DRAFT-WORK-IN-PROGRESS-PLEASE DO NOT CITE

Fake it till You Make It: A Justification for Intellectual Property "Piracy"

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I refuse, to suffer for your selfish mistakes! There's consequences to your actions more than your dreams at stake! I'll make a stand, take my life in my hands! We won't let this end! Dream up a future, make it happen! And follow your plans!

--Fake It Till You Make It, Close to Home¹

ABSTRACT

Economic development especially the Least Developed Countries (LDC) requires use of intellectual property without always compensating the rights holders in the most developed countries. Unconventionally, this Article uses neoclassical economics to provide a rational solution to access rights in the LDC while respecting the first principle of intellectual property right-utilitarianism. The price discrimination model provides a useful rubric to segregate developed country from developing country markets, and it also provides a subtle test in the case of individual uses of intellectual property as to which should be tolerated in developing nations as uncompensated uses and which should be punished as piracy because they subvert the economic incentive necessary to promote intellectual property in the more developed nations. This Article concludes that in the long run tolerated uncompensated uses in nascent LDC markets are more efficient engines of economic development and are in the developed countries best interests for a promote stable global community though economic development in the LDC.

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¹ http://www.plyrics.com/lyrics/closetohome/fakeittilyoumakeit.html

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I. INTRODUCTION

Intellectual property is important for economic development.² Samuel Clemens (Mark Twain) once quipped "that a country without a patent office and good patent laws was just a crab and couldn't travel anyway but sideways and backwards."³ Economic development in the least developed countries (LDC) is a critical social, political, and national security interest of the more developed countries. Over the past decades, many attempts have been made to accelerate the economic growth of the LDCs ranging from direct foreign aid to facilitating technology transfers. Today, developed countries are facing increasing domestic pressure to cut direct

² This Article suggests using the health, welfare, and quality of life in a country as measures of its economic development rather than its level of industrialization.

³ MARK TWAIN, A CONNECTICUT YANKEE IN KING ARTHUR'S COURT 67 (Harper & Bros. 1889).

foreign aid or to closely align foreign aid with domestic or foreign policy strategic interests rather than to use foreign aid as a principled tool to promote economic development in the LDCs.⁴ The existing models of direct foreign aid, technology transfer, customs, or market access preferences have been successful. So far, no country has graduated from the status of being designated a least developed country, despite substantial efforts by developed countries, international organizations, non-governmental organizations, and religious or secular private charities to promote economic development.

However, it is relatively uncontroversial that in the past many countries that successfully transitioned from developing to developed-nation status went through a sustained period of using the intellectual property of more developed nations without compensating foreign rights holders.⁵ They were able to do this because of weak enforcement of domestic intellectual property laws, inchoate international intellectual property norms without an effective enforcement mechanism. This lax period of intellectual property enforcement ended in the post-World Trade Organization era.

The modern scope of domestic intellectual property rights protection is of concern to the new post-colonial nation states. These states were not part of the debates that formalized the 19th Century international instruments that made patent, copyright, trademarks, and to a lesser degree trade secrets international property rights norms. And, more recently these countries were the marginalized countries that had only a feckless voice in creating the modern the World Trade Organization system of preferences, tariffs, and enforcement. The post-WTO/TRIPS enforcement mechanisms create new tolls on the royal road to economic development without providing the necessary resources to develop a domestic infrastructure that promotes sustained economic development.

This Article develops its contentions through two rhetorical devices a meme and a simile. A predominant meme of the latter part of the last century and so far in this one is to "fake it till you make it." Well, to be more charitable, "fake it till you make it" is more often promoted as "visualize it and you will achieve it." This meme serves as this Article's starting point that developing countries, especially the least developed countries ("LDC") will have to fake it [engage in unauthorized uses of intellectual property] before they can make it to the coveted developed nation status. This Article then uses the simile of the pirate code as an ending point to propose the critical rethinking of the scope intellectual

⁴ Thomas Carothers and Diane De Gramont, Development Aid Confronts Politics: The Almost Revolution 89 (Carnegie Endowment 2013).

⁵ See generally Adrian Johns, Piracy: The Intellectual Property Wars from Gutenberg to Gates (Unv. of Chicago Press 2009).

property rights. The pirate code was selected because it was outside the scope the formalities of maritime law; yet, it imposed law on the lawless. Even lawful merchants benefited from the self-discipline of the pirate code. The scope of the proposed solution is perhaps outside the patent/industrial property and copyright conventions of the 19th Century, their exception and limitations, and their ultimate enshrinement into global trade norms as part of the WTO/TRIPs regime. Yet, it is entirely consistent with the economic purposes underlying modern intellectual property law.

The modern mantra of the more economically developed, intellectual property rich, nations is that more and ever increasingly stronger and effective domestic enforcement intellectual property rights promote economic growth in developing countries and create a sounder global economy thus stronger intellectual property rights promotes global general welfare. The mantra of the poorer less intellectual property rich countries is to demand access to the intellectual property of the more developed nations either through compulsory licenses or favorable pricing. These two potentially extreme positions challenge the legitimacy of the modern intellectual property system which is largely justified through a utilitarian model-that presupposes that limited economic incentives to authors and inventors to create and to innovate will encourage the progress of science and promote the useful arts for the ultimate benefit of all.

Either position in the long run promotes disrespect for intellectual property rights. The arguments for ever increasing intellectual property rights are often anecdotal, counterfactual, and of the variety of "what might have been." So far, the balance has been consistently struck in favor of additional intellectual property rights on the assumption that someday the protected intellectual property will enter the public domain for the benefit of all as opposed to fewer rights which may at least theoretically result in underinvestment in research and development and the *ab initio* failure of the system to create new inventions or new works of authorship.

This Article proposes a "pirates code" of uncompensated uses that convert the deadweight loss from protecting foreign intellectual property rights in the LDC and which provide no intellectual property incentive to developed nation intellectual property rights holders into a consumer surplus in the LDCs. Neoclassical economic theory demonstrates that the Article's proposed model which recommends permitting selected developing countries to use the intellectual "property" of more developed countries without compensating developed country rights holders is consistent with the economic incentives needed to promote globally what the United States Constitution calls the progress of science and the useful arts⁶, if the developed and developing country markets can be segmented using a modified third-order price discrimination model. This Article will analyze the possibilities and effects using a price discrimination model grounded in economic literature. By analyzing a price discrimination model and the relevant literature, one may begin to predict the likely effects of uncompensated use in the LDC on the research and development and dissemination of intellectual property in the developed countries, of excluding the least developed countries from the modern international intellectual property regime.

Part II contends that rational property rights, including rational intellectual property rights, should grounded in principles of economic efficiency, and therefore, the very logical corollary that economic efficiency should also determine the scope of property rights.⁷ Part III proposes using a price discrimination model to demonstrate that the lack of intellectual property protection in at least the LDC will not affect the utilitarian incentives needed to promote intellectual property creation and commercialization in developed nations. In Part IV, this article will evaluate whether the LDC are privateers or pirates, and return to the price discrimination model to articulate some legal and economic principles for the development of a pirates code of uncompensated uses. Part V will evaluate the benefits for the developing country for the developed country. This Article then concludes that properly constrained, a "pirate code" of unauthorized and uncompensated uses in some markets are consistent with both the economic theory and reality of the intellectual property system and may also serve as a useful tool of economic development in the LDCs.

II. ECONOMIC JUSTIFICATIONS FOR INTELLECTUAL PROPERTY

Whether there is a sound economic justification for protecting intangible works of innovation and creativity as property under the rubric of intellectual property, is hotly debated among economists.⁸ The putative

⁶ U.S. Const. Art. 1, Sec. 8, Cl. 8

⁷ For the purposes of this article, the so-called classical economic model and justifications for intellectual property are those as authoritatively espoused by William M. Landes and Richard A. Posner. See WILLIAM M. LANDES AND RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW (2003). Whether law and economics is a sound model on which to analyze intellectual property is a highly contested issue. See Andreas Rahmatian, *A Fundamental Critique of the Law and Economics Analysis of Intellectual Property Rights*, METHODS AND PERSPECTIVES IN INTELLECTUAL PROPERTY, Graeme B. Dinwoodie, ed 96-109 (Edward Elger 2013).

⁸ See Stanley M. Besen and Leo J. Raskin, *An Introduction to the Law of Economics of Intellectual Property*, 5 J OF ECON. PERSP. 3, 3-4 (1991); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 Tex. L. Rev. 1031, ____ (2005).

justification intellectual property protection is that statutory protection of creative works and innovation provides the economic incentives necessary to assure their optimal production or perhaps to at least preclude the danger of their under production.⁹ In the United States, the public policy justification for copyright and patent protection is clear. "The sole interest of the United States and the primary object in conferring the monopoly lie in the general benefits derived by the public from the labors of authors."¹⁰ The Supreme Court would later opine, "The primary objective of copyright is not to reward the labor of authors, but 'to promote the Progress of Science and useful Arts."¹¹ So at least in the United States, the constitutional boundary of legitimate intellectual property protection is on the frontier at the point where the consumer surplus is the greatest.¹²

Even economists, who theorize that statutory protection is necessary in order to assure an adequate supply of "intellectual property would not contend that the existing intellectual property regime is sufficiently well calibrated in order to assure the optimal welfare maximizing production of intellectual property.¹³ Excessive statutory economic incentives to create new copyrighted works or to promote research and development of innovation may actually result in sub-optional investment as firms compete in the winner take all race for patent protection or authors steer further afield than necessary to avoid possible allegations of copyright infringement.14

Of course, any economic incentives to promote creativity could be much to do about nothing. Whether the provision of an economic incentive actually does promote creativity is heavily discounted in the psychological literature.¹⁵ One study of the psychological effects of economic incentives

⁹ Bresen, *supra* note XX, at 5.

¹⁰ Fox Film Corp. v. Doyal. 286 U.S. 123, 127-28) (1932) ("A copyright, like a patent, is at once the equivalent given by the public for benefits bestowed by the genius and meditations and skill of individuals, and the incentive to further efforts for the same important objects" (internal quotation marks omitted)); Ebay v. MercExchange, L.L.C., 547 U.S. 388, 392 (2006).

¹¹ Feist v. Rural Telephone Services, 499 U.S. 340, 349(1991).

¹² See Eldred v. Ashcroft, 537 U.S. 186 (2002). However, the exact point on this frontier is one that the U.S. Constitution permits the U.S. Congress to determine as a matter of competing policies rather than rational economic efficiency. See *id.*; Richard A. Epstein, The "Necessary" History of Property and Liberty, 6 CHAP. L. REV. 1, 27 (2003). See generally, Craig W. Dallon, Original Intent and The Copyright Clause: Eldred v. Ashcroft Gets It Right, 50 ST. LOUIS U. L.J. 307 (2007).

¹³ See, e.g., Mark A. Lemley, Property, Intellectual Property, and Free Riding, 8 Tex. L. Rev. 1031 (2004-05); LANDES AND POSNER, supra note xx, at ___; SUZANNE SCOTCHMER, INNOVATION AND INCENTIVES 98-123 (MIT Press, 2006)

¹⁴ See LANDES AND POSNER, *supra* note xx, at _____
¹⁵ See generally Robert Eisenberger and Stephen Armeli, *Can Salient Reward Increase*

and creativity concluded, "The generalization that reward lessens creatively is commonly accepted as fact. Most literature reviews and textbooks agree that the powerful incremental effects of reward on conventional performance simply do not apply to creativity."¹⁶ However, while economic incentives (rewards) may not be necessary to promote creativity (and may even hinder creativity), they still may be necessary for the dissemination and commercialization of works protected by intellectual property.¹⁷

As Fritz Machlup observed, "If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences, to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it."¹⁸ In order to avoid counterfactual arguments about the success of intellectual property protection, the author would extend this principled tongue-in-cheek defense of patent protection to include our current regime of copyright protection.¹⁹

There is extensive scholarly questioning of the underlying economic utilitarian assumptions behind intellectual property protection; therefore, this Article posits that as the utilitarian justification for intellectual property weakens, this Article's policy recommendation of a limited return to the 19th century and early 20th century market principles of laissez-faire domestic uncompensated uses at least in the narrow context of an LDC grows logarithmically stronger.²⁰ This section will examine the scope of legal protection the two of the most significant forms of intellectual property, copyright and patent law and then use economic theory to suggest limitations as to their proper scope in an LDC.²¹.

¹⁸ Fritz Machlup, An Economic Review of the Patent System (U.S. Senate,

Subcommittee on Patents, Trademarks and Copyrights, Study No. 15), pp.79-80 (1958) available at

Creative Performance Without Reducing Intrinsic Creative Interest?, 72 J. of Personality and Social Psychology 52 (1997)(discussing psychology studies on the effects of rewards and creative behavior).

¹⁶ Robert Eisenberger, et. al., Can the Promise of Reward Increase Creativity, 74 J. OF PERSONALITY AND SOCIAL PSYCHOLOGY 704, 704 (1998).

¹⁷ Landes and Posner, *supra* note xx, at 53.

http://library.mises.org/books/Fritz%20Machlup/An%20Economic%20Review%20of%20t he%20Patent%20System_Vol_3.pdf

¹⁹ Cf. Sony Corp. v. Universal City Studios, 464 U.S. 417 (1984).

²⁰ Of course, there are other theoretical justifications for intellectual property. See http://plato.stanford.edu/entries/intellectual-property/. Any diminution in the persuasive force of the law and economic justification would http://plato.stanford.edu/entries/intellectual-property/ not weaken contentions based on other theoretical models.

²¹ In U.S. law, there are other forms of intellectual property that are not discussed in this Article for example: boat-hull protection, mask-works, unfixed recordings, etc. Outside the U.S., there are new forms of IP or quasi-IP, such as geographic indicators, intangible

A. Copyright

Traditionally in common law countries since the Statute of Ann (and the U.S. Constitution), copyright law has relied on a utilitarian justification.²² More recently, the economic rights of authors and artists have been extended in common law countries to recognize the civil law concept of *droit moral* or moral rights. This section will discuss each of these two concepts of copyright. However, for the purposes of this Article, the author's economic rights under copyright law are more significant as an issue of economic development.

1. Copyright's Economic Rights

Copyright protects original works of authorship.²³ In the United States, two requirements for federal copyright protection are that the work be fixed and original.²⁴ Over time, U.S. copyright law has decreased the various formalisms necessary to obtain copyright protection; although, it still grants the copyright owner additional rights, if the owner complies with the ancient formalities of the U.S. copyright law.²⁵ Moreover, the copyright incentive to the author has from the earliest days of copyright law been decoupled from the creator of the work and then transferred to the disseminator of the work, usually a publisher. Over time, the term and scope of copyright law protection has been increasingly detached from its incentive purposes in order to grant strategic rents to a small number of copyright owners (and in reality more often to either publishers or to the estates of deceased authors, artists, and composers).²⁶

2. Copyright's Moral Rights

Moral rights are a more recent accretion from the civil law countries

cultural heritage, and biodiversity. The marginal economic significance of these types of innovation in the context of developing countries is probably not important, and that the economic incentive aspects of these types of intellectual property are sufficiently similar to copyright, patent, trade secrets/know how, and trademarks or outside the scope of viable "uncompensated uses" that a detailed analysis would add length to the article without adding much substance to its analysis.

²² See Alina Ng, COPYRIGHT LAW AND THE PROGRESS OF SCIENCE AND THE USEFUL ARTS 86 (Edward Elger 2011). Fox Film Corp. v. Doyal. 286 U.S. 123, 127-28) (1932), Fiest v. Rural Tel Serv. Co., 499 U.S. 340, 351 (1991)

²³ Fiest v. Rural Tel Serv. Co., 499 U.S. 340, 351 (1991).

²⁴ 17 U.S.C. §101, §102; Fiest, 499, U.S. at 345-46.

²⁵ See 17 U.S.C. §410, §411, §412; see also The Football Ass'n Premier League Ltd. v. YouTube, Inc., 633 F.Supp.2d 159, 162-63 (S.D.N.Y. 2009).

²⁶ See Eldred v. Ashcroft, 537 U.S. 186, 222 (2003) (Stevens, J. dissenting); 537 U.S. at 242 (Breyer, J. dissenting).

onto the copyright regime of the common law.²⁷ Unlike the author's (or artist's) economic rights under copyright law, which are freely alienable, in many countries moral rights are an extension of the personhood of creator of the work and may be waived but not assigned by the author.²⁸ The anti-assignment provision of moral rights as a form of property right makes it difficult to analyze under the rubric presupposed in this article.²⁹ Moreover, it leads to serious question as to whether it is in reality a property right, quasi-property right, tort right, misappropriation right, or even sounds in some other body of law.³⁰

Consequently, the economic arguments justifying an author's moral rights are at best unproven; therefore, this section will not address them in detail.³¹ This Article also will avoid the thorny issue of whether moral rights are economically efficient. It is sufficient to note on this problematic subject that even the proponents of an economic efficiency argument for moral right recognize the at best tangential relationship between moral rights and economic efficiency.³² The posited economic justifications for copyright's moral rights regime sound more in trademark law (or perhaps other forms of unfair competition or tort law) as they relate more to the artist's reputational interests than in traditional principles of copyright which control "copying" broadly defined.³³ Having set aside the tangential

²⁷ Justin Hughes, *American Moral Rights And Fixing The Dastar "Gap"*, 2007 UTAH L. REV. 659, 706-707 (2007).

²⁸ http://en.wikipedia.org/wiki/Moral_rights#Worldwide_situation (table showing the various permutations of moral rights)

²⁹ A more nuanced model of uncompensated uses for economic development could exclude moral rights in unique works versus fungible commodity works. The author posits that rarely will there be a significant moral rights issue in the types of commoditized works that are likely to be used as part of an economic development strategy. These works are more likely to fall under the rubric of neighboring rights in civil law copyright regimes or outside of the Visual Artists Rights Act (VARA) in the United States. See 17 U.S.C. § 106A.

³⁰ Cf. Adam Mossoff, What is Property? Putting the Pieces Back Together, 45 ARIZ. L. REV. 371, 390-91 (2003)(describing alienation as an essential element of property law). See Dane S. Ciolino, Moral Rights And Real Obligations: A Property-Law Framework For The Protection Of Authors' Moral Rights, 69 TUL. L. REV. 935, 950-51, 956-57 (1995); Lars S Smith, General Intangible or Commercial Tort: Moral Rights and State-Based Intellectual Property as Collateral Under U.C.C. Revised Article 9, 22 EMORY BANKR. DEV. J. 95 (2005).

³¹ See LANDES AND POSNER, *supra* xx, at 279-280.

³² Henry Hansmann and Marina Santilli, *Authors' and Artists' Moral Rights: A Comparative Legal and Economic Analysis*, 26 J. OF LEGAL STUDIES 95 (1997) http://www.law.yale.edu/documents/pdf/Faculty/Hansmann_authors_and_artists_moral_rig hts.pdf. My comment regarding the law and economics literature should not be taken as criticism of any one scholar or article rather a generic observation on the paucity of robust articles engaging in a critical economic analysis of moral rights.

³³ *Id.* at _____. See *infra*, III.D discussing the economic justifications for trademark law.

question of moral rights, this Article will focus *solely* on the classical economic or utilitarian justifications for copyright protection.

3. Economic Model for Justifying Copyright Protection

The economic classical model for copyright protection emphasizes the incentive-access tradeoff. The classic economic model of copyright protection is one that attempts to solve the public goods problem. Copyrighted works are expensive to produce (high fixed costs) and once created may be cheaply reproduced. The unauthorized reproductions will compete in the market place with the author's own works, and because the copyist does not bear the fixed costs of creation, the copyist's reproductions will be cheaper and the author will not recover his or her fixed costs of creation.³⁴ This model suffers from a lack of calibration. It does not consider that the level of legal copyright protection is also a variable that may be calibrated to assure the theoretical optimal production of new works.

This Article will use the Landes and Posner economic model for justifying copyright protection. Landes and Posner expounded on the classical model for copyright protection.³⁵ Unlike previous standard copyright models that emphasized the incentive-access tradeoff, the Landes and Posner Model emphasizes the incentive-cost-of-expression with at different levels of copyright protection.³⁶ Landes and Posner's model makes numerous assumptions in order to simplify the model. First, they assume that the quality of the original and the alleged infringing copy are perfect substitutes.³⁷ This may be a problematic assumption in the case of reproduction in the LDCs.³⁸ They then also assume that demand is certain, that the cost of the expression is the sole fixed cost, and the marginal costs of the author-creators but not the infringers are constant.³⁹ This model

³⁹ LANDES AND POSNER, *supra* xx, at ___. Landes and Posner talk about copiers broadly from the legally excused fair uses by ordinary scholars to the illicit and copyright

³⁴See Tom W. Bell, *The Specter of Copyism v. Blockheaded Authors: How User-Generated Content Affects Copyright Policy*, 10 VAND. J. ENT. & TECH. L. 841, 843-846 (2007-2008). We can assume that the author could recover the marginal costs of producing units of the work, just not the fixed initial costs of creating the work. See LANDES AND POSNER, supra xx, at ___.

³⁵ LANDES AND POSNER, *supra* xx, at 71.

³⁶ LANDES AND POSNER, *supra* xx, at 71.

³⁷ LANDES AND POSNER, *supra* xx, at ____

³⁸ This is problematic because for many high value works a copy is not a perfect substitute for the original. For example, it is not clear that a lawyer or doctor would rely on an unprovenanced source – a lawyer would not rely on a "copy" of a case unless she was very sure of the source of the copy or a doctor would rely on unknown work as a source of medical information, and in the case of a patent infringing product the quality of the infringing good may be inferior to that of a licensed product.

develops with the following variables: p=copy price, q=quantity demanded, q*p=market demand, x=number of copy by author, y=number of copies by infringer so that (q=x+y), c=author's marginal cost per copy, e=cost of expression, and z=range of copyright protection from 0 (no protection ~ public domain) to 1 (complete protection ~ fee simple absolute in the work).⁴⁰

The economic assumptions underlying the role of infringers in the Landes and Posner model descriptively is roughly analogous to the model of fringe competitors competing with a market dominant firm in a legitimate market.⁴¹ Infringers are rational and will produce copies to the point where price equals marginal cost (p=mc), and like in any legitimate firm margin costs increase depending on the number of copies (and in the case of the infringing firm, the level of copyright protection (z)). So, the infringers demand curve may be described as y=y(p,z) with $y_p>0$ and $y_z<0$ so that either an increase in price or a decrease in the level of copyright protection will increase the supply of infringing copyrighted works.⁴² Therefore, the author's profits (π) are $\pi = (p-c)x \cdot e(z)$.⁴³ With a few additional levels of algebraic manipulation, based on the previous assumption one may conclude that a rational author will only create a new work if R (author's gross profits) is greater than or equal to the cost of expression (e) multiplied by the level of protection (z) $[(R \ge e(z))]$.⁴⁴ The demand curve for the author is represented by subtracting the supply curve of the infringers $(y=y(p,z^0))$ from the market demand for all copies of the work.

To understand how this interplays in a market, one then needs to consider N which is the total number of equivalent works. For the purposes of this Article, equivalent works are works that could substitute in the market for the copyrighted work. The cost of expression e(z) is a variable that will change by author and by work.⁴⁵ So that the supply of new works will increase until e(z)=R.⁴⁶ Regardless of the level of legal protection, lovers will always write sonnets, and law professors will always sing the blues while grading examinations because copyright law's economic incentives play no role in the creation of these works. However for those works requiring some level of copyright protection, too low a level of

infringing uses. See *id.* at _____. This Article focuses on the arguably illicit range of the uses so it will describe these "copiers" as infringers.

⁴⁰ LANDES AND POSNER, supra xx, at ___. In the context of this Article, the range of *z* could be truncated to only that point on the line z>0 where illicit uses begin.

⁴¹ LANDES AND POSNER, supra xx, at ____

⁴² LANDES AND POSNER, supra xx, at ____

⁴³ LANDES AND POSNER, supra xx, at ____

⁴⁴ LANDES AND POSNER, supra xx, at ____

⁴⁵ LANDES AND POSNER, supra xx, at ___.

⁴⁶ LANDES AND POSNER, supra xx, at ___. (assuming $N_R > 0$, $N_z > 0$))

protection (z) will result in an under production of new works; and for those works with marginal expressive value, too high a level of legal protection (z) will result in an under production. In commercial terms, this could be described as the range from Hollywood blockbusters and user generated puerile YouTube® parodies. Arguendo, faculty law review articles have some economic value; however, at very high level of z, faculty members would stop writing because they could not afford the licensing costs of using the materials that they quote, cite to, or risk adverse to the litigation costs of losing under an extremely narrow fair use exception.

Conceptually, the above can be represented as:

INSERT FIGURE 1, 2 HERE [note to Law Review Editor, professional figures are being prepared to insert here]

Landes and Posner then conclude that social welfare is maximized when the marginal benefit of increasing z, copyright protection resulting in a "higher producer surplus exactly balances the reduction in welfare in the market for copies plus the reduction on producer surplus."⁴⁷ In economic literature, the concept of social welfare [and its maximization] is indeterminate.⁴⁸ However, one definition of social welfare that is consistent with the Landes and Posner Model and the purposes of the Article's analysis, is "[s]ocial welfare is the sum of the firms' expected profits (or, if they are not risk neutral, of their expected utilities of profits) and the monetary equivalent of consumers' welfare."⁴⁹ According, the preferred model of intellectual property balances incentives, access, and future works. As well be discussed later in this Article, reducing the level of protection in LDC, will increase the net social welfare without changing the economic incentives to produce new works.

B. Patent

Patent law promotes the progress of science and the useful arts by encouraging investment in research, development, commercialization as well providing an incentive to the inventor to publically disclose the invention in exchange for a statutory period of strong exclusivity.⁵⁰

⁴⁷ LANDES AND POSNER, supra xx, at ___.

⁴⁸ See generally Gary Lawson, Efficiency and Individualism, 42 DUKE L.J. 53, 78-84 (1992).

⁴⁹ A. Mitchell Polinsky and Steven Shavell, *Contribution and Claim Reduction Among Antitrust Defendants: An Economic Analysis*, 33 STAN. L. REV. 447, 465 (1981).

⁵⁰ See J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124, 142 (2001) ("The disclosure required by the Patent Act is 'the quid pro quo of the right to exclude."" (quoting Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 484 (1974))).

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However, the inventor has an option that the author does not. Unlike an author, who must disclose to commercialize the work, the inventor could elect to exploit her new invention as a trade secret. Patent law provides a shorter period of protection than copyright law; however, the protection granted under patent law is more robust—albeit more expensive to obtain.

The summary of Landes and Posner's economic analysis developed in the previous section on copyright law applies equally well here.⁵¹ Landes and Posner have a well-developed theory of patent law; however, these distinctions are not relevant to this Article.⁵² The basic model of copyright incentives previously developed in this Article adequately accounts for the incentives necessary to develop new forms of innovation under patent law incentives. The incentives behind patent, like those behind copyright, are that a limited period of exclusivity and an opportunity to exploit the market for the claimed invention will provide an incentive to engage in research, development, and commercialization. According, the preferred economic model of patent law balances incentives, access, and future works. As will be discussed later in this Article, reducing the level of protection in LDC, will increase the net social welfare without changing the economic incentives to innovate.

C. Trademark

Although trademark law plays a significant role in the modern intellectual property regime (and is susceptible to economic analysis),⁵³ it is outside the scope of this Article, because unlike copyright and patents the goal of which is the promotion of progress and the useful arts, trademark law is regulatory in nature. Traditionally, the proper goal of trademark law was to regulate the integrity of the marketplace by preventing deceptive transactions that result in the likelihood of consumer confusion. The author of this Article was unable to postulate an economic development reason that would justify deceiving an LDC (or any other) consumer. Further, it is not clear whether the externalities of trademark infringement could be limited to the LDC market where the infringing goods were sold. In a global economy, bad publicity resulting from the sales of defective falsely branded products in an LDC is likely to go viral and to affect the sales of the goods (or other goods) produced by the developed country rights holders in other countries or markets.

⁵¹ LANDES AND POSNER, supra xx, at ___.

⁵² LANDES AND POSNER, supra xx, at

⁵³ LANDES AND POSNER, supra xx, at ___.

D. Conclusion

Although, the points of limitation under copyright and patent are different, each of form of intellectual property contributes to the general welfare as long as it securely moored to the appropriate level of incentives. However, when incentives no longer play a role in their continued production, superfluous copyright and patent protection begin to reduce the general welfare, sometimes even the welfare of the rights holders.⁵⁴ This Article posits that some markets for some goods are unnecessary to the utilitarian incentives that underlay intellectual property law in the developed Therefore, protection of intellectual property in these markets nations. imposes costs, reduces the general welfare, with no corresponding benefit to the author, inventor, or rights holder.

III. A RATIONAL ECONOMIC MODEL FOR INTERNATIONAL LIMITATIONS ON INTELLECTUAL PROPERTY

If one accepts the classical unscientific and intuition-based public policy justifications for intellectual property such as those found in the United States Constitution or the Statute of Ann that provide private incentives to promote the public welfare or even the more modern nuanced "scientific" justifications for intellectual property rights posited by economists then one can reach a logical limit on the scope of international intellectual property rights. In public policy terms, this scope is defined when the extent of the intellectual property right protection is inimical to the public's interest in the creation and dissemination of intellectual property.⁵⁵ In economic terms when marginal increases in intellectual property protection do not provide any additional incentives to create new works or promote innovation; or may even, burden the creation or use of intellectual property.⁵⁶

If one views the market for works of intellectual property as undifferentiated amorphous fungible whole then finding points of limitation on this frontier is an intractable problem of the slippery slope variety. Fortunately, economic theory explains intellectual property incentives in terms of markets. One of the most useful profit maximizing tools of any commercial entity is the potential to engage in price discrimination in order to assure that each transaction is as profitable as possible-maximize potential producer surplus. This Article posits the idea of flipping the usual justifications (and understanding) of price discrimination from maximizing the capture of consumer surplus by firms to providing an economic model

 ⁵⁴ LANDES AND POSNER, supra xx, at ___.
 ⁵⁵ See SCOTCHMER, *supra* xx, at 119 (discussing deadweight loss and profit).

⁵⁶ LANDES AND POSNER, supra xx, at

that maximizes consumer welfare in the LDC. Although, the proposed use is consistent with the normative understanding of price discrimination models; it is admittedly an unconventional use of these models. This Article takes a modified microeconomic approach and focuses with some caveats on individual LDCs at markets and treats them for the purposes of this Article as analogous to individuals in the market place.

This section will analyze how commercial entities engage in price discrimination and how the price discrimination model can be structured to assure that the economic incentives necessary for the promotion of intellectual property remain while permitting the un-fared use by the LDC.

A. Price Discrimination

Price discrimination is sometimes proffered as a treatment if not a cure for piracy.⁵⁷The essence of price discrimination permits a business to attempt charge each consumer (or groups of consumers) the maximum amount that they are willing to pay. A more technical definition is "price discrimination is present when two or more similar good are sold at prices that are in different rations to the marginal costs."⁵⁸ There are three prerequisites for effective price discrimination. First, the firm must have some market power. Second, the firm must have the ability to differentiate among customers. And third, it must have the ability to prevent resale (limit arbitrage) between customers.⁵⁹

For the purposes of this Article's analysis, one should assume that the intellectual property owner has market power over the legal uses of his or her intellectual property and that power is significant enough in the market to deter unlicensed uses of the intellectual property.⁶⁰ Candidly, the market power here is narrowly defined as the compensated, authorized uses that fall within the scope of the intellectual property right and do not fall within the scope of legal limitations and exceptions of the intellectual property right.⁶¹ This market is one that the owner has almost total control over.

This definition of market power is quite different from the usual definition of market power, which is the ability of a firm to raise price

⁵⁷ See, e.g., A Grahan Peace, et al., *Software Piracy in the Workplace: A model and Empirical Test*, 20 J. OF MAN. INFO. SYS. 153, 169 (2003)("country-dependent software pricing").

⁵⁸ Hal R. Varian, *Price Discrimination* printed in HANDBOOK OF INDUSTRIAL ORGANIZATION vol. 1 598 (eds R. Schmaensee and R.D. Willig)(Elsevier Science Pub. 1989); McAffee, *supra* xx, at 465.

⁵⁹ Varian, *supra* note xx, at 599.

⁶⁰ See LANDES AND POSNER, *supra* xx, at __; see also Ariel Katz, *Making Sense* Of Nonsense: Intellectual Property, Antitrust, And Market Power, 49 ARIZ. L. REV. 837, 855-56 (2007).

⁶¹ Cf. Katz, *supra* xx, at 855-56.

above the marginal cost and still earn a positive profit.⁶² One of the significant components of market power (traditionally defined) is the elasticity of demand.⁶³ In the traditional definition if there are ready adequate substitutes then there is little market power.⁶⁴ As a practical matter in order to simplify the discussion in this Article, it will assume that there is at least de jure market power and foreign intellectual property rights (at least in the LDC) protect any readily available substitutes. Further, albeit counter-intuitive, this Article also assumes that because of an imbedded learning curve and network externalities, creative works or innovation that are "open source" or which are now in the public domain intellectual property may not be readily substituted for works that are currently protected by intellectual property.⁶⁵

Second, this Article proposes a bright line test for distinguishing among potential customers. Individual consumer purchasing decisions are not a significant part of the relevant market in this Article's analysis. The focus is on aggregated purchasing power and decisions of the LDC. The analysis focuses on defining the relevant customer through the GNP or per capita income of the LDC with a stratified-nuanced focus on the consumers in that country receiving the benefits of the uncompensated uses. Consequently, luxury goods that are predominantly consumed by the middle or wealthy classes in the LDC who enjoy incomes comparable to those in the developed world would be ineligible for production under the proposed model while normal or inferior goods consumed by average or low-income consumers potentially would be within the tolerated marked for uncompensated uses of foreign intellectual property.

The sole exception is foreign intellectual property that requires an economic incentive provided by developing countries. Frequently, these would be goods that are produced largely for developing and emerging markets. Examples of such goods potentially include devices that are electrically powered in the developed markets but sold as gasoline powered in developing countries or pharmaceutical or medical devices whose primary market is to treat medical conditions in developing countries. Consistent with the thesis of this Article, these exceptions to the pirate code model proposed in this Article only exist because, the LDC markets are the

⁶² United States Steel Corp. v. Fortner Enters., Inc. No. 2, 429 U.S. 610, 621 & n.14 (1977).

⁶³ Eastman Kodak Co. v. Image Technical Services, Inc., 504 U.S. 451, 470 n. 15 (1992).

⁶⁴ Paul S. Grunzweig, Prohibiting The Presumption Of Market Power For Intellectual Property Rights: The Intellectual Property Antitrust Protection Act Of 1989, 16 J. CORP. L. 103.133 (1990).

⁶⁵ See e.g., Stephen P. King, Network Externalities, Price Discrimination and Profitable Piracy, 15 Information Economics and Policy 271, ____ (2003).

markets that incentivize the creation, development, or commercialization of these goods.

Finally, the third factor for effective price discrimination is the ability to prevent resale or arbitrage. In the context of the intellectual property limitation presented in this article, this would be expressed in practice as the problem of exporting counterfeit goods and the effect of their subsequent importation into the markets of more developed nations. Later, this issue will be discussed in greater detail; however, at this point of the Article, the Article assumes that between the LDC's interests in regulating its domestic and its export-international markets, and the developed countries' ability to control their internal markets and borders, that the spill over between the two markets would be insufficient to result in a significant reduction in intellectual property incentives.⁶⁶ The limitation here is the assumption that while there will be some externalities, but there will not be a sufficient erosion of the incentives in developed countries to cause an underinvested in the production of new intellectual property.

1. First Degree Price Discrimination

First-degree price discrimination is sometimes called personalized pricing. ⁶⁷ In an effective first degree-price discrimination situation, the intellectual property owner charges each customer (in our hypothesized case each LDC), the highest cost that each would be willing to pay. Under normal conditions, this is also perfect price discrimination and is impossible to achieve. However, if one treats each LDC as a separate "consumer" then this goal may be more precisely, if still imperfectly, achieved. Theoretically, the scope of the intellectual property concessions or tolerated infringements under the pirate code could be tailored on a continuum to each country, region, consumer, industry, or product so as to produce the largest possible revenues to the developed country rights holders that corresponds to social welfare maximization in the LDC, the goal of the thesis of this Article.

2. Second Degree Price Discrimination

Second-degree price discrimination links price to the quantity demanded.⁶⁸ A good example of this is that usually lower (but sometimes higher) prices to consumers based on the quantity sold. Second-degree price discrimination may not be effective in the context of developing nations.

⁶⁶ See *infra*, sec IV.B.

⁶⁷ COSTAS COURCOUBETIS AND RICHARD WEBER, PRICING COMMUNICATION NETWORKS: ECONOMICS, TECHNOLOGY AND MODELING 144 (Wiley Pub. 2003).

⁶⁸ Michael J. Meurer, *Copyright Law And Price Discrimination*, 23 CARDOZO L. REV. 55, 99 (2001).

Intellectual property that is licensed at a high rate in developing countries is likely to be dependent on developing country markets for its economic incentives. As the proposed uncompensated use limitation requires that such uses not reduce incentives for intellectual property, it is unlikely that adjusting price based on large quantity purchases would be an effective method of price discrimination between developed and undeveloped nations. There are models where this is possible, for example the LDC government purchasing licenses for intellectual property on behalf of its residents. So, for some goods, industries, or individual rights holders, this model could be the most efficient model to protect the innovation-incentive provided by intellectual property law.

3. Third Degree Price Discrimination

The model that the Article finds most useful in developing its thesis that price discrimination can be useful in understanding the effects of uncompensated uses on intellectual property incentives is that of third degree price discrimination. Third degree price discrimination links prices to different consumer groups. Here, this Article proposes that factors, for example various levels of economic development and the characteristics of the intellectual property and the access rights they represent would define the consumer groups with the suggested unique end point (at least in economic literature) that for some consumers the price point would approach zero. Even if some consumers are receiving access to the intellectual property without payment, this does not mean that the intellectual property owner is receiving no benefits from a so-called "free rider."⁶⁹ In LDCs, the collective free riding problem may result in long term positive externalities for the rights holder. Free riders may be the phalanx of market penetration into what will become the emerging markets for the rights holder. The use by free riders in the LDC may expand positive network externalities in the developed markets. These longer term incentives need to be properly valued by the rights holder, the developed countries, and the LDCs.

The use of third-degree price discrimination under the limited circumstances proposed in this Article suggests that there would be a net positive welfare effect in the LCD without any corresponding loss to the intellectual property incentives. The welfare effect of third degree price discrimination has long been debated in the economic literature.⁷⁰ Thirddegree price discrimination may result in a misallocation of output and the

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⁶⁹ See generally Kal Raustiala and Christopher Sprigman, The Knockoff ECONOMY: HOW IMITATION SPARKS INVENTION (Oxford Univ. Press 2012).

⁷⁰ See Donghyun Park, Price Discrimination, Economics of Scale and Profits, available at http://www3.ntu.edu.sg/nbs/sabre/working_papers/02-98.pdf

total output may differ from the total output under uniform pricing.⁷¹ As a general rule, welfare falls if the total output is the same or lower under price discrimination.⁷² So, one prerequisite in order for price discrimination to increase welfare is that under a price discrimination model there must be an increase in total output.⁷³ Assuming that the norms of economics remain true, and that intellectual property is a normal good, then as the price (including the costs of facing enforcement) are decreased to zero then the quantity of intellectual property "consumed" should increase and the total output of goods based on foreign intellectual property rights should increase thus increasing the overall welfare in the LDC.

4. Conclusion

Regardless, of which price discrimination model one adopts as appropriate for this analysis, the economic theory of price discrimination teaches that if one can properly segment the LDC markets for intellectual property from those of more developed nations then the effects on developed country incentives would be marginal for most forms of intellectual property necessary for economic development. Previously, this Article discussed the Landes and Posner model of copyright and patent law incentives to create new works. The demand curve for the author-inventor is defined by the infringer's supply curve ($y=y(p,z^0)$). Accordingly, if the LDC market with the infringing goods can be differentiated from the developed market so that the supply of goods does not change in the developed nations' markets then the demand curve would remain the same as would the rights holder's profits, but the LDC would have an increase in the welfare of its residents.⁷⁴

B. Law of One Price

The unnamed boogeyman and often the straw man in the argument against uncompensated uses is that these LDC uses will force the developed world prices lower. In economic literature, this is called the law of one price. The law of one price assumes that adjusting for costs and purchasing power parity a good must sell for the same price in all markets.⁷⁵ The underlying assumption is the arbitrage will result in goods moving from low

⁷¹ Parks, *supra* xx, at 2.

⁷² Inaki Aguirre, Joan Robinson Was Almost Right: Output under Third Degree Price Discrimination, WORKING PAPER SERIES: IL. 38/09 available at ssrn.com/abstract=1434865

⁷³ Parks, *supra* xx, at 2.

⁷⁴ See II.A.3, supra.

⁷⁵ Sandra Marco Colino, On The Road To Perdition? The Future Of The European Car Industry And Its Implications For EC Competition Policy, 28 NW. J. INT'L L. & BUS. 35, 42 (2007).

price low demand regions (decreasing supply) to higher-demand higherpriced locations (increasing supply) until the two markets reach price parity. One may assume that an intuitive misapplication the law of one price is why some developed nation intellectual property holders insist on enforcing intellectual property rights at costs in the LDC well in excess of any expected market return. Rights holders worry that the lower price pirate goods will affect the price of the good.⁷⁶

The law of one price relies on arbitrage between markets. This Article posits that developed nations can adequately police their borders and internal markets and provide sufficient incentives for the beneficiary LDC nations to police their internal markets and trans-border flows so as to reduce the possibilities of arbitrage.⁷⁷ The Article concedes that the global economy is starting at some level of trans-border trade from the developing to the developed world of goods that are protected in the receiving nation by intellectual property laws. However, the extent of that trade and its scope of its effect on the market incentives for the creation and dissemination of intellectual property in the developed countries are highly contested.

Further, the LDC countries goods although perhaps similar in appearance would not have the many of the same qualities that make them attractive to consumers, for example warranty protection, access to customer services, etc. Further, as this Article contends that trademarked good should be excluded from the proposed limited uncompensated user regime, it is unlikely that goods produced in the LDC will serve as a ready substitute for purchase of an authorized good in the developed country.

C. Marginal Utility of LDC Markets as Providing Incentives

Having established using the theoretical possibility that economic theory would permit the segmentation of the disincentives of pirate code LDC markets from the incentives of the developed country markets, one must now consider when the LDC markets play any significant role in the research, development, or commercialization of non-LDC specific products. If the first principle of the utilitarian justification for intellectual property is to provide an economic incentive to create and to disseminate intellectual property then one must consider whether the LDC markets actually provide such an incentive. First, intellectual property as a general rule is already over incentivized in the developed countries. Over the past decades, the movement intellectual property protection has been for stronger, longer, and more effective protection. Second, if for the sake of argument that one assumes that the level of protection in the developed countries is finely

⁷⁶ Henry H. Perritt, Jr., *New Architectures For Music: Law Should Get Out Of The Way*, 29 HASTINGS COMM. & ENT L.J. 259, 325-26 (2007).

⁷⁷ See section XX, *infra*.

calibrated to the optimal level to provide incentives without unnecessary deadweight loss, even then the LDCs represent an insignificant market for the sale of licensing of developed nations intellectual property rights. Realistically, they play little or no role in the creation, dissemination, or commercialization of products protected by intellectual property rights produced for the developed nations markets.

Any analysis of the economic role of an LDC must consider at least two different markets for intellectual property. Intellectual property products that are produced primarily for the LDCs and for whom the LDC provides the critical market and then there are goods that are produced primarily or even solely for developed country markets for whom the LDC is merely an incidental beneficiary of their creation. The first type of intellectual property principles of market economics demands that the LDC provide the incentive to provide these works.⁷⁸ So, this Article focuses solely on the second type of intellectual property where the demand from the LDC is irrelevant to the creation of the work, but for whom access conveys a significant advantage.

There are 49 LDC according to the United Nations.⁷⁹ A least developed country is defined by the United Nations as having the lowest socioeconomic development using the human development index.⁸⁰ To be defined as a LDC, the country must have a GNI of \$992-to \$1,190 per year, human resource weakness (health, nutrition, education, and literacy); and vulnerability. LDCs constitute about 12% of the world's population (878.2 million people), but they represent less that 2% of the world GDP and approximately 1% of global trade.⁸¹ Another way of considering, the LDCs collectively they represent 878.2 million people who collectively represent a GDP roughly twice the market capitalization of Google, the *third* largest publically traded company in the United States as measured by market capitalization.⁸²

⁷⁸ It is important to remember that all developing countries will not be in the same category for each type of intellectual property or even for individual embodiments of intellectual property. For example, a malaria drug will probably require a developing country incentive, but only from those for who have a viable economic market for the pharmaceutical. [define viable market] This determination will be based on the demand curve of each country for each embodiment or use of intellectual property.

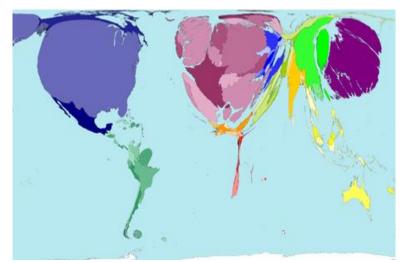
¹⁹ http://www.unitar.org/resource/sites/unitar.org.resource/files/document-pdf/GA-2767-XXVI.pdf. Unfortunately, this is a relatively stable classification. Since 1971, only three countries have graduated into developing country status.

⁸⁰ See RAYMOND W.Y. KAO, SUSTAINABLE ECONOMY: CORPORATE, SOCIAL AND ENVIRONMENTAL RESPONSIBILITY 76 (World Scientific 2010).

⁸¹ http://unohrlls.org/about-ldcs/. Please see generally http://data.worldbank.org/region/LDC for more statistical information about the LDC. ⁸²http://www.theonlineinvestor.com/large_caps/ ;

http://www.bloomberg.com/news/2014-02-07/google-passes-exxon-to-become-second-

There is a cliché that a picture is worth a thousand words. In the diagram below, larger the size of the country, the wealthier it is.



The reader will note the small proportion of the world's wealth represented by the Global South, and the LDC infinitesimally small on this diagram. In fact, they are just a bit larger than the economy of a small European country, approximately the economic size of The Netherlands.⁸³

IV. PRIVATEER OR PIRATE

In the Age of Pirates, whether one is a pirate or privateer depended substantially on whose vessels where being captured (and where).⁸⁴ Many scholars and developing nations argue that the uncompensated intellectual property uses (or technology transfers) posited in the article is already within the scope of permissible activities permitted to the LDC (the privateer model). Many developed country governments, speaking on solely behalf of their intellectual rights holders disagree and contend that any uncompensated use is rank order, unmitigated, shameless piracy. This section will briefly contend that this activity is more akin to privateering then piracy. But, conclude that even if uncompensated uses of intellectual property in the LDC is common piracy, then the international community should adopt a policies (a "pirate code") to govern these activities to insure that they does not threaten intellectual property incentives in the developed countries. For example, the developed countries could more aggressively

most-valuable-u-s-company.html

⁸³ *Compare* the GDP of the LCD (\$705b), http://data.worldbank.org/region/LDC *with* GDP of the Netherlands (\$770b), http://data.worldbank.org/indicator/NY.GDP.MKTP.CD.

⁸⁴ See, e.g., Francis Drake http://en.wikipedia.org/wiki/Francis_Drake

police their borders to prevent counterfeit or infringing goods from being imported into developed country markets rather than shifting the costs and burdens of enforcement to developing countries. The effective gatekeeper to a developed countries borders, markets, and intellectual property incentives is the sovereign developed country itself.

A. The LDC as Privateer

The difference between a privateer and pirate is that one is acting under the color of law while the other operates without even a colorable justification for their piratical acts. The difference did not lie in the economic effect on maritime commerce. This section will explore whether there are colorable or even a sound basis for which more economically developed nations should accept that fact that the LDCs could permit uncompensated uses of the intellectual property of more developed nations. This area of research, the scope of protection under the international intellectual property regime, has been exhaustedly theorized and research by numerous economic and legal scholars; therefore, there is little that this Article could add to the voluminous literature. The various treaties that create the international intellectual property regime have inherent exceptions and limitations that provide a colorable basis for some uncompensated uses.⁸⁵

For the sake of thoroughness, this section will briefly discuss a few of these limitations and exceptions. Also, there may be some general principles of law, such as the civil law doctrine of abuse of right that would preclude domestic enforcement of foreign intellectual property rights. This section concludes that there are sufficient intentional exceptions and perhaps unintentional ambiguities that would permit many uncompensated uses under the color (if not the spirit) of intellectual property law (privateer model). However, until it is demonstrated that such uncompensated uses do not threaten the utilitarian justifications proffered by developed countries for intellectual property protection and the rational interests of intellectual property owners these uncompensated uses although there is a colorable basis for their legality, such uses will continue to remain rare as an instrument of economic development.

1. Three-Step Tests and other limitations

The major international conventions that require nations to protect intellectual property and the global trade regime and which requires their enforcement, contain specific exceptions and limitations as well as a general

^{85 &}lt;u>http://www.wipo.int/edocs/mdocs/scp/en/scp_12/scp_12_3_rev.pdf;</u> <u>http://www.wipo.int/edocs/mdocs/copyright/en/wct_wppt_imp_1.doc;</u>

catchall exception usually referred to as a three-step test.⁸⁶ Three-step tests are a very recent addition to the international conventions to protect intellectual property.⁸⁷ Rhetorically, the three-step tests have become a bogey man threatening legislatures, policy makers, and governments that robust exceptions to the claims of rights holders would place that nation outside international intellectual property norms.⁸⁸ Perhaps, the most cited example of a three step test is Article 9(2) of the Berne Convention. Article 9(2) provides that:

It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.⁸⁹

So, the core of the three-step test is when there are (1) certain special cases which (2) do not conflict with a normal exploitation of the work, and (3) do not unreasonably prejudice the legitimate interests of the author then the country may provide for exceptions that balance the interests of foreign rights holders with that countries national public policy priorities.⁹⁰

There is no authoritative tool for interpreting three-step tests.⁹¹

⁸⁶ See, e.g. TRIPS Arts. 13 and 30; BERNE CONV. Art. 9; See generally MARTIN SEFTLEBEN, "COPYRIGHT, LIMITATIONS, AND THE THREE-STEP TEST: ANALYSIS OF THE THREE-STEP TEST IN INTERNATIONAL AND EC COPYRIGHT LAW (Kluwer Law International 2004). See also http://en.wikipedia.org/wiki/Berne_three-step_test ("Since then, the three-step test has been modified and transplanted into the Agreement on Trade-Related Aspects of Intellectual Property Rights, the WIPO Copyright Treaty (Article 10), the WIPO Performances and Phonograms Treaty, the Directive on the legal protection of computer programs (Article 6(3)), the EU Database Directive (Article 6(3)), and the EU Copyright Directive (Article 5(5)).

⁸⁷ See http://williampatry.blogspot.com/2008/04/fair-use-three-step-test-andeuropean.html (The most famous three step test Art. 9(2) of the 1888 Berne Convention was not added until 1971).

⁸⁸ See http://williampatry.blogspot.com/2008/04/fair-use-three-step-test-andeuropean.html (discussing claims that 17 U.S.C. § 107 ("fair use") is outside international IP norms).

⁸⁹ Berne Convention art. 9(2).

⁹⁰ Martin Senftleben, The International Three-Step Test A Model Provision for EC Fair Use Legislation, https://www.jipitec.eu/issues/jipitec-1-2-2010/2605/JIPITEC%202%20-%20Senftleben-Three%20Step%20Test.pdf ("the first three-step test in international copyright law was devised as a flexible framework, within which national legislators would enjoy the freedom of safeguarding national limitations and satisfying domestic social, cultural, and economic needs.")

⁹¹WILLIAM F. PATRY, PATRY ON FAIR USE § 8:2 ("The 1965 Committee of Governmental experts unequivocally took the view that in the course of the preparatory work for the Stockholm conference that 'the main difficulty was to find a formula which would allow of exceptions, bearing in mind the exceptions already in many domestic

Many prominent scholars have adopted the following interpretative tool. "When correctly applied, the Three-Step Test requires a comprehensive overall assessment, rather than the step-by-step application that its usual, but misleading, description implies. No single step is to be prioritized. As a result, the Test does not undermine the necessary balancing of interests between different classes of right holders or between right holders and the larger general public. Any contradictory results arising from the application of the individual steps of the test in a particular case must be accommodated within this comprehensive, overall assessment."⁹²

In light of the history and purposes of Article 9(2), one may argue that even at the macro level LDC are "special cases" in so far as they are well defined circumscribed exception to the general enforcement norms. However, at the micro level of domestic intellectual property enforcement, the three-step-test paradigm permits nations to grant well defined exceptions to promote their domestic development agenda so long as the other factors are appropriately balanced to protect the economic incentives of the rights holders. The normal exploitation of the work suggests market exploitation in the LDC granting the limitation rather than the abstract possible examples of exploitation that the right holder or similarly situated rights holders may elect to engage in other countries or regions. Other than moral rights, a topic on which this Article is agnostic, the legitimate rights of an intellectual property holder are at best to receive economic remuneration at a fair market value and worst to receive only sufficient rights to provide an incentive that results in the progress of science and the useful arts. The limitation of rights in the LDC is unlikely prejudice the legitimate interests of the rights holder.

This assumes that the three step test would apply in a domestic legal context. However, treaty obligations or rights under Berne or similar conventions are not personal as in that they are vested in the individual rights holder. These rights are treaty rights that must be enforced by nation-states who members of the treaty. Pre-TRIPS, nations could seek to protect their citizen's rights in the International Court of Justice.⁹³ Post-TRIPS the enforcement measures focus on panel decisions and the withdrawal of trade concessions by aggrieved nations.⁹⁴ The penalty for breaching a WTO

laws.")

⁹² http://www.ip.mpg.de/files/pdf2/declaration_three_step_test_final_english1.pdf; WILLIAM F. PATRY, PATRY ON FAIR USE § 8:2

⁹³ ACADEMIE DE DROIT INTERNATIONAL DE LA HAYE, COLLECTED COURSES 283 (Klower Law Int'l2000); DAVID NIMMER, COPYRIGHT: SACRED TEXT, TECHNOLOGY, AND THE DMCA 108 (Klower Law Int'l 2003).

⁹⁴ See Peter K. Yu, TRIPS Enforcement and Developing Countries (January 6, 2011). American University International Law Review, Vol. 26, pp. 727-82, 2011; Drake University Law School Research Paper No. 11-32. Available at SSRN:

obligation is the possibility of retaliation.⁹⁵ Once approved, the retaliation is not directed against the government of the offending country, but the economic and trade rights of its citizens. Accordingly, developed countries may select which uses of their citizen's intellectual property to challenge using the WTO process and which uses that should be a matter of the domestic laws of the country where the treaty rights are arguably violated.

Finally, as a matter of policy, there may be intuitional levers within the WTO to accomplish these goals.⁹⁶ The Doha Declaration is one example where the WTO members were able to negotiate an intellectual property strategy that balanced the needs of both rights holders and rights users in the context of the use of patented pharmaceuticals in the developing world.⁹⁷ Also, the WTO panels have some discretion when interpreting and developing trade law. There is some flexibility in balancing the letter of the treaty in light of its negotiating history and its stated purposes. The WTO/TRIPS regime is not an inherent obstacle to this Article's thesis rather it is potentially one of the policy levers that could enable it.

2. Abuse of Right

"Male enim nostro iure uti non debemus—we should not exercise our rights wrongfully" is an ancient principle of Roman and now--modern civil law.⁹⁸ This is a bit of a digression, but even if there is a legal right under intellectual property law to engage in the enforcement of the property right—these enforcement rights are not without limits. In addition, the limitations inherent in the source of the right, for example affirmative defenses, fair uses, subject matter, and other limitations in the organic act creating the intellectual property right. *"*⁹⁹ "At least one of four conditions is required to invoke the abuse of right doctrine: (1) the predominant motive exists for exercising the right; (3) the exercise of the right is against moral

⁹⁷ http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm

⁹⁹ see also: http://en.wikipedia.org/wiki/Prohibition_of_chicane#cite_note-1

http://ssrn.com/abstract=1736030.

⁹⁵ See Frederick Abbott, Cross-Retaliation in TRIPS: Options for Developing Countries, http://www.ictsd.org/themes/innovation-and-ip/research/cross-retaliation-in-trips-options-for-developing-countries

⁹⁶ See generally, James Thuo Gathii, *The Legal Status Of The Doha Declaration On Trips And Public Health Under The Vienna Convention On The Law Of Treaties*, 15 HARV.J. L. TECH 202 (2002) available at http://jolt.law.harvard.edu/articles/pdf/v15/15HarvJLTech291.pdf

⁹⁸ Vera Bolgar, *Abuse of Rights in France, Germany, and Switzerland: A Survey of a Recent Chapter in Legal Doctrine*, 35 LA. L. REV. 1015, 1017 (1975) available at http://digitalcommons.law.lsu.edu/cgi/viewcontent.cgi?article=4114&context=lalrev see also: http://en.wikipedia.org/wiki/Prohibition_of_chicane#cite_note-1

rules, good faith, or elementary fairness; or (4) the right is exercised for a purpose other than that for which it was granted."¹⁰⁰

German law represents the typical civil law factors abuse of right factors whether the exercise is grossly inequitable under the circumstances; exercised with no regard for the legitimate interests of other parties; right were acquired through bad faith or in violation of the law; in consistent with past conduct; or exercised only for the purpose of causing harm.¹⁰¹ However, the example of Swiss law may be more instructive (analogous to common law courts). The Swiss Code provides that "the manifest abuse of a right is not protected by law." Significantly, in radical departure for a civil law country "famous article 1 of the Swiss Civil Code which, as an unprecedented measure, gives quasi-legislative functions to the courts by authorizing them to substitute their own interpretation where the text of the law or the accepted custom is silent or inadequate."

Under the conditions theorized in this article, at least three of the four black letter law conditions may be present. The author assumes that the exercise of the intellectual right is done is not for the *primary* purpose of causing harm. The economic damage to the economy of an LDC is merely an unintentional, unfortunate, historical externality—an incidental byproduct of colonization and globalization. However, the other three conditions are arguably usually present in the case of enforcing most intellectual property rights in a LDC.

First, as was discussed earlier, if one defines the legitimate purpose of or motive for enforcing an intellectual property right is to retain or obtain the economic incentives provided to create new works of intellectual property then often the enforcement of intellectual property rights, especially against small non-commercial users in a LDC lacks a legitimate economic motive and is being exercised for a purpose other than for which the right was granted. One may think of this as a modified, T.J. Hooper¹⁰³ or United States v. Carroll Towing test for morality.¹⁰⁴ This balancing of costs versus benefits of enforcement weighs especially in favor of non-enforcement in the LDC. These enforcement efforts fail even, if one assumes, that the individual acts of judicial or administrative enforcement was meant to have an *ad terrorem* effect on both commercial and non-

¹⁰⁰ N. Stephan Kinsella, *Civil to Common Law Dictionary*, 54 LA. L. REV. 1265, 1266(1994) available at http://www.kinsellalaw.com/wp-content/uploads/publications/kinsella_civil-common-law-dictionary.pdf

¹⁰¹ Bolgar, *supra* note xx, at 1027-28 (Germany).

¹⁰² Bolgar, *supra* note xx, at 1031.

¹⁰³ T.J. Hooper, 60 F.2d 737 (2d Cir.), *cert. denied*, 287 U.S. 662 (1932).

¹⁰⁴ United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947)("if the probability be called P; the injury, L; and the burden, B; liability depends upon whether B is less than L multiplied by P: i.e., whether B < PL.")

commercial piracy in general.

The second condition requires a nuanced judgment whether the "the exercise of the [intellectual property] right is against moral rules, good faith, or elementary fairness." The author argues that this factor too is susceptible to economic analysis. If the direct costs of enforcement, private litigation, public costs (developed nations politic and economic costs to pressure LDC as well as LDC costs to adjudicate and enforce intellectual property rights) exceed either the increased sales or licensee fees to the intellectual property owner (or other incentives) or the damage to the local economy then one may some sense of elementary fairness.¹⁰⁵

Having shown that there is no injury to the economic incentives that underlay intellectual property rights,¹⁰⁶ there is a significant question of whether there is a legal basis on which to ignore enforcing these rights. Absent the sound economic utilitarian justification underlying modern intellectual property, one may conclude that requiring the domestic enforcement of intellectual property rights in the LDC that benefit no one and which may harm the weakest and the most desperate in our global village is an abuse of right. Civil law does not protect the manifest abuse of a legal right. Although, outside context of real property law, there is not a clear equivalent to an abuse of right in the common law; however, one can see other doctrines that rely on similar jurisprudential moorings, such as the common law prohibition of a spite fence. The law permits useful-fences, (even if it injures a neighbor), but prohibits spite fences because a usefulfence at least benefits one party while a spite fence benefits no one economically while causing an unnecessary and intentional injury to another.

B. A Pirate Code for LDC

At first blush, permitting uncompensated uses of developing countries' intellectual property by the LDC may be viewed as a radical solution and one that totally disregards the underlying first principles of law and economics, a decent respect for individual property rights. However, individual property rights are not unexamined axioms outside of law and economic theory, but rather property rights are critically subject to the same tools of analysis and the similar limitations as are other legal institutions or transactions.¹⁰⁷ At least in the domestic context, the concept of uncompensated uses are not a radical position. Professors Landes and Posner in their seminal work, *The Economic Structure of Intellectual*

¹⁰⁵ Bolgar, *supra* note xx, at 1019-20 (citing cases).

¹⁰⁶ See *infra* Part III.C

¹⁰⁷ See generally ROBERT COOTER AND THOMAS ULEN, LAW AND ECONOMICS 88-119 (HaperCollins 1988).

Property analyzed the limits of property rights in differing forms of intellectual property.¹⁰⁸ First, they note the difference between theft of real property and intellectual property piracy.¹⁰⁹ They conclude that "But when the purchaser of a software program makes a copy for someone else, he does not reduce the number of copies in the software producer's inventory. If the infringer's customer else was not a potential purchaser from the producer, the producer loses nothing from the unauthorized copying. Weak demand for drugs (for example, to treat AIDS in Africa) is an example of how piracy need not reduce the sale revenue of an intellectual property owner." They then discuss their principled (or principal) objection to piracy.

We are not suggesting that piracy is harmless, let alone beneficial, to creators of expressive works and should therefore be permitted. The fact that some recipients of pirated copies would not have paid for them does not imply that all or most would not have paid. Creators of expressive works do obtain and enforce copyrights, as they would not do if piracy benefitted them on balance. No copying 'privilege' for those unwilling to pay the copyright owner's price would be feasible because the law could not distinguish between those who really were unwilling to pay and those who faked their unwillingness to avoid having to pay.¹¹⁰

Landes and Posner's arguments fail in the context of LDCs as posited in this article. First, it is not clear that in general intellectual property owners properly value the indirect economic benefits that they may receive by uncompensated uses, especially network effects.¹¹¹ Second, there is some evidence (albeit hardly conclusive) that casts some doubt on Landes and Posner assumption of the inherent dishonesty in human nature that people (in general) will lie to get something for free for which they would have otherwise have had to pay.¹¹² ITunes and its competitors are excellent examples of individuals buying music that they could access for free on the World Wide Web.¹¹³

¹⁰⁸ See generally, LANDES and POSNER, *supra* xx.

¹⁰⁹ See LANDES AND POSNER, *supra* xx, at 47.

¹¹⁰ LANDES AND POSNER, *supra* xx, at 47.

¹¹¹ See generally Ariel Katz, A Network Effects Perspective on Software Piracy, 55 U. TORONTO L.J. 155 (2005).

¹¹² See, e.g., R. Preston McAfee, *Price Discrimination*, in 1 ISSUES IN COMPETITION LAW AND POLICY 465, 465 (ABA Section of Antitrust Law 2008)(providing an example of Dell selling the same memory module to different groups based on self-identification as government, small business, large business, or consumer status).

¹¹³ http://wallstcheatsheet.com/stocks/study-itunes-is-more-profitable-than-xerox-and-

Third, and most importantly for this Article, the last Landes and Posner limitation, that the law cannot distinguish between those unwilling to pay and those unable to pay does not hold true in the aggregate markets of developing countries. It may be difficult to identify individual consumers who may or may not be willing to pay--consumers who feel no shame on free riding on the efforts of others without making a corresponding contribution. However, in the aggregate of a nation-state, one can use the economic and demographic statistical data to determine whether that country is unable to pay or unwilling to pay. As this Article is focused on aggregate incentives, this distinction between willing and unwilling, able and unable to pay, could be make for each type of good protected by intellectual property good. It could even be finely tailored to individual products by individual manufacture. Concededly, there will be some free riders in the LDC who are both willing and able to pay, but the vast major of the beneficiaries of the pirate code of uncompensated uses represent deadweight loss but for the pirate code.

Even lawless brigands must be governed by a code—so whether privateer or pirate, there must be a code to govern these uncompensated uses otherwise the economic incentive for the creation of intellectual property would quickly fail. As any maritime historian or viewer of the recent Disney Pirates of the Caribbean movies knows, the life of pirates, brigands outside of civil society, having no allegiance to king or country was not lawless. It was in fact governed by a pirate code.¹¹⁴ The pirate code governed activities that took place in the shadow of double law--failure to comply with the pirate code could result in being abandoned to the law of man or the law of nature or submission the judgment of the captain and crew. This Article proposes as a response of Landes and Posner's third criticism of intellectual property piracy, the creation of what will be called solely for the purposes of rhetoric device a Pirate Code-less rhetorical but more accurately, recommendations for policy choices to govern international enforcement of intellectual property rights.

The proposed Pirate Code could be very simple (and law and economics oriented). Activities that may constitute intellectual property piracy, especially in developing countries, should be measured against a golden rule of first principles. Activities that harm no one, or at least do not harm the intellectual property incentives in individual cases (as to individual intellectual property rights holders and markets) and that benefit the local economy should be tolerated. Enforcement efforts should largely focus on stopping activities that interfere with intellectual property incentives with increasing levels of enforcement with the severity of the impact of the use

time-warner-cable.html/?a=viewall

¹¹⁴ http://www.elizabethan-era.org.uk/pirate-code-conduct.htm

on incentives.

V. BENEFITS OF A PIRATE CODE

The pirate code as proposed in this Article promotes economic development in the LDCs at a minimal cost to developed world rights holders and to the economic incentives that justify intellectual property rights. In essence, the Pirate Code permits the LDCs to capture deadweight loss and to convert it into consumer surplus. This process advantages both the LDC and the developed country, and perhaps even developed country rights holders. This section will analyze some of the benefits of a pirate code.

A. Benefits for the LDCs

Assuming that the economic incentives, if any, provided by the LDC, are at best insignificant then the developed country's internal utilitarian justification for exporting strong intellectual property rights fails, and one must then consider the effect of lax or no enforcement on the economic development of the developing country.¹¹⁵ Uncompensated intellectual property transfers to developing countries promote economic efficiency, further development goals, and constitute a type of foreign aid subsidy. To a developing country, the economic effect is similar whether a developed country transfers \$1 million in foreign aid, purchases a \$1 million intellectual property license for the benefit of the developing country, or tacitly permits \$1 million worth of unlicensed intellectual property use in a developing country. The first two examples, a transfer payment of \$1 million or a purchase of a \$1 million intellectual property license, represent an expense borne by the overburdened taxpayers of the developed country.

Further, the economic value-received or economic development effect of such payments or licenses are often confounded with accusations of fraud, waste, and inefficiency. However, willful blindness or tacit consent to the use of unlicensed intellectual property may promote development goals more efficiently—often without any measurable cost to the "donor country" or "rights-holder". The first two examples are top-down, may have significant transaction costs, and are not necessarily responsive to market forces in the developing country. Acquiescence to unlicensed intellectual property transfers ameliorates most of these costs.

Absent strong domestic intellectual property enforcement, the developing country will not pay higher prices for imported goods and

¹¹⁵ Of course, if this was litigation and not policy analysis, the burden would shift to developing countries to prove that uses in individual developing countries are resulting in a marginal decrease in the economic incentives to create or disseminate intellectual property.

technologies since these goods and technologies could be produced locally or imported from another developing country (one with perhaps only a slightly higher level of industrialization (or some other comparative advantage)) without paying an intellectual property premium. Industries in developing countries that produce "pirated" products for their own marketplace, or for that of other developing countries, may continue or even thrive by catering to the demands of other developing countries—thus expanding domestic manufacturing capability, increasing domestic research and development capability, promoting local economic development and jobs, and in the long run creating a sound basis for a developed economy which ultimately will respect foreign intellectual property rights in its own self interest.¹¹⁶

B. Benefits for the LDCs

Developed countries would also benefit from this proposed policy. A tolerated uncompensated uses policy would more effectively promote economic growth with the concomitant increase in general welfare in developing countries. This would result in increased political stability, the creation of new markets for developed country's goods and services, and in the long run promote respect for international intellectual property norms. The normalization of these common but illicit practices would bring them more readily under some forms of regulation and control using the proposed pirate code model. This policy would also decrease demand for direct foreign aid and could be viewed as a good faith effort to meet the WTO promises of increased technology transfer to developing countries.

The extent of piracy and economic effects of uncompensated uses as a substitute for purchasing an authorized copyright or a licensed use are unclear in the international trade area.¹¹⁷ The United States Government Accounting Office (GAO) concluded that while piracy was a problem that "Three widely cited U.S. government estimates of economic losses resulting from counterfeiting cannot be substantiated due to the absence of underlying studies."¹¹⁸ The GAO while reporting the theoretical negative effects from piracy also called into question the survey data adduced by leading industry groups.¹¹⁹ Significantly for this Article, counter intuitively these studies assume that every unauthorized use is a substitution for a sale

¹¹⁶ See Llewellyn Joseph Gibbons, *Do As I Say (Not As I Did): Putative Intellectual Property Lessons For Emerging Economies From The Not So Long Past Of The Developed Nations*, 64 SMU L. REV. 923, 935-36 (2011).

¹¹⁷ See generally GAO Report to Congressional Committees, Intellectual Property Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods (April 2010) available at http://www.gao.gov/assets/310/303057.pdf

 $^{^{118}}$ GAO, *supra* note xx, at 2.

¹¹⁹ GAO, *supra* note xx, at 25-26

or license. ¹²⁰ Further, these studies often value the counterfeit product at the highest theoretical market price for the authorized copy, which often includes warrantees or services that obviously not provided to unauthorized purchasers and does not include ordering discounts.. This GAO finding is consistent with the OECD conclusion that national assessments "rely excessively on fragmentary and anecdotal information; where data are lacking, unsubstantiated opinions are often treated as facts."¹²¹

The available data in the domestic arena is not better. Perhaps, the best research on whether unauthorized uses substitute for market price purchases was conducted as part of the A&M Records, Inc. v. Napster, Inc., litigation.¹²² The *Napster* litigation represented one of the few instances that there was a relatively level playing field in terms of research resources. *Napster* is instructive because unlike the situation posited in this Article where there is much need but little or no market price demand, in the case of *Napster* one may reasonably assume that the vast majority of Napster users could have purchased some or all of the music that they ultimately downloaded for free.¹²³ Also, one may assume a relative ease of access and available resources to conduct these studies. Yet, despite of all of these advantages to opponents of uncompensated uses, at best the results of the survey evidence are mixed.¹²⁴ One prominent economist concluded after analyzing the *Napster* litigation survey reports that "All in all, my reading of the reports in the cases indicates that the plaintiffs in the case failed to make as persuasive a case for hard and the defense did for the lack of

¹²⁰ GAO, *supra* note xx, at____; See also Brian Jackson, Anti-piracy Group's Study 'shockingly misleading', says expert, itbusinss.ca (Sep. 17, 2010) available t http://www.itbusiness.ca/news/anti-piracy-groups-study-shockingly-misleading-saysexpert/15390 (Canada reduced its piracy (as calculated by the BSA) by 5% using the BSA model this should have resulted in 2,600 more jobs and \$1.4 billion more in the GDP so this model substantially over predicted the effects of a net reduction in piracy). See also BSA's Piracy Numbers: Less than They Seem, available at http://blogs.computerworlduk.com/open-enterprise/2010/09/bsas-piracy-numbers-lessthan-they-seem/index.htm

¹²¹ GAO, *supra* note xx, at 20. See also Timothy B. Lee, *Swiss Government: Fling-Sharing No Big Deal, Some Downloading Still Ok*, ARSTECHNICA (Dec 5, 2011) available at http://arstechnica.com/tech-policy/2011/12/swiss-government-file-sharing-no-big-deal-some-downloading-still-ok/

¹²² See Not Reported in F.Supp.2d, 2000 WL 1170106, (N.D. Cal. Aug. 10, 2000) (discussing the survey evidence presented to the court), *aff'd* by 239 F.3d 1004 (9th Cir. 2001).

^{2001).} ¹²³ See Evan Hansen, Study: Napster users buy more music, July 20, 2000 available at http://news.cnet.com/2100-1023-243463.html.

¹²⁴ See Stan Liebowitz, *Policing Pirates in a Networked Age*, 438 POLICY ANALYSIS 11-14 (May 15, 2002) available at http://www.cato.org/publications/policy-analysis/policing-pirates-networked-age.

harm.¹²⁵ So, the domestic evidence is a fragile basis on which to extrapolate the effects of uncompensated uses in the LDC on developed country intellectual property incentives.

In the run of the mill case, the party commencing the litigation is usually responsible for proving damages. Rarely, does the court impose a burden to disprove of damages as part of the defendant's case.¹²⁶ However, unlike the run of the mill infringement case, here, the question is as a matter of policy and law, does the infringement (and resulting damages) rise to the level that it raises the specter of subverting the intellectual property right holder's incentive to invest in intellectual property. If in the extreme case of Napster, operating in a developed country market with 60 million of users and with 2.79 billion downloads in just one month,¹²⁷ actual damages are at best an open, then it is even harder to speculate that uncompensated uses in the LDC would reduced intellectual property incentives in the developed world.

Even the GAO conceded that "There are also certain instances when IP rights holders in some industries might experience potentially positive effects from the knowing consumption of pirated or counterfeit goods."¹²⁸ So arguendo, having reduced claims of actual substantial economic damages to developed world intellectual property holders to mere unproven speculation, and having ameliorated fears that uncompensated uses in the LCD will reduce the utilitarian incentives that underlay the modern intellectual property regime, a corollary is whether there may be positive externalities for the rights holders. These positive externalities may offset even the smell degree of market substitution that may occur. Commentators have speculated that piracy has effected legitimate business creation and innovation through a four-step process.¹²⁹ First, it pioneered the use of new

¹²⁵ Liebowitz, *supra* xx, at 14 (Professor Liebowitz concluded in a footnote that "I think that her [Judge Patel's] decision was in the end correct, even if not supported by the evidence at hand." *Id.* at n. 49). See Martin Peitz and Patrick Waelbroeck, *The Effect of Internet Piracy on CD Sales: Cross-Section Evidence*, CESIFO WORKING PAPER No. 1122 at 17 available at https://www.econstor.eu/dspace/bitstream/10419/76503/1/cesifo_wp1122.pdf (suggesting a 2% loss of CD sales based on downloading).

¹²⁶ See Julie E. Zink, *Shifting The Burden: Proving Infringement And Damages In Patent Cases Involving Inconsistent Manufacturing Techniques*, 2 HASTINGS SCI. & TECH. L.J. 81, 84 (2010).

¹²⁷ See Benny Evangelista, *Assessing Napster—10 years Later*, June 1, 2009, http://www.sfgate.com/news/article/Assessing-Napster-10-years-later-3229454.php ("At its peak, more than 60 million people worldwide used Napster. In one free-music frenzy, users downloaded 2.79 billion songs in February 2001").

¹²⁸ GAO, *supra* note xx, at 19.

¹²⁹ See David A. Choi and Arturo Perez, Online Piracy, Innovation, and Legitimate Business Models, 27 TECHNOVATION 168, 169 (2007).

technologies.¹³⁰ Second, as early adopters pirate communities are sources of valuable market insight.¹³¹ Third, pirates contribute to creating new markets. Finally, piracy can lead directly and indirectly to creating new business models.¹³² This model has repeated itself through generations of new technologies.¹³³ So, one potential positive externality is that uncompensated uses in developing countries may as an externality create new sources of revenue in more developed countries or alternative ways to discover new compensated markets in developing countries.

VII. CONCLUSION

Using third degree price discrimination one can theoretically segregate economies that benefit from strong intellectual property protection from those that would benefit from selective, weak, or no intellectual property protection in order to analyze the effects of uncompensated uses on the market incentives to create new creative or innovative works. Intellectual property rights are not granted to authors, creators, innovators, and brand development in order to make then wealthy. Rather, these rights are granted to serve an important pubic purpose, from the promotion and dissemination of new creative works (copyright) and innovation (patent) to the assurance of goods and services of consistent quality (trademark). In is in essence, Adam Smith's invisible hand, the channeling the passions and energies of self-interest into a socially desirable goal. Intellectual property rights are territorial in nature. In countries, where the economic incentives that lay behind intellectual property rights serve the purpose of promoting the general welfare, these rights serve a useful purpose and most be protected in order to promote creativity and innovation. In countries, where these rights hinder the general welfare and impose burdens without any corresponding benefit, either to the local citizens or the foreign rights holders, these rights are no longer grounded in good public policy or sound economic theory, and these legal privileges should narrowly construed and enforced only in the rare individual cases where they continue to serve some useful purpose. This suggests that an economically effective international intellectual property policy would focus on strong enforcement of intellectual property rights in countries where piracy results in loss sales or licenses (market substitution) rather than in countries were piracy has little or no effect on sales of the protected goods.

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¹³⁰ Choi and Perez, *supra* note xx, at 169.

¹³¹ Choi and Perez, *supra* note xx, at 169.

¹³² Choi and Perez, *supra* note xx, at 169.

¹³³ Choi and Perez, *supra* note xx, at 169.