

FAKE IT TILL YOU MAKE IT: A JUSTIFICATION FOR INTELLECTUAL PROPERTY “PIRACY”

LLEWELLYN JOSEPH GIBBONS*

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 in the Least Developed Countries (LDC), requires use of intellectual property without always compensating the rights holders in the most developed countries.² 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 markets from developing country markets. Furthermore, 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 due to their subverting the economic incentive necessary to promote the creation of 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 than direct foreign or sporadic technology transfer and therefore, are in the developed countries’ best interests to promote a stable global community through economic development in the LDC.

* Professor, University of Toledo College of Law (lgibbon@utnet.utoledo.edu). The author would like to express his appreciation to faculty participants who commented on his paper at the 14th annual Intellectual Property Scholars Conference (Berkeley School of Law), Midwestern People of Color Legal Scholarship Conference (Indiana Tech Law School), and 2014 Intellectual Property Scholars Roundtable (Drake University Law School). He would also like to acknowledge Professor Daryl Lim’s extraordinary skills as a commentator. Finally, the author would like to acknowledge the encouragement of Gerardo Villagomez de Oliveira e Souza. As always, the many flaws in this Article are solely the responsibility of the author.

1. Close to Home, *Fake It Till You Make It*, PLYRICS (2012), <http://www.plyrics.com/lyrics/closetohome/fakeitillyoumakeit.html>.

2. *Least Developed Countries (LDCs)*, UNITED NATIONS CONFERENCE ON TRADE & DEV. (2013), <http://unctad.org/en/Pages/ALDC/Least%20Developed%20Countries/LDCs.aspx> (last visited Sept. 19, 2014) (defining LDCs as “a category of States that are deemed highly disadvantaged in their development process, for structural, historical and also geographical reasons”).

INTRODUCTION

Intellectual property is important for economic development.³ 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.”⁴ Economic development in the least developed countries (LDCs)⁵ is a critical social, political, and national security interest of the more developed countries.⁶ 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.⁷ Today, developed countries are facing increasing domestic pressure to cut direct foreign aid or to align more closely 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.⁸ The existing models of direct foreign aid, technology transfer, customs, or market access preferences have been unsuccessful at promoting sustained or even culturally appropriate economic development.⁹ So far, according to some reports, 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.¹⁰ If the existing model was credible

3. Kamil Idris, *Intellectual Property: A Powerful Tool for Economic Growth*, WORLD INTELLECTUAL PROP. ORG. (2004), http://www.wipo.int/export/sites/www/freepublications/en/intproperty/888/wipo_pub_888_1.pdf. This Article suggests measuring a country's economic development using its health, welfare, and quality of life.

4. MARK TWAIN, *A CONNECTICUT YANKEE IN KING ARTHUR'S COURT* 67 (Harper & Bros. 1917) (1889).

5. *Least Developed Countries (LDCs)*, *supra* note 2.

6. *Helping Developing Countries Benefit from Global and Regional Trade*, DEP'T FOR INT'L DEV. (June 2014), <https://www.gov.uk/government/policies/helping-developing-countries-economies-to-grow/supporting-pages/helping-developing-countries-benefit-from-global-and-regional-trade>.

7. Bichaka Fayissa & Mohammed I. El-Kaissy, *Foreign Aid and the Economic Growth of Developing Countries (LDC's): Further Evidence*, 34 *STUD. IN COMP. INT'L DEV.* 37, 37-38 (1999).

8. THOMAS CAROTHERS & DIANE DE GRAMONT, *DEVELOPMENT AID CONFRONTS POLITICS: THE ALMOST REVOLUTION* 89 (2013).

9. Fayissa & El-Kaissy, *supra* note 7, at 46-47.

10. UNITED NATIONS OFFICE OF THE HIGH REPRESENTATIVE FOR THE LEAST DEVELOPED COUNTRIES, *LANDLOCKED DEVELOPING COUNTRIES, & SMALL ISLAND DEVELOPING STATES, STATE OF THE LEAST DEVELOPED COUNTRIES v* (2013), *available at* <http://unohrlls.org/custom-content/uploads/2013/10/State-of-the-LDCs-2013.pdf> (noting that while progress has been made, “the majority of LDCs grew at a pace slower than their last- decade averages”); *but see* UNITED NATIONS CONFERENCE ON TRADE AND DEV., *THE LEAST DEVELOPED COUNTRIES REPORT 2012 4* (2012), *available at* <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CG0QFjAI&url=http%3A%2F%2Functad.org%2Fen%2FPublicationsLibrary%2FIdc2>

in promoting economic development, then after almost thirty years, there should be at least one success story.

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.¹¹ They were able to do this because of weak enforcement of domestic intellectual property laws and inchoate international intellectual property norms without an effective enforcement mechanism.¹² This lax period of intellectual property enforcement ended in the post-World Trade Organization era.¹³

The modern scope of domestic intellectual property rights protection is of critical 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.¹⁴ More recently, these countries consisted of marginalized states that had only a feckless voice in creating the modern World Trade Organization (WTO) system of preferences, tariffs, and enforcement.¹⁵ The post-WTO/Agreement on Trade-Related Aspects of Intellectual Property Rights (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.”¹⁶ To be more charitable, “fake it till you make it” is more often promoted as “visualize it and you will achieve it.”¹⁷ This meme serves as this Article’s starting point that developing countries, especially the LDCs, 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

012_en.pdf&ei=WCL7U5TpHluqyATIpICoAw&usq=AFQjCNGjADufXspGYNYwLexpqUKpPkm&sig2=mJClCui-pex5pmndcbUDA&bvm=bv.73612305,d.aWw (noting that three countries have graduated from LCD status).

11. See generally ADRIAN JOHNS, *PIRACY: THE INTELLECTUAL PROPERTY WARS FROM GUTENBERG TO GATES* (2009).

12. *Id.* at 8-11.

13. See *id.* at 327-56.

14. Peter Drahos, *The Universality of Intellectual Property Rights: Origins and Development*, in *INTELLECTUAL PROPERTY AND HUMAN RIGHTS, WORLD INTELLECTUAL PROPERTY ORGANIZATION* 13, 15-26 (Paul Torremans ed., 1999).

15. See, e.g., Aurelie Walker, *The WTO Has Failed Developing Nations*, *GUARDIAN* (Nov. 14, 2011), <http://www.theguardian.com/global-development/poverty-matters/2011/nov/14/wto-fails-developing-countries>.

16. See, e.g., Close to Home, *supra* note 1.

17. See Lifer, *Why You Should Fake It ‘Til You Make It*, *LIFE BRINK* (Aug. 9, 2014), <http://lifebrink.com/why-you-should-fake-it-til-you-make-it/>.

propose the critical rethinking of the scope of intellectual property rights. The pirate code was selected because it exists outside the scope of the formalities of maritime law; yet, it imposed law on the lawless.¹⁸ Even lawful merchants benefited from the self-discipline of the pirate code.¹⁹ 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.²⁰

The modern mantra of the more economically developed, intellectual property rich nations is that more and ever increasingly strong and effective domestic enforcement of intellectual property rights promote economic growth in developing countries and create a sounder global economy.²¹ As such, stronger intellectual property rights regime coupled with effective domestic enforcement will promote global general welfare.²² The mantra of the poorer, less intellectual property rich countries is to demand access to the intellectual property belonging to the citizens of the more developed nations either through compulsory licenses or favorable pricing.²³ These two potentially extreme positions challenge the legitimacy of the modern intellectual property system, which is largely justified through a utilitarian model that balances the interests of intellectual property creators and intellectual property users.²⁴ This model 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.²⁵

Either position in the long run promotes disrespect for intellectual property rights. The arguments for ever increasing levels intellectual property rights and draconian enforcement incentives are often anecdotal, counterfactual, and of the

18. Pam Uher, *The History of the Code*, HUMANITIES 360 (Apr. 9, 2008), <http://www.humanities360.com/index.php/the-history-of-the-pirate-code-55869/>.

19. See Michael Keenan, *Interview with Peter Leeson, Author of The Invisible Hook and Anarchy Unbound*, THE SEASTEADING INSTITUTE (Apr. 24, 2014), <http://www.seasteading.org/2014/04/interview-peter-leeson-author-invisible-hook-anarchy-unbound/>.

20. See *infra* CONCLUSION.

21. Nathan Associates, Inc., *Intellectual Property and Developing Countries: An Overview*, USAID(2003), available at <http://www.nathaninc.com/sites/default/files/Intellectual%20Property%20and%20Developing%20Countries.pdf>.

22. *Id.*

23. See, e.g., Glyn Moody, *As Big Pharma Piles on the Political Pressure, Indian Government Slows Pace of Compulsory Drug Licensing*, TECHDIRT (Mar. 10, 2014), <https://www.techdirt.com/blog/tag=robotsA/?tag=compulsory+license>.

24. VAN LINDBERG, *INTELLECTUAL PROPERTY AND OPEN SOURCE: A PRACTICAL GUIDE TO PROTECTING CODE 15* (2008). Of course, the categories of users and creators are not mutually exclusive. Today's creator is building on the work of yesterday's producers.

25. See *id.*

variety of “what might have been.”²⁶ So far, the balance of interests has been consistently struck in favor of additional intellectual property rights.²⁷ Modern intellectual property policy has rested on the assumption that someday the protected newly-incentivized intellectual property will enter the public domain ultimately for the benefit of all, as opposed a regime with fewer intellectual property rights or weaker levels of enforcement which may at least theoretically result in underinvestment in research and development; and therefore, in the *ab initio* failure of the system to create new inventions or new works of authorship.²⁸

This Article also proposes a “pirate code” of uncompensated uses that convert the deadweight loss resulting from protecting foreign intellectual property rights in the LDC, 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 this 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 U.S. Constitution calls the progress of science and the useful arts²⁹ 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 relevant literature, one may begin to predict the likely effects of uncompensated use in the LDCs on the research, development, and dissemination of intellectual property in the developed countries and the externalities 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 be grounded in principles of economic efficiency, and that, therefore, ultimately the scope of property rights should be determined by economic efficiency.³⁰ Part III proposes using a price discrimination model to

26. See, e.g., *Why Are Intellectual Property Rights Important?*, U.S. CHAMBER OF COMMERCE GLOBAL INTELLECTUAL PROP. CTR. (Dec. 28, 2009), <http://www.theglobalipcenter.com/why-are-intellectual-property-rights-important/>.

27. See generally William W. Fisher III, *The Growth of Intellectual Property: A History of Ownership of Ideas in the United States*, HARVARD CYBER LAW, available at <http://cyber.law.harvard.edu/people/tfisher/iphistory.pdf>

28. Masiyuki Morikawa, *Protection of Intellectual Property to Foster Innovations in the Service Sector*, VOX (July 24, 2014), <http://www.voxeu.org/article/intellectual-property-and-service-sector-innovation>.

29. U.S. CONST. art. 1, § 8, cl. 8.

30. 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 & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 8 (2003). Whether law and economics is a sound model on which to analyze intellectual property is a highly contested issue. See Andreas Rahmatian, *A*

demonstrate that the lack of intellectual property protection in at least the LDCs 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 LDCs are privateers or pirates and will return to the price discrimination model to articulate some legal and economic principles for the development of a pirate code of uncompensated uses. Part V will evaluate a few of the benefits for the developing country and for the developed country. This Article then concludes that when properly constrained, a “pirate code” of narrowly defined unauthorized and uncompensated uses in some markets is 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.

I. 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.³¹ The putative justification for intellectual property protection is that statutory protection of creative works and innovation provides the economic incentives necessary to assure their optimal production or, at least, to preclude the danger of their under production.³² 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.”³³ The U.S. 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.’”³⁴ Therefore, at least in the United States, the constitutional boundary of legitimate intellectual property protection is the public policy and enforcement point where the consumer surplus is the greatest.³⁵

Fundamental Critique of the Law and Economics Analysis of Intellectual Property Rights, 17 MARQ. INTELL. PROP. L. REV. 191, 192-93 (2003).

31. See Stanley M. Besen & Leo J. Raskin, *An Introduction to the Law of Economics of Intellectual Property*, 5 J. ECON. PERSP. 3, 3-4 (1991); see also Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1031-32 (2005).

32. Besen & Raskin, *supra* note 31, at 5.

33. *Ebay v. MercExchange, L.L.C.*, 547 U.S. 388, 392 (2006); *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127-28 (1932) (emphasis added); see also *id.* (“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).

34. *Feist v. Rural Tel. Servs.*, 499 U.S. 340, 349 (1991) (emphasis added) (quoting U.S. CONST. art. 1, § 8, cl. 8).

35. See *Eldred v. Ashcroft*, 537 U.S. 186, 214-16 (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.* at 212-13; see also Richard

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.³⁶ Excessive statutory economic incentives to create new copyrighted works or to promote research and development of innovation may actually result in sub-optimal 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.³⁷

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.³⁸ One study of the psychological effects of economic incentives and creativity concluded: “The generalization that reward lessens creativity 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.”³⁹ 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.⁴⁰

As Fritz Machlup observed, “[i]f 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.”⁴¹ 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

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).

36. See, e.g., LANDES & POSNER, *supra* note 30, at 6-7; SUZANNE SCOTCHMER, INNOVATION AND INCENTIVES 98-123 (2006); Lemley, *supra* note 31, at 1065-66.

37. See LANDES & POSNER, *supra* note 30, at 6.

38. See generally Robert Eisenberger & Stephen Armeli, *Can Salient Reward Increase Creative Performance Without Reducing Intrinsic Creative Interest?*, 72 J. PERSONALITY & SOC. PSYCHOL. 52 (1997) (discussing psychology studies on the effects of rewards and creative behavior).

39. Robert Eisenberger et al., *Can the Promise of Reward Increase Creativity*, 74 J. PERSONALITY & SOC. PSYCHOL. 704 (1998).

40. LANDES & POSNER, *supra* note 30, at 53.

41. Fritz Machlup, *An Economic Review of the Patent System*, in COMMITTEE ON THE JUDICIARY UNITED STATES SENATE, AN ECONOMIC REVIEW OF THE PATENT SYSTEM 80 (1958), available at http://library.mises.org/books/Fritz%20Machlup/An%20Economic%20Review%20of%20the%20Patent%20System_Vol_3.pdf.

current regime of copyright protection.⁴²

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 nineteenth century and early twentieth century market principles of laissez-faire domestic uncompensated uses, at least in the narrow context of the LDCs, grows logarithmically stronger.⁴³ This section will examine the scope of legal protection as providing legal incentives for the creation of 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.⁴⁴

A. Copyright

Traditionally, in common law countries since the Statute of Anne (and the U.S. Constitution), copyright law has relied on a utilitarian justification.⁴⁵ More recently, the economic rights of authors and artists have also been extended to recognize the civil law concept of *droit moral*, or moral rights.⁴⁶ 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.⁴⁷ In the United States, two requirements for federal copyright protection are that the work be fixed and original.⁴⁸ 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

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

43. Of course, there are other theoretical justifications for intellectual property. See Adam Moore, *Intellectual Property*, STANFORD ENCYCLOPEDIA PHIL. (Mar. 8, 2011), available at <http://plato.stanford.edu/entries/intellectual-property/> (but any diminution in the persuasive force of the law and economic justification would not weaken contentions based on other theoretical models).

44. Within the United States, there are other forms of intellectual property that are not discussed in this Article, for example: boat-hull protection, mask-works, and unfixed recordings. Outside the U.S., there are new forms of IP or quasi-IP, such as geographic indicators, intangible cultural heritage, and biodiversity. The marginal economic significance of these types of intellectual property protection in promoting innovation in the context of developing countries is probably not important.

45. See *Fiest Publ'g, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 351 (1991); *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127-28 (1932); ALINA NG, *COPYRIGHT LAW AND THE PROGRESS OF SCIENCE AND THE USEFUL ARTS* 86 (2011).

46. Justin Hughes, *American Moral Rights and Fixing the Dastar "Gap,"* 2007 UTAHL. REV. 659, 706-07.

47. *Fiest*, 499 U.S. at 351.

48. 17 U.S.C. §§ 101-02 (2014); *Fiest*, 499 U.S. at 345-46.

owner complies with some of the ancient formalities of the U.S. copyright law.⁴⁹ 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.⁵⁰ 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).⁵¹

2. *Copyright's Moral Rights.*—Moral rights are a more recent accretion from the civil law countries onto the copyright regime of the common law.⁵² 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 person, or creator of the work, and may be waived, but not assigned, by the author.⁵³ The anti-assignment provision of moral rights as a form of property right makes it difficult to analyze moral rights under the rubric presupposed in this Article.⁵⁴ Moreover, it leads to serious questions 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.⁵⁵

Consequently, the economic arguments justifying an author's moral rights are at best unproven; therefore, this section will not address them in detail.⁵⁶ 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

49. See 17 U.S.C. §§ 410-12; see also *The Football Ass'n Premier League Ltd. v. YouTube, Inc.*, 633 F. Supp. 2d 159, 162-63 (S.D.N.Y. 2009).

50. See *Edlred v. Ashcroft*, 537 U.S. 186, 194-96 (2003).

51. See *id.* at 222 (Stevens, J., dissenting); see also *id.* at 242 (Breyer, J., dissenting).

52. Hughes, *supra* note 46, at 706-07.

53. See *Moral Rights*, WIKIPEDIA, http://en.wikipedia.org/wiki/Moral_rights#Worldwide_situation (last visited Aug. 28, 2014) (showing the various permutations of moral rights); see also Betsy Rosenblatt, *Moral Rights Basics*, HARVARD.EDU, <http://cyber.law.harvard.edu/property/library/moralprimer.html> (last modified March 1998) (providing a basic description of moral rights).

54. 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 (2014).

55. 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, 124-155 (2005).

56. See LANDES & POSNER, *supra* 30, at 279-80.

proponents of an economic efficiency argument for moral rights recognize the, at best, tangential relationship between moral rights and economic efficiency.⁵⁷ 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.⁵⁸ Having set aside the tangential 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.⁵⁹ The classic economic model of copyright protection is one that attempts to solve the public goods problem inherent in the production of non-rivalrous copyrighted works.⁶⁰ Copyrighted works are expensive to produce (high fixed costs) and once created may be cheaply reproduced.⁶¹ The unauthorized reproductions will compete in the market place with the author's own work; 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.⁶² Therefore, the historical classical 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.⁶³ Landes and Posner expounded on the classical model for copyright protection.⁶⁴ Unlike previous standard copyright models that emphasized the incentive-access tradeoff, the Landes and Posner Model emphasizes the incentive-cost-of-expression with different levels of copyright protection.⁶⁵ 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

57. Henry Hansmann & Marina Santilli, *Authors' and Artists' Moral Rights: A Comparative Legal and Economic Analysis*, 26 J. LEGAL STUDIES 95, 102-04 (1997). My comment regarding the law and economics literature should not be taken as criticism of any one scholar or article but, rather, as a generic observation on the paucity of robust articles engaging in a critical systemic economic analysis of moral rights.

58. *Id.* at 104-05; *see infra* Part III.C (discussing the economic justifications for trademark law).

59. Tom W. Bell, *The Specter of Copyism v. Blockheaded Authors: How User-Generated Content Affects Copyright Policy*, 10 VAND. J. ENT. & TECH. L. 841, 843-46 (2008).

60. *Id.*

61. *Id.* at 844.

62. *See id.* at 843-46. 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 & POSNER, *supra* 30, at 37-41.

63. *See* LANDES & POSNER, *supra* note 30, at 37-70.

64. *Id.* at 71.

65. *Id.*

alleged infringing copy are perfect substitutes.⁶⁶ This may be a problematic assumption in the case of reproduction in the LDCs.⁶⁷ They then also assume that demand is certain, the cost of expression is the sole fixed cost, and the marginal costs of the author-creators, but not the infringers, are constant.⁶⁸ This model develops with the following variables: p =copy price, q =quantity demanded, $q \cdot p$ =market demand, x =number of copies 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 =level of copyright protection from 0 (no protection ~ public domain) to 1 (complete protection ~ fee simple absolute in the work).⁶⁹

Descriptively, the economic assumptions underlying the role of infringers in the Landes and Posner model is roughly analogous to the model of fringe competitors competing with a market dominant firm in a legitimate market.⁷⁰ Infringers are rational and will produce copies to the point where price equals marginal cost ($p=mc$) and, like in any legitimate firm, marginal costs increase depending on the number of copies (and in the case of the infringing firm, the level of copyright protection (z)).⁷¹ 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.⁷² Therefore, the author's profits (π) are $\pi=(p-c)x-e(z)$.⁷³ With a few additional levels of algebraic manipulation and 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) [$R \geq e(z)$].⁷⁴ The demand curve for copies produced by the author is represented by subtracting the supply curve of

66. *Id.*

67. This is problematic because a copy of many high value works is not a perfect substitute for the original. For example, it is not clear that a lawyer or doctor would rely on an unproven source—a lawyer would not rely on a “copy” of a case unless she was very sure of the source of the copy, and a doctor would not rely on unknown work as a source of medical information. Similarly, in the case of a patent infringing product, the quality of the infringing good may be inferior to that of the licensed product. This factor becomes even more problematic if one considers other intangible but measurable distinctions such as warranty, pre- or post-sale service, or interoperability with other products.

68. LANDES & POSNER, *supra* note 30, at 71. Landes and Posner talk about copiers broadly, from the legally excused fair uses by ordinary scholars to the illicit and copyright infringing uses. This Article focuses on the arguably illicit range of the uses, so it will describe these copiers as infringers.

69. *Id.* 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.

70. *Id.*

71. *Id.*

72. *Id.* at 72 n.4.

73. *Id.* at 72.

74. *Id.* at 73.

the infringers ($y=y(p,z^0)$) from the market demand for all copies of the work.⁷⁵ To understand how this interplays in a market, one needs to consider N , which is the total number of equivalent works.⁷⁶ For the purposes of this Article, equivalent works are works that could substitute the copyrighted work in the market. The cost of expression $e(z)$ is a variable that will change by author and by work; so the supply of new, equivalent works will increase until $e(z)=R$.⁷⁷

Regardless of the level of legal protection, lovers will always write sonnets and law students will always sing the blues while writing examinations because copyright law's economic incentives play no role in the creation of these works.⁷⁸ However, for those works requiring some incentive-level of copyright protection, too low a level of protection (z) will result in an under production of these new works,⁷⁹ and for those works with marginal expressive value, too high a level of legal protection (z) will also result in an under production of new works.⁸⁰ In commercial terms, this could be described as the range of incentivized copyrighted works from Hollywood blockbusters to user-generated puerile YouTube cat parodies. Similarly, faculty law review articles may have some economic value, but when faced with a 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 and cite. One doubts whether faculty who write law review articles would have sufficient incentive to continue to write them, if they faced either paying licensing fees or faced a serious risk of the threat litigation costs that would be associated with litigating a copyright infringement action under an extremely narrow fair use exception.

Landes and Posner conclude based on their economic model that social welfare is maximized when the marginal benefit of increasing copyright protection resulting in a "higher producer surplus exactly balances the reduction in welfare in the market for copies plus the reduction in producer surplus."⁸¹ In economic literature, the concept of social welfare (and its maximization) is indeterminate.⁸² However, one definition of social welfare that is consistent with the Landes and Posner model and the purposes of the Article's analysis states that "[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

75. *Id.* at 74.

76. *Id.* at 73.

77. *Id.* (assuming $N_R > 0$, $N_z > 0$).

78. *Id.* at 112 ("The point is only that nothing is gained, at least in terms of enhancing incentives to create expressive works, by allowing the identical copy to be copyrighted.").

79. *Id.* at 73.

80. *Id.* at 74 ("[T]oo much protection can raise the costs of creation to a point at which current authors cannot cover their costs even though they have complete copyright protection for their originality.").

81. *Id.* at 76.

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

consumers' welfare."⁸³ Accordingly, the preferred model of intellectual property consistent with the public policy justifications for its creation balances incentives, access, and future works. As discussed later in this Article, reducing the level of copyright protection in LDCs will increase the net social welfare without changing the economic incentives in more developed countries to produce new works.⁸⁴

B. Patent

Patent law promotes the progress of science and the useful arts by encouraging investment in research, development, and commercialization, as well as providing an incentive to the inventor to publicly disclose the invention in exchange for a statutory period of strong exclusivity.⁸⁵ However, the inventor has an option that the author does not. Unlike an author who must disclose her work in order to commercialize it, the inventor could elect to exploit her new invention as a trade secret.⁸⁶ Patent law also provides a substantially shorter period of protection than copyright law.⁸⁷ The protection granted under patent law is more robust—albeit more expensive to obtain.⁸⁸

The summary of Landes and Posner's economic analysis developed in the previous section on copyright law applies equally well here.⁸⁹ Although Landes and Posner have a well-developed theory of patent law,⁹⁰ these distinctions are not relevant to this Article. The basic model of copyright incentives adequately accounts for the incentives necessary to develop new forms of innovation under patent law incentives. The incentives behind patents, like those behind copyrights, 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.⁹¹ Similar to intellectual property as a whole, the preferred economic model of patent law also balances incentives, access, creation, and ultimate commercialization of future innovation.

C. Trademark

Although trademark law plays a significant role in the modern intellectual

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

84. *See infra* Part V.

85. *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)).

86. LANDES & POSNER, *supra* note 30, at 354.

87. *Id.* at 295.

88. *Id.*

89. *Id.* at 71-76.

90. *Id.* at 297-300.

91. *Id.* at 294.

property regime and is susceptible to economic analysis,⁹² it is outside the scope of this Article. Unlike copyrights and patents, the goals of which are the promotion of progress and the useful arts, trademark law is regulatory in nature.⁹³ Traditionally, the proper goal of trademark law was to regulate the integrity of the marketplace by preventing deceptive transactions that result in consumer confusion.⁹⁴ The author of this Article was unable to postulate an economic development reason that would justify deceiving a consumer in LDC or any other consumer in any market. Furthermore, 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.

D. Conclusion

Although the points of limitation under copyright and patent law are different, each form of intellectual property contributes to the general welfare as long as it is securely moored to the appropriate level of incentives.⁹⁵ 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 rights holders.⁹⁶ This Article posits that some markets for some goods are unnecessary to the utilitarian incentives that underlay intellectual property law in developed nations. Therefore, protection of intellectual property in these markets imposes costs and reduces the general welfare with no corresponding benefit to the author, inventor, or rights holder.

II. 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 U.S. Constitution or the Statute of Anne, 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 as when the extent of the intellectual property rights protection is inimical to the public’s interest in the creation and dissemination of intellectual property.⁹⁷ In economic terms, as marginal increases in intellectual

92. *Id.* at 166.

93. *See generally* Lanham Act, 15 U.S.C. § 1114 (2014).

94. *Id.* (The Lanham Act prohibits using a reproduction or copy without consent that “is likely to cause confusion, or to cause mistake, or to deceive.”).

95. *See supra* Part II.A-B.

96. LANDES & POSNER, *supra* note 30, at 422.

97. *See* SCOTCHMER, *supra* note 36, at 119 (discussing deadweight loss and profit).

property protection do not provide any additional incentives to create new works or which promote innovation, and may even increasingly burden the creation or use of intellectual property.⁹⁸

If one views the market for works of intellectual property as an undifferentiated amorphous fungible whole, then finding measurable points of limitation in the real world on this frontier are an intractable problem of the slippery slope variety. Fortunately, economic theory explains intellectual property incentives in terms of markets.⁹⁹ One of the most useful profit maximizing tools available to any commercial entity is the potential to engage in price discrimination in order to assure that each transaction is as profitable as possible—to maximize potential producer surplus.¹⁰⁰ This Article suggests the novel approach of flipping the usual justifications and understanding of price discrimination in the context of intellectual property enforcement in the LDCs. That is, replace the economic model that maximizes the capture of consumer surplus by firms with an economic model that maximizes consumer welfare in LDCs. 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 each individual LDC as a collective-entity operating in markets and treats it as analogous to an individual or a collective entity such as a corporation operating in the marketplace. 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 of intellectual property by LDCs.

A. Price Discrimination

Price discrimination is sometimes proffered as a treatment, if not a cure, for intellectual property piracy.¹⁰¹ The essence of price discrimination permits a business to attempt to charge each consumer (or groups of consumers) the maximum amount that they are willing to pay.¹⁰² A more technical definition is “price discrimination is present when two or more similar good are sold at prices that are in different ratios to the marginal costs.”¹⁰³ There are three prerequisites for effective price discrimination.¹⁰⁴ First, the firm must have some market

98. LANDES & POSNER, *supra* note 30, at 74.

99. See generally Richard A. Posner, *Intellectual Property: The Law and Economics Approach*, 19 J. ECON. PERSPECTIVES 57 (2005).

100. See generally Hal R. Varian, *Price Discrimination*, in 1 HANDBOOK OF INDUS. ORG. 597 (R. Schmaense & R.D. Willig eds., 1989).

101. See, e.g., A. Graham Peace et al., *Software Piracy in the Workplace: A Model and Empirical Test*, 20 J. MAN. INFO. SYS. 153, 169 (2003) (“country-dependent software pricing”).

102. Varian, *supra* note 100, at 600.

103. *Id.* at 598.

104. *Id.* at 599.

power.¹⁰⁵ Second, the firm must have the ability to differentiate among customers.¹⁰⁶ Lastly, it must have the ability to prevent resale (limit arbitrage) between customers.¹⁰⁷

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 (but not eliminate) unlicensed uses of the intellectual property.¹⁰⁸ Candidly, the market power here is extremely 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 to the intellectual property right.¹⁰⁹ As defined, the legal uses of intellectual property are a market over which the owner has almost total control.

This Article's narrow definition of market power is quite different from the usual much broader definition of market power, which is the ability of a firm to raise the price of a good above the marginal cost and still earn a positive profit.¹¹⁰ One of the significant components of market power (traditionally defined) is the cross-elasticity of demand.¹¹¹ In the traditional definition, if there are ready adequate substitutes, then there is little market power.¹¹² 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 other foreign intellectual property rights (at least in the LDCs) that protect any readily available substitutes. Further, albeit a bit counter-intuitive, this Article assumes that because of an imbedded learning curve and network externalities, less expensive creative works or innovation that are "open source," "creative commons," or which are now in the public domain of intellectual property, may not be readily substituted for works that are currently protected by intellectual property.¹¹³

Second, this Article proposes a novel bright line test for distinguishing among potential customers. Individual consumer purchasing decisions are not a

105. *Id.*

106. *Id.*

107. *Id.*

108. See LANDES & POSNER, *supra* note 30, at 378; see also Ariel Katz, *Making Sense of Nonsense: Intellectual Property, Antitrust, and Market Power*, 49 ARIZ. L. REV. 837, 855-56 (2007) (arguing that a patent-holder has inherent market power even if competing goods are only slightly differentiated).

109. *Cf.* Katz, *supra* note 108 (explaining that patent holders' market power typically does not encroach into antitrust territory due to competition from close-substitute goods).

110. *Id.* at 853-54; see also *U.S. Steel Corp. v. Fortner Enters., Inc.*, 429 U.S. 610, 621 (1977) (contextualizing the traditional market power definition).

111. *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 470 (1992).

112. 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).

113. See generally Stephen P. King, *Network Externalities, Price Discrimination and Profitable Piracy*, 15 INFO. ECON. & POLICY 271 (2003).

significant part of the relevant market in this Article's analysis. The focus of the Article is on aggregated purchasing power and decisions of the LDC's consumers as representing a "single" consumer for market analysis. This analysis focuses on defining the relevant customer through the gross national product or per capita income of the LDC with a stratified-nuanced emphasis on the types of 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, those who enjoy incomes roughly 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 proposed tolerated market for uncompensated uses of foreign intellectual property.¹¹⁴

The sole exception to this bright line test is foreign intellectual property that requires an economic incentive provided by developing countries.¹¹⁵ 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 and medical devices whose primary market is to treat medical conditions in developing countries.¹¹⁶ Consistent with the thesis of this Article, these exceptions to the pirate code model only solely because the LDC markets constitute the 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.¹¹⁷ 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 on intellectual property incentives. Later, this issue will be discussed in greater detail; however, at this point, the Article assumes that between the LDCs' interests in regulating its domestic and export-international markets and the developed countries' ability to control their internal markets and borders, the spill over between the two markets would be insufficient to result in a significant reduction in intellectual property incentives.¹¹⁸ The limitation here is the assumption that while there will be some externalities, there will not be a sufficient erosion of the incentives in developed countries to cause an underinvestment in the production of new intellectual property.

1. First-Degree Price Discrimination.—First-degree price discrimination is

114. *Id.* at 276-77.

115. See generally Brook K. Baker, *Patents, Pricing, and Access to Essential Medicines in Developing Countries*, 11 VIRTUAL MENTOR: AM. MED. ASS'N J. ETHICS 527 (2009).

116. *Id.*

117. Yongmin Chen, *Oligopoly Price Discrimination and Resale Price Maintenance*, 30 RAND J. ECON. 441, 442-43 (1999, available at http://stripe.colorado.edu/~cheny/research/rje_autumn'99_chen.pdf).

118. See *infra* Part IV.B.

sometimes called personalized pricing.¹¹⁹ In an effective first-degree price discrimination situation, the intellectual property owner charges each customer (or each LDC in our hypothesized case) the highest cost that each would be willing to pay.¹²⁰ Under normal conditions, this is perfect price discrimination and is impossible to achieve.¹²¹ However, if one treats each LDC as a separate “consumer,” then this goal may be more precisely, if still imperfectly, achieved.¹²² 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 correspond to social welfare maximization in the LDC, which results in economic development.

2. *Second-Degree Price Discrimination.*—Second-degree price discrimination links price to the differentiating qualities of a product.¹²³ One example of this is offering lower (but sometimes higher) prices to consumers based on the quantity sold.¹²⁴ However, this form of price discrimination may not be effective in the context of developing nations. 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.¹²⁵ 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, such as instances when the LDC’s government purchases licenses for intellectual property on behalf of its residents. 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 this Article finds most useful in developing the 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.¹²⁶ Here, this Article proposes that certain factors, such as the level of economic development, the characteristics of the intellectual property, and the access rights they represent would define in part the consumer groups with a *suggested* unique end point (at least in economic literature). For some consumers, the price point would

119. COSTAS COURCOUBETIS & RICHARD WEBER, PRICING COMMUNICATION NETWORKS: ECONOMICS, TECHNOLOGY AND MODELING 144 (Sheldon Ross & Richard Weber eds., 2003).

120. *Id.*

121. *Id.* at 149.

122. *See id.* at 149-50.

123. Michael J. Meurer, *Copyright Law and Price Discrimination*, 23 CARDOZO L. REV. 55, 72-75 (2001).

124. *Id.*

125. *See supra* text accompanying notes 101-16.

126. Meurer, *supra* note 123, at 69-72.

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 zero benefits from a so-called “free rider.”¹²⁷ 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 as the LDC economy develops 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 and other longer-term incentives must be properly valued by the rights holder, the developed countries, and the LDCs.

The model 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 LCDs without any corresponding loss to the intellectual property incentives. However, the welfare effect of third-degree price discrimination has long been debated in the economic literature.¹²⁸ Third-degree price discrimination may result in a misallocation of output and the total output may differ from the total output under uniform pricing.¹²⁹ As a general rule, welfare falls if the total output is the same or lower under price discrimination.¹³⁰ So, one prerequisite in order for price discrimination to increase welfare is that there must be an increase in total output. under a price discrimination model.¹³¹ Assuming that the norms of economics remain true and that intellectual property is a normal good, then as the price (including the costs of associated with facing the threat of enforcement) are decreased, 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.¹³² According to them, the demand curve for the author-inventor is defined by the infringer’s supply curve ($y=y(p,z^0)$).¹³³ Accordingly, if the LDC market

127. See generally KAL RAUSTIALA & CHRISTOPHER SPRIGMAN, *THE KNOCKOFF ECONOMY: HOW IMITATION SPARKS INVENTION* (2012).

128. See Donghyun Park, *Price Discrimination, Economics of Scale, and Profits*, 31 J. ECON. EDUC. 66 (2000).

129. *Id.* at 67.

130. Inaki Aguirre, *Joan Robinson Was Almost Right: Output Under Third-Degree Price Discrimination*, UNIV. OF THE BASQUE COUNTRY (2008), available at <http://ssrn.com/abstract=1434865>.

131. Park, *supra* note 128, at 67.

132. See *supra* Part II.A.3.

133. LANDES & POSNER, *supra* note 30, at 74.

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 and the rights holder's profits (incentives) would remain the same, but the LDCs would have an increase in the welfare of its residents.¹³⁴

B. *Law of One Price*

The unnamed boogeyman, and often the straw man, in the argument against uncompensated uses is that these uncompensated LDC uses will force the developed world prices lower.¹³⁵ In economic literature, this is called the law of one price.¹³⁶ The law of one price assumes that, after adjusting for costs and purchasing power parity, a good must sell for the same price in all markets.¹³⁷ The underlying assumption is the arbitrage will result in goods moving from low price, low demand regions (decreasing supply) to higher-demand, higher-priced locations (increasing supply) until the two markets reach price parity.¹³⁸ An intuitive misapplication of the law of one price is why some developed nation intellectual property holders insist on enforcing intellectual property rights in the LDC at costs well in excess of any expected market return.¹³⁹ Rights holders worry that the lower price pirate goods will affect the price of the authorized good.¹⁴⁰

The law of one price relies on arbitrage between markets.¹⁴¹ 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.¹⁴² This 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 is protected in the receiving nation by intellectual property laws. However, the extent of that trade and the 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 LDCs' goods, although perhaps similar in appearance to those goods from developed countries, would not have many of the essential intangible

134. See *supra* Part II.A.3.

135. See, e.g., 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).

136. *Id.*

137. *Id.*

138. *Law of One Price*, INVESTOPEDIA, <http://www.investopedia.com/terms/l/law-one-price.asp> (last visited Aug. 24, 2014).

139. See, e.g., 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).

140. *Id.*

141. *Law of One Price*, *supra* note 138.

142. See *infra* Part III.C.

qualities that make them attractive to consumers, such as warranty protection and access to customer services. Additionally, as this Article contends that trademarked goods 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 or properly branded good in the developed country.

C. Marginal Utility of LDC Markets as Providing Incentives

Having established that, theoretically, 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,¹⁴³ 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.¹⁴⁴ Over the past decades, the movement of intellectual property protection has been for stronger, longer, and more effective protection.¹⁴⁵ Second, if for the sake of argument, one assumes that the level of protection in the developed countries is finely calibrated to the optimal level so as to provide incentives without unnecessary deadweight loss, the LDCs still represent an insignificant market for the sale of licensing of developed nations' intellectual property rights.¹⁴⁶ 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.¹⁴⁷

Any analysis of the economic role of an LDC must consider at least two different markets for intellectual property: (1) intellectual property products that are produced primarily for the LDCs and for which the LDC provides the critical market; and (2) goods that are produced primarily or even solely for developed country markets for which the LDC is merely an incidental beneficiary of their

143. Moore, *supra* note 43.

144. See Doris Estelle Long, *First, "Let's Kill All the Intellectual Property Lawyers!"*: *Musings on the Decline and Fall of the Intellectual Property Empire*, 34 J. MARSHALL L. REV. 851, 853-56 (2001).

145. *Id.* at 854-56. In addition to increasing statutory protection, intellectual property owners are increasingly closing any gaps in that protection through technological protection measures (digital rights management), private law (licensing), imposing liability on so-called gate keepers, and of course, changing the default statutory fair use or other exceptions to the scope of protection to their statutory rights.

146. See *Economic Development and Patents*, WORLD INTELLECTUAL PROP. ORG., <http://www.wipo.int/patent-law/en/developments/economic.html> (last visited Sept. 19, 2014).

147. See *id.*

creation.¹⁴⁸ The first market type demands that the LDC provides the incentive to provide these works.¹⁴⁹ 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 forty-eight LDCs according to the United Nations.¹⁵⁰ A least developed country is defined by the United Nations as having the lowest socioeconomic development using the human development index.¹⁵¹ To be defined as an LDC, the country must have a gross national income of \$992 to \$1,190 per year, human resource weakness, and vulnerability.¹⁵² LDCs constitute about twelve percent of the world's population, but they represent less than two percent of the world GDP and approximately one percent of global trade.¹⁵³ Another way of considering this disparity is that LDCs collectively represent 878.2 million people, and these people collectively represent a GDP roughly twice the market capitalization of Google, which as measured by market capitalization is the *third* largest publicly traded company in the United States.¹⁵⁴

148. See, e.g., World Intellectual Property Organization Committee on Development and Intellectual Property (CDIP), Geneva, Switzerland, April 26-30, 2010, *Project on Intellectual Property and Product Branding for Business Development in Developing Countries and Least-Developed Countries (LDCS)*, (March 2, 2010), available at http://www.wipo.int/edocs/mdocs/mdocs/en/cdip_5/cdip_5_5.pdf (describing a program to utilize intellectual property concepts within LDC markets).

149. 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 that have a viable economic market for the pharmaceutical. This determination will be based on the demand curve of each country for each embodiment or use of intellectual property. To reiterate, the solution proposed in this Article is fact specific to each LDC and is dependent on the specific characteristics of its market for each good that is covered by intellectual property protection, and the author clearly rejects any one-size-fits-all approach to economic development.

150. *List of Least Developed Countries*, UNITED NATIONS, http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_list.pdf (last visited Sept. 19, 2014). Unfortunately, this is a relatively stable classification. Since 1971, only three countries have graduated into the next level developing country status, and none have moved into the coveted developed nation status.

151. See Franco Gandolfi & Philip A. Neck, *Poverty: A Social Disgrace and Dilemma*, in, SUSTAINABLE ECON.: CORPORATE, SOCIAL AND ENVTL. RESPONSIBILITY 73, 76 (2010).

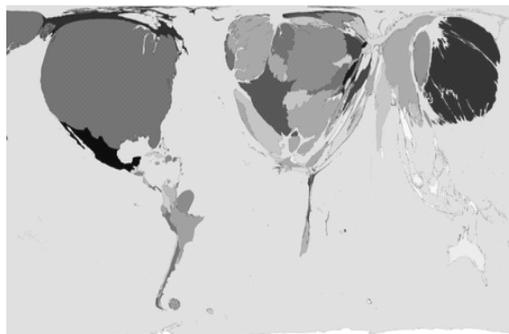
152. *The Criteria for Identifying Least Developed Countries*, UNITED NATIONS DEV. POLICY AND ANALYSIS DIV. (August 2013), http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_definitions.shtml (defining "health resources weakness" as weakness in health, nutrition, education, and literacy).

153. *About LDCs* UNITED NATIONS OFFICE OF THE HIGH REPRESENTATIVE FOR THE LEAST DEVELOPED COUNTRIES, LANDLOCKED DEVELOPING COUNTRIES, & SMALL ISLAND DEVELOPING STATES, <http://unohrlls.org/about-ldcs/> (last visited Sept. 19, 2014); see generally *Least Developed Countries: UN Classification*, THE WORLD BANK <http://data.worldbank.org/region/LDC> (last visited Sept. 19, 2014) (showing more statistical information about the LDCs).

154. Steven Russolillo, *Google Climbs Market-Cap Ladder; Takes Reins as Third-Biggest U.S.*

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

Illustration of GDP Wealth¹⁵⁵



The small proportion of the world's wealth that is represented by the Global South and that the LDCs is almost infinitesimally small. In fact, they are just a bit larger than the economy of a small European country approximately the economic size of The Netherlands.¹⁵⁶

III. PRIVATEER OR PIRATE

In the Age of Pirates, whether one was a pirate or privateer depended substantially on whose vessels were being captured (and where).¹⁵⁷ Many scholars and developing nations argue that the uncompensated intellectual property uses or technology transfers posited in this Article are already within the scope of permissible activities permitted to the LDC (the "privateer model").¹⁵⁸ Many developed country governments, speaking solely on behalf of their intellectual rights holders, disagree and contend that any uncompensated use is

Company, MARKET BEAT (Oct. 2, 2012), <http://blogs.wsj.com/marketbeat/2012/10/02/google-climbs-market-cap-ladder-takes-reigns-as-third-biggest-u-s-company/>; see also Brian Womack, *Google Briefly Tops Exxon as 2nd-Most Valuable U.S. Firm*, BLOOMBERG (Feb. 7, 2014), <http://www.bloomberg.com/news/2014-02-07/google-passes-exxon-to-become-second-most-valuable-u-s-company.html>.

155. *GDP Wealth*, WORLDMAPPER, <http://www.worldmapper.org/display.php?selected=169> (last visited Sept. 19, 2014). On this map, the fatter the country or region, the wealthier it is, so compare the obese North with the famished South.

156. *Compare Least Developed Countries: UN Classification*, *supra* note 153 (showing a GDP of \$775.4 billion), with *Netherlands*, THE WORLD BANK, <http://data.worldbank.org/country/netherlands> (last visited Aug. 26, 2014) (showing a GDP of \$800.2 billion).

157. See, e.g., *Francis Drake*, WIKIPEDIA, http://en.wikipedia.org/wiki/Francis_Drake (last updated Aug. 27, 2014); see also Brian Whitenton, *The Difference Between Pirates, Privateers and Buccaneers Pt. 1*, THE MARINERS' MUSEUM (Sept. 20, 2012), <http://www.marinersmuseum.org/blogs/library/?p=1054>.

158. See *infra* Part IV.A.1.

rank order, unmitigated, and shameless piracy.¹⁵⁹ This section will briefly contend that this activity is more akin to privateering than piracy; it will conclude, however, that even if uncompensated uses of intellectual property in the LDC is common piracy, the international community should adopt an informal policy (a “pirate code”) to govern these activities to ensure that they do not threaten intellectual property incentives in the developed countries. For example, the developed countries could more aggressively 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 most effective gatekeeper with the greatest incentives to protect a developed country’s 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 legal justification for their piratical acts.¹⁶⁰ The difference does not lie in the economic effect on maritime commerce. This section will explore whether there are colorable or even sound bases for which more economically developed nations should accept the fact that the LDCs could, as a question of internal domestic development policy, permit uncompensated uses of the more developed nations’ intellectual property. The various treaties that create the international intellectual property regime have inherent exceptions and limitations that provide a colorable basis for some uncompensated uses.¹⁶¹ This area of research, namely the scope of appropriate protection under the international intellectual property regime, has been exhaustively theorized and researched by numerous economic and legal scholars; therefore, there is little that this Article could add to the voluminous literature.

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

159. JOHNS, *supra* note 11, at 3-8.

160. Christopher Minster, *Pirates, Privateers, Buccaneers, and Corsairs*, ABOUT.COM, <http://latinamericanhistory.about.com/od/Pirates/a/Pirates-Privateers-Buccaneers-And-Corsairs.htm> (last visited Sept. 19, 2014); *see* U.S. Const. art. 1, § 8, cl. 11 (Letters of Marque and Reprisal).

161. WORLD INTELLECTUAL PROP. ORG., REPORT ON THE INTERNATIONAL PATENT SYSTEM, (2008), *available at* http://www.wipo.int/edocs/mdocs/scp/en/scp_12/scp_12_3_rev.pdf; *see also* Workshop on Implementation Issues of the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), Geneva, Switzerland, Dec. 6-7, 1999, *Exceptions and Limits to Copyright and Neighboring Rights*, (Dec. 3, 1999), *available at* http://www.wipo.int/edocs/mdocs/copyright/en/wct_wppt_imp/wct_wppt_imp_1.doc.

intellectual property law (the “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, despite there being a colorable basis for their legality, 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 that requires their enforcement, contain specific exceptions and limitations as well as a general catchall exception usually referred to as a three-step test.¹⁶² Three-step tests are a very recent addition to the international conventions to protect intellectual property.¹⁶³ Rhetorically, the three-step tests have become a bogeyman, with which opponents balanced intellectual property protection threaten legislatures, policy makers, and governments. If these governments consider laws or policies that create robust exceptions to the claims of intellectual property rights holders then under a three-step test such laws or policies will place the nation outside international intellectual property norms.¹⁶⁴ 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.”¹⁶⁵

So, the core of the three-step test is that 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

162. See, e.g., Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), arts. 13, 30, Apr. 15, 1994; Berne Convention for the Protection of Literary and Artistic Works, art. 9, Sept. 9, 1886; see also *Berne Three-step Test*, WIKIPEDIA http://en.wikipedia.org/wiki/Berne_three-step_test (last updated Mar. 15, 2014) (“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))”; see generally MARTIN SENFTLEBEN, COPYRIGHT, LIMITATIONS, AND THE THREE-STEP TEST: AN ANALYSIS OF THE THREE-STEP TEST IN INTERNATIONAL AND EC COPYRIGHT LAW (2004).

163. See William Patry, *Fair Use, the Three-Step Test, and the Counter-Reformation*, THE PATRY COPYRIGHT BLOG (Apr. 2, 2008), <http://williampatry.blogspot.com/2008/04/fair-use-three-step-test-and-european.html> (noting that the most famous three step test, Art. 9(2) of the 1886 Berne Convention, was not added until 1971).

164. *Id.*

165. Berne Convention for the Protection of Literary and Artistic Works, art. 9(2), Sept. 9, 1886.

holders with its national public policy priorities.¹⁶⁶

There is no authoritative tool for interpreting three-step tests.¹⁶⁷ 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.¹⁶⁸

In light of the history and purposes of Article 9(2), one may argue that even at the macro level, LDCs are “special cases” in so far as they are well defined, circumscribed exceptions 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.¹⁶⁹ The normal exploitation of the work suggests market exploitation in the LDCs granting the limitation rather than the abstract possible examples of exploitation that the rights 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, at worst, to receive only sufficient rights to provide an incentive that results in the progress of science and the useful arts.¹⁷⁰ The limitation of rights in the LDCs is unlikely to prejudice the

166. See Martin Senftleben, *The International Three-Step Test A Model Provision for EC Fair Use Legislation*, 1 JIPITEC 67 (2010), available at <https://www.jipitec.eu/issues/jipitec-1-2-2010/2605/JIPITEC%202%20-%20Senftleben-Three%20Step%20Test.pdf> (“[T]he 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.”).

167. WILLIAM F. PATRY, PATRY ON FAIR USE § 8:2 (2014) (“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 laws.’”).

168. CHRISTOPHE GEIGER ET AL., DECLARATION: A BALANCED INTERPRETATION OF THE “THREE-STEP TEST” IN COPYRIGHT LAW, available at http://www.ip.mpg.de/files/pdf2/declaration_three_step_test_final_english1.pdf; see also PATRY, *supra* note 167.

169. Cf. Annette Kur, *Of Oceans, Islands, and Inland Water—How Much Room for Exceptions and Limitations Under the Three-Step Test?*, MAX PLANCK INST. FOR INTELLECTUAL PROP., COMPETITION, AND TAX LAW 31-40 (2008) (discussing options for flexibility within the three-step test).

170. *Philosophy: TRIPS Attempts to Strike a Balance*, WORLD TRADE ORG., <http://www.wto>.

legitimate interests of the rights holder.

This conclusion 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 these rights are vested in the individual rights holder.¹⁷¹ But rather, these treaties create rights that must be enforced by nation-states who are members of the treaty.¹⁷² Pre-TRIPS, nations could seek to protect their citizens' treaty rights in the International Court of Justice.¹⁷³ Post-TRIPS, the enforcement measures focus on panel decisions and the withdrawal of trade concessions by aggrieved nations.¹⁷⁴ The penalty for breaching a WTO obligation is the possibility of retaliation.¹⁷⁵ Once approved, the retaliation is not directed against the government of the offending country but against the economic and trade rights of its citizens.¹⁷⁶ Accordingly, developed countries may select which uses of their citizens' intellectual property to challenge using the WTO process and which uses should be a matter of the domestic laws of the country where the treaty rights are arguably violated, and may also tailor their response in a proportional manner when the rights of their citizens have been violated.¹⁷⁷

Finally, as a matter of policy, there may be institutional levers within the WTO to accomplish these goals.¹⁷⁸ The Doha Declaration represents merely one example where 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.¹⁷⁹ Also, the WTO panels have some discretion when interpreting and developing trade law.¹⁸⁰ There is some flexibility in balancing the letter of the treaty in light of its

org/english/tratop_e/trips_e/factsheet_pharm01_e.htm (last visited Sept. 19, 2014).

171. *Summary of the Berne Convention for the Protection of Literary and Artistic Works (1886)*, WORLD INTELLECTUAL PROP. ORG., http://www.wipo.int/treaties/en/ip/berne/summary_berne.html (last visited Sept. 19, 2014).

172. *Id.*

173. ACADEMIE DE DROIT INTERNATIONAL DE LA HAYE, COLLECTED COURSES 283 (2000); DAVID NIMMER, COPYRIGHT: SACRED TEXT, TECHNOLOGY, AND THE DMCA 108 (2003).

174. See Peter K. Yu, *TRIPS Enforcement and Developing Countries*, 26 AM. U. INT'L L. REV. 727, 727-82 (2011).

175. See Frederick Abbott, *Cross-Retaliation in TRIPS: Options for Developing Countries*, INT'L CTR. FOR TRADE AND SUSTAINABLE DEV. (Apr. 1, 2009), <http://www.ictsd.org/themes/innovation-and-ip/research/cross-retaliation-in-trips-options-for-developing-countries>.

176. *Id.*

177. *Id.*

178. 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. 291 (2002), available at <http://jolt.law.harvard.edu/articles/pdf/v15/15HarvJLTech291.pdf>.

179. World Trade Organization, Ministerial Declaration of 14 November 2001, WT/MIN(01)/DEC/1 (2001), available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm.

180. Gathii, *supra* note 178, at 299.

negotiating history and its stated purposes.¹⁸¹ Therefore, 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*.—“[M]ale enim nostro iure uti non debemus—we should not exercise our rights wrongfully” is an ancient principle of Roman and now, modern civil law.¹⁸² 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.¹⁸³ In addition to 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, there is also a general limiting principle in civil law: the abuse of right¹⁸⁴

At least one of four conditions “is required to invoke the [abuse of right] doctrine: (1) the predominant motive for exercising the right is to cause harm; (2) no serious or legitimate motive exists for exercising the right; (3) the exercise of the right is against moral rules, good faith, or elementary fairness; or (4) the right is exercised for a purpose other than that for which it was granted.”¹⁸⁵

German law represents the typical civil law abuse of right factors: whether the exercise of rights is grossly inequitable under the circumstances or is carried out with no regard for the legitimate interests of other parties; the right is acquired through bad faith or in violation of the law; the exercise of rights is inconsistent with past conduct; or the right is exercised only for the purpose of causing harm.¹⁸⁶ However, the example of Swiss law may be more instructive and analogous to common law courts.¹⁸⁷ The Swiss Code provides that “the manifest abuse of a right is not protected by law.”¹⁸⁸ Significantly, in radical departure for a civil law country, “article 1 of the Swiss Civil Code which, as an unprecedented measure, gives quasi-legislative functions to the courts by authorizing the judges to substitute their own interpretation where the text of the law or the accepted

181. *Id.*

182. 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 *Abuse of Rights*, WIKIPEDIA, http://en.wikipedia.org/wiki/Prohibition_of_chicane#cite_note-1 (last updated Apr. 5, 2014).

183. *Id.*

184. *Id.*

185. 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.

186. Bolgar, *supra* note 182, at 1027-28.

187. *Id.* at 1031.

188. *Id.* at 1031 n.83 (translated from original language).

custom is silent or inadequate.”¹⁸⁹

Under the conditions theorized in this Article, at least three of the four black letter law conditions may be present when enforcing intellectual property rights in a LDC.¹⁹⁰ The Author assumes that the exercise of the intellectual property right is done is not for the primary purpose of causing harm. The economic damage to the economy of LDCs is merely an unintentional, unfortunate, historical externality—an unfortunate incidental byproduct of colonization and globalization. However, the other three conditions are usually present in the case of enforcing most intellectual property rights in LDCs.

First, as was discussed earlier, if one defines the legitimate purpose for enforcing intellectual property rights as to retain or obtain the economic incentives provided to create new works of intellectual property,¹⁹¹ then often enforcement of those rights, especially against small non-commercial users in an LDC, lack a legitimate economic motive and are being exercised for a purpose other than that for which the rights were granted. One may think of this as a modified, *T.J. Hooper*¹⁹² or *Carroll Towing*¹⁹³ test for morality. 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 were meant to have an *ad terrorem* effect on both commercial and non-commercial piracy in general.

The second condition requires a nuanced judgment whether “the exercise of the [intellectual property] right is against moral rules, good faith, or elementary fairness.”¹⁹⁴ The author argues that this factor too is susceptible to economic analysis. If the direct costs of enforcement, private litigation, and public costs (developed nations’ political and economic costs to pressure LDCs as well as LDCs’ 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 have some sense of elementary fairness (or at least test whether such enforcement is economically rational).¹⁹⁵

Having shown that there is no injury to the economic incentives that underlay intellectual property rights,¹⁹⁶ there is a significant question as to whether there is a legal basis on which to ignore the effects of enforcing these rights. Absent the sound economic utilitarian justification underlying modern intellectual

189. *Id.* at 1031.

190. Kinsella, *supra* note 185, at 1266.

191. Besen & Raskin, *supra* note 31, at 5.

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

193. *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947) (“[I]f 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 $B < PL$.”).

194. Kinsella, *supra* note 185, at 1266.

195. Bolgar, *supra* note 182, at 1019-20 (citing Court of Cassation, CASS. CIV., Feb. 18, 1907, D.1907.1.385, 387 (Switz.)).

196. *See supra* Part III.C.

property, one may conclude that requiring the domestic enforcement of intellectual property rights in the LDCs that benefit no one and which may harm the weakest and most desperate communities in our global village is an abuse of right. Civil law does not protect the manifest abuse of a legal right.¹⁹⁷ 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.¹⁹⁸ The law permits useful-fences, (even if it injures a neighbor), but prohibits spite fences because a useful-fence at least benefits one party while a spite fence benefits no one economically while causing an unnecessary and intentional injury to another.¹⁹⁹

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, and 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 other legal institutions or transactions.²⁰⁰ At least in the domestic context, the concept of uncompensated use is not a radical position. Professors Landes and Posner, in their seminal work *The Economic Structure of Intellectual Property*, analyzed the limits of property rights in differing forms of intellectual property.²⁰¹ First, they note the difference between theft of real property and intellectual property piracy.²⁰² They conclude:

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 someone 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 sales revenue of an intellectual property owner.²⁰³

They then discuss their principled (or principal) objection to piracy.²⁰⁴

197. Kinsella, *supra* note 185, at 1266.

198. *See* Dowdell v. Bloomquist, 847 A.2d 827, 830-33 (R.I. 2004).

199. *See generally* M.L. Cross, Annotation, *Spite Fences and Other Spite Structures*, 133 A.L.R. 691 (1941).

200. *See generally* ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 88-119 (1988) (discussing the intersection of property rights and economics).

201. *See generally* LANDES & POSNER, *supra* 30.

202. *See id.* at 47.

203. *Id.*

204. *Id.*

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 copyright, as they would not do if piracy benefited 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 in order to avoid having to pay.²⁰⁵

Landes and Posner’s arguments against uncompensated uses fail in the context of LDCs. 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.²⁰⁶ Second, there is some evidence (albeit hardly conclusive) that casts some doubt on Landes and Posner’s assumption of the inherent dishonesty in human nature that people will lie to get something for free for which they would otherwise have had to pay.²⁰⁷ iTunes and its competitors are excellent examples of companies whose consumers buy music that they could freely access without cost (including real risk of enforcement) on the World Wide Web.²⁰⁸

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,²⁰⁹ 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.²¹⁰ However, in the aggregate of a nation-state, one can use 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 to pay and unable to pay, could result in each type of good being protected by differing levels intellectual property law enforcement. It could even be finely tailored to individual products by individual manufacturers.

205. *Id.*

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

207. See, e.g., R. Preston McAfee, *Price Discrimination*, in 1 ISSUES IN COMPETITION LAW AND POLICY 465, 465 (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).

208. Jacqueline Sahagian, *Study: iTunes Is More Profitable Than Xerox and Time Warner Cable*, WALL ST. CHEAT SHEET (Feb. 12, 2014), available at <http://wallstcheatsheet.com/stocks/study-itunes-is-more-profitable-than-xerox-and-time-warner-cable.html/?a=viewall>.

209. See LANDES & POSNER, *supra* 30, at 47.

210. *Id.*

Concededly, there will be some free riders in the LDC who are both willing and able to pay, but the vast majority of the beneficiaries of the proposed pirate code of uncompensated uses represent deadweight loss but for the pirate code.

Even lawless brigands must be governed by a code. Whether privateer or pirate, there must be a code to govern these uncompensated uses; otherwise, the assumed economic incentive (as a prerequisite) for the creation of intellectual property would quickly fail. As any maritime historian or viewer of the recent *Disney Pirates of the Caribbean*²¹¹ 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.²¹² The pirate code governed activities that took place in the shadow of double law, and failure to comply with the pirate code could result in the offending pirate being abandoned to the law of man, the law of nature, or submission to the judgment of the captain and crew.²¹³ 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 in the LDC market.

The proposed pirate code could be very simple and should be grounded in law and economics. 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 on incentives.

IV. BENEFITS OF A PIRATE CODE

The proposed pirate code promotes economic development in the LDCs at a minimal cost to developed world rights holders and promotes economic incentives that justify intellectual property rights. In essence, the pirate code permits LDCs to capture deadweight loss and to convert it into consumer surplus. It also permits LDC to stop expending public funds to enforce rights that provide no benefit either to the rights holder bringing the action or to the domestic economy. This process advantages the LDCs and the developed countries, and perhaps even developed countries' rights holders. This section will analyze some of the benefits of a pirate code.

211. PIRATES OF THE CARIBBEAN: THE CURSE OF THE BLACK PEARL (Walt Disney Pictures 2003).

212. See generally *Pirate Code of Conduct*, ELIZABETHAN ERA, <http://www.elizabethan-era.org.uk/pirate-code-conduct.htm> (last visited Sept. 19, 2014).

213. *Id.*

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.²¹⁴ Uncompensated intellectual property transfers to developing countries promote economic efficiency, development goals, and constitute a type of foreign aid subsidy.²¹⁵

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.²¹⁶

Further, the economic value-received or economic development effect of such payments or licenses are often confounded with accusations of fraud, waste, and inefficiency.²¹⁷ 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.”²¹⁸ The first two examples are top-down, may have significant transaction costs, and are not necessarily responsive to market forces in the developing country.²¹⁹ “Acquiescence to unlicensed intellectual property transfers ameliorates most of these costs.”²²⁰ Furthermore:

Absent strong domestic intellectual property enforcement, the developing country will not pay higher prices for imported goods and technologies since these goods and technologies could be produced locally or imported from another developing country (one with a slightly higher level of industrialization) without paying an intellectual property premium. Industries in developing countries that produce “pirated” products for their own marketplace, or for that of other developing

214. 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.

215. 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, 927 (2011).

216. *Id.*

217. *Id.*

218. *Id.*

219. *Id.*

220. *Id.*

countries, may continue or even thrive in business 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.²²¹

In the long run, this creates a sound basis on which to grow a developing country into a developed economy, which ultimately will respect foreign intellectual property rights in its own self-interest.²²²

B. Benefits for Developed Countries

Developed countries would also benefit from this proposed policy. A tolerated uncompensated use 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.²²³ The U.S. Government Accounting Office (GAO) concluded that while piracy was a problem that “[t]hree widely cited U.S. government estimates of economic losses resulting from counterfeiting cannot be substantiated due to the absence of underlying studies.”²²⁴ The GAO reported that the theoretical negative effects from piracy also call into question the survey data adduced by leading industry groups.²²⁵ Significant to this Article's thesis, these studies counter intuitively assume that every unauthorized use is a substitution for a sale or license.²²⁶ Further, these studies often value the

221. *Id.* at 927-28.

222. *Id.* at 927.

223. *See generally* UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE, INTELLECTUAL PROPERTY OBSERVATIONS ON EFFORTS TO QUANTIFY THE ECONOMIC EFFECTS OF COUNTERFEIT AND PIRATED GOODS (2010), available at <http://www.gao.gov/assets/310/303057.pdf> [hereinafter GAO].

224. *Id.* at 2.

225. *Id.* at 25-26.

226. *Id.* at 17; *see also* Brian Jackson, *Anti-Piracy Group's Study 'Shockingly Misleading', Says Expert*, ITBUSINESS.CA (Sep. 17, 2010), <http://www.itbusiness.ca/news/anti-piracy-groups-study-shockingly-misleading-says-expert/15390> (Canada reduced its piracy, as calculated by the Business Software Alliance (“BSA”), by five percent using the BSA model, which should have resulted in 2,600 more jobs and \$1.4 billion more in the GDP. As such, this model substantially over predicted the effects of a net reduction in piracy.); Glyn Moody, *BSA's Piracy Numbers: Less*

counterfeit product at the highest theoretical market price for the authorized copy (so-called “manufacturer’s suggested retail price”), and often includes the value of warranties or services that are obviously not provided to unauthorized purchasers and does not include ordering discounts.²²⁷ This GAO finding is consistent with the Organisation for Economic Co-operation and Development’s (OECD) conclusion that national assessments “rely excessively on fragmentary and anecdotal information; where data are lacking, unsubstantiated opinions are often treated as facts.”²²⁸

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, Incorporated v. Napster, Incorporated* litigation.²²⁹ The *Napster* litigation represented one of the few instances in which there was a relatively level playing field in terms of research resources.²³⁰ *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.²³¹ Also, one may assume a relative ease of access and availability of resources to conduct these studies. Yet, despite of all of these advantages to opponents of uncompensated uses, the results of the survey evidence, at best, are mixed.²³² One prominent economist concluded after analyzing the *Napster* litigation survey reports that “[a]ll in all, my reading of the reports in the case indicates that the plaintiffs in the case failed to make as persuasive a case for harm as the defense did for the lack of harm.”²³³ So, the domestic evidence (in the USA) is a fragile

Than They Seem, COMPUTERWORLDUK (Sept. 17, 2010, 2:54 PM), <http://blogs.computerworlduk.com/open-enterprise/2010/09/bsas-piracy-numbers-less-than-they-seem/index.htm>.

227. See Jackson, *supra* note 226.

228. GAO, *supra* note 223, at 16; see also Timothy B. Lee, *Swiss Government: Fling-Sharing No Big Deal, Some Downloading Still Ok*, ARSTECHNICA (Dec 5, 2011), <http://arstechnica.com/tech-policy/2011/12/swiss-government-file-sharing-no-big-deal-some-downloading-still-ok/>.

229. See *A&M Records Inc., v. Napster, Inc.*, No. C9905183MHP, 2000 WL 1170106, at *2-11 (N.D. Cal. Aug. 10, 2000), *aff’d*, 239 F.3d 1004 (9th Cir. 2001); *A&M Records Inc., v. Napster, Inc.*, No. C000074MHP, 2000 WL 1170106, at *2-11 (N.D. Cal. Aug. 10, 2000), *aff’d*, 239 F.3d 1004 (9th Cir. 2001); (both cases discussing the survey evidence presented to the court).

230. *Id.*

231. See Evan Hansen, *Study: Napster Users Buy More Music*, CNET (July 20, 2000), <http://news.cnet.com/2100-1023-243463.html>.

232. See Stan Liebowitz, *Policy Analysis No. 438: Policing Pirates in a Networked Age*, CATO INST. (May 15, 2002), <http://www.cato.org/publications/policy-analysis/policing-pirates-networked-age>.

233. *Id.* at 14; see *id.* at 14 n.14 (concluding that “[Judge Patel’s] decision was in the end correct, even if not supported by the evidence at hand.”); see also Martin Peitz & Patrick Waelbroeck, *The Effect of Internet Piracy on CD Sales: Cross-Section Evidence* (2004) (unpublished manuscript) (*available at* https://www.econstor.eu/dspace/bitstream/10419/76503/1/cesifo_wp1122.pdf) (suggesting a two percent loss of CD sales based on downloading).

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.²³⁴ Rarely does the court impose a burden to disprove damages as part of the defendant's case.²³⁵ However, as a matter of policy and law, the question at hand is does the infringement (and resulting damages) rise to the level where 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 sixty million users and with 2.79 billion downloads in just one month,²³⁶ actual damages are at best an speculative opinion, then it is even harder to speculate that uncompensated uses in the geographically distant LDCs, where consumers are unlikely be able to afford an authorized product, would reduce intellectual property incentives in the developed world.

The GAO conceded that “[t]here 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.”²³⁷ So arguendo, having reduced claims of actual substantial economic damages to developed world intellectual property rights holders to mere unproven speculation, and having ameliorated fears that uncompensated uses in the LCDs 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 small degree of market substitution that may occur. Commentators have speculated that piracy has positively effected legitimate business creation and innovation through a four-step process.²³⁸ First, it pioneered the use of new technologies.²³⁹ Second, as early adopters pirate, communities are sources of valuable market insight.²⁴⁰ Third, pirates contribute to creating new markets.²⁴¹ Finally, piracy can lead directly and indirectly to creating new business models.²⁴² This model of a positive externality for alleged

234. 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).

235. *Id.*

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

237. GAO, *supra* note 223, at 15.

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

239. *Id.*

240. *Id.*

241. *Id.*

242. *Id.*

piratical activities has repeated itself through generations of new technologies.²⁴³ 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.

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 developers in order to make them wealthy. Rather, these rights are granted to serve an important public 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 essence, these rights serve as Adam Smith's invisible hand, channeling the passions and energies of self-interest into a socially desirable goal.²⁴⁴ 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 must 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 be 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 lost sales or licenses (market substitution) rather than in countries where piracy has little or no effect on sales of the protected goods.

243. *Id.*

244. *The Concise Encyclopedia of Economic: Adam Smith*, LIBRARY OF ECONOMICS AND LIBERTY, <http://www.econlib.org/library/Enc/bios/Smith.html> (last visited Sept. 19, 2014).