of their recognition that the conventional output/profitability test’s intertype competition framework fails to promote a sufficient extent of innovation, courts simply and sincerely may be going to great lengths, albeit with little success, to find a separate and distinct function for the market access test. The latter account, which takes courts at face value in their expressed attempt to devise a normatively independent function for market access analysis and which will be set out in Section D, affords a point of departure for Part IV of this Article, which seeks to explicate just such a function.

1. Pragmatic Justifications

Unlike the apologists’ perspective, courts that have given priority to market access may believe that the universe of possible antitrust and intellectual property law cases is better represented by a

166. See *supra* notes 122–39 and accompanying text.

167. Oona A. Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System*, 86 IOWA L. REV. 601, 631–32 (2000).

168. *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962) (emphasis omitted).

scenario in which the category of anticompetitive restraints that must be assessed by a market access approach forms a significant component of consumer welfare analysis that the conventional output/profitability intertype competition framework cannot capture.

Current market regulatory theory teaches us that antitrust law should protect competition, not competitors,¹⁶⁹ and that intellectual property law should protect innovation, not innovators.¹⁷⁰ But with the shift in the twenty-first century from commodity markets to cultural networks and the growing commodification of cultural time and human relationships that render the exchange of property as such less meaningful, and access to lived experiences as the consummate commodity determining the features of one's status, "consumers" now may be among the "competitors" and "innovators." This approach to the promotion of progress, which defines one aspect of progress to be the degree to which consumers themselves are able to participate in the construction of our economy renders plain the need for courts to establish a dialectical relationship between copying and protecting, and between producing and consuming, as consumers often will find themselves in the role of second generation users, appropriating, criticizing, building on, and responding to the property of first generation producers.

Certainly, the notion of consumers as producers or creators is prominent in intellectual property law. But it is of growing importance in antitrust law as well.¹⁷¹ Imagine a market in which only competition between product manufacturers of different brands, for example, exists. In such a market, courts almost inevitably worry solely about providing consumers with an adequate level of influence in terms of choosing between them, as if no other options exist. Such a market offers consumers the possibility to choose between Levi and Armani jeans, between Apple and Samsung tablets, between Ford and BMW cars, and the like. What is more, consumers' ability to "vote" in such a marketplace remains firmly rooted in an opportunity to buy Levi jeans in Levi stores, sold at the terms and conditions that Levi suggests, to purchase Armani jeans in Armani stores, sold at the terms and conditions that Armani suggests, and so on. But these possibilities are not the only ones conceivable, perhaps not even the most important ones, for consumers seeking to exert a significant influence on the type of economy and society they desire to inhabit. Consider the various types of innovations that less proprietary forms

169. *Id.*

170. Harry First, *Controlling the Intellectual Property Grab: Protect Innovation, Not Innovators*, 38 RUTGERS L.J. 365 (2007).

171. *See infra* notes 233–45 and accompanying text.

of production and distribution have brought to our economies. In highly decentralized and user-driven markets, consumers often wield a significant amount of influence over what is being produced and offered, because consumers routinely govern markets as users themselves.¹⁷² They regularly modify, maintain, and repair existing goods and commodities, to the extent that what traditional manufacturers produce is developed in cooperation with consumer groups and users, and is enhanced and modified by user-driven innovation. Choosing between distinct platforms, networks, or brands of different manufacturers is thus not the only path of influence for consumers. They can exercise sovereignty in their ongoing dialogue with the market by altering the terms of sale, by making apposite suggestions on how existing goods should be modified, reused, or improved. In a market with intratype competition, consumers have competitive choices not only in the initial purchase of a printer, for example, but in the subsequent repair and maintenance of the printer throughout its life cycle. In such markets, independent manufacturers, dealers, and service providers can make productive (re)use of the goods, services, or works somebody else has produced. The same holds true with respect to a computer's unused excess data storage capacity, the unused excess capacity of cars, bicycles, and other products that can be more efficiently harnessed and allocated through sharing rather than through exclusive ownership.

From this perspective, resorting to market access as an independent doctrine may be a practical response to the perceived distribution of thinkable market regulatory scenarios.¹⁷³ Market access reasoning is crucial to evaluating anticompetitive restraints when output/profitability analysis provides an ill-formed or otherwise inadequate basis for assessing antitrust and intellectual property law liability. However, the market access doctrine is not construed as a mere exception to some more general rule of output/profitability maximization. As an alternative, given the perceived frequency of its significance in modern markets, market access is treated as a primary and independent doctrine that must supplement output/profitability considerations.¹⁷⁴

172. ERIC VON HIPPEL, *DEMOCRATIZING INNOVATION 2* (2005).

173. A growing body of literature emphasizes the importance of promoting innovation rather than solely static efficiency in antitrust and intellectual property law. *See, e.g.*, MICHAEL A. CARRIER, *INNOVATION FOR THE 21ST CENTURY* (2009); SUZANNE SCOTCHMER, *INNOVATION AND INCENTIVES* (2004); Michael A. Carrier, *Copyright and Innovation: The Untold Story*, 2012 WIS. L. REV. 891 (2012); Shelanski, *supra* note 36, at 1673.

174. *See, e.g.*, STIGLITZ, *supra* note 7, at 30–50 (expressing conviction that market access plays a dominant role in the regulation of contemporary markets); Herbert J. Hovenkamp, *The Obama Administration and Section 2 of the Sherman Act*, 90 B.U. L. REV. 1611 (2010).

The manner in which a particular doctrine is constructed may be seen to pivot on the sort of judicial error that courts intend to minimize. By treating market access as an independent means of establishing antitrust or intellectual property law infringement, the market access framework seems designed to minimize cases in which consumer welfare is erroneously deemed to be hampered due to background assumptions about the limited opportunity of rivals to compete. Conversely, the output/profitability test, by implicitly deeming equal economic opportunities to compete anomalous or exceptional, seems designed to minimize cases in which consumer welfare is erroneously found to be hampered through overly generous application of granting equal economic opportunities to compete. The choice of doctrinal construction consequently rests, at least partially, on the policy question of whether one prefers judicial errors to occur in the favor of existing business or (potential) competitors.¹⁷⁵

With that choice in mind, one can better understand the reluctance of some courts to openly espouse a market access framework. After all, the history of antitrust and intellectual property law jurisprudence is peppered with glib encomia to the consumer, whose covetous customs are perceived as representing the driving force behind the accomplishments of contemporary capitalism, but whose misery and credulity are viewed as requiring steady protection by the courts.¹⁷⁶ While modern decisions address consumers with little contempt, courts nevertheless remain proud of their pioneering

175. The bulk of the literature has focused on minimizing “type 1” errors, i.e., on minimizing the prohibition of mistakenly procompetitive activities as opposed to the minimization of “type 2” errors, i.e., the minimization of the permission of anticompetitive practices. The former are held to be costlier than the latter. See Frank H. Easterbrook, *Limits of Antitrust*, 63 TEX. L. REV. 1 (1984). Commentators who have emphasized the importance of promoting innovation are increasingly skeptical towards this view. See, e.g., RUBINFELD, *supra* note 48, at 57–58.

I am troubled that the concern about false positives (bringing inappropriate cases) has tended to trump worries about false negatives (failing to bring appropriate cases). Losing cases or those that are seen as inappropriate often come under visible attack, whereas one has to listen carefully to hear about cases that should have been pursued that were not. Furthermore, the move to dispense with difficult vertical issues (price and non-price restraints) may be too forceful. While many economists see great value in the use of rule of reason in the evaluation of vertical restraints, it is important to acknowledge that some restraints may on balance be anticompetitive. Per se legality is not where antitrust should be located. . . . The economics of innovation is no doubt quite difficult, and our empirical knowledge is limited. However, innovation is too important for antitrust to use the limits of our knowledge as an excuse for failing to take action in appropriate cases.

Id.

176. See, e.g., BORK, *supra* note 15, at 314–20; Posner, *supra* note 13, at 938; George J. Stigler & Gary S. Becker, *De Gustibus Non Est Disputandum*, 67 AM. ECON. REV. 76 (1977).

role in the antitrust and intellectual property law revolution and their commitment to the norm of promoting, and protecting, consumer welfare.¹⁷⁷ Thus, in addition to the practical considerations described above, courts also seem concerned about the expressive implications of their approach, notwithstanding the apologists' otherwise accurate observation regarding the functional equivalence of both doctrinal frameworks. Put differently, relegating the protection of "consumer welfare" to an unequivocally subordinate role might create the impression that courts have left behind their determination to guarantee the self-actualization and satisfaction of consumers in the modern marketplace.

2. The Indeterminacy Problem

On top of the pragmatic justifications described in the previous subsection, another possibility for the willingness of some courts to embrace market access while simultaneously refusing to endorse the doctrine more explicitly may be that these courts perceive as much ambiguity in such a doctrine as apologists do in the output/profitability test. After all, Richard Posner, who provided antitrust law's most famous formal expression of output/profitability analysis for territorial restraints within a court's pronounced rule of reason inquiry in *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality*, also held the view that

[a] standard so poorly articulated and particularized, applied by tribunals so poorly equipped to understand and apply it, places at considerable hazard any restriction that a manufacturer imposes on its dealers and distributors.¹⁷⁸

If even the foremost originator of output/profitability analysis in antitrust law found its precision "vacuous," "unlimited," "free-wheeling," and "vague,"¹⁷⁹ some jurisdictions may continue to embrace market access simply because they do not perceive an evidently superior alternative.

Despite Posner's admonition, courts and scholars for decades seemed to take the analytical clarity of the output/profitability test's cost-benefit balancing method as an article of faith, particularly when compared to a market access inquiry.¹⁸⁰ In a number of recent articles,

177. See *supra* notes 13–34 and accompanying text.

178. See Posner, *supra* note 61, at 15; Posner, *supra* note 64, at 16 ("The Rule of Reason in its present state is a poor guide to the decision of [antitrust] cases.").

179. Posner, *supra* note 61, at 14–15.

180. See, e.g., Joshua D. Wright & Douglas H. Ginsburg, *The Goals of Antitrust: Welfare Trumps Choice*, 81 *FORDHAM L. REV.* 2405, 2422 (2012) (arguing that output/profitability thinking "quite comfortably incorporates the tradeoffs between price and quality that consumers

however, commentators have begun to argue that while output/profitability reasoning can be helpful in analyzing competition, it fails to provide a clear answer most notably where conduct by a dominant firm seems to create some efficiencies, but at the same time has demonstrably exclusionary effects.¹⁸¹ As these scholars argue, if enhanced producer output would always lead to pro-competitive results, a monopoly firm's exclusionary conduct would almost never be objectionable because the dominant firm could increase both output and price while excluding competitors from the relevant market.¹⁸² Furthermore, switching consumers from one firm to another always will result in a private gain for the dominant firm, but will not always advance the forms of commerce that consumers ultimately desire.¹⁸³ Exclusionary conduct, therefore, often is much more difficult to detect because such conduct commonly assists consumers in the short term. Such an analysis falls short, however, of the long-term implications of such a strategy for consumers, competitors, and the economy. While courts typically are capable of arriving at a determinate answer as to the overall welfare effects of allegedly anticompetitive conduct in ordinary cases,¹⁸⁴ a balancing of pro- and anticompetitive effects where exclusionary conduct and cumulative innovation is involved often is deemed to be almost impossible given difficulties in weighing short and long term effects on the consumer.¹⁸⁵

As this subsection attempts to show, both formulations of assessing anticompetitive restraints in American antitrust and intellectual property law seem destined to result in a fair amount of uncertainty in application. In light of such vagaries, courts giving precedence to market access may do so simply because they do not believe that the output/profitability test provides a clearly preferable alternative. After all, the market access doctrine asks a largely

face"). For Wright and Ginsburg, the flaw of other standards is that "[they] altogether reject the economic approach to dealing with these tradeoffs . . ." *Id.*

181. See, e.g., EVANS, FISHER, RUBINFELD & SCHMALENSEE, *supra* note 33, at 45–86; Ross, *supra* note 5; Shelanski, *supra* note 36, at 1667–68; see also C. Edwin Baker, *The Ideology of the Economic Analysis of Law*, 5 PHIL. & PUB. AFF. 1, 3–48 (1975).

182. See Jonathan B. Baker, *Exclusion as a Core Competitive Concern*, 78 ANTITRUST L.J. 527 (2013).

183. See Grimes, *Dynamic Analysis*, *supra* note 48, at 122–23; Grimes, *Brand Marketing*, *supra* note 48.

184. This often is the case in non-price vertical restraints and multi-market mergers. See *Continental T.V., Inc., v. GTE Sylvania Inc.*, 433 U.S. 36, 57 n.27 (1977).

185. This difficulty is exacerbated and stakes are even higher if distant, uncertain positive spillover and network effects are involved. See, e.g., William H. Page & Seldon J. Childers, *Antitrust, Innovation, and Product Design in Platform Markets: Microsoft and Intel*, 78 ANTITRUST L.J. 363, 365 (2012) (arguing that complements can often substitute for a better platform).

factual question regarding the extent of new innovation that consumers expect a particular commodity to provide.¹⁸⁶ The output/profitability test, on the other hand, contemplates a multi-factored analysis of competing commodities followed by an instrumentalist query that at times appears fundamentally inconsistent with the normative intuitions and cognitive thought processes of wide segments of the population, including many judges.¹⁸⁷ Given such a choice of second-best doctrines, some courts may simply give priority to one brand of uncertainty over another.

D. An Independent Function for Market Access

1. The Indeterminacy Problem Revisited

One significant doctrinal reason that market access courts object to the output/profitability test's intertype competition framework is that the assumption that this framework will necessarily promote consumer welfare in every case often results in a mere inference, rather than a conclusive determination, in relation to a given set of particular facts. Thus, putting aside the pragmatic and expressive interests served by treating market access as a nominally independent doctrine, the most fundamental issue to be addressed by courts and commentators is whether the market access doctrine can improve antitrust and intellectual property law liability analysis under circumstances where the output/profitability test would run the risk of producing erroneous decisions, but that nonetheless would serve the normative goals of promoting consumer welfare.¹⁸⁸ To answer this question, one must address an issue that courts heretofore

186. See *infra* Part IV.

187. Another element of uncertainty plagues the output/profitability test. The elimination of intratype competition through denying access is often accompanied by new costs generated by the exclusive protection of intertype competition. See Grimes, *Dynamic Analysis*, *supra* note 48, at 105; Grimes, *Brand Marketing*, *supra* note 48, at 111–19. However, this type of 'cost-cost' analysis is extremely expensive and difficult to conduct. In order to analyze alternative scenarios in which markets spur innovation, factfinders must be prepared to consider not only the costs that may be posed by intratype competition, but also the many other secondary effects that the exclusive protection of intertype competition may produce, including, for example, costs that arise other than those that specifically affect the incumbent market actor such as costs stemming from decreased functional advantages of similar goods, changes in the desirability of new commodities, commodities of competitors, and so forth. A comprehensive analysis of this sort is not only dauntingly complex to conduct, but also is subject to considerable manipulation by parties who strategically highlight only those ancillary effects that support their preferred outcome.

188. On the axiomatic nature of competition policy paradigms, see Adrian Kuenzler, *Economic Content of Competition Law: The Point of Regulating Preferences*, in *THE GOALS OF COMPETITION LAW* 182 (Daniel Zimmer ed., 2012).

have failed to confront with sufficient clarity: what precisely are the theoretical foundations of the market access doctrine?

It is well recognized that the competitor test of output/profitability analysis can be grounded firmly in economic theory.¹⁸⁹ By measuring the marginal costs and benefits posed by producing different quantities, the output/profitability test appears to ensure that producers and inventors face legal incentives to maximize consumer welfare. The market access doctrine, on the other hand, purports to effectuate the longer term expectations in new innovation of consumers but generally fails to explain how those expectations are to be ascertained or, indeed, why they should be vested with adjudicatory significance.

Judge Michael Boudin's concurrence in *Lotus* demonstrates this problematic indeterminacy. According to Judge Boudin:

If *Lotus* is granted a monopoly on this pattern [i.e. the menu command hierarchy], users who have learned the command structure of *Lotus* 1-2-3 or devised their own macros are locked into *Lotus*, just as a typist who has learned the QWERTY keyboard would be the captive of anyone who had a monopoly on the production of such a keyboard. Apparently, for a period *Lotus* 1-2-3 has had such sway in the market that it has represented the de facto standard for electronic spreadsheet commands. So long as *Lotus* is the superior spreadsheet—either in quality or in price—there may be nothing wrong with this advantage.

But if a better spreadsheet comes along, it is hard to see why customers who have learned the *Lotus* menu and devised macros for it should remain captives of *Lotus* because of an investment in learning made by the users and not by *Lotus*. *Lotus* has already reaped a substantial reward for being first; assuming that the Borland program is now better, good reasons exist for freeing it to attract old *Lotus* customers: to enable the old customers to take advantage of a new advance, and to reward Borland in turn for making a better product. If Borland has not made a better product, then customers will remain with *Lotus* anyway.

Thus, for me the question is not whether Borland should prevail, but on what basis. [. . .]¹⁹⁰

Of this inquiry, the first factor—whether the establishment of a platform (here, a particular command hierarchy for spreadsheets) deserves protection so as to provide the necessary incentives to spur innovation—appears intuitively to be the subject of consistent consideration by advocates of the output/profitability framework. The second factor—that full proprietary protection of such a platform could diminish consumer welfare rather than increase it—often does not seem to be an item of contemplation by apologists of the output/profitability account, even though it may be a relevant concern of consumers. Such concerns typically only become relevant within

189. See Posner, *supra* note 13, at 934; BORK, *supra* note 15, at 116–17.

190. *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807, 821 (1st Cir. 1995) (Boudin, J., concurring).

the conventional output/profitability framework in cases where the costs of contractual or intellectual property protection for one reason or another has become so salient to courts that they would prefer competitors to appropriate some of the value of the platform and would thus contemplate providing market access.¹⁹¹ Hence, omission of the second factor generally appears to represent the ordinary expert's rather than the ordinary consumer's preferences.¹⁹²

These observations entail that either the market access doctrine must devolve in practice into an ordinary (output/profitability) analysis, as *Lotus* and other market access opinions demonstrate, or that the area occupied by the market access doctrine is, as critics contend, so ambiguous and imprecise as to render continued adherence to the test untenable.

2. A Three-Step Inquiry into Evaluating Market Access

As implicated in Judge Boudin's concurrence, a fair use analysis—or any other conventional doctrinal lever—could easily accommodate the relevant innovation policy issues. Under a distinct market access test, courts would be more flexible to engage in a fact-specific analysis that would allow them to assess the relevant issues as opposed to making categorical judgments about the protectability of a particular platform. To make market access analysis more tractable, the market access test would have to follow a three-part investigation.¹⁹³

First, courts would have to consider whether the inventor, through first mover advantages, has reaped a sufficient reward such that contractual or intellectual property rights protection would no longer be required to facilitate innovation. In nearly all innovation markets where platform goods have a dominant market share, this consideration would weigh in favor of granting market access. This requirement is firmly rooted in Supreme Court jurisprudence; for instance, in *Feist Publications, Inc., v. Rural Telephone Service Co.*, the Court explained,

191. See *infra* notes 256–68 and accompanying text.

192. See *supra* notes 122–61 and accompanying text.

193. *Id.*; see also *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 516 U.S. 233 (1996); *Sony Comput. Entm't, Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992); Mark A. Lemley, *Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 1079–81 (1996) (arguing in favor of a concept that grants access to “radical improvers”); Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1111–12 (1989) (arguing in favor of a concept of “transformative use”); Philip J. Weiser, *The Internet, Innovation, and Intellectual Property Policy*, 103 COLUM. L. REV. 534, 606–07 (2003) (arguing in favor of a “competitive platforms model” that can incorporate such a three-step test).

[t]he primary objective of copyright is not to reward the labor of authors, but to promote the Progress of Science and useful Arts. To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work.¹⁹⁴

The Court's statement that "copyright assures authors the right to their original expression" precludes courts from finding that *all* expression is necessarily protectable. In *Kodak*, the Supreme Court rejected Kodak's position that although ISOs put substantial efforts into the service market for Kodak printers, they were free riding on Kodak's investments. In the Court's view, Kodak's tying practice resulted in the creation of entry barriers. As the Court stated, "[Kodak's] understanding of free-riding has no support in our case law. To the contrary . . . , one of the evils proscribed by antitrust laws is the creation of entry barriers to potential competitors by requiring them to enter two markets simultaneously."¹⁹⁵ In conformity with the first prong of the market access test, the Court supported free riding as a legitimate business reason for exclusionary conduct only "because without restrictions a manufacturer would not be able to induce competent and aggressive retailers to make the kind of investment of capital and labor necessary to distribute the product."¹⁹⁶ The Supreme Court's notion in *Kodak* that access should otherwise be granted conforms to the belief that in an advanced market economy, nearly every firm's sales benefit from complementary products made by other firms. Computer software is useless unless someone makes hardware. Hardware manufacturers sell more computers because software developers create applications. Consumers buy more software because hardware manufacturers produce faster computers, and so on. Rather than viewing the software developer as free riding on the hardware manufacturer, an increase in the hardware manufacturer's sales might be the result of the software developer's investment. Depending on the vantage point taken, the software developer's production may increase the demand, and incentive, for the amount of raw material (hardware) produced rather than simply free riding on it. Today, many goods and services, not just new and complex equipment, are able (and are, in fact, in need) of complementing each other. This may increase, rather than diminish, manufacturers' incentives to invest in additional resources in production, and may increase, rather than

194. 499 U.S. 340, 349–50 (1991) (citation omitted).

195. *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 485 (1992). *But see* Carlton, *supra* note 112, at 112 ("With ex ante competition combined with reputations and sophisticated buyers, or simply with ex ante competition alone, the [interbrand] competition should provide enough protection so that the antitrust laws are likely to do only harm when they are used to intervene in a market.")

196. *Eastman Kodak*, 504 U.S. at 485.

diminish, both the output of producers, suppliers and the benefits to consumers. Courts, under the first prong of the market access test, must thus inquire whether the original platform should be foreclosed from contractual or intellectual property rights protection to enable competitors to build upon a sufficient stock of raw material.

Second, courts should assess whether competitors are able to challenge the proprietary platform's position in the market without the possibility of granting access. This requirement simply assures that the provision of market access and compulsory sharing will not lead to remedies "costly to the entire market."¹⁹⁷ In this vein, Phillip Areeda famously noted that that sharing should be compulsory only "when it is both critical to the plaintiff's competitive vitality and the plaintiff is essential for competition in the marketplace. 'Critical to the plaintiff's competitive vitality' means that the plaintiff cannot compete effectively without it and that duplication or practical alternatives are not available."¹⁹⁸ As a result,

[n]o one should be forced to deal unless doing so is likely substantially to improve competition in the marketplace by reducing price or by increasing output or innovation. Such an improvement is unlikely (a) when it would chill desirable activity; (b) the plaintiff is not an actual or potential competitor; (c) when the plaintiff merely substitutes itself for the monopolist or shares the monopolist's gains; or (d) when the monopolist already has the usual privilege of charging the monopoly price for its resources . . . Even when all these conditions are satisfied, denial of access is never per se unlawful; legitimate business purpose always saves the defendant.¹⁹⁹

In conformity with those requirements, the court's underlying supposition in *Microsoft* was that because Microsoft dominated its network for computer operating systems, which in turn dominated the market that it served, highly creative innovations were unable to find a market as there was no easy way to make them compatible with the rest of the network.²⁰⁰ Notwithstanding the possibility that over time an alternative operating system might have supplanted Windows or forced it to provide interoperability information, without reasonable access for rivals' server software the resulting entrenchment directed innovation along a specific path and gravely constrained the innovations of others.²⁰¹ Hence, market access rules must no longer be seen to require a dominant firm to assist rivals by providing them

197. Thomas C. Arthur, *The Costly Quest for Perfect Competition: Kodak and Nonstructural Market Power*, 69 N.Y.U. L. REV. 1 (1994).

198. Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841, 852 (1989).

199. *Id.*

200. See *supra* notes 154–59 and accompanying text.

201. Hovenkamp, *supra* note 174, at 1639–41.

with interoperability information with respect to the platform good it has developed, but rather must be viewed as an antitrust equivalent to enabling cumulative innovation in path-dependent settings where a rival's superior or more cost-effective innovation is given a chance to compete on the rest of that dominant network. Under these assumptions, market access may enhance the competitiveness and quality of platforms so that all parties capable of competing are given a level playing field that is unconstrained by a dominant firm's self-dealing.²⁰²

Third, courts should determine whether competitors seeking to benefit from market access will make use of it to facilitate the introduction of a new (differentiated, rival) good rather than merely in order to copy the initial invention.²⁰³ This requirement is explicit in nearly all market access cases. For example, prior to its fair use analysis, the *Sega* court noted,

Accolade did not attempt to 'scoop' Sega's release of any particular game or games, but sought only to become a legitimate competitor in the field of Genesis-compatible video games. Within that market, it is the characteristics of the game program as experienced by the user that determine the program's commercial success.²⁰⁴

In *Connectix*, although the district court found that "a [market] substitution [of Connectix's Virtual Game Station for Sony PlayStation consoles] occurs," the Ninth Circuit Court declared, "because the Virtual Game Station is transformative, and does not merely supplant the PlayStation console, the Virtual Game Station is a legitimate competitor in the market for platforms on which Sony and Sony-licensed games can be played."²⁰⁵

Applying a three-step inquiry in this manner would allow courts to place the market access doctrine on a more solid conceptual foundation. Courts would finally be in a position to recognize that market access and output/profitability represent different items of contemplation by consumers, because consumers describe and understand the content of the market access sphere of antitrust and intellectual property law liability differently from that contained

202. Joseph Farrell & Garth Saloner, *Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation*, 76 AM. ECON. REV. 940, 941-43 (1986); Stan J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-in, and History*, 11 J.L. ECON. & ORG. 206 (1995).

203. Areeda, *supra* note 191, at 851-52. Nothing in this Article contradicts these well-accepted suppositions. Particularly, Areeda's formulation includes the possibility of providing market access if such access is likely to spur innovation (as opposed to merely reducing price or increasing output).

204. *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1523 (9th Cir. 1992).

205. *Sony Comput. Entm't, Inc. v. Connectix Corp.*, 203 F.3d 596, 607 (9th Cir. 2000).

within the output/profitability standard. As will be shown in the next Part, the market access test represents sufficiently substantial, analytically separate substance that can be placed within that sphere.

IV. A REINVIGORATED ROLE FOR MARKET ACCESS

Legal scholars focusing on the output/profitability view of antitrust and intellectual property law have relied on a notion of progress in which individuals are assumed to process available information in order to maximize utility over time. By contrast, scholars examining human judgment and decision making have observed that individuals regularly process information and make decisions in manners that deviate from the conventional expected-utility maximizing hypothesis. Moreover, these deviations from rational utility maximization are consistent and predictable, and as such offer the potential to significantly enhance the descriptiveness of the market access account, while stopping short of the radical indeterminacy implied by opponents of it.

This Part argues that research from cognitive psychology provides a better understanding as to why courts to date have been hesitant to explicitly embrace market access considerations in antitrust and intellectual property law litigation. The conventional approach to output/profitability analysis in many respects is based on a notion of progress that is narrower and less normatively imbued than the understanding typically held by ordinary consumers. Contrary to this notion, as research from the cognitive sciences demonstrates, the market access doctrine has the potential to provide an important avenue for the expression of consumer preferences associated with innovation and progress that might otherwise be ignored within antitrust and intellectual property law. The proposed market access test would therefore advance the promotion of innovation and progress without entailing the same perceived degree of vagueness that heretofore has been associated with the market access doctrine. In that way, the market access doctrine might eventually present an independent reality that cannot simply be written off as the result of mere historical accident or good fortune on the part of market access courts.

A. Why A Distinct Market Access Paradigm Fails to Emerge

In contrast to the picture emerging from scholars adhering to the conventional output/profitability view of promoting progress, a number of studies have demonstrated that the reason for industry's choice to obtain maximum proprietary protection is found in its

institutional culture and practices, or in the “psychology” of the companies, CEOs, and market actors involved. For instance, in Harvard Business School Professor Clayton M. Christensen’s study, *The Innovator’s Dilemma: When New Technologies Cause Great Firms to Fail*, Christensen suggests that leading companies may often succeed in putting into effect “sustaining innovations” but frequently fail to keep pace with disruptive, “radical innovations” that displace current business models by making simpler, more convenient, and cheaper products that attract new consumers.²⁰⁶ In essence, Christensen claims that preexisting investments in employees, facilities, and materials often are related to a particular technology, allowing large firms to provide services to an existing customer base and to raise their share prices by increasing growth.²⁰⁷ As a result, “[s]ustaining innovations improve existing products and involve incremental [innovation].”²⁰⁸ Disruptive technologies, by contrast, lead to speculative markets in the future, involve less interest and greater threat, and thus endanger existing business models and management practices of established firms.²⁰⁹ In an important series of examples, Christensen demonstrates that new market entrants are frequently more flexible and remain unburdened “by human and physical assets geared to highly specific production . . . ,” and that they “have every economic incentive to overturn the existing order” and thus “little to lose” in promoting disruptive innovation.²¹⁰

The tense but inescapable relationship between institutional inertia and new innovation also is the theme of law professor Michael Carrier’s startling and fascinating study of dozens of CEOs, company founders, and vice presidents from technology companies, the music recording industry, and venture capital firms. Carrier points out that established market actors often are in denial about the potentially transformative capacity of new technologies and remain mired in the legal, economic, and ideological detritus of the past rather than ceding existing property rights to independent innovators. One clear indication of this observation, according to Carrier’s study, is the established market actors’ “focus on the short term over the long term”

206. CLAYTON M. CHRISTENSEN, *THE INNOVATOR’S DILEMMA: WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL* 15, 39 (1997); *see also* CLAYTON M. CHRISTENSEN & MICHAEL E. RAYNOR, *THE INNOVATOR’S SOLUTION: CREATING AND SUSTAINING SUCCESSFUL GROWTH* 31–32, 34 (2003).

207. CHRISTENSEN, *supra* note 206, at 98, 132–33; JAMES M. UTTERBACK, *MASTERING THE DYNAMICS OF INNOVATION* 163 (1996).

208. CHRISTENSEN, *supra* note 206, at 39–40.

209. *Id.* at 98–99, 147.

210. UTTERBACK, *supra* note 207, at 161, 164.

to the extent that “all rewards go to the short term.”²¹¹ Such an emphasis on immediate, short-term gains over more distant, long-term benefits is arguably rooted in the typical company officers’ focus on “bonuses based on how they did compared to last year” and the “organizational and institutional incentives to try to recreate last year’s business going forward.”²¹² That is, most established companies try to produce always more rather than less revenue because executives concentrate “on the short term—their stock, their cash compensation year after year, their own personal [profit and loss statement]—and not the greater good of the company.”²¹³

1. (Non-)Availability and Spillover Effects

In line with those observations, leading proponents of the behavioral approach to human behavior and decision making have demonstrated that certain psychological tendencies might lead individuals and groups to behave systematically in this way: Amos Tversky and Daniel Kahneman, in their canonical treatment of the availability heuristic, for instance point out that “[l]ife-long experience has taught us that . . . likely occurrences are easier to imagine than unlikely ones . . .”²¹⁴ In the realm of markets, this heuristic can have pernicious effects. The traditional output/profitability view appears to reflect and perhaps exacerbate such tendencies by focusing asymmetrically on the harm that might come from free riding, sharing, copying, or imitating rather than on the positive spillover effects such practices might entail or the benefits that might follow from limiting contractual or intellectual property rights, and from providing market access for competitors. This view, however, depends on a selective perception of the economic and social scientific consequences of open innovation. While much has been made of the free riding hypothesis as a catalyst for underinvestment in the prevention of copying, free riding can just as easily lead to overinvestment in the prevention of sharing or imitating. In the event of some underrated benefits, the provision of market access therefore might allow innovators and firms to overcome the problem of non-availability.

211. Carrier, *supra* note 173, at 928.

212. *Id.* at 928–29.

213. *Id.* at 929.

214. Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, 5 *COGNITIVE PSYCHOL.* 207, 208 (1973).

Consider the case of positive spillover effects. As the literature on commons-based modes of production has shown,²¹⁵ the management of ordinary goods and resources can evolve into shareable infrastructure²¹⁶ and can generate significant positive externalities²¹⁷ in that such management may facilitate productive behaviors by third parties.²¹⁸ Even if the third-party effects are often incidental, the occurrence of spillovers may render the provision of access socially desirable and internalization by way of exclusive property rights inefficient.²¹⁹ Moreover, such internalization is often

215. See generally YOCHAI BENKLER, *THE PENGUIN AND THE LEVIATHAN: HOW COOPERATION TRIUMPHS OVER SELF-INTEREST* (2011) [hereinafter BENKLER, *THE PENGUIN AND THE LEVIATHAN*]; YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* (2007) [hereinafter BENKLER, *THE WEALTH OF NETWORKS*]; LAWRENCE LESSIG, *FREE CULTURE: THE NATURE AND FUTURE OF CREATIVITY* (2005); LAWRENCE LESSIG, *CODE: AND OTHER LAWS OF CYBERSPACE* (1999); LAWRENCE LESSIG, *REMIX: MAKING ART AND COMMERCE THRIVE IN THE HYBRID ECONOMY* (2009); STEVEN WEBER, *THE SUCCESS OF OPEN SOURCE* (2005); VON HIPPEL, *supra* note 172, at 1; Josh Lerner & Jean Tirole, *Some Simple Economics of Open Source*, 50 J. INDUS. ECON. 197 (2002);

216. Peter Lee, *The Evolution of Intellectual Infrastructure*, 83 WASH. L. REV. 39, 43 (2008).

217. BRETT M. FRISCHMANN, *INFRASTRUCTURE: THE SOCIAL VALUE OF SHARED RESOURCES* 37–38 (2013).

218. The ability of market regulators and courts to grasp these benefits may hinge on a number of actors: as Professors Felix Oberholzer-Gee and Koleman Strumpf emphasize in the context of file-sharing, “[t]he role of complements makes it necessary to adopt a broad view of markets when considering the impact of [sharing] on the creative industries. Unfortunately, the popular press—and a good number of policy experts—often [assess the value of access] by looking at a single product market.” Felix Oberholzer-Gee & Koleman Strumpf, *File Sharing and Copyright*, 10 INNOVATION POL’Y & ECON. 19, 46 (2010). Analyzing trends in CD sales, for example, they conclude that:

... piracy has wreaked havoc on the music business. This view confuses value creation and value capture. Record companies may find it more difficult to profitably sell CDs, but the broader industry [by streaming more record singles, creating revenues from selling shows, videos, live concerts and other complements] is in a far better position. In fact, it is easy to make an argument that the business has grown considerably [by providing market access].

Id.

A further reason why a drop in industry revenues might not hurt creative production is that authors, writers, musicians, and innovators often take pleasure from creating, from enjoying a flexible lifestyle, and from lacking an immediate hierarchical employment structure. The remuneration of creative talent often takes a non-monetary form, consisting of fame, admiration, social status and so on, suggesting that a diminution in monetary incentives might not always result in a reduced effect on the quantity and quality of creative output. *Id.* at 48. Finally, because many of today’s goods and services are, by their nature, neither rival nor nonrival but rather their degree of rivalry may vary across time, among users, and across contexts, many goods and services must now be viewed as being able to *become* infrastructure to the extent that they exhibit platform features based on widespread social use and reliance. RICHARD CORNES & TODD SANDLER, *THE THEORY OF EXTERNALITIES, PUBLIC GOODS, AND CLUB GOODS* 8 (2d ed. 1996).

219. CORNES & SANDLER, *supra* note 218, at 37.

“irrelevant” in the sense that, “whether or not [spillovers] are internalized by actors, the actors would not change their actions.”²²⁰ This point places a “significant limit on . . . arguments about free riding and speculative diminution of incentives to invest” because “capturing value realized by others—through monetary returns or otherwise is [often no longer] necessary to support incentives to innovate”²²¹ Spillover effects often complicate and confound traditional economic analysis of the costs and benefits of granting property rights, and present fundamental challenges to the way that individuals and regulators think about the economy, particularly because vivid examples of spillover effects often cease to come to mind. The reasons for such unavailability are that spillovers, as Brett M. Frischmann and Mark A. Lemley observed, often are temporal:

Alexander Graham Bell got some benefit from his invention of the telephone, but he doesn't anymore. The companies he founded continue to make money from the telephone, but they also have competitors who make money from the invention as well, and users of the telephone benefit in countless ways from which they do not fully pay.²²²

Others are geographic, in several different ways: “[a]n innovation contributes to a local economy, employing people who spend their money locally.”²²³ Or “[p]opulation density is strongly positively related to local innovation—people are more inventive when they are around other inventive people. Ideas may travel further or more quickly than they would if confined to market transactions.”²²⁴ Again, other spillovers are inter-industry: “[w]ork done in one field, such as defense or space science, may have benefits in seemingly unrelated fields such as materials science. The inventor may have no interest in or even awareness of the benefits her idea has in these unrelated fields [but she may benefit through increased visibility and more demand].”²²⁵ And many spillovers are non-appropriable:

[d]uring the period Bell held patents on the telephone, he did not recognize, much less capture, the full benefits of his inventions. People paid him a certain amount for telephones, but as others bought phones, the value of the phones to the earlier purchasers went up, and Bell did not capture any of that new value. Nor did he capture the benefits to those who saved money or lives because their neighbors

220. FRISCHMANN, *supra* note 217, at 15.

221. *Id.* at 39.

222. Brett M. Frischmann & Mark A. Lemley, *Spillovers*, 107 COLUM. L. REV. 257, 260 (2007).

223. *Id.*

224. *Id.* at 260–61.

225. *Id.* at 261.

could call the police to report a crime, or any of countless other benefits the telephone provided to society.²²⁶

In these and other examples, it is often easier to recall the harms of free riding rather than to imagine the vague benefits of sharing, particularly because the former have been highly theorized and discussed in public, whereas the latter have remained largely obscure in legal and economic theory.

2. Decision Making Under Uncertainty

The behavioral research further indicates that there are several important reasons to believe that human perception and decision making under uncertainty are generally skewed against the promotion of innovation and progress. Underlying this indication is the fact that both the decisions of market actors and regulators often are framed as a choice between avoidance of a relatively sure, immediate, or very near-term loss of money (i.e., the costs resulting from diminished private profits when market access is granted) and avoidance of a relatively unsure, non-immediate loss in individual and social welfare (i.e., the loss resulting from diminished private and social gains due to foregone spillover effects when market access is denied). In particular, this holds true when decision makers are asked to assess the costs and benefits of new innovations: it is often easier for us to perceive exactly the harmful side of creative destruction than it is to grasp its constructive side.²²⁷

The way in which the parties to *United States v. Microsoft* assessed the effects of innovation colorfully illustrates this point.²²⁸ Today, in the view of an overwhelming number of distinguished

226. *Id.* On the supply side, spillovers are uncaptured benefits that could be internalized to increase incentives to invest, and on the demand side, spillovers reflect unobserved, lost signals of consumer demand that fail to guide investment and management decisions. From the vantage point of a property rights theorist, we should thus eliminate spillovers.

227. JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM AND DEMOCRACY 84 (1976). See Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 268–69 (1979), for a thorough study of this phenomenon. Kahneman and Tversky concluded that people generally overweigh outcomes that are considered certain relative to outcomes that are merely probable. One implication of their observation is that, when faced with choosing between the receipt of a sure gain and an unsure gain, both with identical expected value, people often choose to receive the sure gain. Conversely, when they have to make a choice between the avoidance of a sure loss and the avoidance of an unsure loss of identical expected magnitude, they will often decide to avoid the sure loss. Since the level of uncertainty about future losses due to innovative activity often is great, the bias in favor of avoiding sure losses—and thus against engaging in innovative activity—over unsure losses—and thus in favor of less innovative activity—likely will be robust in the intellectual property and antitrust regulatory context.

228. See EVANS, FISHER, RUBINFELD & SCHMALENSSEE, *supra* note 33, at 1, 4.

commentators, Microsoft's conduct consisted of quite a few actions to conserve and proliferate entry barriers into the PC operating system market,²²⁹ including, among other things: tying its browser to the operating system; its exclusion of browser competitors from the most efficient distribution channels; placing restrictive agreements on OEMs by forcing them to utilize only Microsoft's browser; and imposing agreements on Internet service and content providers to exclude competing browsers.²³⁰ As noted above, the relevant concerns were so complex and difficult to determine with certainty that competition authorities could only guess what might have been the chain of effects set off by Microsoft's conduct. Future gains or losses in innovation typically are uncertain, both at the level of determining whether an innovation's perceived opportunities will be beneficial or detrimental to the economy and to consumers and with respect to the question of whether available regulatory tools will in fact prevent such harm.²³¹ It is, for instance, exceedingly difficult to predict exactly what effect anticompetitive restraints will have on the magnitude and speed of the development of platform competition, on the delivery of complementary goods, the growth of network effects, and, perhaps most hypothetically of all, on how much better off consumers will be as a result of such innovation.²³² By contrast, it is often fairly certain that at least some opportunity costs, in the form of lower average revenue per unit, will be incurred as a result of less proprietary protection.²³³ In rejecting a consumer claim against Microsoft for the identical restraints on innovation that the District Court for the District of Columbia banned, one appellate court held:

[I]t would be entirely speculative and beyond the competence of a judicial proceeding to create in hindsight a technological universe that never came into existence. . . . It would be even more speculative to determine the relevant benefits and detriments that non-Microsoft products would have brought to the market and the relative monetary value . . . to a diffuse population of end users.²³⁴

229. *Id.* at 4. *But see* Hovenkamp, *supra* note 174, at 1630–43; First, *supra* note 5, at 1369, 1396–97.

230. EVANS, FISHER, RUBINFELD, & SCHMALENSEE, *supra* note 33, at 3.

231. *See* CHRISTINA BOHANNAN & HERBERT HOVENKAMP, CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION 251 (2012) (“Restraints on innovation are unquestionably a concern of antitrust policy, but enforcement has never been as strong as it should be. On the one hand, it seems clear that the social losses that result from innovation restraints are immense. On the other, identifying anticompetitive innovation restraints has proven to be difficult, and development of suitable remedies even more problematic.”).

232. *Id.* at 249, 251.

233. *Id.* at 245.

234. *Id.* at 253. Whether the EU Microsoft decision must be seen as adopting a long-term view or may be seen as the result of a “debiasing mechanism” in antitrust law that in doubt provides for market access rather than against it, remains an open question. Jon D. Hanson &

Underlying this statement is the additional difficulty that the conventional output/profitability models generally involve a balancing of costs and benefits of a single parameter determining one single pathway of the economy, and thus often reach a limit as a guide to real world settings containing multiple interactions among costs and benefits, multiple pathways of multiple parameters, and multiple economic actors with heterogeneous preferences.²³⁵ The point is not that efforts to assess the costs and benefits of innovation based on these models are necessarily imprudent or misguided, but rather that it is exceedingly difficult to predict with precision the extent of a lost invention to consumers, as compared to any price increase or loss of profit on existing products that results from prohibiting a particular practice because it is viewed as an anticompetitive restraint. The difficulty is underscored by the psychological predisposition to emphasize the perceived, certain losses in productivity over possible anticompetitive effects on innovation.

Studies in cognitive psychological research further show that people value the avoidance of instantaneous or almost instantaneous losses far more strongly than the avoidance of remote losses, even in the not-too-distant future.²³⁶ In the market regulatory context, losses in innovative and creative activity are typically more distant than are foregone industrial profits or job losses. Years can pass between a software manufacturer's provision of interoperability information to his rivals and the corresponding realization of network effects as a result of widespread use of applications that will grow the network's output in terms of increased economies of scale in consumption.²³⁷ Likewise, a standard printer's platform characteristics can only be realized if the manufacturer permits every qualifying independent service organization to provide maintenance and repair for its product, which depends on the possibility of competition in the aftermarket

Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1420, 1552 (1998); see also Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L.J. 1527 (2011).

235. See Rafael Núñez & Kensy Cooperrider, *The Tangle of Space and Time in Human Cognition*, 17 TRENDS COGNITIVE SCI. 220 (2013).

236. George Loewenstein & Drazen Prelec, *Anomalies in Intertemporal Choice: Evidence and an Interpretation*, 107 Q.J. ECON. 573 (1992); Marjorie K. Shelley, *Gain/Loss Asymmetry in Risky Intertemporal Choice*, 59 ORG. BEHAV. & HUM. DECISION PROCESSES 124 (1994); see also Charles Vlek & Gideon Keren, *Behavioral Decision Theory and Environmental Risk Management: Assessment and Resolution of Four "Survival" Dilemmas*, 80 ACTA PSYCHOLOGICA 249 (1992).

237. In the United States, for instance, it took more than half a century for the telephone system to evolve into a single network. See RICHARD R. JOHN, NETWORK NATION: INVENTING AMERICAN TELECOMMUNICATIONS 2 (2010).

among many types of suppliers.²³⁸ It may take us years to understand the full implications of intratype competition where demand by one group of consumers affects demand by another²³⁹ and its attendant losses in innovative activity if such competition is suppressed. On the other hand, no one doubts that the imposition of a duty to deal or to provide market access in such cases will result in immediate economic costs for the manufacturer.²⁴⁰ This occurs through more intense competition and a constrained capacity to run away with all of the private gains once it is no longer in a position to do so (although the evidence suggests that those costs are often significantly overstated by market access opponents, at least in the long run).²⁴¹

To be sure, these dynamics do not tell us whether a market regulatory policy based on weak (contractual and intellectual) property rights is more or less desirable than an approach which aims at internalizing maximum private rewards. The answer depends on whether the problem of overprotecting against the immediate costs of providing access to a market actor's production output, i.e., when those costs are cognitively readily available, is greater or lesser than the problem of under-protecting against the costs of foregone cumulative innovation that are not cognitively available. A mounting body of literature in psychology suggests, however, that in the market regulatory context agencies and courts probably should be more concerned with the latter problem. According to what are known as "dual-process theories of thinking," numerical representations of risks often lack compelling meaning to individuals.²⁴² As a result, the significance of what stands behind statistical information frequently will be underrepresented in their decision making and beliefs.²⁴³

Accordingly, much of the debate within antitrust and intellectual property law scholarship juxtaposes the relatively certain, immediate monetary costs of reduced monopolization, income

238. For example, to the extent that the installed base of existing users of a particular type of computer becomes larger, software becomes more profitable to write and cheaper to purchase.

239. One example is network television, which is free to viewers but costly to advertisers who are willing to pay more when the viewing audience is larger.

²⁴⁰ See, e.g., David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 YALE J. REG. 325 (2003). Most manufacturers that offer complementary goods or services such as printers and ink jets or razors and razor blades might increase attractiveness of their product to developers and users and eventually the number of consumers by charging a lower price for their primary product, thus increasing attractiveness of their product to developers, users, and consumers on the secondary market.

241. *Id.*

242. Paul Slovic et al., *Psychic Numbing and Mass Atrocity*, BEHAV. FOUND. POL'Y, 126, 483 (Eldar Shafir ed., 2011).

243. *Id.*; George F. Loewenstein et al., *Risk as Feelings*, 127 PSYCHOL. BULL. 267, 267-68, 270 (2001); Paul Slovic et al., *The Affect Heuristic*, 177 EUR. J. OPERATIONAL RES. 1333 (2007).

reductions, and decreased incentive effects and the relatively uncertain, more distant welfare effects from undeveloped cumulative innovations that would have manifested in qualitatively (i.e., nonmonetary) improved or innovative new products. At stake in this characterization of the economy is how agencies and courts are made to understand the nature of competition, innovation, and the economy itself. The framing of economic policy issues as reflecting purely quantifiable trade-offs between numerical values (money) on the one hand and non-numerical dynamic innovation on the other has implications for cognitive inferences or heuristics beyond well-established conceptions of deadweight losses, efficiency, and economic rationality. In order to assess the competitive effects of innovation based on the output/profitability test's intertype competition framework, decision makers must create trade-offs and reduce the uncertain and remote costs and benefits in innovation to numbers. In this process, the distant, uncertain, and nonmonetary benefits of innovation often get lost, not just because they cannot be manifested solely—or at all—in quantifiable differences in the way that cost economies in product manufacturing can be stated, but also, and perhaps primarily, because innovation in the form of qualitatively improved or new products, in the form of technical advances, or in the form of the cost-control function of competition as such are simply difficult for individuals to project.

B. Collaborative Consumption Preferences

The strength of the case for the sort of economy in which antitrust and intellectual property laws are called upon to make market access thinking possible, however, depends on the assumed content of consumer preferences, and on an evaluation of those preferences within their specific market regulatory contexts. Though proponents of the output/profitability view are inclined to view preferences for less proprietary forms of production and distribution as particularly unreliable bases for consumer decision making, such preferences on close examination seem to mirror coherent, well grounded consumer vantage points, and are reminiscent of a number of influences that have united the consumer and the market in the modern information society.²⁴⁴

In a particularly vivid illustration of this stance, Rachel Botsman and Roo Rogers document in their book, *What's Mine Is Yours—The Rise of Collaborative Consumption*, the rapidly

244. Amy Kapczynski, *The Access to Knowledge Mobilization and the New Politics of Intellectual Property*, 117 YALE L.J. 804 (2007).

proliferating concept and practice of sharing resources—human and physical assets, in everything from bicycles and automobiles to accommodation, foodstuff, offices, household articles, and even time and knowledge.²⁴⁵ Individuals and organizations, as these authors document, have begun to distribute, split, and re-use unexploited excess capacity in goods and services. Some of the business icons of this new economy include: Uber, Lyft, ZipCar, CityCarShare, and Relay Rides, with the help of which individuals can leverage the unused capacity of their cars to members; MechanicalTurk, which provides developers of human intelligence tasks with crowdsourced solutions; Ushahidi, which allows individuals to donate small slivers of time to perform simple tasks that others need doing; or Airbnb, which makes it possible for people to share their homes for a fee. Similarly, businesses that share information about product design and distribution and offer independent maintenance and repair services ostensibly have seen an upsurge in demand. Customers of their services arguably seek to “unlock” the unused value of ready-made durable commodities.²⁴⁶ Spurred presumably by increasing consumer awareness with respect to the value of access over ownership, new forms of “distributed capitalism” have expanded from a little-understood fringe element to one of the fastest growing segments of American markets. In 2013, they generated an estimated \$3.5 billion in revenue²⁴⁷ and forecasts predicted a future market potential

245. RACHEL BOTSMAN & ROO ROGERS, *WHAT'S MINE IS YOURS: THE RISE OF COLLABORATIVE CONSUMPTION 1* (2010).

246. See, e.g., BENKLER, *THE PENGUIN AND THE LEVIATHAN*, *supra* note 215, at 214–16; BENKLER, *THE WEALTH OF NETWORKS*, *supra* note 215, at 59–90; DAREN C. BRABHAM, *CROWDSOURCING 1* (2013); BRETT KING, *BANK 3.0: WHY BANKING IS NO LONGER SOMEWHERE YOU GO BUT SOMETHING YOU DO* (2012); LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* 117–249 (2001); Nia Hamm, *How Collaborative Consumption Is Helping Small Businesses Grow*, CNBC (July 13, 2014, 7:04 AM), <http://www.cnbc.com/id/101822531> [<https://perma.cc/4YK4-D9HQ>]; Xavier de Lecaros Aquisé, *The Rise of Collaborative Consumption and the Experience Economy*, *GUARDIAN* (Jan. 3, 2014, 5:42 PM) <http://www.theguardian.com/technology/2014/jan/03/collaborative-consumption-experience-economy-startups> [<https://perma.cc/2ZRP-J7P8>]; *Airbnb, Snapgoods and 12 More Pioneers of the 'Share Economy'—In Photos: Airbnb, Snapgoods and 12 More Pioneers Of The 'Share Economy'*, *FORBES*, <http://www.forbes.com/pictures/eeji45emgkh/airbnb-snapgoods-and-12-more-pioneers-of-the-share-economy/> [<https://perma.cc/L8DU-FGSB>] (last visited Feb. 18, 2017).

247. European Commission, *Report by Business Innovation Observatory on The Sharing Economy: Accessibility Based Business Models for Peer-to-Peer Markets*, Ref. Ares (2015) 4645909 (Oct. 28, 2015), http://ec.europa.eu/geninfo/query/index.do?queryText=the+sharing+economy%3A+accessibility+based+business+models&summary=summary&more_options_source=global&more_options_date=0&more_options_date_from=01%2F10%2F2015&more_options_date_to=31%2F10%2F2015&more_options_language=en&more_options_f_formats=.pdf&swlang=en [<https://perma.cc/5AKF-PU9D>].

of \$110 billion in the United States alone.²⁴⁸ Meanwhile, the size of the new digital economy has grown far beyond these numbers to the point that collaborative consumption is more than just a localized phenomenon that results in substantial cost savings and earnings for individuals and enterprises. Indeed, entrepreneurs with a broader vision contend that for producers, this economy is about something bigger than couch-surfing, bicycle sharing, or tool libraries. Collaborative consumption, they contend, prescribes a new *modus operandi* which will disrupt the “hyper-individualized” and “hyper-materialistic” assumptions of our present-day consumer culture.²⁴⁹ Buoyed by their successes, they posit that peer-to-peer collaboration constitutes the foundation of a new social contract in which sharing acts as a catalyst for an economic transformation apt to meet the profound social and cultural challenges of the twenty-first century.²⁵⁰ In this view, collaborative consumption gravitates around the “maximum utilization of assets through efficient [. . .] redistribution and shared access.”²⁵¹ It does not invariably rest on a principle of sharing goods and services such as cars, bicycles, labor, talent, and so forth by any strict meaning, nor is it limited or tied to the success of digital technologies which make such sharing easier. Instead, the emphasis of collaborative consumption is on a broadened sharing spectrum that includes the exploitation of complementaries, unused excess capacities, and network effects of non-material or intangible qualities of all sorts of everyday consumer goods that enhance an individual’s well-being in terms of capability.

The significance of these developments for contemporary market regulatory doctrine becomes evident if we contemplate for a moment the effects that strong proprietary forms of production and distribution have had on the economy. Before the advent of the industrial revolution, consumers used to exchange information directly with craftsmen and were able to describe precisely what they desired and how they wanted it to be done. With the emergence of economies of scale and scope, however, producers came to conclude—often quite rightly so—that mass production was an important way to

248. *Id.*

249. See generally JULIET B. SCHOR, *TRUE WEALTH: HOW AND WHY MILLIONS OF AMERICANS ARE CREATING A TIME-RICH, ECOLOGICALLY LIGHT, SMALL-SCALE, HIGH-SATISFACTION ECONOMY* (2d ed. 2011) (previously published as *PLENITUDE*).

250. See Robert C. Ellickson, *The Market for Social Norms*, 3 *AM. L. ECON. REV.* 1, 43 (2001).

251. Rachel Botsman, *The Sharing Economy Lacks a Shared Definition*, *CO.EXIST* (Nov. 11, 2013, 7:30 AM), <https://www.fastcoexist.com/3022028/the-sharing-economy-lacks-a-shared-definition> [<https://perma.cc/HJF5-WN4S>].

lower costs by producing larger volumes on the same pattern.²⁵² This insight gave rise to a clash between the accommodation of every consumer's desires and the goal of reducing costs by diminishing the variety of styles produced. In response to the ensuing expansion of strong proprietary forms of trade, markets have generally produced a less abundant variety of goods and services because new methods of mass production held back the fabrication and distribution of goods and services for which there was scant or no mass demand at all. In this way, scale economies in production—while lowering costs—restricted the range of goods produced, and restricted even further the variety of goods widely distributed.²⁵³

Against this background we must recognize that the consumer behavior observed by Botsman and Rogers calls for a shift in market regulatory policy from ever more (contractual and intellectual) property protection to an improved understanding of sharing and augmenting the raw material we are presumed to create in our society and economy. Indeed, from its outset, we must understand collaborative consumption as an attempt by consumers to reclaim some public space *within* the market, a space that has been under challenge by an increasing trend toward propertization and innovation-impeding power dynamics. As economist William Hutt wrote quite some time ago “we believe that the achievements of the productive system can be measured only in terms of the extent to which they represent a response to the consumers’ will.”²⁵⁴ The consumer, as Hutt writes:

[I]s usually also a producer. But as a producer he is the servant of the community. He must apply himself and the property and equipment he possesses to producing what the community wants or he will obtain nothing in the form of claims on others in return. As a consumer, he commands other producers. The individual's twofold relationship to society, that of sovereign and subject is best exemplified in his roles of consumer and producer respectively. These terms refer simply to different aspects of each member of society. As a ‘consumer,’ each directs. As a ‘producer,’ each obeys.²⁵⁵

Hutt makes evident that our modern understanding of capitalism tends to ignore its ancestors by dismissing preferences for less proprietary forms of production and distribution, and asserts that less proprietary forms of trade interfere with the unequivocally normative

252. Nicholas Kaldor, *The Economic Aspects of Advertising*, 18 REV. ECON. STUD. 1, 4 (1990).

253. Kevin Lancaster, *The Economics of Product Variety: A Survey*, 9 MARKETING SCI. 189, 192 (1990).

254. WILLIAM H. HUTT, *ECONOMISTS AND THE PUBLIC: A STUDY OF COMPETITION AND OPINION* 258 (2d ed. 1990).

255. *Id.* at 257–58.

goals of maximizing product manufacturers' immediate, tangible outputs.

Yet if production is judged based on placing consumers first, market actors should in many instances be free to access a product manufacturer's output and to distribute, reuse, and build upon them to fit consumers' needs and desires, and should be free to share their own produce, because such sharing constitutes the basis of a prosperous and competitive economy. As commons-based models of innovation and growth exemplify, consumers appear to be expressing preferences not merely for the goods that they wish to acquire, but also for the conditions and values that they hope to encourage in the economy's productive sphere. Most notably, consumer concerns seem premised on a recognition that consumers, as users and citizens, care about what kind of economy and society they are allowed to inhabit.²⁵⁶ To that extent, rejecting consumer preferences outright for less proprietary forms of production and distribution seems unwarranted today. Instead, in keeping with the premises of liberal market societies, the default reaction of the government to allegedly dubious consumer preferences for less proprietary forms of production and distribution should not be to suppress them, but rather to expose them to scrutiny and counterargument.

C. Process Preferences

In conformity with these observations, there is extensive evidence that individuals have preferences for consuming goods and activities themselves, that is, they have preferences for goods and activities that do not depend for their full value upon how much the good or activity is worth in the market or even on their usefulness of the goods or activities in question. Software developers who feel part of a technical community and who are committed to improving their programming skills to facilitate their work through better software illustrate this point in a startling manner.²⁵⁷ They consume software and at the same time develop and modify it for their own use.²⁵⁸ The desire of the consumer, in such cases, is to pursue a shared goal such as the improvement and customization of goods at hand while enjoying an intrinsically satisfying activity. This idea pertains to the

256. Rolf H. Weber, *Consumer Autonomy—Challenges from an Unfair Competition and Human Rights Perspective*, 3 INT'L J. PUB. L. POL'Y 1 (2013).

257. See, e.g., WEBER, *supra* note 215, at 134–55.

258. VON HIPPEL, *supra* note 172, at 19–31.

notion of process benefits, to the extent that consumers are engaging in activities that are enjoyable in themselves.²⁵⁹

From the perspective of adherents to the output/profitability test's intertype competition framework, such preferences are difficult to explain. The output/profitability view deals only with observable choices that explain consumers' preferences with regard to the instrumental satisfactions obtained. Cars, clothes, television sets, or books bought in the market offer opportunities for satisfaction primarily in terms of how much they are worth on the commodity and money markets. But aside from the ownership of brand reputation, exclusiveness, origin, or configuration, it is the driving of the car, the wearing of the clothes, the watching of a movie, or the reading of a book that yield the intended satisfaction. The mental satisfactions derived from these activities are distinct from merely purchasing a good, and can be considered as the intrinsic process benefits attached to their use in time.²⁶⁰

Support for this view emanates from far-reaching empirical literature on the importance of procedural characteristics to an individual's assessment of outcomes and the institutional structures within which they exist. Psychologists have found repeatedly that individuals value certain procedures not only for their influence over outcomes, but also for their intrinsic desirability as fair procedures.²⁶¹ One of the most widely cited examples is the case that individuals are far less likely to accept a price increase that they perceive to be exploitative, such as the price increase for snow shovels after a snowstorm or similar conditions pertaining to excess demand situations.²⁶² By the same token, if employees have been extraordinarily dedicated, managers also will attempt to treat their employees well, even when it is not in the manager's self-interest to do so.²⁶³ Other instances of economic behavior induced by fairness considerations involve consumers who may not buy a good sold by a

259. F. Thomas Juster & Frank P. Stafford, *Introduction and Overview* to F. THOMAS JUSTER, TIME, GOODS, AND WELL-BEING 1, 3–4 (F. Thomas Juster & Frank P. Stafford eds., 1985); E. ALLAN LIND & TOM R. TYLER, THE SOCIAL PSYCHOLOGY OF PROCEDURAL JUSTICE (1988); TOM R. TYLER, WHY PEOPLE COOPERATE: THE ROLE OF SOCIAL MOTIVATIONS 27–48 (2013).

260. TOM R. TYLER, WHY PEOPLE OBEY THE LAW 3–7 (2006).

261. *Id.*; LIND & TYLER, *supra* note 259, at 1.

262. Daniel Kahneman, Jack L. Knetsch & Richard Thaler, *Fairness as a Constraint on Profit Seeking: Entitlements in the Market*, 76 AM. ECON. REV. 728, 729 (1986) [hereinafter Kahneman, Knetsch & Thaler, *Constraint on Profit Seeking*]; Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Fairness and the Assumptions of Economics*, 59 J. BUS. 285, 297–98 (1986) [hereinafter Kahneman, Knetsch & Thaler, *Assumptions of Economics*].

263. Kahneman, Knetsch & Thaler, *Constraint on Profit Seeking*, *supra* note 262, at 730; Kahneman, Knetsch & Thaler, *Assumptions of Economics*, *supra* note 262, at 296.

monopolist at unfair conditions even if the material value to the consumer is greater than its price. The presence and extent of procedural utility that consumers might obtain from taking part in a marketplace that affords the right to “vote” through private consumption on important matters of economic organization suggests a conceptual scheme in which progress occupies an objective reality capable of being described with regard to human values other than those that the output/profitability view may capture. That is, consumers participating in collaborative consumption may do so not only because they are revealing their willingness to pay for the shared good or for independent product innovations, but also because they are attempting to express the strength of their conviction that such production constitutes sound economic policy.²⁶⁴ It is precisely the difficulty of the output/profitability test to grapple with such preferences that prevents it from adequately capturing the rich, contextual manner in which real-world consumers conceive of progress. As previously described, progress is to a large extent a constructed concept that depends critically on the observer’s prior selection of relevant variables. Because consumer welfare is assessed under the output/profitability test mostly in relation to quantifiable factors that concern manufacturer output and price, the sphere of relevant variables becomes confined to manifest (physical) characteristics of goods and their proffered alternatives. In that manner, the output/profitability test closely resembles the type of consumer welfare assessment associated with expert decision-making.

D. Government-Regulated Preferences

Some authors have offered an equally critical examination of the manner in which output/profitability analysis actually promotes consumer interests. Even though the accepted account derives much of its appeal from being a disciplined and administrable analytical tool for evaluating market regulatory choices, these authors express concern over the ability of market regulators and courts to presuppose that the world outside official agencies is irrational, and that policy choices made on any other basis than those founded on output/profitability analyses must be fundamentally flawed. That is, rather than engage in a meaningful comparison of the often more distant and uncertain costs and benefits of innovation, factfinders are forced to conceive of the costs and benefits of innovation in a manner that is commensurable with the output/profitability framework.

264. See Douglas A. Kysar, *Preferences for Processes: The Process/Product Distinction and the Regulation of Consumer Choice*, 118 HARV. L. REV 525 (2004).

While the incorporation of such distinctions into the conventional approach seems somewhat coarse, to some extent the output/profitability framework is capable of incorporating the observed disparities. Industrial organization economists have used quality adjusted prices to help consumers value the benefits of nonprice, quality related concerns indirectly, in light of empirical evidence suggesting that individuals sometimes value variety, service, independent maintenance and repair, and so on more than the accidental benefits of increased manufacturer outputs that dominate standard economic literature. For instance, markets that are price competitive often are also valued as being competitive for nonprice preferences. If accepted, this quality-adjusted price would work to effectively translate consumers' nonprice preferences into price equivalents by increasing the monetary benefits of such preferences for purposes of conventional output/profitability analyses. But the very promise of quality-adjusted nonprice attributes found in industrial economic literature also suggests the literature's diversity, indeterminacy, and potential manipulability. Just as industrial economists are unable to agree among themselves whether specific demands for innovation-related benefits are generally untrustworthy or not, interest groups within regulatory battles seem likely to cast about within antitrust and intellectual property law scholarship in search of studies and findings that support their preferred outcomes. As Douglas Melamed explains, there are serious problems with such an approach.

First, it would be hard to apply and, indeed, would likely be beyond the competence of the courts and enforcement agencies. Weighing the benefits to welfare . . . against the harm to welfare . . . would require quantifying both welfare effects by estimating price, cost, and quantity of output under two conditions—before and after [the innovation]; dealing with the time dimension (both duration and discounting to present value) of each; and comparing both to a hypothetical but-for world in which the [innovation] did not take place. Efforts to shortcut the process by substituting intuition or educated guesses for precise calculation would reduce transaction costs but also would move the analysis along a continuum from probably impossible precision toward arbitrary decision.²⁶⁵

It is apparent, then, that all relevant factors cannot always be captured in the output/profitability calculus of quality adjusted price.

Franklin M. Fisher and Daniel L. Rubinfeld have rendered this point plain in their economic analysis of *United States v. Microsoft*. As they explain:

Microsoft made its bundling decision not to achieve efficiencies but to foreclose competition. The problem is not that Microsoft offered OEMs [Original Equipment

265. A. Douglas Melamed, *Exclusive Dealing Agreements and Other Exclusionary Conduct—Are There Unifying Principles?*, 73 ANTITRUST L.J. 375, 381 (2006).

Manufacturers] and users a bundled version of Windows and IE [Internet Explorer]; it is that Microsoft did not give them the option of taking Windows without the browser. It thus compelled those OEMs and users that wished otherwise to take IE in order to get Windows. This foreclosure of competition had an immediate harmful effect on consumers, whose choice of browsers was restricted and who faced substantial uncertainty. The harm was not simply to consumers who faced limited browser choice; other harms resulted from the unnecessarily cumbersome operating system, and by the limited options of those who preferred not to use a browser.²⁶⁶

Given the different types of harms involved, if price and output are still taken as the sole means of measuring and balancing the costs and benefits of some instance of anticompetitive practice, this inevitably involves differentiated weighting of the subjective valuations of the various types of consumer harms concerned. Such differentiated weighting applies not only with respect to the producer-consumer relationship but also to discrepancies between the subjective valuations of consumers relative to other consumers. The regulator, in such cases, faces a choice that can only be justified on normative grounds. Should he attempt to use certain weighting factors to compensate for a loss in consumer choice? And on what basis are the said weighting factors to be defined? Whichever route is taken determines the final result. But, depending on the option chosen, the competitive assessment of a given case at hand will not always be the same. Instead, this arrangement runs the risk of reducing the output/profitability calculus to a decision rule subject to random manipulation. Suddenly, it is no longer a matter of balancing quantifiable factors; rather, it becomes a matter of economic policy debate on the role of protecting businesses allegedly restrained from competing or of protecting the businesses allegedly restraining competitors that is played out under the guise of an equally-balanced output/profitability analysis.

Attempts to incorporate non-price preferences into the output/profitability test thus might simply add another layer of gamesmanship to a regulatory process that already has been fittingly described as blood sport.²⁶⁷ Consider Neil Averitt's and Robert Lande's proposed "consumer choice" paradigm as an alternative to the prevailing output/profitability test in antitrust law. According to Averitt and Lande, "an antitrust violation can . . . be understood as an activity that unreasonably restricts the totality of price and nonprice

266. EVANS, FISHER, RUBINFELD & SCHMALENSEE, *supra* note 33, at 35–36, 57, 60–61.

267. Thomas O. McGarity, *Administrative Law as Blood Sport: Policy Erosion in a Highly Partisan Age*, 61 DUKE L.J. 1671 (2011).

choices that would otherwise have been available [to consumers].”²⁶⁸ According to their view, the central focus of US courts in a series of recent rulemakings has not been on the price or cost of production of any current product or service, but rather on the possibility that innovation in the form of new products and increased consumer choice will be diminished by an allegedly anticompetitive practice.²⁶⁹ One of their examples includes Judge Jackson’s definition of the relevant market in *Microsoft* with respect to consumers’ incapacity to substitute other products for Microsoft’s operating system. As Jackson explained, “a consumer would not obtain a satisfactory substitute for an Intel-compatible PC operating system even if he purchased a server, since server operating systems lack the features—and support for the breadth of applications—that induce users to purchase Intel-compatible PC operating systems.”²⁷⁰ On this basis, Jackson defined Microsoft’s market power in terms of consumer preferences for various features: “[t]he consumer wants an operating system that runs not only types of applications that he knows he will want to use, but also those types in which he might develop an interest later.”²⁷¹ With respect to the question of whether monopoly power had illegally been maintained, Jackson found that “the actions that Microsoft took against Navigator hobbled a form of innovation that had shown the potential to depress the applications barrier to entry sufficiently to enable other firms to compete effectively against Microsoft in the market for Intel-compatible PC operating systems. That competition would have conduced to consumer choice and nurtured innovation.”²⁷² Jackson’s articulation of consumer harm thereby rendered, contrary to what the accepted account permits, consumer choice as the focal point of Microsoft’s illegal maintenance of market power.²⁷³

The primary justification for the protection of consumer choice generally, notwithstanding low price in particular, comes from a concern by scholars and practitioners that the output/profitability approach often cannot accurately reflect the full range of consumer concerns and preferences, and instead tends to impose artificial restrictions on the range of nonprice options relevant to making

268. Neil W. Averitt & Robert H. Lande, *Using the “Consumer Choice” Approach to Antitrust Law*, 74 ANTITRUST L.J. 175, 182 (2007).

269. See Neil W. Averitt & Robert H. Lande, *Consumer Choice: The Practical Reason for Both Antitrust and Consumer Protection Law*, 10 LOY. CONSUMER L. REV. 44 (1997); Robert H. Lande, *Consumer Choice as the Ultimate Goal of Antitrust*, 62 U. PITT. L. REV. 503 (2000).

270. *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, 15 (D.D.C. 1999).

271. *Id.* at 19.

272. *Id.* at 111–12.

273. *Id.* at 50–51, 111–12.

reasonably free and rational selections from those options.²⁷⁴ However, critics of this view respond that, just as the standard economic literature more generally has been interpreted to suggest that consumers often misconstrue and mis-pursue their best rational interests, “the choice standard . . . altogether rejects the economic approach to dealing with [conventional] trade-offs,”²⁷⁵ and thus reduces what is conventionally understood by consumer and total welfare “by shifting the focus of antitrust analysis from efficiency to . . . misleading proxies for consumer welfare.”²⁷⁶ In this way, opponents of the choice approach to antitrust reject altogether arguments that there are other, cognitively less visible dimensions of competition and innovation apart from price, and that the tendency of the choice standard is to distract from “key economic questions and to avoid analysis of the relevant [issues].”²⁷⁷ Consistent with these assumptions is the associated conclusion that:

[C]onsumers’ revealed preferences, as expressed in their actual choices, [do not require antitrust analysis to ignore or under-weigh nonprice dimensions of competition]. [Instead], the standard microeconomic framework requires the assumption that consumer preferences are relatively stable, but those preferences can and do incorporate various nonprice values. Therefore, to incorporate nonprice elements into the standard model, as a conceptual matter, no revolution is required.²⁷⁸

Any departure from the accepted account, as a result, is not just unnecessary in this view, but mostly undesirable.²⁷⁹

E. Normative Preferences

Consumer preferences for new innovation should be understood not only from the vantage point of their effect on the outside world or their usefulness as instruments for civic communication, but also from the standpoint that consumption frequently is a uniquely personal activity with far-reaching ethical implications. As Richard Stallman, the American software freedom activist and computer programmer remarked, “[c]ontrol over the use of one’s ideas’ really constitutes control over other people’s lives; and it is usually used to make their

274. Averitt & Lande, *supra* note 268, at 175; Lande, *supra* note 269, at 503.

275. Wright & Ginsburg, *supra* note 180, at 2422.

276. *Id.*

277. *Id.* at 2414.

278. *Id.* at 2417.

279. *Id.* at 2411 (“An evidence based approach to incorporating nonprice competition into the traditional welfare standard . . . would be unobjectionable.”).

lives more difficult.”²⁸⁰ Many consumers seem to share aspects of this view, such that their own sense of moral well-being is affected by the nature and degree of contractual or intellectual property rights that others hold regardless of the effect that collaborative consumption, or indeed their own behavior, may have on existing forms of production and distribution. Like the procedural aspects of collaborative consumption preferences, this ethical account provides an independent ground for conceiving of such preferences as worthy of respect by government agencies and courts. That is, even if observed consumer choices do not justify support of preferences for promoting innovation according to a regulator’s technical or scientific assessment, regulators still are obliged to recognize the intrinsically private elements of the act of buying and consuming, and the widely accepted liberal denial to dissect or evaluate such inward-looking beliefs.²⁸¹

For example, it is often said that private rights, particularly intellectual property rights, are meant to “strike a balance” between producers’ and consumers’ interests. They are supposed to do so not for their own sake but rather to modify individual behavior, to provide an incentive for innovators to create more, and for manufacturers to produce to a greater extent. But as the normative view suggests—an observation that proponents of the output/profitability view tend to neglect—consumers also have an interest in their own freedom in making further use of existing innovations. According to this view, because producers’ and consumers’ interests often (partly) collide, we cannot think of striking the right balance of interests between those parties. Rather we must think of arriving at the right balance between spending consumers’ freedom and keeping it. More subtly, we may compare this trade-off to an attempt by the government to obtain for taxpaying motorists the best deal it can get when signing contracts with construction companies to build highways. The government, in such a case, will attempt to use the least possible amount of the taxpayer’s wealth (by, for instance engaging in competitive bidding—making use of market forces, not monopolies—to lower the price of offers). When the government acts on behalf of the public, it is responsible for finding the best possible deal, that is, the agreement that is best for the public, not best for the other party in the agreement. These same principles apply in the context of promoting innovation and progress. Here, the government spends

280. Richard Stallman, *The GNU Manifesto*, in *FREE SOFTWARE, FREE SOCIETY: SELECTED ESSAYS OF RICHARD M. STALLMAN* 39 (Joshua Gay ed., 2009).

281. RONALD DWORKIN, *TAKING RIGHTS SERIOUSLY* 272–73 (1978); JOHN RAWLS, *POLITICAL LIBERALISM* 303–04 (1993).

consumers' freedom (by granting property rights to market actors) instead of their money. It is often said that freedom is more precious than money, which is why the government's obligation to spend consumers' freedom intelligently and carefully is even greater than its obligation to spend their money in the same way.²⁸²

Other critics argue that consumer preferences for new innovation do not reflect a normatively defensible vision of consumer behavior when considered in light of the widely accepted goal of antitrust and intellectual property law of maximizing producers' output.²⁸³ The difficulty with this argument, from the vantage point of consumers who value collaborative consumption, is that the goal of maximizing, not just increasing, output elevates producers far above consumers. When people buy something, they do not generally buy the whole quantity in stock or always purchase the most expensive version of an article. People often use their funds sparingly, by purchasing only what they need of any particular good, and pick a model of sufficient rather than the highest quality. The law of diminishing returns implies that spending all our wealth on one specific article constitutes an inefficient allocation of resources; people thus usually decide to save some money for other expenditures.²⁸⁴ Diminishing returns apply to antitrust and intellectual property law just as to any other purchase. If we try to find a reasonable way of posing the ethical dilemmas created by a world of output maximization, the first freedoms we should reasonably bargain away are those that affect consumers the least, while encouraging innovation the most.²⁸⁵ The maximization of producers' returns above all else thus simply rejects many of the more profitable, perhaps wiser bargains in advance, and commands consumers to give up virtually all of their freedom to use the existing stock of raw material to encourage private innovation for just a little more output.

282. See Richard Stallman, *Misinterpreting Copyright—A Series of Errors*, in *FREE SOFTWARE, FREE SOCIETY: SELECTED ESSAYS OF RICHARD M. STALLMAN* 81 (Joshua Gay ed., 2009).

283. See generally Herbert Hovenkamp, *Implementing Antitrust's Welfare Goals*, 81 *FORDHAM L. REV.* 2471 (2012); Alan J. Meese, *Reframing the (False) Choice Between Purchaser Welfare and Total Welfare*, 81 *FORDHAM L. REV.* 2197 (2012); Barak Orbach, *Antitrust's Pursuit of Purpose*, 81 *FORDHAM L. REV.* 2151 (2012); Wright & Ginsburg, *supra* note 180, at 2409.

284. Stallman, *supra* note 282, at 82.

285. *Id.* (arguing that the goal of maximizing publication in the copyright context, regardless of the cost to freedom, is supported by widespread rhetoric which asserts that public copying is illegitimate, unfair, and intrinsically wrong).

F. Legal Implications

Application of the market access doctrine must thus not consist of the type of largely unguided, formless judgment that commentators to date have associated with it. As findings from the cognitive psychological research demonstrate, courts should be tasked with determining as a factual matter, specifically the kind of progress ordinary consumers value. Further, the analysis must take into account the types of innovation that observers of collaborative forms of consumption have identified as pertinent to public understanding and beliefs about progress. Because uncompensated benefits that one person's activity provides to another are ubiquitous in our society and economy, antitrust and intellectual property law scholars must devise rules that enable sharing, that is, provide access to an innovator's production output which is a main force of promoting progress. More broadly, rules based on antitrust and intellectual property laws must reflect a view according to which free riding is not always a wrong in and of itself, and that contractual and intellectual property rights should not always strive to internalize all of the benefits generated by the intellectual property for others.²⁸⁶ The larger challenge of antitrust and intellectual property laws will thus be to make meaningful distinctions between sheer quantitative expansion (growth) from qualitative improvement (development) in order to further not only the consumption of more (physical) goods over time, but also, and perhaps primarily, to advance human prosperity in the long-run.²⁸⁷ An effective market access test must therefore render expert testimony admissible for those aspects of innovation that raise issues relating to ordinary consumer perceptions.

The inclusion in antitrust and intellectual property law of the insight that many everyday durable consumer goods may be understood as "platforms" might work, quite reasonably, toward this end. First, to moderate the appeal of the consumption of mere "output," scholars, administrative agencies and courts must begin to recognize that not only digital information goods, such as computer applications and the like, constitute "platforms," but that most durable consumer goods provide a basis for the delivery of further

286. See Christopher S. Yoo, *Copyright and Public Good Economics: A Misunderstood Relation*, 155 U. PA. L. REV. 635, 684 (2007) (arguing that overexposure of works doesn't cause congestion externalities but will often serve as additional advertising, and that higher demand of the work will cause even higher demand in other consumers); see also Mark A. Lemley & Mark P. McKenna, *Owning Mark(et)s*, 109 MICH. L. REV. 137, 140–41 (2010).

287. Amartya Sen, *The Moral Standing of the Market*, 2 SOC. PHIL. & POL'Y 1 (1985); see also Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 624–26, 677 (1998).

content. In nearly all innovation markets, platforms rely on complementary products or services that use the base good as a standard or user interface. Take, for example, a Kodak printer. This product, which can be understood as a platform, supports complementary goods and services specifically made for it.²⁸⁸ Similarly, both a razor and a razor blade, a television and a speaker set, or a cell phone and a charger work in this fashion, as they enable the use of complementary products in a compatible format. The essence of each of these platforms is the platform standard—the base good—for which complements can be built, and the user experience generated by its enhancement.

Even though for market actors developing base goods that work as platforms, protecting their platform standards is sometimes critical to enabling them to succeed, such protection should not always prevail. In the case of a printer, the manufacturer may well deny (horizontal) access to its platform standard to preclude a would-be rival from obtaining access to its system and appropriating the value of the original invention by developing a clone. But (vertical) access, which involves products and services that are complementary, not substitutive, to the base good often should not be restricted. This includes cases involving the ability to transfer user-created innovations, such as the modification of bicycles or surfboards, from one system to another.²⁸⁹ Furthermore, if it turns out that a single platform emerges as dominant, antitrust and intellectual property laws should make competition based on (as opposed to against) that platform possible, by granting (horizontal) access on terms and conditions that restrict the original manufacturer's ability to recoup its investments to a reasonable extent (i.e., the smallest possible extent necessary to provide sufficient incentives to innovate).²⁹⁰ In so doing, antitrust and intellectual property laws will be adjusting investment incentives (to prevent awarding excessive windfall profits for existing innovations) and will facilitate sustained progress in markets where a single market actor manages the basic platform standard. In this manner, despite the longstanding complaint of antitrust and intellectual property law scholars that market access fails to provide a coherent and workable basis for antitrust and intellectual property law liability, and despite the failure of courts generally to articulate such a basis, the market access doctrine will provide an important complement to the instrumentalist balancing of output/profitability analysis.

288. See Frischmann & Lemley, *supra* note 222, at 285.

289. *Id.* at 281.

290. *Id.* at 283.

V. CONCLUSION

Antitrust and intellectual property law commentators rightly have criticized the market access doctrine, despite its apparent resistance to change. The aim of this Article has not been to defend the doctrine as it currently is conceived and applied, but instead to direct the way toward a more theoretically justifiable construction of it, one that strives both to respond to the doctrine's critics and to outline a substantively independent function for it to perform. Particularly, if the proposed market access test were tied to concrete, robust findings from the literature on various kinds of consumer preferences, as this Article claims it should be, then the market access doctrine would come to represent not a moment of unbridled intuition on the part of judges, but an important vehicle for capturing ordinary consumer judgments about new technologies, cumulative innovation, and progress. Such judgments seem difficult to capture within output/profitability approaches attempting to provide an answer to the question of how consumer welfare can best be promoted. Accordingly, the market access test defined and discussed in this Article should be thought of as a work in progress, subject to debate and revision in the best spirit of the framers of the Sherman Act and the Progress Clause. Along those lines, future debate about the proposed market access test should address potential objections to, and limitations of, the reinvigorated market access doctrine.