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COMMENT

COPYRIGHTS, CRIMINAL SANCTIONS AND ECONOMIC RENTS: APPLYING THE RENT SEEKING MODEL TO THE CRIMINAL LAW FORMULATION PROCESS*

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I. INTRODUCTION

Few, if any, public choice theorists¹ have applied the rent seeking model² to the criminal law formulation process.³ This is particularly

* David Haddock and Fred McChesney provided invaluable comments on earlier drafts. Any remaining errors are solely the responsibility of the author.

¹ Public choice is defined as the economic study of non-market decision making, or simply the application of economics to political phenomena. DENNIS C. MUELLER, *PUBLIC CHOICE II: A REVISED EDITION OF PUBLIC CHOICE 1* (1989). In other words, public choice theorists use microeconomic models to examine political markets:

Traditional economic theory studies how the interactions of large numbers of self-interest-seeking producers and consumers in ordinary private markets determine outcomes such as prices, quantities, incomes, and profits; modern public-choice theory studies how the interactions of large numbers of self-interest-seeking demanders, suppliers, and brokers of wealth transfers in political markets determine outcomes such as tax rates, income subsidies, and regulatory intervention.

William F. Shughart II, *Public-Choice Theory and Antitrust Policy*, in *THE CAUSES AND CONSEQUENCES OF ANTITRUST: THE PUBLIC-CHOICE PERSPECTIVE* 10 (Fred S. McChesney & William F. Shughart II eds., 1995).

² Rent seeking was first discussed systematically by Gordon Tullock. See Gordon Tullock, *The Welfare Costs of Tariffs, Monopolies and Theft*, 5 *WESTERN ECON. J.* 224 (1967) [hereinafter *Welfare Costs*]. The actual term "rent seeking" was introduced by Anne Krueger. See Anne O. Krueger, *The Political Economy of the Rent Seeking Society*, 64 *AM. ECON. REV.* 291 (1974). Professor Mueller provides a useful definition:

The government can, for example, help create, increase, or protect a group's monopoly position. In doing so, the government increases the monopoly rents [*i.e.*, "profits"] of the favored groups, at the expense of the buyers of the group's products or services. The monopoly rents that the government can help provide are a prize worth pursuing, and the pursuit of these rents has been given the name rent seeking.

MUELLER, *supra* note 1, at 229. For a complete discussion of the rent seeking model, see *infra* Part III.

odd given that rent seeking is such a prevalent model in examining the formulation of civil legislation.⁴ On first inspection, public choice theorists may posit that the benefits of criminal law are public goods.⁵ For example, streets which are free from criminal activity offer benefits that are nonexcludable and nonrivalrous. Accordingly, interest groups have little incentive to organize on the ground that the benefits of their collective action would be available to the public at large, yet they would have to bear the entire cost of organization. This may well be true for some aspects of criminal law, in particular policies of general deterrence. On closer inspection, however, there are areas of criminal law which enable organized interests to use the mechanism of government to create or protect economic rents. These areas lend themselves to rent seeking analysis.

In order to clarify the argument, this Comment will examine the changing nature of copyright law. Copyright law is making increased use of criminal sanctions to punish transgressions.⁶ Prior to 1976, for example, the maximum criminal sanction for the willful infringement of a copyright by an individual constituted a misdemeanor penalty of \$1,000 and one year in prison.⁷ After 1992, by contrast, the maximum criminal sanction for the willful infringement of a copyright by an individual constituted a felony penalty of \$250,000 and five years in

³ A number of economists and public choice theorists have applied microeconomic models to criminal law. These applications, however, almost exclusively focus on price theory and its impact upon criminal behavior, optimal deterrence or rule enforcement. See, e.g., Gary S. Becker & George J. Stigler, *Law Enforcement, Malfeasance, and Compensation of Enforcers*, 3(1) J. LEGAL STUD. 1 (1974); Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968).

⁴ The list of public choice literature addressing rent seeking through the use of civil legislation is extensive. For a useful overview, however, see GORDON TULLOCK, *THE ECONOMICS OF SPECIAL PRIVILEGE AND RENT SEEKING* (1989); *TOWARD A THEORY OF THE RENT-SEEKING SOCIETY* (James M. Buchanan & Robert D. Tollison eds., 1980).

⁵ Public goods have two characteristics: nonexcludability of would-be consumers and nonrivalrous consumption. Nonexcludability means that if one person consumes the good, it cannot feasibly be withheld from all other persons. MANCOUR OLSON, *THE LOGIC OF COLLECTIVE ACTION* 14 (1965). Nonrivalrous means that one person's consumption of the good does not diminish another person's consumption of the same good, or equivalently, the marginal cost of supplying the good to an additional individual is zero. Paul Samuelson, *The Pure Theory of Public Expenditure*, 36 REV. OF ECON. & STAT. 387, 389 (1954). The classic example of a pure public good is national defense, namely, once it is provided it is impossible or infeasible to exclude people from the benefits and the cost of protecting an additional individual is zero. JOSEPH E. STIGLITZ, *THE ECONOMICS OF THE PUBLIC SECTOR* 121-23 (1986).

⁶ See *infra* Part II. See generally *Dowling v. United States*, 473 U.S. 207, 221-27 (1985) (describing the evolution over the last century of broader and stiffer criminal penalties for copyright infringement); Mary Jane Saunders, *Criminal Copyright Infringement and the Copyright Felony Act*, 71 DENV. U. L. REV. 671 (1994); Carl H. Loewenson, Jr. & Marta E. Nelson, *Congress Toughens Criminal Copyright Law*, N.Y.L.J., Nov. 13, 1992, at 1.

⁷ For a complete discussion of the pre-1976 criminal copyright law, see *infra* Part II.

prison (for first time offenders) and ten years (for second time offenders).⁸ Thus, there has been a clear and dramatic shift toward stiffer and more stringent criminal penalties for copyright infringement.

This Comment posits that the traditional public choice model of rent seeking can explain the increase in criminal sanctions for copyright infringements. As the value of intellectual property rights has increased with the emergence of new technology, particularly in the area of computer software, the incentives for interests to expend resources in order to gain monopolies over these products have also increased.⁹ This Comment argues that Congress' decision to increase criminal penalties was driven by interest groups seeking copyrights protected by criminal sanctions as a means of restricting entry into an increasingly profitable market. Indeed, given the nature of intellectual property, criminal sanctions are the most effective means of restricting competition and realizing economic rents. Thus, this Comment extends the methodology of public choice from the civil to

⁸ For a complete discussion of the post-1992 criminal copyright law, see *infra* notes 73-80 and accompanying text.

⁹ The assumption is that a copyright confers a monopoly position over the copyrighted material. There are three distinct systems for granting property rights in ideas: patents; trademarks; and copyrights. ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 135 (1988). The distinguishing "[e]conomic characteristics of each of these methods for establishing property rights in information is that they are *monopoly* rights." *Id.* (emphasis in original). Specifically relating to copyrights, S.J. Leibowitz concludes that, "[i]ntellectual property law, by providing the copyright holder ownership over the intellectual product, provides a degree of monopoly power to these individuals. The lack of competition in the reproduction or use of the intellectual product allows greater remuneration to the copyright holder than would otherwise be the case." S.J. Leibowitz, *Copyright Law, Photocopying and Price Discrimination*, 8 RES. LAW & ECON. 181, 184 (1986). As a practical matter, there seems to be a spectrum between those copyrighted materials for which there are no substitutes and those for which there are near perfect substitutes. See William W. Fisher III, *Reconstructing the Fair Use Doctrine*, 101 HARV. L. REV. 1659, 1702-03 (1988). Accordingly, copyright confers a degree of monopoly power, and it gives greater monopoly power to some creators than others.

By contrast, some authors argue that copyrights do not confer monopoly positions over the copyrighted material. See, e.g., Kenneth W. Dam, *Some Economic Considerations in the Intellectual Property Protection of Software*, 24 J. LEGAL STUD. 321, 335-37 (1995). This does not, however, eliminate the possibility of rent seeking. Copyright holders enjoy economic rent. Indeed, Professor Dam recognizes this position when he opines that, "[t]he fact that the grant of intellectual property may permit the innovator to enjoy economic rent suggests that rent seeking may be a problem." *Id.* at 337 (but noting that certain copyright doctrines reduce the rent seeking threat); see also Kenneth W. Dam, *The Economic Underpinnings of Patent Law*, 23 J. LEGAL STUD. 247, 250 (1994) (arguing that patents do not constitute monopolies, but noting that "many patents, especially those that achieve commercial success, do result in the patentee enjoying the economic rent."). Therefore, even if copyrights are not monopolies, and Professor Dam is correct in asserting that certain copyright doctrines may reduce the problem of rent seeking, it nonetheless seems reasonable to assert that positive economic rent provides a sufficient incentive for interest groups to mobilize and seek to capture and protect these rents.

the criminal law formulation process. To public choice theorists such an argument may not seem particularly controversial. To legal scholars, however, such thinking may be quite revolutionary.

The fundamental purpose of the Comment is thus to demonstrate that the criminal law formulation process does not occur in a political vacuum; namely, it is not a frictionless process void of interest group activity. Given that quotas, tariffs and regulations are coveted by economic interests,¹⁰ it would seem reasonable to suggest that certain criminal sanctions are also coveted by economic interests. The secondary purpose of the Comment is to suggest that copyright protection may be inappropriate for certain works. Specifically, government-conferred copyrights enable the holder to realize economic rents, and these rents offer an incentive for interest groups to expend resources in order to gain these copyrights. This process of rent seeking means that there are greater costs associated with the current system of copyrights than the present literature suggests. Indeed, when these costs are factored into the equation, the benefits of copyright protection may not, on balance, outweigh the costs. It is important to emphasize, however, that the Comment's analysis is predominately positive (i.e., non-normative) and specific policy choices are beyond its scope.

In order to develop the above thesis, section II explores the increasingly criminal nature of copyright law and the legislative history behind the three most recent amendments to the Copyright Act. Section III explains the rent seeking model in some detail. Section IV gives a brief overview of the economics of intellectual property. Section V discusses the need for criminal sanctions as a means of deterring entry into a lucrative market for copyrighted material. This section applies the rent seeking model to the legislative history of the Copyright Act. Section V does not claim to prove a causal connection between interest group demands and the resulting law, but rather a conceptual correlation.¹¹ Some readers may view this section as pure assertion, and indeed, there is considerable scope for future research. This Comment, far from being the final word on the phenomenon of rent seeking in the area of copyright law, is meant to suggest the need for empirical research and further study. Finally, Section VI concludes.

¹⁰ See, e.g., George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. 3 (1971).

¹¹ A further qualification is that the Comment does not use statistical analysis. Although such analysis would be exceedingly useful, it is beyond the technical scope of this Comment.

II. THE INCREASE IN CRIMINAL SANCTIONS FOR COPYRIGHT INFRINGEMENT

For more than one hundred years, the federal government did not impose criminal penalties for copyright infringement.¹² In 1897, Congress amended the federal copyright law and, for the first time, promulgated criminal sanctions for those who infringed protected copyrights.¹³ The actions giving rise to criminal sanctions, however, were limited to unlawful performances and representations of copyrighted dramatic and musical compositions. The newly amended Copyright Act provided, "[i]f the unlawful performance and representation be willful and for profit, such person or persons shall be guilty of a misdemeanor and upon conviction may be imprisoned for a period not exceeding one year."¹⁴ Other forms of copyright infringement such as the unauthorized reproduction or distribution of a copyrighted work continued to be resolved through civil litigation.¹⁵

The first attempt to broaden criminal sanctions for copyright infringement occurred during the general copyright revision of 1909.¹⁶ The process that led to the Copyright Act of 1909¹⁷ was driven by industry representatives with a vested interest in copyright law.¹⁸ In order to revise the copyright laws, the Librarian of Congress convened a series of conferences.¹⁹ Invited to the conferences were representatives of industries protected by copyright legislation.²⁰ The draft bill generated out of these conferences, however, encountered opposition

¹² The focus of the Comment is on federal statutory law. Although copyright law in the United States developed along the parallel tracks of federal statutory and state common law, Congress, pursuant to the Copyright Act of 1976, chose to preempt the field, effectively ending a dichotomy that had received judicial approval for a century and a half. See 1 MELVILLE B. NIMMER, *NIMMER ON COPYRIGHT*, OV-3 (1995). For a short and concise history of the early state and federal copyright law, see Bernard A. Grossman, *Cycles in Copyright*, 22 N.Y.L. SCH. L. REV. 653, 658-66 (1977).

¹³ Act of Jan. 6, 1897, 29 Stat. 481, *reprinted in* 5 NIMMER, *supra* note 12, at App. 7-92 [21].

¹⁴ *Id.*

¹⁵ Saunders, *supra* note 6, at 673.

¹⁶ *Id.*

¹⁷ Act of Mar. 4, 1909, 35 Stat. 1075, *reprinted in* 5 NIMMER, *supra* note 12, at App. 6-1. The Copyright Act of 1909, as amended, continued to be effective through December 31, 1977 until the Copyright Act of 1976 came into effect on January 1, 1978. The Copyright Act of 1909 continues to govern pre-1978 causes of action. *Id.*, v.1, at OV-1.

¹⁸ See Jessica D. Litman, *Copyright Legislation and Technological Change*, 68 OR. L. REV. 275, 278 (1989) [hereinafter *Copyright Legislation*] (finding that "[C]ongress and the Copyright Office have settled on a scheme for statutory drafting that features meetings and negotiations among representatives of industries with interests in copyright. That scheme dominated copyright revision during the legislative process that led to the enactment of the 1909 Copyright Act.").

¹⁹ *Id.* at 284.

²⁰ *Id.*

from other interest groups not represented at the conferences.²¹ This conflict was resolved by subsequent negotiations between the various groups, and it was this interest group compromise that became the 1909 statute.²² The 1909 Copyright Act applied criminal infringement provisions to all types of copyrighted works except sound recordings.²³ The Act provided misdemeanor penalties of up to one year in jail or a fine between \$100 and \$1,000, or both, for "any person who willfully and for profit" infringed upon a protected copyright.²⁴

By 1971, there was a substantial increase in unauthorized record and tape duplication. For example, the House of Representatives Judiciary Committee estimated that the annual volume of unauthorized record and tape duplication exceeded \$100 million.²⁵ The Committee traced the problem to the exclusion of sound recordings from criminal copyright infringement provisions.²⁶ As Mary Jane Saunders notes, "[i]n response to demands from the sound recording industry, Congress extended general federal copyright protection to sound recordings with the Sound Recording Act of 1971."²⁷ Criminal sanctions, for the first time, were available against those who willfully and for profit infringement upon the copyright of protected sound recordings.

Apart from the Sound Recording Act of 1971, which represented an incremental adjustment, criminal copyright law remained largely unchanged from the original Copyright Act of 1909.²⁸ Indeed, in 1976 the House of Representatives Judiciary Committee noted that "[t]he present copyright law . . . is basically the same as the act of 1909."²⁹ There had been, however, dramatic changes in technology. Since 1909, a wide range of new techniques for capturing and communicating printed matter, visual images and recorded sounds had

²¹ *Id.* at 286. This opposition was driven by the not surprisingly one-sided nature of the draft bill. As Professor Litman notes, "[t]he copyright bill produced by the conferences conferred significant advantages upon composers and music publishers, who had participated, at the expense of the piano roll and talking machine [phonograph] industries, which had not." *Id.*

²² *Id.* at 287.

²³ Saunders, *supra* note 6, at 673. See also *Dowling v. United States*, 473 U.S. 207, 221 n.14 (1985).

²⁴ Copyright Act of Mar. 4, 1909, § 28, 54 Stat. 1075 (codified and amended as § 104), reprinted in 5 NIMMER, *supra* note 12, at App. 6-36.

²⁵ H.R. REP. NO. 487, 92d Cong., at 2 (1971), reprinted in 1971 U.S.C.C.A.N. 1566, 1567.

²⁶ *Id.*

²⁷ Saunders, *supra* note 6, at 674 (citing Act of Oct. 15, 1971, Pub. L. 92-140, 85 Stat. 391).

²⁸ H.R. REP. NO. 1476, 94th Cong., at 47 (1976), reprinted in 1976 U.S.C.C.A.N. 5659.

²⁹ *Id.*

emerged.³⁰ These technical advances generated new industries and new methods for the reproduction and dissemination of copyrighted works.³¹

Despite the rapid change in technology and the growth of new information-based industries, Congress did not provide a comprehensive revision of the copyright law until 1976.³² The legislative history behind the Copyright Act of 1976³³ is long and complex.³⁴ There were more than thirty studies, three reports issued by the Register of Copyrights, four panel discussions issued as committee prints, six series of subcommittee hearings, eighteen committee reports, and the introduction of at least nineteen general revision bills over a period of more than twenty years.³⁵

Most commentators agree that the final version of the Act was the

³⁰ *Id.*

³¹ *Id.*

³² The reason for the delay was not for want of trying. Indeed, there were proposals and efforts to revamp the copyright law for more than 20 years. *Id.* The fundamental barriers to change were conflicting sectional interests. In his 1965 testimony to the Senate Subcommittee on Patents, Copyrights and Trademarks, Abraham Kaminstein, Register of Copyrights, explained:

[Before] the House Judiciary Committee earlier this year a question was raised as to why, in view of the fast-evolving communications technology, there have not been more frequent revisions of the copyright law. If there is a single answer to this question, I believe it is that there are so many interrelated creator-user interests in the copyright field, and they present such sharp conflicts on individual issues, that the consensus necessary for any general revision is extremely difficult to achieve. Examples of this difficulty are found throughout the concentrated efforts to revise the 1909 act which went on continuously between 1924 and 1940 and which all ended in failure and futility. Realizing fully what copyright law revision is up against, Arthur Fisher, my predecessor as Register of Copyrights, planned a program that would be based on a thorough knowledge of all the issues and a painstaking effort to resolve as many disputes as possible before a bill reached the stage of congressional hearings. It took us 10 years, but the program he planned has been carried out to the best of our ability.

Copyright Law Revision: Hearings on S. 1006 Before the Subcomm. on Patents, Trademarks and Copyrights of the Senate Comm. on the Judiciary, 89th Cong. 66 (1965).

³³ Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified at 17 U.S.C. §§ 101-1101), reprinted in 5 NIMMER, *supra* note 12, at App. 2-1.

³⁴ For an excellent, in-depth examination of the legislative history behind the Copyright Act of 1976, see Jessica D. Litman, *Copyright, Compromise and Legislative History*, 72 CORNELL L. REV. 857 (1987).

The legislative materials disclose a process of continuing negotiations among various industry representatives, designed and supervised by Congress and the Copyright Office and aimed at forging a modern copyright statute from a negotiated consensus. During more than twenty years of negotiations, the substantive content of the statute emerged as a series of interrelated and dependent compromises among industries with differing interests in copyright. The record demonstrates that members of Congress chose to enact compromises whose wisdom they doubted because of their belief that, in this area of law, the solution of compromise was the best solution.

Id. at 862. See also *Mills Music, Inc. v. Snyder*, 469 U.S. 153, 159-61 (1985) (noting that the 1976 Act was the culmination of twenty years of congressional hearings); *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 462-63 n.9 (1984) (same).

³⁵ Litman, *supra* note 34, at 865.

result of interest group negotiations and compromise through congressional institutional structures.³⁶ As Professor Litman observed, “[m]ost of the statutory language was not drafted by members of Congress or their staffs at all.”³⁷ Rather, the language evolved through a process of negotiation among authors, publishers, and other parties with economic interests in the property rights that the statute created.³⁸ Indeed, by the time the House and Senate subcommittees began holding hearings on copyright revision legislation, the participants in the pre-hearing negotiations had reached agreement on the bill’s basic structure.³⁹ “Members of Congress openly acknowledged their limited substantive expertise and their largely supervisory role in the drafting process.”⁴⁰

The Copyright Act further expanded the scope and amount of

³⁶ *Id.* at 861-62. See also Litman, *Copyright Legislation*, *supra* note 18, at 281. As Litman notes:

Congress and the Copyright Office [as in the Copyright Act of 1909] again depended on negotiations among representatives of an assortment of interests affected by copyright to draft a copyright bill. During twenty-one years of inter-industry squabbling, the private parties to the ongoing negotiations settled on a strategy for the future that all of them could support.

Id. at 281. See also Barbara Ringer, *First Thoughts On The Copyright Act of 1976*, 22 N.Y.L. SCH. L. REV. 477, 482 (1977) (“[t]he law as a whole bespeaks concern for literally hundreds of contending and overlapping special interests from every conceivable segment of our pluralistic society.”).

³⁷ Litman, *supra* note 34, at 860-61.

³⁸ *Id.* at 861.

³⁹ *Id.* at 873.

⁴⁰ *Id.* at 880. Although Professor Litman’s account of the legislative history leading to the various Copyright Act revisions is being used by this Comment, it is important to note that she would not necessarily agree with its thesis. Indeed, Professor Litman labels the public choice argument the “market model.” She frames the market model as follows:

Recently, some commentators have suggested that courts should view statutes as negotiated, enforceable bargains between lobbyists and legislators. They see the legislative process as a ‘market’ in which special interests barter campaign contributions, votes, and endorsements in return for favorable legislation. Courts, they argue, should interpret and enforce at least some statutes as if they were integrated contracts.

Id. at 880 (citing William Landes & Richard Posner, *The Independent Judiciary in an Interest-Group Perspective*, 18 J.L. & ECON. 875 (1975)). Professor Litman criticizes the “market” model and argues that it applies poorly to the 1976 Copyright Act. *Id.* at 881. Specifically, the negotiated bargains were not being struck between legislatures and interest groups, but among industrial representatives because Congress forced the competing interests to sit down and negotiate. *Id.* Professor Litman misses the mark somewhat. Public choice theorists do not posit a simple model where an interest approaches a member of Congress for legislation, and the member acquiesces. Rather, a rent seeking model explained in detail below, see *infra* Part III, suggests that there is considerable competition between the interests themselves for favorable legislation. Indeed, the biggest opposition to favorable group legislation is other competing interest groups. See generally Gary S. Becker, *Public Policies, Pressure Groups, and Deadweight Costs*, 28 J. PUB. ECON. 329 (1985), reprinted in GEORGE STIGLER, *CHICAGO STUDIES IN POLITICAL ECONOMY* 85 (1988); Sam Peltzman, *Toward a More General Theory of Regulation*, 19 J.L. & ECON. 211 (1976), reprinted in STIGLER, *supra*, at 234.

criminal sanctions for copyright infringement.⁴¹ The 1976 Act amended the criminal provisions of copyright law in two significant ways.⁴² First, the 1976 Act relaxed the mens rea required for criminal copyright infringement. Instead of proof that the infringement was done willfully and for profit, the offense of criminal infringement now only required conduct which was done "willfully and for the purpose of commercial advantage or private financial gain."⁴³

Second, the 1976 Act increased the criminal sanctions for copyright infringement. Persons convicted of the misdemeanor offense of criminal infringement under the Act faced a maximum of \$10,000 or imprisonment for not more than one year, or both.⁴⁴ In the case of sound recordings or motion pictures, the courts could increase the fine to \$25,000.⁴⁵ Repeat offenders faced increased fines of not more than \$50,000 or imprisonment for not more than two years, or both.⁴⁶ In addition to the above changes, "[u]pon conviction of criminal copyright infringement, the 1976 Act provided for the forfeiture, destruction, or disposition of all infringing copies or phonorecords and all implements, devices, or equipment used in the manufacture of such infringing copies or phonorecords."⁴⁷ The Act made forfeiture and destruction mandatory for criminal copyright infringement but discretionary with the courts in civil actions.

During the mid and late 1970s, two trade associations, the Motion Picture Association of America, Inc. (MPAA) and the Recording In-

⁴¹ It is interesting to note that despite the urging of representatives of the film industry, see *Copyright Law Revision: Hearings on H.R. 2223 Before the House Subcomm. on Courts, Civil Liberties, and the Administration of Justice*, 94th Cong., at 716 (1975) (statement of Jack Valenti, president of the Motion Picture Association of America, Inc.), and the initial inclination of the Senate, see S. REP. NO. 94-437 at 146 (1975), Congress declined to provide felony penalties for copyright infringement involving sound recordings and motion pictures. As noted in the text, Congress did increase the amount and scope of criminal penalties, but felony penalties would not be adopted for another six years.

⁴² Saunders, *supra* note 6, at 674.

⁴³ 17 U.S.C. § 506(a) (1978). The 1976 Act does not mandate evidence that the defendant actually realized commercial advantage or private financial gain, only that the defendant's activity or activities were for the purpose of financial gain or benefit. See *United States v. Cross*, 816 F.2d 297, 301 (7th Cir. 1987) (holding that a video store sales assistant's assertion that she, as a store employee and not the owner, realized no commercial advantage or private financial gain from alleged conspiracy, nevertheless did not preclude liability for criminal copyright infringement).

⁴⁴ 17 U.S.C. § 506(a) (1978).

⁴⁵ 17 U.S.C. § 106 (1978).

⁴⁶ 18 U.S.C. § 2319(b)(1)(c) (1988), amended by 18 U.S.C. § 2319 (Supp. IV 1992).

⁴⁷ Saunders, *supra* note 6, at 675 (citing 17 U.S.C. § 506(b) (1978)). See also *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 434 n.15 (1984) (observing that "anyone who willfully infringes the copyright to reproduce a motion picture for purposes of financial gain is subject to substantial criminal penalties, and the fruits and instrumentalities of the crime are forfeited upon conviction.").

dustry Association of America, Inc. (RIAA), organized an effort to increase the penalties for film and record unauthorized duplication.⁴⁸ In 1979, the MPAA and the RIAA reported that even though the motion picture and sound recording industries were spending upward of \$1 million a year to investigate and prosecute unauthorized duplication through civil action, the occurrence of such duplication remained widespread.⁴⁹

The motion picture and sound recording industries wanted Congress to adopt, for the first time, felony penalties for certain forms of copyright infringement. Their basic concerns were twofold. First, civil infringement actions had no deterrent effect on sophisticated persons engaged in unauthorized duplication. In a joint statement before the Senate Subcommittee on Criminal Law, the MPAA and the RIAA opined that the "[e]xisting criminal penalties do not deter counterfeiters and pirates. A first offense is only a misdemeanor, a very small risk in light of the enormous profits to be made."⁵⁰ Second, the penalties prescribed under existing law tended to discourage criminal enforcement efforts.⁵¹ The U.S. Attorney, confronted with a wide range of possible prosecutions, preferred the prospect of almost any felony conviction to misdemeanor conviction for copyright infringement.⁵²

In 1982, Congress responded to the efforts of the motion picture and sound recording industries by restructuring, and moreover, increasing the sanctions for criminal copyright infringement.⁵³ The offense of criminal infringement was still defined in § 506(a) of Title 17; the penalties, however, were placed in new § 2319 of Title 18. Further, certain acts of criminal copyright infringement were increased to felony offenses.⁵⁴ The first felony provisions that were created for criminal copyright infringement involved reproduction or distribution of records, motion pictures and audiovisual works. These felony provisions provided for substantial sanctions and were based on a formula of time periods and numerical thresholds of infringing copies

⁴⁸ Saunders, *supra* note 6, at 675.

⁴⁹ See *Hearings on Reform of Federal Criminal Laws Before the Senate Comm. on the Judiciary*, 96th Cong., at 10694 (1979) (joint statement of the MPAA and RIAA). The MPAA and the RIAA estimated that by 1979 "all forms of record and film counterfeiting and piracy" were draining more than "\$650 million annually from legitimate sales and rentals in both industries." *Id.* at 10697.

⁵⁰ *Hearings on the Piracy and Counterfeiting Amendments Act of 1981 (S. 691) Before the Senate Subcomm. on Criminal Law*, 97th Cong., at 27 (1981) (joint statement of the MPAA and RIAA).

⁵¹ *Id.*

⁵² *Id.*

⁵³ Act of May 24, 1982, Pub. L. No. 97-180, 97th Cong., 96 Stat. 91.

⁵⁴ Saunders, *supra* note 6, at 676.

or phonorecords reproduced or distributed.⁵⁵

For example, if the defendant was convicted of reproducing or distributing, during any 180-day period, "at least one thousand phonorecords or copies infringing the copyright in one or more sound recordings," or "at least sixty-five copies infringing the copyright in one or more motion pictures or other audiovisual works," or the conviction was a second offense, the court could impose a fine not more than \$250,000, a sentence not more than five years, or both.⁵⁶ The same maximum fine of \$250,000, but a less severe sentence of not more than two years, or both, was prescribed for criminal infringement involving "the reproduction or distribution, during any one one-hundred-and-eighty day period, of more than one hundred but less than one thousand phonorecords or copies infringing the copyright in one or more sound recordings," or "more than seven but less than sixty-five copies infringing the copyright in one or more motion pictures or other audiovisual works."⁵⁷

Even after these new felony sanctions were enacted, most criminal copyright infringement remained a misdemeanor offense. For example, in "any other case" of criminal copyright infringement the penalty was a fine of not more than \$25,000, or imprisonment for not more than one year, or both.⁵⁸ Thus, the misdemeanor penalty was applicable to criminal infringement of any works other than the aforementioned sound recordings, motion pictures and other audiovisual works. The misdemeanor penalty was also the penalty to be applied to criminal infringement of sound recordings, motion pictures and other audiovisual works, if the number of infringing copies fell below the statutory numerical thresholds.

In the wake of legislation increasing the criminal penalties for copyright infringement involving motion pictures, sound recordings and audiovisual works, the computer software industry became aware that it had a problem with large scale unauthorized duplication of software programs.⁵⁹ When the penalties were increased for unau-

⁵⁵ *Id.*

⁵⁶ 18 U.S.C. § 2319(b)(1) (1988), incorporated by reference in 17 U.S.C. § 506(a), as amended by the Act of May 24, 1982 (Pub. L. 97-180).

⁵⁷ 18 U.S.C. § 2319(b)(2) (1988), incorporated by reference in 17 U.S.C. § 506(a), as amended by the Act of May 24, 1982 (Pub. L. 97-180).

⁵⁸ 18 U.S.C. § 2319(b)(3) (1988), incorporated by reference in 17 U.S.C. § 506(a), as amended by Act of May 24, 1982 (Pub. L. 97-180).

⁵⁹ See *Criminal Sanctions for Violations of Software Copyright: Hearings on S.893 Before the Subcomm. on Intellectual Property and Judicial Admin. of the House Comm. on the Judiciary*, 102d Cong. 27 (1992) (prepared statement of Gail Penner on behalf of the Software Publishers Association) ("[w]e estimate that revenue lost to software piracy in the U.S. was \$2.4 billion in 1990, the last year for which we have statistics.").

thorized duplication of motion pictures and sound recordings, the computer software industry did not enjoy a mass market, and indeed, was only in its infancy stage of development.⁶⁰ By the late 1980s, however, the software industry had emerged as one of the fastest growing sectors of the U.S. economy.⁶¹

Accordingly, the software and video game industries, following the example set by the motion picture and sound recording industries, turned to Congress.⁶² These industries based their call for felony sanction on the same reasons that previous industries did, namely, the system of civil and misdemeanor sanctions did not deter large scale unauthorized duplication and did not provide incentives for federal prosecutors.⁶³ Senators Orrin Hatch (R-Ut) and Dennis DeConcini (D-Az) initiated Senate Bill 893, to create felony sanctions for willful violation of copyrighted software.⁶⁴

As originally drafted, Senate Bill 893 applied only to software. Senator Hatch's bill amended § 2319 of Title 18, and provided that the reproduction or distribution of fifty or more infringing copies of computer software over a 180-day period would be punishable with up to a five-year prison term and a \$250,000 fine.⁶⁵ The reproduction of ten to forty-nine copies within that same period would be punishable by a fine of up to \$250,000 and/or two years in prison.⁶⁶ Other violations would be punishable by up to a \$25,000 fine and/or one year in prison.⁶⁷

The Subcommittee on Intellectual Property and Judicial Administration, House Judiciary Committee, held hearings on Senate Bill 893.⁶⁸ Testimony at the hearing was received from representatives of the computer software and video game industries.⁶⁹ After this hear-

⁶⁰ *Id.* at 26.

⁶¹ *Id.*

⁶² Saunders, *supra* note 6, at 679.

⁶³ See *Criminal Sanctions for Violations of Software Copyright*, *supra* note 59, at 26-34.

⁶⁴ Saunders, *supra* note 6, at 679.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ See *Criminal Sanctions for Violations of Software Copyright*, *supra* note 59.

⁶⁹ *Id.* Testifying at the Subcommittee hearing on S. 893 were James Charne, general counsel, Absolute Entertainment, Inc., representing the video game industry; Gail Penner, counsel, Autodesk, Inc., representing the Software Publishers Association; Edward J. Black, vice president and general counsel, Computer & Communications Industry Association, representing computer manufactures; and David M. Ostfeld, chairman, Institute of Electrical & Electronics Engineers, Inc., United States Activities, representing electrical and computer engineers. Charne and Penner endorsed S. 893, whereas, Black and Ostfeld expressed concern that felony provisions might be misapplied to ordinary business disputes and situations involving reverse engineering. Reverse engineering is defined as:

[A] method of analyzing a product in which the finished item is studied to determine

ing, the Subcommittee Chairman, Representative William Hughes (D-NJ), proposed an amendment in the nature of a substitute to Senate Bill 893.⁷⁰ Rather than adopting a piecemeal approach to copyright legislation and simply adding computer programs to the list of works whose infringement rise to felony penalties, Representative Hughes suggested that felony provisions should apply to willful infringement of all types of copyrighted works.⁷¹ Representative Hughes also recommended altering the numerical thresholds that must be satisfied before felony liability might be imposed.⁷² Representative Hughes' amendment, in the nature of a substitute, received the endorsement of the proponents of Senate Bill 893, and upon approval in Conference, became the Copyright Felony Act.

This most recent amendment to the Copyright Act in 1992 further increased the criminal sanctions and lowered the numerical thresholds for copyright infringement.⁷³ Offenders convicted under the Copyright Act for the first time may be imprisoned for up to five years⁷⁴ or fined up to \$250,000 (individuals), \$500,000 (organizations),⁷⁵ or twice the gains from the offense⁷⁶ if the offense consists of the reproduction or distribution during a 180-day period of at least ten copies with a retail value of more than \$2,500.⁷⁷ If the offender has been convicted under the statute previously, the maximum prison sentence increases to ten years.⁷⁸ The Copyright Act also prescribes a misdemeanor sentence of up to one year for any criminal copyright infringement failing to reach the numerical thresholds described

its makeup or component parts, typically for the purpose of creating a copy or a competitive product—for example, studying a completed ROM chip to determine its programming or studying a new computer system to learn about its design.

MICROSOFT PRESS COMPUTER DICTIONARY 300 (1st ed. 1991), *quoted in* Lawrence D. Graham & Richard O. Zerbe, Jr., *Economically Efficient Treatment of Computer Software: Reverse Engineering, Protection, and Disclosure*, 22 RUTGERS COMPUTER & TECH. L.J. 61, 63 n.3 (1996) (examining the appropriate level of protection for software in general, and the value of reverse engineering in particular).

⁷⁰ See H.R. REP. NO. 102-997, 102d Cong., at 4 (1992), *reprinted in* 1992 U.S.C.A.N. 3569.

⁷¹ *Id.* (“[t]he substitute harmonizes the felony provisions in section 2319 to apply to all types of copyrighted works, as is currently the case for misdemeanor violations.”).

⁷² *Id.*

⁷³ 17 U.S.C. § 506(a) (1988 & Supp. V 1995). Section 506 also addresses other criminal activities related to copyrights such as fraudulent use of copyright notice, fraudulent removal of copyright notice, and false representation in connection with a copyright application. 17 U.S.C. § 506(c)-(d) (1988 & Supp. V 1995).

⁷⁴ 18 U.S.C. § 2319(b)(1) (1994).

⁷⁵ 18 U.S.C. § 357(b)-(c) (1988 & Supp. V 1995).

⁷⁶ *Id.* § 357(d).

⁷⁷ 18 U.S.C. § 2319(b)(1) (1994).

⁷⁸ *Id.* § 2319(b)(2).

above.⁷⁹ Finally, § 506(b) continues to mandate the forfeiture and destruction of infringing items and all implements, devices, or equipment used in their manufacture.⁸⁰

What drove these changes in federal copyright law? The legislative history demonstrates that industry specific interest groups were instrumental in driving the shift from copyright law based on misdemeanor penalties to one based on felony sanctions. Thus, the more fundamental question becomes, why was there so much interest group activity? Why were interest groups so involved during the amendments to the copyright law, but when Congress adopted general criminal deterrence measures such as the Sentencing Guidelines? In addition, why did these interests start to pursue increased criminal sanctions during the 1970s and 1980s, as opposed to the 1910s and 1920s, or at any other juncture? Lastly, why did these interests seek criminal sanctions rather than other forms of penalties or, in the traditional interest group manner, subsidies or tax advantages?

Most legal commentators who have examined the legislative history of various amendments and alterations to the copyright law have been reluctant to develop a model which has explanatory and predicative power. For example, Professor Litman, after criticizing the market model adopted by legal economists, stated that she "offer[ed] no . . . competing model."⁸¹ This non-systematic approach contrasts with the work done by public choice theorists in other legislative contexts. They have developed a parsimonious model—the rent seeking model—which has explanatory and predictive power. The remainder of the Comment attempts to facilitate the same analytical approach used by public choice theorists, and apply it to the criminal law context.

III. THE RENT SEEKING MODEL

A. ECONOMIC RENT IN A COMPETITIVE MARKET

An economic rent is that part of the payment to an owner of a resource over and above that which the resource could command in its next highest use, that is, payment greater than the opportunity cost.⁸² For example, a lawyer earning \$70,000 whose only alternative occupation is being a paralegal for \$30,000 yields an economic rent of \$40,000. There would, however, seem to be no allocative necessity for

⁷⁹ *Id.* § 2319(b)(3).

⁸⁰ 17 U.S.C. § 506(b) (1994).

⁸¹ Litman, *supra* note 34, at 881.

⁸² James M. Buchanan, *Rent Seeking and Profit Seeking*, in *TOWARD A THEORY OF THE RENT-SEEKING SOCIETY*, *supra* note 4, at 5.

such excess.⁸³ The resource (good, skill, service etc.) would have been directed toward the observed employment for any payment above cost, even an infinitesimally smaller sum.⁸⁴ The lawyer would remain in his current position even if paid only \$30,100. For our purposes, and the definition which is most commonly referred to, a firm making excess profits is earning economic rent.⁸⁵

In an ordered market structure, the potential attractiveness of economic rents serves an important function. It offers the motivation to resource owners and entrepreneurs who combine resources into production.⁸⁶ By constantly seeking new opportunities to earn economic rent and to exploit more fully existing opportunities, profit-seeking entrepreneurs generate a dynamic process of continuous resource reallocation that ensures economic growth and development.⁸⁷

Economic rents are dissipated as the market adjusts to new and emerging opportunities.⁸⁸ Imagine an entrepreneur discovers a use for a resource that had not been previously used. The entrepreneur organizes production and commences sale of the new product or service. Due to his initiative, the entrepreneur is a pure monopolist and can, consequently, charge a monopoly price. In a competitive market, the entrepreneur realizes quasi-rent. Quasi-rent is the excess made in the short run by an entrepreneur/firm from the difference between the selling price and the variable cost of production.⁸⁹ For example, suppose a firm can make pens at a cost of 10 cents in labor and raw materials, and can sell them for 40 cents. A quasi-rent of 30 cents is earned. This is not, however, the profit of the firm because there are costs of other inputs which have to be covered by sales, even though they do not add to the cost of making extra pens, such as the initial investment in the factory where the pens are manufactured.

Quasi-rent, therefore, is analogous to economic rent because it

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ Two types of profits are distinguished in economics. Normal or accounting profit is the opportunity cost of the entrepreneur, that is, the minimum amount necessary to attract him to an activity or to induce him to remain in the activity. Super-normal economic profit is any profit over and above normal profit. Super-normal profit will be earned only in the short run and is a return to monopoly power, which, unless there are barriers to entry, will be dissipated by new entrants into the market. See *infra* notes 95-107 and accompanying text. See also GRAHAM BANNOCK ET AL., *THE PENGUIN DICTIONARY OF ECONOMICS* 345 (5th ed. 1992).

⁸⁶ Buchanan, *supra* note 82, at 5.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ BANNOCK ET AL., *supra* note 85, at 355. For an interesting analysis of potentially appropriable quasi-rents, see Benjamin Klein et al., *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J.L. & ECON. 297 (1978).

represents a return in excess of that necessary to keep the firm in production. It differs from economic rent, however, in that it is a temporary phenomenon. It can exist because, in the short run, price may differ from marginal cost as firms take time to enter the market and reduce excess profits. In other words, in a competitive market, the entrepreneur is only a short term monopolist.⁹⁰ The fact that the innovating entrepreneur is observed to be receiving quasi-rent conveys information to other non-innovating but potentially imitating producers of the product or service.⁹¹

Assuming no barriers to entry, other producers enter the market and sell the new product or a close substitute which causes output to expand and the price to drop.⁹² The initial monopoly position, and hence the quasi-rent of the innovator is dissipated to the benefit of consumers generally.⁹³ Therefore, rents received by producers are eroded in the dynamics of competitive market adjustment and resources come to be allocated efficiently between the producer of the new product and other uses in the economy.⁹⁴

B. RENT SEEKING: CREATING UNCOMPETITIVE MARKETS

The above discussion conveniently assumed away restrictions upon entry. Producers, however, have an incentive to seek such restrictions. If a producer successfully bars entry into his market, then he can earn monopoly rents for an indefinite period. The producer does not need to invest resources into new modes of production in order to reduce costs or improve upon the use of existing resources, rather he can rely on barriers on entry to realize economic rent.

Figure 1 is useful for demonstrating this point.⁹⁵ When the market price rises from the competitive level (P_c) to the monopoly price (P_m), consumers who continue to purchase the seller's product at the new higher price suffer a loss (L), exactly offset by the additional revenues that the seller obtains at the higher price. Thus, consumer's loss (L) is exactly equal to the producer's gain (the economic rent). In the language of economists, consumer surplus has been transferred into producer surplus.⁹⁶ Those who stop buying the product suffer a

⁹⁰ Buchanan, *supra* note 82, at 5.

⁹¹ *Id.* at 7.

⁹² *Id.*

⁹³ *Id.*

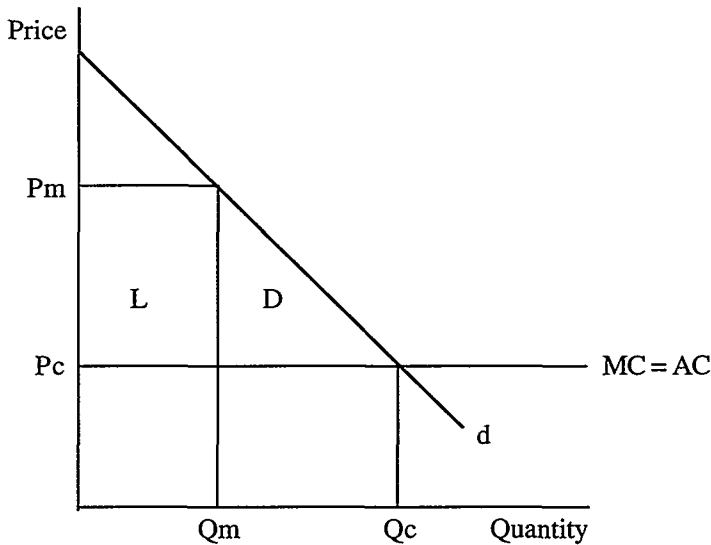
⁹⁴ *Id.*

⁹⁵ The graph is adapted from Richard A. Posner, *The Social Costs of Monopoly and Regulation*, in TOWARD A THEORY OF THE RENT-SEEKING SOCIETY, *supra* note 4, at 72.

⁹⁶ Consumer surplus is the amount by which consumers value a product over and above what they pay for it. This term was coined by Alfred Marshall who explained it as follows: The price which a person pays for a thing can never exceed and seldom comes up to

loss, (D), not offset by any gain to the seller. This is the "deadweight loss" from uncompetitive pricing, and in traditional microeconomic analysis it is the only social cost, L being regarded merely as a transfer from consumers to producers.⁹⁷ However, as discussed in greater detail below, loss (D) substantially understates the social cost of monopoly.⁹⁸

FIGURE 1



A producer can realize monopoly rents in one of four ways. First, a producer can discover a new product or a new method of making a product. The producer, due to his initiative, may be able to earn quasi-rents. However, as discussed above, quasi-rent differs from monopoly rent in that the former is only a short term phenomenon. As firms enter the market, these quasi-rents are dissipated.

Second, a producer may seek to monopolize the market. If there

that which he would be willing to pay rather than go without it: so that the satisfaction which he gets from its purchase generally exceeds that which he gives up in paying away its price: and he thus derives from the purchase a surplus of satisfaction. The excess of the price which he would be willing to pay rather than go without the thing, over that which he actually does pay, is the economic measure of this surplus satisfaction.

BANNOCK ET AL., *supra* note 85, at 84-85. Producer surplus is the excess of the revenue received by the supplier of a product or service over the minimum amount he would be willing to accept to maintain the same level of supply. *Id.* at 343.

⁹⁷ A.C. Harberger, *Using the Resources at Hand More Effectively*, 49 AM. ECON. REV. 134 (1959) (examining the welfare impact of tariffs).

⁹⁸ See Tullock, *Welfare Costs*, *supra* note 2. See also Krueger, *supra* note 2; Posner, *supra* note 95, at 71.

are economies of scale to be gained,⁹⁹ then the producer can expand production so as to produce at the bottom of the average cost curve. But, as is often the case, firms which enjoy economies of scale are often price-regulated.¹⁰⁰ Further, there is the problem of contestable natural monopolies.¹⁰¹ For instance, given the economies, it may benefit only one airline to serve the route between Chicago and Gary, Indiana. But if the airline increases the price in order to earn monopoly rents, a second airline may move into the route and attract the disgruntled customers. The second airline can do so because the marginal cost of transferring an existing airline route is minimal. Even if a producer does not enjoy economies, it may still seek to increase market power, but there remains the problem of market entry from potential competitors.

Third, monopoly rents can be realized through the creation of a cartel, whereby a number of companies producing a particular product join together and restrict production. Assuming a fairly inelastic demand,¹⁰² profits for each firm will increase.¹⁰³ OPEC (Organization of Petroleum Exporting Countries) during the 1970s provides a good example of a cartel.¹⁰⁴ From the cartel's perspective there are

⁹⁹ Economies of scale exist when factors which cause the average cost of producing a commodity to fall as output of the commodity rises. For instance, a firm or industry which would less than double its costs, if it doubled its output, enjoys economies of scale. Thus, such firms or industry are characterized by falling average cost curves. BANNOCK ET AL., *supra* note 85, at 130-31.

¹⁰⁰ Harold Demsetz argues, however, that firms or industries which enjoy economies need not be regulated in the traditional manner, that is, through price controls. Rather, governmental regulatory bodies should adopt a process of bidding, rather like the current approach adopted by governmental bodies for other standard services such as ambulance services, road construction and so on. If a natural monopoly attempts to earn monopoly rents, then the governmental authority should bid the work out to other parties. Such a process would keep the price above marginal cost, but below the monopoly price. Harold Demsetz, *Why Regulate Utilities?*, 11 J.L. & ECON. 55 (1968).

¹⁰¹ See WILLIAM J. BAUMOL ET AL., *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE* (1982); Elizabeth E. Bailey & William J. Baumol, *Deregulation and the Theory of Contestable Markets*, 1 YALE J. ON REG. 111 (1984).

¹⁰² The price elasticity of a demand or a supply curve is defined as the percentage change in quantity divided the percentage change in price. For example, an inelastic demand means a large change in price results in only a small change in quantity. By contrast, an elastic demand means a small change in price results in a large change in quantity. The two extremes are perfectly elastic (a horizontal supply or demand curve) and perfectly inelastic (a vertical supply or demand curve). DAVID D. FRIEDMAN, *PRICE THEORY: AN INTERMEDIATE TEXT* 160 (2d ed. 1990).

¹⁰³ Elasticity of demand is important when examining the amount resources devoted to securing a (public or private) monopoly or cartel. A given industry or firm will be less enthusiastic about restrictions on entry when the demand for the industry is highly elastic. Resources devoted to monopolization yield a low rate of return because price cannot be increased without a significant fall in consumer demand. Peltzman, *supra* note 40.

¹⁰⁴ WILLIAM F. SHUGHART II, *THE ORGANIZATION OF INDUSTRY* 226 n.1 (1990). See also Ian Ayres & John Braithwaite, *Partial-Industry Regulation: A Monopsony Standard for Consumer Pro-*

two problems. First, there is still the problem of entry. Second, within the cartel framework a free rider problem exists.¹⁰⁵ There is a direct incentive for a firm to lower its prices in order to gain an even larger share of the super-normal profits. This leads all firms to lower their prices in order to prevent losing market share. Therefore, each company is worse off (although the consumer is better off) due to the free rider. Again OPEC provides a solid example of the free rider problem destroying a cartel.¹⁰⁶

Thus, a firm has an incentive to seek a government conferred monopoly in order to avoid the problems of entry and/or the free rider problem. If a firm can gain a legal monopoly via governmental mechanisms, then the firm can realize monopoly rents without the threat of entry or competition. This constitutes the fourth way a firm can realize monopoly rents. In Figure 2, a firm will produce at Q_c and price at P_c in a competitive market. If the firm achieves a governmentally sanctioned monopoly, then it can maximize profits by producing where marginal cost (MC) intersects marginal revenue (MR), thereby charging P_m . The firm earns monopoly rents, R . Therefore, rent seeking is defined as the "collusive pursuit by producers of restrictions on competition that transfer consumer surplus into producer surplus."¹⁰⁷

lection, 80 CAL. L. REV. 13, 38-43 (1992).

¹⁰⁵ For an explanation of the free rider problem, see *infra* note 131 and accompanying text.

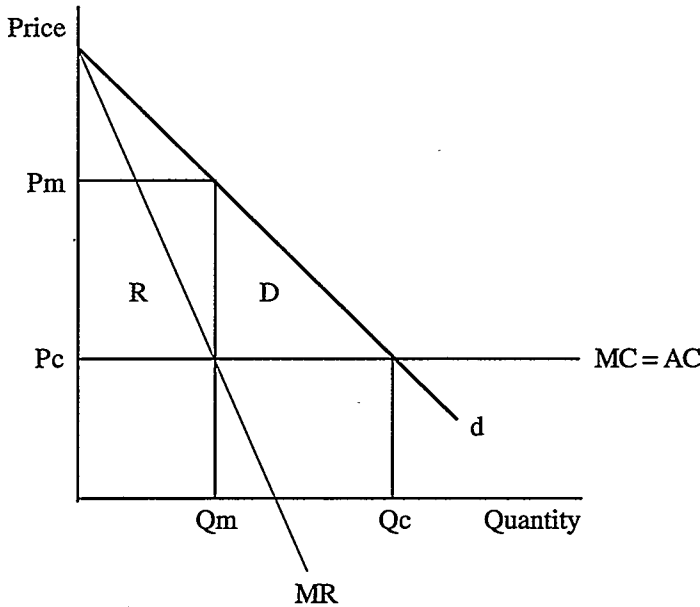
¹⁰⁶ Ayres & Braithwaite, *supra* note 104, at 38-39:

After thirteen years of successful collusion, the oil cartel of the Organization of Petroleum Exporting Countries (OPEC) disintegrated in 1986. The cartel dissolved when price chiseling by individual member nations instigated a price war that more than halved the price of oil. The instability of OPEC was brought on in part by the downturn in United States demand for oil. With reduced demand, some OPEC members could no longer stay within their OPEC production quota and still generate the revenues required for domestic programs. To increase revenues, the poorest oil-exporting nations began to cut the cartel price in an effort to regain some lost demand.

See also Ian Ayres, *How Cartels Punish: A Structural Theory of Self-Enforcing Collusion*, 87 COLUM. L. REV. 295, 314-16 (1987).

¹⁰⁷ Gordon Tullock, *The Cost of Special Privilege*, in PERSPECTIVES ON POSITIVE POLITICAL ECONOMY 199 (James E. Alt & Kenneth A. Shepsle eds., 1984).

FIGURE 2.



Rent seeking does not, however, result in a straight transfer of consumer surplus to producer surplus.¹⁰⁸ There are substantial dead-weight losses associated with the unproductive search for rents via governmentally sanctioned barriers to entry. Dead-weight loss is the net loss of consumer surplus which occurs when rent seeking is successful in transferring consumer surplus into producer surplus.¹⁰⁹ Dead weight losses emerge for three possible reasons. First, the full consumer demand is not satisfied thus resulting in the classic monopoly welfare loss triangle, D, in Figures 1 and 2. Second, and moreover, resources are expended in the search for restrictions on entry. Specifically, resources will be invested until rates of return are similar to other investments. If a computer software manufacturer can yield a better rate of return investing time and money in Washington (i.e., lobbying) than developing better modes of production or more effective products, then he will not invest in a new mode of production but instead put resources into congressional lobbying. Such expenditures constitute net social waste.

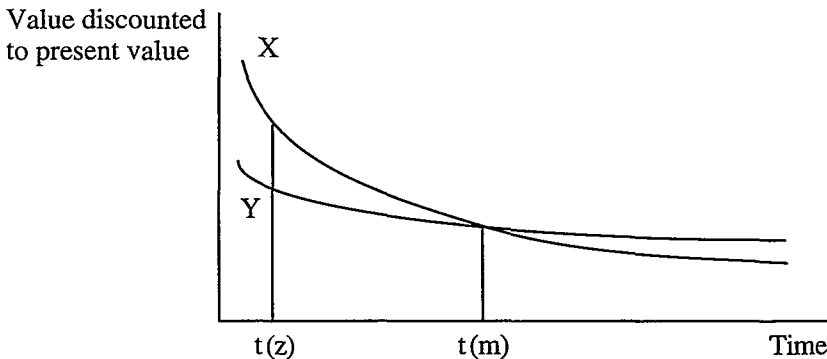
In the context of copyrights and patents, there is a third way by

¹⁰⁸ See *supra* note 96 and accompanying text.

¹⁰⁹ Discussion with Professor Patrick Dunleavy, Dep't of Gov't, London School of Economics & Political Science (Dec. 1, 1993). For an interesting overview and critique of the traditional public choice model regarding interest group behavior see PATRICK DUNLEAVY, *DEMOCRACY, BUREAUCRACY AND PUBLIC CHOICE: ECONOMIC EXPLANATIONS IN POLITICAL SCIENCE* 36-78 (1991).

which rent seeking dissipates rents and results in dead weight loss. Yoram Barzel argues that competition between potential innovators to obtain property rights (and rents) from innovations can result in premature applications of the discoveries.¹¹⁰ The argument can be most effectively displayed graphically.¹¹¹ In Figure 3, Y is the discounted flow of benefits from innovation and X is the opportunity cost, that is, the value of the resources used elsewhere.¹¹² If the investment in the innovation is delayed from t to $t + 1$, the cost saving is the interest that the capital earns elsewhere in the economy.¹¹³ At any date earlier than $t(m)$, the innovator's costs per unit of time will be larger than his benefit, thus he is better off not to undertake the investment so early.¹¹⁴ Conversely, at any date later than $t(m)$ the benefits per unit of time will be larger than the costs, and he could have maximized profits by advancing the date of his investment activity.¹¹⁵ At $t(m)$, benefits are equal to cost, and this is the profit maximizing date.¹¹⁶

FIGURE 3



The possibility of obtaining a patent or copyright, however, offers

¹¹⁰ Yoram Barzel, *Optimal Timing of Innovations*, 50 *REV. ECON. & STAT.* 348 (1968). Although Barzel used this model to posit behavior of those seeking patents, the same logic can be expanded to copyrights because both confer on the innovator a monopoly position and the opportunity to capture the full stream of future income that accrue from the innovation. See also Terry L. Anderson & Peter J. Hill, *The Race for Property Rights*, 33 *J.L. & ECON.* 177 (1990); David D. Haddock, *First Possession Versus Optimal Timing: Limiting the Dissipation of Economic Value*, 64 *WASH. U. L.Q.* 775 (1986) (arguing that title by first possession causes premature occupation through a process of racing, and such racing results in the partial or complete marginal rent dissipation).

¹¹¹ Barzel, *supra* note 110, at 351.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

the innovator an incentive to release his innovation earlier than the profit maximizing date. This incentive arises because the first innovator to obtain the coveted patent or copyright can capture the full stream of future income. Thus, a profit maximizing innovator will release the innovation just prior to $t(m)$, thereby gaining the monopoly before any other innovator. But the problem is that each innovator will act in such a manner and the innovation will be released at $t(z)$. This phenomenon is "racing," namely, racing between competitors in order to gain the monopoly and capture the future stream of income from the innovation. Such racing dissipates all the rents and the innovation is not released when socially optimal.¹¹⁷

C. SEEKING RENT IN A COMPETITIVE MARKET VERSUS RENT SEEKING

It is important to clarify the difference *in effect* between the seeking of economic rent in a competitive market and rent seeking, that is, the creation of uncompetitive markets via legally sanctioned monopolies or restrictions on production. The seeking of rent, as argued above, ensures the efficient allocation of resources. Entrepreneurs, through the constant search of economic rents, seek to create inventions or improvements on current forms of production. For their efforts they earn quasi-rents. But this is a short term phenomenon. Entrants soon enter the market and the quasi-rents are dissipated. Full consumer demand is satisfied and accordingly no net dead weight loss is generated. Quantity and price are at competitive levels which are Q_c and P_c in Figure 2, respectively.

By contrast, rent seeking results in the sub-optimal allocation of resources. Indeed, as the analysis above suggests, not only is no net value generated, but net value is actually destroyed. If an entrepreneur can gain a legally sanctioned monopoly, then entry into the market is barred and monopoly rents are not dissipated. Full consumer demand is not satisfied, creating the classic welfare loss triangle. Moreover, the entrepreneur had to expend valuable resources in obtaining the monopoly. These resources which could have been invested elsewhere in new forms of production or innovation were instead spent lobbying government officials. Gordon Tullock has analogized this wasteful allocation of resources to building tunnels

¹¹⁷ As an example of this phenomenon, software companies often release programs prematurely. See James Gleick, *Making Microsoft Safe for Capitalism*, N.Y. TIMES, Nov. 5, 1995 (Magazine), at 50 ("Microsoft knows that the technologically perfect product is rarely the same as the winning product. Time and again its strategy has been to enter a market fast with an inferior product, to establish a foothold, create a standard and create market share.").

that lead nowhere.¹¹⁸

Further, rent seeking does not generally involve a single interest attempting to gain the monopoly "right." Prior to the granting of the monopoly; other producers have competed for the same advantageous position. Then, once the monopoly is granted, other interests do not sit passively by. Rather, they continue their rent seeking efforts. All these expenditures do not produce any new product, nor are they used to develop more efficient modes of production. They have been used to gain an advantageous position over the production of a single product or service. Professor Buchanan effectively highlights the distinction between rent seeking and seeking of rents in the competitive market:

Rent seeking on the part of potential entrants in a setting where entry is either blocked or at best reflect one-for-one substitution must generate social waste. Resources devoted to [gaining the monopoly] might be used to produce valued goods and services elsewhere in the economy, whereas nothing of net value is created by rent seeking. In the competitive market, by comparison, resources of potential entrants are shifted directly into the production of the previously monopolized commodity or service, or close substitutes; in this usage, these resources are more productive than they would have in alternative employment.¹¹⁹

Until this point, rent seeking has been assumed to mean competition for legal monopolies. But rent seeking is not so narrow. There are a large number of government entitlements beyond legal monopolies that are valuable to the holder. Examples include licenses, quotas, permits, authorizations, approvals (such as zoning), and franchise agreements.¹²⁰ These are valuable to the holder because it generally confers on them a valuable "right" to engage in a certain activity to the exclusion of others. The creation of such scarcity implies the potential emergence of rents, which, in turn, generates rent seeking activity.¹²¹ As with the pursuit of legal monopolies, interest groups will invest scarce resources in attempts to secure either the initial assignment of "rights" to these opportunities or replacement assignments as other initial holders are ousted from privileged positions.¹²² In both cases, and despite rational investment ex ante, valuable resources will be wasted in the process.¹²³

¹¹⁸ Tullock, *Welfare Costs*, *supra* note 2, at 225.

¹¹⁹ Buchanan, *supra* note 82, at 8.

¹²⁰ TOWARD A THEORY OF THE RENT-SEEKING SOCIETY, *supra* note 4, at 9.

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

IV. THE ECONOMICS OF COPYRIGHT

Whether the current system of copyright law is good, bad or indifferent is largely beyond the scope of this Comment. For example, some economists have argued that copyrights are necessary to spur creative works,¹²⁴ and others have argued that copyrights merely benefit the holder to the detriment of the consumer.¹²⁵ Which view is correct is not essential for the Comment's thesis. Regardless of whether they are necessary or not, copyrights offer substantial benefits (economic rent) to the holder. The apparent economic value of these governmentally conferred entitlements generates rent seeking activity. Such activity, as exemplified in the context of the premature application of discoveries, results in rent dissipation.¹²⁶

Therefore, the primary purpose of the analysis is not to determine whether copyrights are the most effective mechanism for ensuring innovation of creative works, but rather, the purpose is to posit the reason for the emergence of criminal sanctions in an area of law where civil remedies had historically been evoked. The specific thesis is that this shift in policy was driven by interest groups seeking copyrights protected by criminal sanctions as a means of realizing economic rents. While the self interested action taken by these groups may provide socially beneficial outcomes, namely, Adam Smith's invisible hand working through the political market place, these social benefits are purely incidental to the main goal of these groups: wealth maximization.¹²⁷

¹²⁴ For the arguments in favor of copyright protection, see *infra* Part IV.A.

¹²⁵ For the arguments against copyright protection, see *infra* Part IV. B.

¹²⁶ As Professor Haddock observes:

Securing possession of an entitlement is costly, and the resources expended have alternative uses[.] . . . It does not matter whether the entitlement is a "free" student ticket to a college football game, which (if the team is popular) induces wasteful pre-dawn occupation of places in line at the ticket office; a patent or copyright; a "free" farm on the frontier; a legal monopoly over the provision of cable services; or lobsters taken from the sea. The anticipation of capturing property of future value induces abandonment of alternative pursuits of positive current productivity. . . . If there are no restraints, a rent-seeking race to establish title ensues. At the margin, expenditures to capture title will equal the value of the assets whose title is sought, so marginal rents are completely dissipated.

Haddock, *supra* note 110, at 777-78. See also Anderson & Hill, *supra* note 110, at 177 ("[w]hen property rights and the rents therefrom are 'up for grabs,' it is possible for expenditures to establish rights to fully dissipate the rents, leaving the efficiency gains from privatization in question").

¹²⁷ It might be argued at this point: if rent seeking results in societal dead weight loss, then how can there be benefits derived from the action of these rent seeking interest groups? The answer lies in an Demsetzian notion of efficiency. Harold Demsetz, *Information and Efficiency: Another Viewpoint*, 12 J. L. & ECON. 1 (1969). Demsetz argued that economists often suffer from the "nirvana fallacy," that is, comparing existing "imperfect" institutional arrangements to some ideal norm. *Id.* But rather than adopting the nirvana fallacy, economists should compare the various institutional arrangements, and label as

As a secondary purpose, the analysis attempts to demonstrate that the emergence of the current system of copyright law was not costless; specifically, creating legal monopoly rights generates incentives for innovators to expend resources in the search of these entitlements. This suggests that in certain cases the cost of legislating criminal sanctions for certain copyrighted material may exceed the benefits. It may be entirely accurate to assert that copyrights are necessary to spur innovation, but it is important to recognize that such a system has its costs, and future adjustments to the criminal law will occur in an interest group environment. The implications from such analysis suggest that an all-or-nothing, across-the-board approach could be undesirable, and instead each discrete area of copyright might require different degrees of monopoly protection and different remedies for infringement, that is, civil rather than criminal. Given the above parameters, it is nonetheless necessary to briefly give an overview of the economics of intellectual property and the varying arguments in favor of and against copyrights.¹²⁸

A. THOSE FOR COPYRIGHTS¹²⁹

A distinguishing feature of intellectual property is its nature as a public good.¹³⁰ In the case of copyrighted material, the ability to exclude others once the product is made available may be infeasible. Therefore, copyrights enable others to appropriate the benefits without incurring the costs. These people are said to be free riding.¹³¹ If

"efficient" the one that offers the most benefits. *Id.* See also GORDON TULLOCK, *THE NEW FEDERALIST* 18 (1994) ("[h]uman institutions are imperfect, government is imperfect, and the market is imperfect[.] . . . It is wise to select the best among a number of possible alternatives, none of which is perfect.").

In this respect, the existing system of copyrights might be necessary to spur innovation. See *infra* Part IV.A. But, as has been consistently argued, this Comment is not attempting to make an institutional comparison between a system of copyrights or the free market and determine which of the two should be deemed efficient. Rather, the Comment attempts to show that the current system of copyrights generates the possibility of monopoly rents. Interest groups will attempt to gain these rents through rent seeking. Such activity results in social dead weight loss. See *supra* notes 107-15 and accompanying text. The costs may be outweighed by the advantages of copyright. But that is a different article.

¹²⁸ For an overview of the literature, past and present, on the scope of patents and copyrights, see Steven N. S. Cheung, *Property Rights and Invention*, 8 *RES. LAW & ECON.* 5 (1986).

¹²⁹ This section owes much to William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 *J. LEGAL STUD.* 325 (1989).

¹³⁰ "Public good" is used here in the technical, economic sense. See *supra* note 5.

¹³¹ The free riding problem arises in many situations. Basically, no individual is willing to contribute towards the cost of something when he hopes that someone else will bear the cost instead. See generally OLSON, *supra* note 5 (discussing motivations behind collective action). As mention above, the problem arises whenever there is a public good. *Id.* For example, everyone in an apartment block may want a faulty light repaired, but no one

enough people free ride, then there is no economic incentive for the innovator to release his product. If the copies made by the original innovator are at or close to marginal cost, then others may be discouraged from free riding (that is, making copies), but the innovator's total revenues may not be sufficient to cover the costs of creating the work. Thus, according to Landes and Posner, "[c]opyright protection—the right of the copyright's owner to prevent others from copying—trades off the costs of limiting access to a work against the benefits of providing incentives to create the work in the first place."¹³²

Landes and Posner posit that the cost of producing a copyrightable work such as a book has two components.¹³³ The first is the cost of creating the work which is fixed for it does not vary with the number of copies produced or sold.¹³⁴ It consists of the author's time and effort plus the cost of the publisher, of soliciting and editing the manuscript and setting it in type.¹³⁵ Posner and Landes called these fixed costs the "cost of expression."¹³⁶ The second component is the variable cost of production. This cost of production a work increases with the number of copies produced such as the cost of printing, binding and distributing individual copies.¹³⁷ The cost of expression is a sunk cost and does not enter into the making of copies because, once the work is created, the author's efforts can be incorporated into another copy virtually at zero cost.¹³⁸

For a new work to be created, the expected return must exceed the expected costs.¹³⁹ Landes and Posner assume that the demand

wants to bear the cost of organizing the repair themselves. They would rather free ride on the effort of someone else. Another example is when individual shareholders take little interest in the management of their companies, hoping someone else will monitor what the executives are doing. For more on the role of investors, see WILLIAM L. CAREY & MELVIN ARON EISENBERG, *CORPORATIONS* 241-54 (7th ed. 1995). For those interested in game theory and the free rider problem, see ROBERT AXELROD, *THE EVOLUTION OF COOPERATION* (1984); RUSSELL HARDIN, *COLLECTIVE ACTION* (1982); Russell Hardin, *Collective Action as an Agreeable Prisoners' Dilemma*, 16 *BEH. SCI.* 472 (1971).

¹³² Landes & Posner, *supra* note 129, at 326.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.* at 327.

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.* Landes and Posner assume that revenues are raised "typically, and we shall assume exclusively, from the sale of copies." *Id.* at 327. Such an assumption, however, is very narrow. As will be discussed below, many products which have public good characteristics can be marketed in such a manner that revenue does not come from the actual sale of the product. For example, once radio waves are produced, it is largely infeasible to restrict access, and given the Landes and Posner argument, radio stations could not make revenue unless they have a copyright or some means of restriction such as a mandatory toll. Yet

curve is negatively sloping (as in Figures 1 and 2) because there are good but not perfect substitutes for a given book.¹⁴⁰ Due to the cost of expression,

[t]he creator will make copies up to the point where the marginal cost of one more copy equals its expected marginal revenue. The resulting difference between price and marginal cost, summed over the number of copies sold, will generate revenues to offset the cost of expression.¹⁴¹

Since the decision to create the work is made before the demand for the copies is known, the work will be created only if the difference between expected revenues and the cost of making the copies equals or exceeds the cost of expression.¹⁴² Graphically, using Figure 2, the variable cost of making copies is the MC curve, and the fixed cost of expression is the difference between the MC curve and P_m , thus, revenues need in order to cover the cost of expression is R . Any price below P_m , the work will not be produced.

The above description assumed the existence of copyright protection. In its absence, anyone can buy a copy of the book when it first appears and make and sell copies. According to Landes and Posner, "[t]he market price of the book will eventually be bid down to the marginal cost of copying, with the unfortunate result that the book probably will not be produced in the first place, because the author and publisher will not be able to recover their cost of creating the work."¹⁴³

Further, there is the problem of uncertainty. Even with copyright protection, sales may be insufficient to cover the cost of expression and may not even cover the variable cost of making copies.¹⁴⁴ Thus, the difference between the price and marginal cost of the successful work must not only cover the cost of expression but also must compensate for the risk of failure. Without the protection of copyright, this uncertainty acts as an additional disincentive to create the

radio stations make their revenue not from the sale of their service, but rather through advertising. Tom G. Palmer, *Intellectual Property: A Non-Posnerian Law and Economics Approach*, 12 *HAMLINE L. REV.* 261, 277 (1989).

¹⁴⁰ Landes & Posner, *supra* note 129, at 327.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.* at 328.

¹⁴⁴ In an important work, Kenneth Arrow acknowledges that the patent system (and by implication copyrights) will encourage invention. However, he notes three reasons for the failure to achieve "optimality" in these activities: uncertainty, indivisibility and inappropriability. Because of these factors, government intervention is required by investing in R&D in order to ensure an optimal level of innovation. KENNETH J. ARROW, *Economic Welfare and the Allocation of Resources for Invention*, in KENNETH J. ARROW, *THE RATE AND DIRECTION OF INVENTIVE ACTIVITY* 609, 609-25 (1962). For a sharp criticism of ARROW's definition of "optimality" as the quintessential "nirvana fallacy," see Demsetz, *supra* note 127.

work.¹⁴⁵

Thus, according to Landes and Posner as well as other proponents of copyright protection, the system is necessary in order to offer incentives for innovators to produce works which would not be produced without such protection. Most proponents of the copyright system accept that there are costs associated with such monopoly protection, but nonetheless, on aggregate, the benefits outweigh the costs.¹⁴⁶ As the next section indicates, there remain a number of economists who posit that copyrights are actually unnecessary and, indeed, detrimental.

B. THOSE AGAINST COPYRIGHTS

Critics of copyright protection argue that creators of traditionally copyrighted works can gain sufficient revenues through a variety of market mechanisms without having to resort to governmentally conferred monopoly rights.¹⁴⁷ These critics initially focus on the concept of publicness: "publicness is an attribute of institutions, not of abstract economic goods. Every good can be made more or less public by examining it in different institutional contexts."¹⁴⁸ The public good nature of a product is often determined, not by the good itself, but rather the way in which it is provided on the market.¹⁴⁹

Movie theaters, for example, invest in exclusion devices like ticket windows, walls and ushers, all designed to exclude potential free riders from enjoyment of the service.¹⁵⁰ "Drive-ins," faced with the prospect of free riders peering over walls, installed—at considerable expense—individual speakers for each car, thus rendering the publicly available visual part of the movie of little interest.¹⁵¹

According to Palmer,

¹⁴⁵ Landes & Posner, *supra* note 129, at 329.

¹⁴⁶ See reservations in Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 291-308 (1970). *But see* Barry W. Tyerman, *The Economic Rationale for Copyright Protection for Published Books: A Reply to Professor Breyer*, 18 UCLA L. REV. 1100 (1971).

¹⁴⁷ This section owes much to Palmer, *supra* note 139.

¹⁴⁸ Tyler Gowen, *Public Goods and Their Institutional Context: A Critic of Public Goods Theory*, 43 REV. SOC. ECON. 53 (1985).

¹⁴⁹ As Kenneth Goldin argues:

The evidence suggests that we are not faced with a set of goods and services which have the inherent characteristics of public goods. Rather, we are faced with an unavoidable choice regarding every good or service: shall everyone have equal access to that service (in which case the service will be similar to a public good) or shall the service be available selectively: to some but not to others? In practice, public good theory is often used in such a way that one overlooks this important choice problem.

Kenneth Goldin, *Equal Access vs. Selective Access: A Critique of Public Goods Theory*, 29 PUB. CHOICE 53 (1977) (emphasis omitted), *quoted in* Palmer, *supra* note 139, at 284.

¹⁵⁰ Palmer, *supra* note 139, at 284.

¹⁵¹ *Id.*

[t]he costs of exclusion are involved in the production of virtually every good imaginable. There is no compelling justification for singling out some goods and insisting that the state underwrite their production, simply because of a decision to make the good available on a nonexclusive basis. This decision is itself the relevant factor in converting a potential private good into a public good.¹⁵²

Thus, “[e]xclusion devices should be seen as endogenous to the market, as a regular part of its operation.”¹⁵³ What follows is a list of practical exclusion mechanisms for providing traditionally copyrighted goods without recourse to copyright protection.¹⁵⁴

First, there are marketing strategies such as being the “first to market.”¹⁵⁵ During this period the original creator will not face competition and thus can earn quasi-rents until competitors enter the market.¹⁵⁶ This seems particularly true for products which have a relatively short market life such as a variety of software packages which are constantly being upgraded.¹⁵⁷ There is also the possibility of price discrimination.¹⁵⁸ For example, a publisher of academic journals may capture part of the value that individuals obtain from copying articles by charging a higher price for the journal—especially to libraries.¹⁵⁹ In the case of videocassettes, producers have been able to engage in temporal price discrimination, initially offering movies at high prices to enthusiasts (who have a relatively inelastic demand) or to rental store owners (who will rent the movie many times), then dropping the prices after several months to capture less enthusiastic segments of the market.

Secondly, non-purchasers can be excluded from enjoying a good by “bund[ling] it together with another good, for which the cost of

¹⁵² *Id.* at 285.

¹⁵³ *Id.*

¹⁵⁴ This is not meant to be, by any account, an exhaustive list. Rather, it attempts merely to offer a flavor of the arguments being proposed by the critics of the copyright system of protection.

¹⁵⁵ See, e.g., Palmer, *supra* note 139, at 295; Landes & Posner, *supra* note 129, at 330; Breyer, *supra* note 146, at 299-302.

¹⁵⁶ As a point of conjecture, it would seem reasonable to suggest that Microsoft would have received sufficient revenues to offset the cost of expression within a short time of placing Windows 95 on the market.

¹⁵⁷ See Graham & Zerbe, *supra* note 69, at 68-69 (“the pace of advancement in the computer industry has resulted in a very short shelf life for software products. By the time a second developer’s product is on the market, the first developer may have already an upgraded version of its product.”). On average, a new software product becomes antiquated in less than two years. *Id.* at 69 n.32.

¹⁵⁸ Palmer, *supra* note 139, at 295.

¹⁵⁹ This point is stressed by S. J. Liebowitz, *Photocopying and Price Discrimination*, 8 J. RES. L. & ECON. 181 (1986); S. J. Liebowitz, *Copying and Indirect Appropriability: Photocopying Journals*, 93 J. POL. ECON. 945 (1983).

exclusion may be lower.”¹⁶⁰ This bundled good can either be complementary to the public good, such as program guides sold in conjunction with television broadcasts, or noncomplementary but appealing to market segments that are sufficiently coextensive, such as health insurance through the Farm Bureau, which also provides the public good of lobbying for farm programs that benefit all farmers.¹⁶¹ Computer programs may also be “bundled” together with other goods, such as manuals, free upgrades, and toll-free numbers and passwords that give purchasers access to expert advice on the use of the of the program. Finally, television stations can tie one good, the broadcast of electromagnetic signal, with another, the dissemination of information from (excludable) sellers to potential buyers (advertising).¹⁶²

Lastly, there are contractual alternatives to copyright protection.¹⁶³ For example, licensing the original work on the condition that the licensee does not make copies of it or disclose it to others in a way that would enable them to make copies.

Performance bonds can be posted . . . to ensure compliance with the terms of a mutually agreeable contract Such contractual remedies can be used in conjunction with trade secrecy law[s], which offer[s] a broad spectrum of protection against unauthorized disclosure of any guarded or contractually governed secret ‘used in one’s business and which gives him an opportunity to gain an advantage over competitors who do not know how to use it.’ While trade secrecy laws do not offer protection identical to patents or copyright law, there are cases where it is preferable.¹⁶⁴

The example of Coca-Cola, the formula which was never patented, indicates one of the advantages of reliance on trade secrecy laws, i.e., permanent in duration.

C. THE ECONOMICS OF COPYRIGHT: THE NEED FOR FURTHER RESEARCH

The above discussion in subsections A and B was not meant to offer a conclusive position on whether copyright right protection is necessary or not. Indeed, according to Professor Priest, a review of the economic literature on copyright reveals a remarkable dearth of analysis:

In “Property Rights and Invention,” Professor Steven Cheung usefully reviews that classic literature on the scope of the patent right I use

¹⁶⁰ Palmer, *supra* note 139, at 289-90.

¹⁶¹ For an extensive discussion on bundled noncomplementary goods, see OLSON, *supra* note 5, at 132-67.

¹⁶² Benjamin Klein, *Tie-Ins and the Market Provision of Collective Goods*, 10 HARV. J.L. & PUB. POL’Y 451, 452 (1987). See also Harold Demsetz, *The Private Production of Public Goods*, 13 J.L. & ECON. 293 (1970).

¹⁶³ Palmer, *supra* note 139, at 291.

¹⁶⁴ *Id.* at 292-93.

the word "useful" in a slightly peculiar way: the utility of the Cheung review lies in revealing how thin this classic literature really is. Cheung's simplifying descriptions of the competing theories provide an unwitting parody of what must be one of the least productive lines of inquiry in all of economic thought.¹⁶⁵

The above discussion may indicate that a single unified theory on the efficiency of copyrights requires a less all-or-nothing approach, but instead, one which examines each discrete area of copyright law. But one thing remains crystal clear: copyrights create economic rents. And as Professor Mueller argues, "[t]he iron law of rent seeking is that wherever a rent is to be found, a rent seeker will be there trying to get it."¹⁶⁶

V. THE NEED FOR CRIMINAL SANCTIONS TO REALIZE MONOPOLY RENTS: APPLYING THE RENT SEEKING MODEL TO THE COPYRIGHT LAW CONTEXT

The legislative history of the recent amendments to the Copyright Act demonstrates that interest groups were prevalent throughout the process. Indeed, many of the changes in the law were the direct result of interest group preferences.¹⁶⁷ Legal theorists, however, have not provided a model which explains the motivation behind these interest groups' calling for increased criminal sanctions for copyright infringement.¹⁶⁸ Therefore, while applying the rent seeking model to the case of copyright law, several fundamental questions must be addressed. First, why were interests groups so prevalent in the revisions of the copyright laws, and can such activity be expected in other areas of the criminal law formulation process? Second, why did this pressure increase in 1970s and 1980s, as opposed to an earlier juncture? Lastly, why did these groups pursue criminal sanctions rather than more stringent civil sanctions? In addition to considering the model's explanative power, it is also important to examine the implications derived from the model, that is, the model's predicative value.

A. INTEREST GROUP INVOLVEMENT DURING THE COPYRIGHT REVISIONS

There are considerable profits to be earned in the area of intellectual property. For example, the world market for computer

¹⁶⁵ George L. Priest, *What Economists Can Tell Lawyers About Intellectual Property: Comment on Cheung*, 8 RES. L. & ECON. 19 (1986). For the article by Steven Cheung, see *supra* note 128.

¹⁶⁶ MUELLER, *supra* note 1, at 241.

¹⁶⁷ See *supra* Part II.

¹⁶⁸ See, e.g., Litman, *supra* note 34, at 881.

software alone is currently estimated at \$70 billion per year, and the Commerce Department has predicted that this figure could increase to \$1 trillion by the year 2000.¹⁶⁹ In a purely competitive market (that is, one with no barriers to entry), firms can only earn quasi-rents.¹⁷⁰ Quasi-rents are only a short term phenomenon, however. They soon attract firms to enter the market and dissipate the quasi-rents that the existing firms in the market are realizing. But as previously noted, if a firm can restrict entry into a particular market thereby reducing competition, then the firm can earn monopoly rents.¹⁷¹ Thus, given the large potential economic rents in the computer software, motion picture, sound recording and other similar industries, there is a strong incentive for the creators of intellectual property to seek some form of protection from possible competitors.

A firm can seek barriers to entry in several ways. First, it can attempt to monopolize the market for a given range of products. Attempts to monopolize, however, can be problematic if the monopoly is not legally legitimate (that is, a monopoly not conferred by the government). Indeed, the Antitrust Division of the Department of Justice is currently engaged in the third major phase of an investigation into possible antitrust violations by the Microsoft Corporation.¹⁷² As the Microsoft Corporation can attest, the cost of defending an alleged monopoly position can be expensive. These costs arise whether defending entry from potential competitors, or as in the case of Microsoft, defending against a potential federal prosecution.¹⁷³ Finally, a monopoly position is rarely permanent. For example, by the late 1970s IBM dominated the computer hardware market, but its monopoly position soon evaporated once Apple began producing personal computers.¹⁷⁴

Second, a number of firms can create a private cartel.¹⁷⁵ But given the structure of the current market for intellectual property, cartelization is problematic. George Stigler has noted that firms want to collude in order to restrict output and drive-up prices.¹⁷⁶ There remains, however, an incentive to chisel (free ride), that is, one firm lowering its price in order to increase market share and gain an even larger percentage of the economic rent.¹⁷⁷ Thus, for a cartel to sur-

¹⁶⁹ See S. REP. NO. 102-268, at 2 (1992).

¹⁷⁰ See *supra* notes 89-94 and accompanying text.

¹⁷¹ See *supra* notes 95-107 and accompanying text.

¹⁷² See Gleick, *supra* note 117, at 50.

¹⁷³ *Id.*

¹⁷⁴ *Id.*

¹⁷⁵ See *supra* notes 102-06 and accompanying text.

¹⁷⁶ See George J. Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44 (1964).

¹⁷⁷ *Id.* at 46.

vide, it must have a policing arrangement which can identify the chiseling firms.¹⁷⁸ According to Professor Stigler, the ability to police the cartel becomes problematic when the number of firms and customers entering the market increase.¹⁷⁹ In the main, the current structure of the intellectual property demonstrates these two characteristics. In many areas there are a number of firms producing comparable goods, such as in video game industry. Furthermore, the market for intellectual property is increasing at a rapid rate, and new customers are continuously entering the market. Thus, the ability to chisel (free ride) without being detected is high, and cartels would tend not to be stable.

Therefore, in order to realize monopoly rents, firms attempt to gain a legitimate and enforceable monopoly over the products they produce. Copyrights serve the purpose of conferring a legitimate monopoly. Assuming no infringement, an owner of the copyright can realize the full stream of future revenue from the copyrighted work.¹⁸⁰ The amount of the potential economic rent and the ability of the firm to capture this rent offers an incentive to overcome the Olsonian free rider problem.¹⁸¹ Once the free rider problem is overcome, industry specific interest groups can mobilize and lobby Congress. Thus, the reason for interest group activity in the area of copyright law is based

¹⁷⁸ *Id.* See also Ayes, *supra* note 106.

¹⁷⁹ Stigler, *supra* note 176, at 46.

¹⁸⁰ See *supra* notes 110-16 and accompanying text.

¹⁸¹ See *supra* note 131. There may be some confusion as to the use of the term free rider. This Comment has used the term in the cartel as well as the interest group mobilization context. They are basically two sides of the same coin. Free riding occurs whenever a person/group can receive the benefits from the action of others and not have to sustain the costs themselves. Free riding can both be desirable and undesirable depending on the institutional context. For example, in the case of cartels, free riding ensures that the cartel cannot survive. In this context, free riding dissipates monopoly rents and ensures an optimal allocation of resources. By contrast, in other institutional contexts, free riding is undesirable. For example, it may be beneficial that more persons mobilize and call for increased protection of the environment, but due to free riding, the groups calling for environmental protection remains relatively small and under-mobilized. For example, most opinion polls conducted in the 1980s demonstrated that 70 percent of the population thought more needed to be done about the environment, but only a small proportion were willing to invest time and resources into the collective endeavor.

As Russell Hardin notes:

The answer . . . is that environmentalists contribute woefully little to their cause given the enormous value to them of success and given the repeated survey results that show the strong commitment of a large percentage of Americans to that cause. Environmentalists annually spend less on their apparently great cause than 25,000 two-pack-a-day smokers spend on cigarettes.

HARDIN, *supra* note 131, at 11. For a complete listing of survey results, see Riley E. Dunlap, *Trends in Public Opinion Towards Environmental Issues: 1965-1990*, in RILEY E. DUNLAP & ANGELA G. MERTIG, *AMERICAN ENVIRONMENTALISM: THE US ENVIRONMENTAL MOVEMENT 1970-1990*, 102-06 (1992).

on the iron law of rent seeking.¹⁸²

In this respect, the motivation of interest groups in the criminal law formulation process does not differ from interest group motivation in other legislative contexts. It is well documented by public choice scholars that there is a high degree of interest group activity where there are specific rents to be captured through legislative mechanisms (i.e., legitimate monopolies or other barriers to trade).¹⁸³ For example, the tariff and import quota legislative process is dominated by rent seeking interests attempting to create artificial barriers to entry in order to reduce foreign competition.¹⁸⁴ The reduction in competition enables domestic producers to increase prices without rent dissipation.¹⁸⁵

Similarly, if interest groups can use criminal sanctions as a means of restricting entry into lucrative markets, they will do so. There is no reason to suppose that rent seeking interest groups prefer non-criminal to criminal law, especially when the latter can effectively deter potential competitors. It is important to note, however, that interest groups activity will not permeate every aspect of the criminal law formulation process. Interest groups, for example, will not be involved in policies of general deterrence. The lack of interest group involvement arises for two reasons. First, there are often no direct economic benefits to be gained from enacting such policies. Second, and moreover, even if there are economic benefits, interest groups will not mobilize due to the nonexcludability of would-be consumers. If our streets are safe, then we all benefit whether we lobbied or not for more police protection or longer sentences for violent criminals. In other words, policies of general deterrence constitute public goods,¹⁸⁶ and hence are subject to the free rider problem.¹⁸⁷

Thus, interest groups will mobilize and use the criminal law formulation process when there are economic benefits to gain from such mobilization, and these benefits can be captured. In the case of copyrights, a firm that gains a copyright can directly enjoy the economic benefits that accrue from that copyright. The more clearly stipulated the copyright is, the greater its economic value. The reason being what is viewed as a copyright from the holder's perspective is simply a set of prohibitions and sanctions from the perspective of everyone

¹⁸² See MUELLER, *supra* note 1, at 241.

¹⁸³ See *supra* note 4.

¹⁸⁴ See Tullock, *supra* note 107, at 199.

¹⁸⁵ *Id.*

¹⁸⁶ See *supra* note 5 and accompanying text.

¹⁸⁷ For a general discussion of the free rider problem, see *supra* note 183.

else.¹⁸⁸ Consequently, there is a direct incentive for holders and future holders to invest resources to ensure that copyrights are clearly stipulated and well-protected by readily observable sanctions. Rational interest groups will therefore pursue criminal sanctions as a means of protecting their copyrights.

B. RENT SEEKING IN THE 1970S AND 1980s

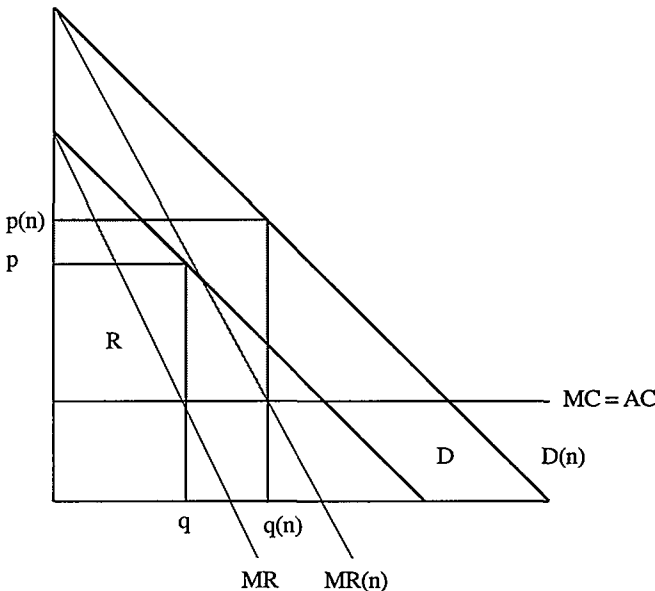
Why did the various industry representatives call for more stringent protection of copyrights during the 1970s and 1980s, as opposed to an earlier period? There are two concurrent reasons for this trend: the increase in potential economic rents and the decrease in the marginal cost of duplication. With the communication explosion during the 1960s and 1970s, the market for intellectual property became increasingly profitable. Indeed, by the 1980s, the software industry was one of the fastest growing industries in the U.S.¹⁸⁹ Such growing profits offered an incentive for groups to invest more resources into securing clearly-stipulated copyrights.¹⁹⁰ The increase in profitable

¹⁸⁸ Discussion with David D. Haddock, Professor of Law & Economics, Northwestern University School of Law, Chicago, Ill. (Oct. 18, 1996).

¹⁸⁹ See *Criminal Sanctions for Violations of Software Copyrights*, *supra* note 59, at 26.

¹⁹⁰ In other words, as copyrights become increasingly valuable, interests will expend more resources in order to obtain them. Figure 4 demonstrates this proposition in graph form. The graph is based on Sam Peltzman's more generalized work on regulation. See Peltzman, *supra* note 40.

FIGURE 4



It is assumed that the work has already been created, and the only remaining question is

markets was coupled with technology that decreased the marginal cost of duplication.¹⁹¹ In other words, just as profits were increasing, imitators could duplicate at marginal cost and sell on the open market, thereby dissipating the economic rent that would have been realized by the creators.

Thus, it is not coincidental that the first main push for felony sanctions came from the motion picture and sound recording industries. During the 1970s, the emergence of cheaper and better recording equipment and the video cassette recorder (VCR) reduced the marginal cost of duplication.¹⁹² Accordingly, the motion picture and sound recording industries expressed concern, and pursued increased sanctions for copyright infringement.¹⁹³ The next push for felony

how much should the firm expend in order to obtain copyright protection. Assuming the demand schedule is D , then the firm will produce where marginal cost (MC) intersects marginal revenue (MR), thereby charging P . The firm will earn R . Now, if the firm can costlessly protect the innovation, then all of R constitutes profits. But protecting an innovation from appropriation is not costless, namely, the firm will have expend valuable resources in order to secure a copyright. In the scenario described thus far, the firm will expend up to R in order to secure a valid copyright. Any investment over R would result in a net financial loss to the innovating firm.

But now assume there has been an endogenous market shift—the demand for this particular form of intellectual property has shifted outward. The new demand schedule is represented by $D(n)$. If the innovator can capture this full demand, then the new profits constitute R plus the shaded area. But if the increased demand is satisfied by appropriation (i.e., copying) by the new market entrants, then the market demand to the innovator still appears to be D rather than $D(n)$. Thus, given the new demand, the innovator will be willing to spend up to R plus the shaded area in order to obtain more stringent copyright protection.

¹⁹¹ See *Criminal Sanctions for Violation of Copyrights*, *supra* note 59, at 26-27 (“However, unlike [other copyright-based industries], software is exceptionally easy to reproduce. Whereas reproduction of a good copy of a book requires a printing plant and bindery . . . all that is required to make perfect copies of a computer program within a few seconds is a standard personal computer.”). See also Timothy D. Howell, Comment, *Intellectual Property Pirates: Congress Raises the Stakes in the Modern Battle to Protect Copyrights and Safeguard the United States Economy*, 27 ST. MARY’S L.J. 613, 657 (1996) (observing that “[i]n many cases . . . modern technology reduces copyright infringement to a task as simple as the push of a button”); INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 12 (1995) (recognizing that modern technology enables “one individual, with a few key strokes, to deliver perfect copies of digitized works to scores of other individuals.”).

¹⁹² See *Hearings on the Piracy and Counterfeiting Amendments Act*, *supra* note 50, at 29 (joint statement of MPPA and RIAA) (“Audio piracy began its rapid growth in the late 1960s when pre-recorded tape cartridges were introduced into automobiles and homes; video piracy began in the 1970s with the introduction of videocassette recorders.”).

¹⁹³ *Id.* at 26-63. See also Teddy C. Kim, Note, *Taming the Electronic Frontier: Software Copyright Protection in the Wake of United States v. LaMacchia*, 80 MINN. L. REV. 1255, 1260 n.21 (1996) (“In the 1980s, the advent of home video recording technology allowed home viewers to duplicate copyright programs easily and efficiently. Concerns about infringement led the movie industry to lobby for higher penalties for criminal infringement. Ever solicitous, Congress increased penalties for criminal infringement in 1982.”).

sanctions occurred during the mid-1980s when personal computers were becoming widespread. Again, the marginal cost of duplication was being driven down.¹⁹⁴ Thus, these two paradigm shifts created a situation where the markets were more profitable, but it was becoming increasingly difficult to restrict or reduce competition from unauthorized duplicators who were violating protected copyrights.

C. THE DESIRE FOR CRIMINAL SANCTIONS

The owners of intellectual property such as copyright holders have an obvious incentive to protect their governmentally conferred entitlement by pursuing civil remedies. Indeed, it was not until 1897 that Congress provided criminal sanction for those who willfully infringed a copyright. And even then, it was not until the 1990s that felony penalties were adopted across the board to cover all copyright infringements. For many years, therefore, copyright holders relied almost exclusively on civil remedies.¹⁹⁵ It would seem, on first impression, that copyright holders would prefer more stringent civil remedies rather than an increase in criminal sanctions. For example, the burden of proof is higher and there is a mens rea requirement in

¹⁹⁴ See *Criminal Sanctions for Violations of Software Copyrights*, *supra* note 59, at 27.

¹⁹⁵ Indeed, a criticism that could be lobbied at this Comment is that the imposition of criminal sanctions continues to remain the exception rather than the rule. See Howell, *supra* note 191, at 646-47 (observing that over the last century criminal copyright laws have broadened both in their scope and use, but the treatment of copyright infringement as a crime still remains less utilized than traditional civil remedies); Sharon B. Soffer, *Criminal Copyright Infringement*, 24 AM. CRIM. L. REV. 491 (1987) (pointing out the infrequency of criminal copyright prosecutions in cases that are not severe). Two brief responses are warranted. First, this Comment predominately focuses on the impact that interest groups have on the legislature rather than on the courts. Second, and moreover, when the courts fail to impose criminal sanctions in certain cases, the affected interests often return to Congress to have the law amended in order to ensure that criminal sanctions are imposed in future similar cases. *United States v. LaMacchia*, 871 F. Supp. 535 (D. Mass. 1994), provides a good example of this phenomenon. In *LaMacchia*, a federal grand jury indicted David LaMacchia for criminal copyright infringement, stemming from his creation of a bulletin board on the Internet from which subscribers uploaded and downloaded copies of computer software. Although the scheme resulted in estimated losses of one million dollars to the copyright holders, the court found that LaMacchia's actions were not criminal sanctionable under § 506(a) of the Copyright Act. The reason was that there was no indication that LaMacchia had operated his computer bulletin board for "purposes of commercial advantage or private financial gain." After the decision, the computer software industry began to lobby Congress to amend the Copyright Act. In response, Congress proposed the Criminal Copyright Improvement Act of 1995 (Improvement Act) which, if enacted, would close the legal loopholes exposed by the *LaMacchia* decision. See Howell, *supra* note 191, at 671 (noting that the Improvement Act has three provisions that "directly address the issues raised by the *LaMacchia* fiasco, and serve the sole purpose of deterring willful mass infringements undertaken without financial incentive."). Therefore, although various interests cannot directly influence the court system, they can lobby to change the Copyright Act so that future decisions are more favorable.

criminal actions that can decrease the chances of successful prosecution. Furthermore, copyright holders do not receive any direct pecuniary gain from criminal prosecutions. That is, while civil fines accrue to the plaintiff, criminal fines accrue to the federal government.

Yet despite these apparent disadvantages, there are a number of reasons why copyright holders might prefer criminal sanctions over civil remedies. First, criminal sanctions serve to augment civil deterrence. The possibilities of civil remedies alone is often insufficient to deter potential violators who willfully infringe a protected copyright for commercial gain.¹⁹⁶ Indeed, civil damages actions can be seen as just another cost of doing business. As one witness stated before the Senate's Subcommittee on Patents, Copyrights and Trademarks:

Civil penalties can sometimes be absorbed as a mere cost of doing business. However, large civil penalties at most result in the collapse of an illegal enterprise. Only criminal penalties, with jail or the prospect of jail, are drastic enough to restrain repeated offenders and to deter the flagrant kinds of piracy with which Congress has been concerned.¹⁹⁷

From the holder's perspective, the problem is that an individual can infringe the copyright, pay the civil damages and still earn a profit on the venture. The imposition of criminal sanctions can serve to fill this "gap" through substantial fines and imprisonment.¹⁹⁸

Second, criminal sanctions are a more effective deterrence than civil remedies against judgment proof defendants. This is a common justification for criminal sanctions,¹⁹⁹ but it rings particularly true

¹⁹⁶ Hanock Gessesse & Karen Sanzaro, *Intellectual Property Crimes*, 33 AM. CRIM. L. REV. 839, 840 (1996).

¹⁹⁷ See *Civil and Criminal Enforcement of the Copyright Laws: Hearings Before the Subcomm. on Patents, Copyrights and Trademarks of the Senate Comm. on the Judiciary*, 99th Cong. 74 (1985) (statement of David Ladd, former Register of Copyrights, Wiley & Rein, Washington, D.C.). See also Gessesse & Sanzaro, *supra* note 196, at 840 ("[t]he possibility of civil sanctions alone is insufficient to deter violators who would steal a trade secret or infringe on another's trademark, copyright or patent. Indeed, some entrepreneurs view civil damage actions as just another cost of doing business.")

¹⁹⁸ *Id.* See also David D. Haddock et al., *An Ordinary Economic Rationale for Extraordinary Legal Sanctions*, 78 CAL. L. REV. 1 (1990). Professor Haddock and his contributors provide an efficiency rationale for the use of punitive sanctions:

A remedy that "makes the plaintiff whole" [that is, ordinary remedies] can create incentives for a defendant to bypass negotiation in favor of an outright taking. Takings discourage investment in takeable assets and create deadweight losses, since defendants spend resources to find such takeable assets and plaintiff spends resources to protect them. Consequently, an efficient legal system often will opt for a remedy that makes a defendant rather than a plaintiff whole [that is, extraordinary remedies] when the defendant intentionally takes, rather than negotiates for, a property-protected entitlement.

Id. at 50.

¹⁹⁹ Steven Shavell, *Criminal Law and the Optimal Use of Nonmonetary Sanctions as a Deterrent*, 85 COLUM. L. REV. 1232 (1985). Professor Shavell argues that nonmonetary sanctions (i.e., imprisonment) should be employed "only where monetary sanctions cannot adequately

given the advent of modern technologies that have made the duplication process easier and cheaper. For example, those engaged in the unauthorized duplication of copyrighted material are often individuals who are using their own personal equipment. Even operations that are larger might not be endowed with many resources beyond the equipment used to produce the unauthorized copies. In both situations, the imposition of civil sanctions can prove ineffective because the defendants have insufficient funds to cover the fine. Yet, criminal sanctions in the form of imprisonment can be imposed on defendants who are liable for large damages but have limited resources. Accordingly, the traditional rationale for criminal sanctions takes on a new urgency—at least from the holder's perspective—in the area of modern copyright infringement.

Third, the incarceration of convicted infringers ensures that they are no longer market participants. After civil fines have been imposed, infringers can rapidly re-enter the market. Civil remedies do not require that the infringing copies or the manufacturing equipment used to be destroyed. But even if the trial judge in his or her discretion decides to have the infringing copies and the manufacturing equipment destroyed, the convicted individual can nonetheless quickly re-enter the market due to low start-up costs.²⁰⁰ By contrast, if criminal sanctions in the form of imprisonment are imposed, then the infringer is physically removed from the market (along with the infringing copies and manufacturing equipment), and therefore no longer represents a threat. In this sense, felony sanctions ensure a form of cartelization. Market participants who charge a competitive price are removed from the market thereby leaving just the copyright holders who charge monopoly prices.

As a final matter, the rent seeking model, in order to prove its worth, must also have predicative as well as explanatory power. The main implication stemming from the model is that industry-specific interests will continue to push for more stringent criminal sanctions. As potential economic rents increase and the marginal costs of dupli-

deter undesirable acts." *Id.* at 1236. To determine whether monetary sanctions can offer sufficient deterrence, five factors need to be examined. "One of these factors plainly is the size of a party's assets In the extreme case, for instance, it is impossible to deter a person with no assets by the threat of monetary sanctions." *Id.* at 1236-37.

²⁰⁰ In recent years, the price of duplicating equipment has decreased dramatically. See Jayashri Srikantiah, Note, *The Response of Copyright to the Enforcement Strain of Inexpensive Copying Technology*, 71 N.Y.U. L. REV. 1634, 1634 (1996) (observing that "[a]dvances in reprographic technology have spawned inexpensive photocopiers, videotape recorders (VTRs), modems, computers, networks, and tape recorders capable of making high-quality copies."); Howell, *supra* note 191, at 657 (noting that "devices such as computers, modems, fax machines and photocopiers are a common part of everyday life, thus rendering the 'tools' of infringement readily accessible to pirates").

cation decrease, there will be a continued drive for more stringent criminal sanctions. Both elements are characteristic of the current intellectual property market. Potential economic rents are increasing, and hence, industry-specific groups have an incentive to lobby for more stringent protection of their copyrights. By all accounts, the market for intellectual property is expanding rapidly, which means larger profits and hence greater incentive to spend more resources in securing well-protected copyright protection.

As the market for copyrighted material increases, however, new technology causes a decrease in the marginal cost of duplication. As the *Wall Street Journal* recently reported: “[n]ever, [copyright holders] say, has there been a threat quite like the Internet. It is a medium capable of making endless copies of material—songs, software, text, films—at virtually no cost.”²⁰¹ The MPAA is currently calling for criminal sanctions to be extended to digital copies.²⁰² The Commerce Department suggests that the copyright laws should be extended to cover the content on the Internet, including a recommendation that the infringement of more than \$5,000 of copyrighted material on-line be made a felony offense.²⁰³ Given the above, the shift towards more stringent criminal sanctions for copyright infringement is likely to be the trend for the foreseeable future.

VI. CONCLUSION

Copyright law has become increasingly criminally oriented. Prior to 1976, the willful infringement of a copyright constituted, at most, a misdemeanor penalty of not more than \$1,000 and *one year* in prison. By 1992, the willful infringement of a copyright constituted, at most, a felony penalty of \$250,000 and *ten years* in prison. The legislative history of the three recent criminal amendments to the Copyright Act indicates that the shift in policy was not made by policy makers sitting in a vacuum, determining the “optimal policy.” Rather, the process was driven by industry-specific interest groups.

This Comment does not posit whether such a process is, or indeed the results are good, bad or indifferent. Merely what this Comment intended to demonstrate was that the rent seeking model—previously only applied in the non-criminal context—was equally applicable to the criminal law formulation process. The parsimonious model hypothesizes: wherever there is a rent, there is a rent seeker

²⁰¹ Ross Kerber, *Vigilant Copyright Holders Patrol the Internet*, WALL ST. J., Dec. 13, 1995, at B1.

²⁰² Mike Snider, *Lifting On-Line Material*, USA TODAY, Feb. 9, 1996, at D1 (quoting Jack Valenti, Motion Picture Association of America).

²⁰³ ARIZ. REPUBLIC, Sept. 6, 1995, at D7.

trying to get it. Thus, if interest groups can use criminal law mechanisms in order to earn monopoly rents, the iron law applies. Criminal law is not free from self-interested, utility maximizing groups solely because it comes under the umbra of "criminal law." Rather the focus should be on whether the criminal law can generate economic rents for specific interests. If so, then it is likely that these interests will be involved, to a high degree, in the formulation of these criminal laws.