# Accounting for Taste: An Analysis of Tax-and-Reward Alternative Compensation Schemes

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*In response to problems posed by the unauthorized digital distribution of movies and music, many policy analysts, industry critics, and academics have suggested that we adopt a tax-and-reward system of legalized file sharing, whereby broadband and digital music-related products would be taxed and the funds would in turn be distributed to the artists whose music is being shared. While many skeptics have critiqued whether such a tax could reasonably be levied, this Article focuses on the second half of tax-and-reward proposals, specifically, on the feasibility of dividing whatever tax is levied.*

*The author argues that none of the current tax-and-reward proposals are adequate substitutes for the current market for two reasons. One, there is a fundamental disconnect between market allocation and the manner in which the funds are divided under each of the tax-and-reward proposals; and two, even if the disconnect were tolerable for the policy purposes, they would still not be sufficiently market-like to be compliant with international copyright law, namely, the Agreement on Trade Related Aspects of Intellectual Property (TRIPs).*



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## I. INTRODUCTION

> "Musical training is a more potent instrument than any other, because rhythm and harmony find their way into the inward places of the soul, on which they mightily fasten, imparting grace, and making the soul of him who is rightly educated graceful, or of him who is ill-educated ungraceful."
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> —Plato[1]

> "Everyone talk about pop muzik."
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> —Robin Scott[2]

Part II of this Article defines the problem set. It lays out the aesthetic critique of the music industry and explores the possibility that a system of legalized file sharing might ameliorate some of the problems that critics describe. Part II also examines the concerns of the current stakeholders in the copyright system (e.g., artists, producers, record labels), analyzing whether unauthorized file sharing poses a justifiable concern and whether the recording industry's current litigation strategy is an appropriate and useful response. Concluding that the cycle of litigation is harmful to all parties involved (the music-consuming public, the copyright holders, and the public in general), Part II describes the solution set, including tax-and-reward alternative compensation schemes.

Part III of this Article carries on this project in greater detail by describing the two main subtypes of tax-and-reward schemes currently discussed in the literature and analyzing these proposals vis-à-vis the criticisms of the music industry, as well as the copyright holders' concerns about just compensation.

Part IV then turns away from internal critiques of the proposals and analyzes them from an international perspective, specifically testing the proposals for compliance with the Agreement on Trade-Related Aspects of Intellectual Property (TRIPs), to which the United States is a signatory.

## II. DEFINING THE PROBLEM AND IDENTIFYING THE STANDARD BY WHICH TO JUDGE THE POSSIBLE SOLUTIONS

Before beginning a discussion on alternative compensation systems, we must ascertain if they are even needed. As the saying goes: if it ain't broke, don't fix it. If the current system of copyright-protected music controlled by right holders and sold to the public on privately established terms is successful, or at least reasonably successful, then alternative

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1. PLATO, THE REPUBLIC OF PLATO 400 (Benjamin Jowett trans., Clarendon Press, 1908).
2. ROBIN SCOTT, *Pop Muzik*, *on* NEW YORK-LONDON-PARIS-MUNICH (Westside Records 1979).

compensation systems are not needed. But what does it mean to be successful? Music is different from many other physical commodities such as blue jeans and automobiles. Music is not just about entertainment; music, as Plato describes, reaches into "the inward places of the soul."[3] It is constitutive, not only of culture, but of certain aspects of our humanity. For a system of music creation and distribution to be successful, it must not only be efficient in terms of a classic economic analysis, but it must also meet certain aesthetic goals. This Part of this Article explores the music industry at present. It begins by looking at the aesthetic/anti-industry criticism of the copyright-controlled method of distribution and the assertion that file sharing has aesthetic benefits. Next it examines the right holders' concerns about file sharing and their arguments that file sharing actually hurts artists and *art* by reducing the revenue streams of musicians and destroying incentives to create music in the future.

This Part concludes that whether or not the right holders' concerns are fully borne out by the evidence, their concerns are, at least, not unreasonable. Nevertheless, this Part also argues that the current cycle of litigation (right holders suing creators of peer-to-peer (P2P) technologies and individual infringers) leaves no party truly satisfied. Not only is it a vicious cycle of building a better mousetrap to catch a smarter mouse, the recording industry's litigation campaign dampens technological innovation as well. Having defined the problem set, Part II ends by describing the solution space, which is where the alternative compensation schemes—specifically, tax-and-reward proposals—fit in.

### *A. The Aesthetic or Anti-Industry Critique of Copyright*

Music's ability to enrich our aesthetic experience, to inspire us as individual moral agents, and to alter our course of collective action is undeniable. Plato acknowledged as much in *The Republic*.[4] Nietzsche, before he became disillusioned with Wagner, believed the German composer was the embodiment of the Übermensch.[5] And Bono, the lead singer of U2, still believes if he rocks hard enough, he can find a cure for AIDS, absolve the third world of its debt, and save failing family farms.[6]

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3. PLATO, *supra* note 1.

4. *Id.*

5. Nietzsche's love affair with Wagner is a rather well-known story. For Nietzsche's actual words of praise, see Richard Wagner, *Bayreuth*, *in* UNTIMELY MEDITATIONS 195 (Daniel Breazeale ed., 1997).

6. The members of U2 are well known for their political activism. The band frequently performs at the annual FarmAid benefit concerts. They have also performed in several benefit concerts raising money for HIV/AIDS research and have lobbied British political figures to

But while music can influence our lives in very significant ways, it does not always do so. Just as the power of music is undeniable, so is the fact that music composed for the masses dominates the market. This music is often criticized as being trivial, uninteresting, and, ultimately, forgettable. For example, the song, *Pop Muzik*, was extremely popular when it was first released in 1979, hitting the top of the European and American music charts. A decade later, however, it was all but erased from public consciousness,[7] and probably would have remained so if U2 had not covered the song in 1997.[8]

Yet even the staunchest aesthetic realists (i.e., those that assert a metaphysical difference between good and bad music) would hesitate to argue that the government should discriminate between that which is aesthetically worthy and that which is merely popular in granting First Amendment or copyright protection. Nevertheless, those concerned with aesthetics might question whether the government should adopt measures that indirectly promote or favor mass-marketed music. Some critics of the legal structure of copyright argue that government does just that by granting strong copyright protection to music. They suggest that true beneficiaries of copyright in music are not the artists or the right holders, but rather the four major record labels that dominate the market.[9] These critics further assert that among the artists signed by one of these labels, the benefits of copyright are also concentrated in a handful of superstar artists at the expense of the less popular, but, in the critics' opinions, more deserving artists.[10]

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decrease the debt owed by third-world countries. For a brief overview of the band's many humanitarian efforts, see *U2 Handed Top Portuguese Honour*, BBC NEWS: WORLD EDITION, Aug. 15, 2005, http://news.bbc.co.uk/2/hi/entertainment/4152088.stm.

7. *See* Tim Ellison, *I'm on the Headline*, VILLAGE VOICE, Sept. 28, 2004, at 98; *see also* Steve Huey, *M: Biography*, ALL MUSIC GUIDE, http://www.vh1.com/artists/az/m/bio.jhtml (last visited Mar. 27, 2007).

8. U2, *Pop Muzik*, *on* LAST NIGHT ON EARTH (Polygram Int'l 1997). U2 released their cover of *Pop Muzik* as a B-side on *Last Night on Earth*. *Id.*

9. *See, e.g.*, Steven A. Hetcher, *The Music Industry's Failed Attempt To Influence File Sharing Norms*, 7 VAND. J. ENT. L. & PRAC. 10, 17 (2004) (discussing commonly asserted arguments made by critics of the recording industry and copyright).

10. *See, e.g.*, Paul Keegan, *Making Beautiful Music*, UPSIDE MAGAZINE, Sept. 1, 1998 ("Even the world's most famous artist have little choice but to reach their audiences through the major labels . . . . Because these giants also own the biggest record distribution companies, they have enormous power to determine what kind of music is made and how much of it ends up in the record stores for consumers to buy."); Mark S. Nadel, *How Current Copyright Law Discourages Creative Output: The Overlooked Impact of Marketing*, 19 BERK. TECH. L.J. 785, 797-810 (2004); *see also* Ben Kroll, *Us vs. Them—What's Wrong with the Record Industry?*, EPINIONS.COM, Apr. 23, 2003, http://www.epinions.com/content_3252592772 ("[I]t seems that the major players in the music industry [see] the music that they produce as little more than a product for the rest of us to consume. Industry execs come across as far too preoccupied with

Based on the above beliefs, these critics argue that the copyright system, and the record labels that so vigorously defend it, are unnecessary and inefficient. They are unnecessary, in the minds of the critics, because advancements in digital technology and dropping prices in consumer electronics have made it easier for independent artists to create, record, produce, and master their music without relying on the services of an expensive studio or funding from a major record label.[11] If creating, recording, and mastering music is affordable, then independent artists' only obstacles are the difficulties of distributing and promoting their music. The traditional means of music distribution was to sell a physical copy of the recording in a brick-and-mortar store. Such stores, however, will likely refuse to carry the music of an unsigned artist without a reasonable assurance that the album will sell. Moreover, the entrance of large national chain stores, such as Wal-Mart and Target, into the market for physical recording sales has decreased the total number of brick-and-mortar stores and has increased the concentration of ownership of such stores. This makes it far more difficult for independent artists to secure distribution of their music. Furthermore, such artists lack access to the traditional means of promotion, which include securing airtime on commercial radio, airtime on music video television, and print advertising in magazines. This Article asserts that these tasks are prohibitively expensive for the majority of independent artists.

Critics of the music industry argue, however, that traditional means of distribution and promotion are no longer necessary. They argue that the digital distribution in a world of free and legal file sharing can help independent artists distribute in three ways. First, digital distribution

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sales numbers, and simply want to move as many units as possible in as short a time as they can. In an attempt to cater to the widest audiences possible, studio execs are dumbing things down to the lowest common denominator, and creating pre-packaged units based on market research. . . . Yes, there are small, independent music labels that still care about creating quality music, but none of them [have] the clout or influence that the major labels have. If a band or an artist wants to make the leap to national or international exposure, they have to sign with one of the major labels, where the music suddenly becomes just another product.").

11. Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 306 (2002) ("Advances in technology have reduced the costs of creation as well. Today, a home computer capable of word processing, editing video, and recording, sampling, and mixing music can be purchased for under $900. Recording and editing software and hardware can be purchased for approximately $150. These elements combined enable a musician to record music at home with almost the same acoustical quality as music recorded in a professional studio."); *see also* Eric A. Taub, *Homemade Music with a Professional Sound*, N.Y. TIMES, Dec. 21, 2000, at G11 (quoting David Fiedler, developer of Homerecording.com, "just a few hundred dollars can buy entry-level editing software that can be used to create professional-sounding music when used with a Pentium-class PC or Power Macintosh running at a speed of at least 200 megahertz").

perturbs the industry model, which could force internal change.[12] Second, digital distribution allows the independent artist to bypass the traditional methods of distribution and reach the consumer directly.[13] Third, digital distribution, because it is either free or very cheap for the consumer, increases the independent[14] and nonradio-friendly[15] artists' promotion capabilities by creating a wider word-of-mouth advertising network.

### *B. The Concerns of the Copyright Defenders*

On the other side of the debate are those with stakes in the current system: the major record labels, many superstar artists, and the players involved in the promotion and distribution of music. These groups

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12. One commonly cited example is the story of Fiona Apple's recently released *Extraordinary Machine*. The album was first recorded in 2002. Sony was reportedly unenthusiastic about the original recording, and shelved the project for two years. Then in 2004, two tracks of the album, *Extraordinary Machine* and *Better Version of Me*, were leaked on the Internet in digital format. These tracks were widely (and illegally) shared through P2P networks. Following the tracks' popular reception, the rest of the album was subsequently leaked. Fans organized a Web site, Free Fiona, http://www.freefiona.com, petitioning the record label, Epic (owned by Sony), to release the album commercially. Then in October 2005, the album was finally released. Epic's spokespersons have denied that they had anything to do with the delayed release. Apple herself has stated that she caused the delay because she was unhappy with the original product. However, it seems likely that the popularity of the illegally digitally distributed tracks not only signaled to the record label that the album would be a commercial success, but also put pressure on Apple to complete a project that might have otherwise been shelved indefinitely. *See* Interview by Sasha Frere-Jones with Fiona Apple, Grammy-Winning Singer/Songwriter, originally broadcast by PBS on the Charlie Rose Show (Apr. 11, 2006) (transcript available through Voxant, Inc.); *see also* Free Fiona, http://www.freefiona.com (last visited Mar. 27, 2007).

13. *See, e.g.*, Greg Kot, *Cyberspace: It Continues To Be a Bumpy Ride for the Record Industry: The Second in an Occasional Series*, CHI. TRIB., Mar. 3, 2002, at C1. Brian Austin Whitney, president of Just Plain Folks, a coalition of independent musicians, is quoted as saying:

> It raises the question, if an independent artist builds a niche on the Internet, will he get money due him if he's part of a royalty system controlled by the major labels? Right now, nobody is getting paid. An artist can't sit in his basement, upload music and wait for the money to roll in. You might as well buy lottery tickets—your chances for success will be greater. So you have to go back to basics: Work on live performance and use the Internet to communicate more quickly with your audience.

*Id.*

14. *Id.* (quoting John Mayer who started out as an independent musician but is now signed by a major record label). Though Mayer has mixed feelings about unauthorized digital distribution, he acknowledges, the "misplaced enthusiasm [of fans who illegally downloaded my music] has allowed me to have this career. I think it's great that people can build their own CDs off the Net and trade them. Downloading of my music has made me—it has absolutely made me." *Id.*

15. *Id.* (quoting Ed O'Brien, the guitarist of Radiohead, as saying, "[illegal digital distribution] does our music a lot of good, because in many ways it takes a while for people to get used to our music").

defend not only the current industry model but also the current copyright regime. They argue that the superstars who dominate the market actually subsidize new artists, most of which are signed at a loss to the label.[16] The industry players further argue that the current copyright regime is the only way that they can generate enough revenue to continue discovering, producing, and distributing music. Unauthorized digital distribution undermines the revenue stream and ends up hurting both superstars and less popular musicians by lowering sales, which directly reduces profits to artists and generates less revenue for the record label, reducing the funds available for developing less popular artists. The industry players argue that unauthorized distribution will, in the long run, result in less music being available to the public.[17]

This debate is a manifestation of the necessary tension that is present in any discussion of the efficacy of copyright regimes. Such tension is necessary because of the intrinsic nature of the copyright regime: copyright is supposed to balance two conflicting measures of efficiency. Copyright is meant to strike a balance between static inefficiency and dynamic efficiency in the information market.

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16. *See, e.g.*, Neil Strauss, *Pennies That Add Up to $16.98: Why CD's Cost So Much*, N.Y. TIMES, July 5, 1995, at C11. A top executive at a major label said:

> It costs $400,000 to $600,000 to sign a band. The first video costs a minimum of $50,000. Touring is more expensive, and people's salaries are a lot higher. Our profit margins are being squeezed. It's a very speculative business that we're in. If a label can break one new band a year, they're having a good year. The first 300,000 to 500,000 copies a record label sells of most CD's don't make money. That's 80 percent of all records that don't make money; the other 20 percent have to pay for the 80 percent.

*Id.* This line of reasoning has not changed much in the last ten years. *See* Revella Cook, *The Impact of Digital Distribution on the Duration of Recording Contracts*, 6 VAND. J. ENT. L. & PRAC. 40, 41-42 (2003); *see also* Lynn Morrow, *The Recording Artist Agreement: Does It Empower or Enslave?*, 3 VAND. J. ENT. L. & PRAC. 40, 42 (2001) ("The record companies, on the other hand, argue that they are the substantial risk-takers. A major record label will likely spend between $500,000 to $1,000,000 to launch a new artist, with no guarantee it will see a return on its investment. The major labels argue further that the system works for most artists who lack the time, money, or resources to promote and market their albums.").

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> [I]f music is free for downloading, the music industry is not viable. All the jobs I just talked about [record producers, recording engineers, programmers, assistants, other musicians, recording studios owned by small businessmen, and "hundreds of record company employees" who "provide programming for numerous radio and television stations"] will be lost and the diverse voices of the artists will disappear.

*Music on the Internet: Is There an Upside to Downloading?: Before the S. Comm. on the Judiciary*, 106th Cong. 10 (2000) (testimony of Lars Ulrich, Member and Co-founder, Metallica).

Static efficiency measures the market efficiency at a single point in time.[18] Copyright laws create static inefficiency because they artificially raise the price of information products far above the efficient price—zero. The efficient price is zero because after a piece of information is produced for the first time, the cost of reproduction is essentially zero. Dynamic efficiency, on the other hand, compares the production of information across time.[19] While it is true that if copyrights were destroyed tomorrow there would be an influx of new production, it is also possible that over time people would be discouraged by their inability to profit from their production, thus significantly reducing production in the long run. Advocates of the current system argue that because copyright creates incentives that prompt future production, it is dynamically efficient.[20] Defenders of the copyright system recognize that static and dynamic efficiency are at odds with each other and have to be balanced, but they argue that such a balance is best achieved by granting a time-limited monopoly (copyright), while simultaneously allowing certain exemptions (fair use) to mitigate the negative effects of static inefficiency.[21]

Current copyright holders and defenders of the copyright regime believe legalized file sharing threatens to distort this balance, especially if there is not an alternative system of compensation that mirrors the current system. These file-sharing critics are concerned that legalized file sharing without compensation not only destroys the ability of existent artists to sustain their trade, but also discourages future artists from entering the trade.

### *C. Are the Concerns of Copyright Defenders Justified?*

Anytime a new technology threatens to change this balance, the negatively impacted party will take countermeasures in an attempt to shift the balance in a more favorable direction.[22] Consider, for example,

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18. *See* Yochai Benkler, *Coase's Penguin, or, Linux and* The Nature of the Firm, 112 YALE L.J. 369, 404-05 (2002) (providing an extended discussion of information goods, pricing, and static and dynamic efficiency).

19. *Id.*

20. *Id.*

21. *Id.*

22. *See* JESSICA LITMAN, DIGITAL COPYRIGHT 35-70 (2001) (providing a fuller history of this phenomenon); *see also* Jane Ginsburg, *Copyright and Control over New Technologies of Dissemination*, 101 COLUM. L. REV. 1613, 1619-26 (2001) (providing a legal realist explanation of the Supreme Court's seemingly disparate line of copyright/technology cases). Ginsburg argues that such cases fall into two distinct categories. The first deals with efforts of right holders to "obliterate" new technologies for dissemination of works; the second deals with the efforts of right holders merely to seek compensation for the new modes. Ginsburg argues that the Court

the history of video cassette recorder (VCR) technology. When VCRs were introduced to the consumer electronics market, Hollywood and the television industry lobbied Congress to restrict the use of the technology. The industry argued as follows: if VCRs were sold to the general public without any checks on their use, then consumers would believe that they had permission to videotape television. This would result in widespread videotaping, which would allow viewers to fast-forward (and thus skip) the commercial advertisements contained in the original broadcasts. The industry argued that advertisers would thus stop paying for airtime (as commercials are ineffective if no one views them) and the companies' main source of revenue would be destroyed. The logical conclusion to this line of reasoning was that the introduction of the VCR meant the end of television.[23] The television industry fought a number of legal battles asserting the illegality of VCR technology. The United States Supreme Court ultimately settled the legal debate in the landmark case *Sony Corp. of America v. Universal City Studios, Inc.*[24]

Despite the *Sony* decision—which affirmed both the right of manufacturers to produce, market, and sell VCR technology to the general public and the right of consumers to record television programs for later viewing—the television industry's end-of-the-world scenario did not play out. In fact, the opposite occurred. Hollywood was able to increase its revenue stream by selling movies directly to consumers. The television industry was also able to cash-in on this venue by selling collections of popular shows such as *Seinfeld*, *Friends*, and *Law and Order*. But before one concludes that the television industry's fears were unreasonable, one has to remember that even with VCRs, most people still watched television in real time. Thus tape-and-fast-forward behavior was not as prevalent as the industry worried it would be.[25]

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has been generally unsympathetic to right holders in the first instance, but quite sympathetic to right holders in the second. *Id.*

23. *See Home Recording of Copyrighted Works: Hearings Before the Subcomm. on Courts, Civil Liberties and the Admin. of Justice of the H. Comm. on the Judiciary*, 97th Cong., 1-2 (1982); Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 417-18 (1984).

24. 464 U.S. 417 (1984).

25. However, the introduction of digital video recorders (DVRs), such as TiVo, makes the industry's fears more plausible. DVRs allow consumers to time shift television programs within minutes of the original broadcast. This allows the consumer to watch the program almost simultaneously with its broadcast, but still retain the capability to fast-forward through commercials. As TiVo advertises on its Web site, the user can "[p]ause, rewind, and instant replay live TV: fast forward through the boring stuff." Press Release, TiVo (Dec. 8, 2005), http://www.tivo.com/cms_static/press_72.html. "Boring stuff" is a euphemism for commercials. In fact, the Frequently Asked Questions portion of the Tivo Web site even instructs viewers on the best way to skip commercials:

More recently, the Recording Industry Association of America (RIAA) levied similar arguments for the regulation of Digital Audio Tape (DAT) equipment. Before it became clear that there was little consumer demand for DAT technology, the RIAA was able to convince Congress that the music industry would lose significant income due to unauthorized copying facilitated by DAT technology. The solution was the Audio Home Recording Act (AHRA), which was signed into law by President George Bush in 1992.[26] A tax was levied on the sale of DAT recorders and related equipment, and the revenue generated was supposed to be divided up among copyright owners according to their market share. In theory, this represented a victory for copyright holders. Several bills were introduced in Congress to levy a similar tax on VCR equipment and blank videotapes during the VCR debates discussed above, but none of them passed.[27] The RIAA's victory, however, became a moot point. Due to the rapid advance in the technology of CD-burners and file compression, consumer demand for DAT equipment never fully materialized and the unauthorized file copying of which the RIAA warned did not happen, at least not in the realm of DAT.

Returning to the present debate over unauthorized digital distribution, in the current environment with widespread Internet access, an increased bandwidth, new compression technologies, the development of P2P networks, and permissive norms in regard to file sharing, it is apparent that the RIAA's fears were not unreasonable, even if they were not ultimately actualized. Let us briefly examine how these five factors have led to an increase in unauthorized digital distribution.

In 1995, only three years after the AHRA was signed into law, there were approximately sixteen million Internet users.[28] When Shawn Fanning first released the original Napster P2P file-sharing program in the fall of 1999, there were 248 million Internet users.[29] Alongside this dramatic growth in Internet users was a simultaneous growth in

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> Does TiVo allow me to fast forward through commercials? The TiVo remote control has three-speeds of fast forward and rewind that enable you to easily skim through any part of a recorded program at 3, 18, or 60x normal speeds, including commercials . . . . Often, TiVo subscribers sit down to watch a 60-minute "live" program 20 minutes past the start time so they can skip past the commercials and catch up to "real" time by the program's end.

TiVo Most Popular FAQs, http://www.tivo.com/1.6.1.asp#8 (last visited Nov. 9, 2006).

26. 17 U.S.C. §§ 1001-1010 (2000).

27. *See, e.g.*, Amend. No. 1333 to S. 1758, 97th Cong., 2d Sess., 128 CONG. REC. 3377 (1982); H.R. 5705, 97th Cong., 2d Sess., 128 CONG. REC. 3120 (1982).

28. Internet World Stats: Usage and Population Statistics, http://www.internetworldstats.com/emarketing.htm#stats (last visited Nov. 9, 2006).

29. *Id.*

bandwidth. In 1996, the United States Treasury Department issued a white paper on e-commerce. At that time, the Department estimated that "at the transfer speeds available to most consumers, it would take about two days to transfer the entire contents of a music CD across the Internet."[30] By June 2004 there were approximately 757 million Internet users,[31] and of these, around 100 million were connected through broadband.[32] Another 115 million people were connected to the Internet via DSL.[33] That means that a little less than thirty percent of the global Internet-using population had high-speed connections to the Internet.

Simultaneously with the growth in the Internet's users and capacity, there were advancements in file compression technology as well. Though the MP3 was developed in 1991,[34] the technology was not widely used to compress music into a digital format until 1997.[35] The MP3 allows the number of bits in an uncompressed digital signal (i.e., the signal contained on a standard audio CD) to be compressed into a file one-tenth to one-twelfth of the original size.[36] Even if one connected to the Internet at a moderately slow speed (e.g., 56.6 kBs), it would take only minutes to download a single MP3 track, which converts to an average of a half-hour per CD.[37] With a high-speed connection, downloading an entire album takes a few minutes. The importance of the MP3 is easy to see when you compare these download times with the Treasury Department's two-day estimate.

Equally as important as the MP3's compression capacity is its sound quality. For the general population of listeners, the MP3 produces sound that is indistinguishable from the original CD.[38] Moreover, there is no

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30. Office of Tax Policy, U.S. Dep't of the Treasury, *Selected Tax Policy Implications of Global Electronic Commerce* § 3.1.4, at 7-8 (Nov. 1996), *available at* http://www.ustreas.gov/offices/tax-policy/library/internet.pdf.

31. *See* Internet World Stats, *supra* note 28.

32. SACHA WUNSCH-VINCENT & GRAHAM VICKERY, ORG. FOR ECON. CO-OPERATION AND DEV., DIGITAL BROADBAND CONTENT: MUSIC 14 (2005), *available at* http://www.oecd.org/dataoecd/13/2/34995041.pdf [hereinafter OECD REPORT].

33. DSL Forum, Broadband and DSL Subscribers (Sept. 20, 2005), http://www.dslforum.org/dslnews/pdfs/Q22005briefingsummary.pdf.

34. MP3 is short for Motion Picture Experts Group-1 Audio Layer 3. *See* Jack Ewing, *How MP3 Was Born*, BUSINESSWEEK ONLINE, Mar. 5, 2007, http://www.businessweek.com/print/globalbiz/content/mar2007/gb20070305_707122.htm (providing a history of the MP3); *see also* Douglas Heingartner, *Patent Fights Are a Legacy of MP3's Tangled Origins*, N.Y. TIMES, Mar. 5, 2007, at C3 (describing some of the disputes over the origin of the MP3).

35. David R. Johnstone, Note, *The Pirates Are Always with Us: What Can and Cannot Be Done About Unauthorized Use of MP3 Files on the Internet*, 1 BUFF. INTELL. PROP. L.J. 122, 128 (2001).

36. *Id.*

37. *Id.*

38. *Id.* at 130.

degradation of sound in second, third, or $n^{th}$ generation copies. This makes MP3s and other similar formats quite different from VHS and home recordings of audio cassette tapes. Copying a CD to a cassette or a broadcast signal to VHS produces a lower quality picture or sound, and making a copy of a copy magnifies this degradation.

The last piece of the equation is the development of P2P networks and the evolution of permissive sharing norms among the technology's users. Prior to P2P technology, if a user wanted to share files on her computer, she would have to upload them to a central, static server. It was possible for her personal computer to function as a server, but that required the other would-be users to connect directly to her machine. Before the development and the popularization of the World Wide Web, there were electronic Bulletin Board Systems (BBS) which allowed such direct connections and file sharing; however, BBS died out with the increasing popularity of the Internet and the ability to upload information to central servers, which are accessible by a multitude of users.[39] There were two kinds of problems with placing MP3s on a central server: the first was technical and the second legal. First, placing files on a central server required securing server space, which most people had to pay for. Though the cost was usually not high, it represented a minimum-effort barrier that prevented many people from uploading their music collections and making them accessible to the world. Second, placing files on a central server exposed the person uploading the music to liability for copyright infringement.[40] Moreover, the owner of the central server or the Internet Service Provider (ISP) was not only free to delete the copyrighted material, but also required by law to do so upon notification that the copyright-infringing material existed.[41]

P2P networks have provided partial solutions to each of these problems. First, P2P networks rely on the computing power and bandwidth of the networks' users. In theory, a P2P file transfer network does not rely on clients and servers. Instead the network's members, or nodes, play both of these roles. This means that there is no central server

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39. *See, e.g.*, Jason Scott, the TEXTFILES.COM Historical BBS List: A Collection of BBS Numbers from the Past 20 Years, http:bbslist.textfiles.com/ (providing a brief introduction to the BBS's place in the history of the Internet). Scott's statistics on the rise and fall of the BBS population can be found here: http://bbslist.textfiles.com/support/statistics.html (last updated Dec. 15, 2001). As a historical aside, the BBS that this Author hosted and operated during high school, Shadow Fire, is listed on Scott's site at http://bbslist.textfiles.com/509/ (last visited Mar. 27, 2007). The official Pullman High School BBS is also listed. *Id.*

40. *Id.* at 122-28.

41. *See* Digital Millennium Copyright Act, tit. II, Pub. L. No. 105-304, 112 Stat. 2860 (1998).

users must connect to in order to share files with one another. The P2P network software a user installs on her computer allows her to connect to all the other computers with that same software. Her files stay on her computer, but she shares some of her processing power and bandwidth to run the network. The user also may allow others to access certain files on the user's computer that the user has designated.[42] Because there is no central server and no single ISP on which the unauthorized copies reside, P2P technology makes it far more difficult for copyright holders to control the sharing of unauthorized copies of their works.

These four factors—an increase in Internet access, greater bandwidth, new compression technologies, and P2P technology—made it possible for unauthorized copies of musical works to be disseminated easily and, therefore, widely. The last piece of the puzzle is the permissive norms regarding copying and sharing, which made unauthorized digital distribution not only possible, but actual. By 2001, there were over twenty-six million unique file traders on Napster, one of the most popular P2P networks.[43] In the early days of file trading, the predominant belief was that because the technology made it possible to share, it was (or at least should be) legal and ethical to share. This belief slowly began to change after the RIAA began an aggressive litigation campaign against specific users.[44] This tactic curtailed file sharing somewhat,[45] but it worked because it increased the fear of being *caught* for distributing unauthorized copies of protected works, rather than changing the actual norms of the sharing ethos.[46] Indeed, when second-

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42. *See* Petter Biddle et al., *The Darknet and the Future of Content Distribution*, *in* DIGITAL RIGHTS MANAGEMENT: TECHNOLOGICAL, ECONOMIC, LEGAL AND POLITICAL ASPECTS 344 (Eberhard Becker et al. eds., 2003), *available at* http://crypto.stanford.edu/DRM2002/darknet5.doc (providing a more detailed explanation of P2P technology).

43. John Tehranian, *All Rights Reserved? Reassessing Copyright and Patent Enforcement in the Digital Age*, 72 U. CIN. L. REV. 45, 57 (2003).

44. *See* Press Release, Recording Indus. Ass'n of Am., Recording Industry Begins Suing P2P File Sharers Who Illegally Offer Copyrighted Music Online (Sept. 8, 2003), http://www.riaa.com/news/newsletter/090803.asp; *see also* Press Release, Recording Indus. Ass'n of Am., RIAA Files New Copyright Infringement Lawsuits Against 754 Illegal File Sharers (Dec. 16, 2004), http://www.riaa.com/news/newsletter/121604.asp (announcing lawsuits against 754 individuals); OECD REPORT, *supra* note 32, at 102-04.

45. OECD REPORT, *supra* note 32, at 103; *see also* Memorandum from Lee Rainie, Pew Internet Project Dir., Mary Madden, Research Specialist, Dan Hess, comScore Media Matrix Senior VP, and Graham Mudd, Senior Analyst (Apr. 2004), http://www.pewinternet.org/pdfs/PIP_Filesharing_April_04.pdf (presenting survey results suggesting the drop in the number of people who distribute or download illegal copies of music is a direct result of the RIAA lawsuits against individual users); Frank Ahrens, *Four Students Sued over Music Sites*, WASH. POST, Apr. 4, 2003, at E1; Jon Healey, *Students Hit with Song Piracy Lawsuits*, L.A. TIMES, Apr. 4, 2003, at 1.

46. Hetcher, *supra* note 9 (discussing the prevalence of permissive sharing norms); OECD REPORT, *supra* note 32, at 80 (citing a study finding that thirty-five percent of those polled

and third-generation P2P technologies were developed, which made it harder to track down any particular user, the levels of unauthorized file sharing increased.[47]

The record labels did, of course, win several more important battles in the court. Alongside the RIAA's lawsuits against individual users were the lawsuits against the creators and distributors of the software that allowed users to form P2P networks.[48] A & M Records' successful lawsuit against Napster[49] resulted in the shutting down of the entire Napster network, bankruptcy, and eventually the sale of the company.[50] Then there was the RIAA's lawsuit against AIMster.[51] Again, the copyright holders prevailed and AIMster was shut down. Most recently, MGM Studios sued Grokster. The case made it to the United States Supreme Court, making it the first time that the Court would directly address *Sony* since the decision was first handed down. Again, the copyright holder prevailed: Though the Supreme Court only remanded *Grokster* to the lower court, the Court in effect granted summary judgment to the plaintiffs, writing:

> In addition to intent to bring about infringement and distribution of a device suitable for infringing use, the inducement theory requires evidence of actual infringement by recipients of the device, the software in this case. There is evidence of such infringement on a gigantic scale. Because substantial evidence supports MGM on all elements, summary judgment for respondents was error. On remand, reconsideration of MGM's summary judgment motion will be in order.[52]

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agreed that "[f]ile sharing services are *not bad* for artists because they help promote and distribute an artist's work" while only twenty-three percent agreed that "[f]ile sharing services *are bad* for artists because they allow people to copy an artist's work without permission or payment"); Albert Z. Kovacs, Note, *Quieting the Virtual Prison Riot: Why the Internet's Spirit of "Sharing" Must Be Broken*, 51 DUKE L.J. 753, 776-77 (2001) (arguing that permissive sharing norms must be changed).

47. OECD REPORT, *supra* note 32, at 102-04.

48. *Id.*

49. A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

50. *See* JOSEPH MENN, ALL THE RAVE: THE RISE AND FALL OF SHAWN FANNING'S NAPSTER (2003) (providing a detailed history of Napster).

51. *In re* Aimster Copyright Litig., 334 F.3d 643 (7th Cir. 2003).

52. Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 941 (2005).

Grokster ultimately shut down,[53] but its fate is not as important as the decision's impact on other developers and distributors of P2P technology. Mark Gorton, the developer of the product and owner of LimeWire, a popular file-sharing software, stated that he was likely to stop distributing his product because of the *Grokster* decision. In his words: "Some people are saying that as long as I don't actively induce infringement, I'm O.K. I don't think it will work out that way. . . . [The Court has] handed a tool to judges that they can declare inducement whenever they want to."[54]

Yet despite all these court victories, unauthorized file sharing still occurs. There are foreign companies, such as KaZaA, that continue to produce file-sharing software. And there are still many Internet users who are not deterred by the threat of a lawsuit.[55] The causal effect of file sharing on music sales is, not surprisingly, a hotly debated subject. Numerous studies support the recording industry's argument that file sharing hurts record sales, while other studies conclude that file sharing does not reduce revenue generated by sales.[56]

The ambiguity of these studies and the fact that unauthorized file sharing still occurs, makes the concerns of copyright holders more plausible than the analogous fears of the copyright holders in the VCR and DAT contexts. Also, given that the stakes are higher in the world of

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53. Grokster shut down its Web site on November 7, 2005. Its home page now contains the following note:

> The United States Supreme Court unanimously confirmed that using this service to trade copyrighted material is illegal. Copying copyrighted motion picture and music files using unauthorized peer-to-peer services is illegal and is prosecuted by copyright owners. There are legal services for downloading music and movies. This service is not one of them.

Grokster Home Page, http://www.grokster.com (last visited Mar. 27, 2007). The site then displays a message that reads: "YOUR IP ADDRESS IS [XXX.XXX.XXX.XX] AND HAS BEEN LOGGED. Don't think you can't get caught. You are not anonymous." *Id.* The company has stated that it is developing a legal file-sharing system, Grokster 3G, but as of March 2007, no such service was in operation. *See* http://www.grokster3g.com.

54. Tom Zeller, *Trying To Tame an Unruly Technology*, N.Y. TIMES, June 28, 2005, at C1.

55. Brian Hindo, *Did Big Music Really Sink the Pirates?*, BUS. WK. ONLINE, Jan. 16, 2004, http://www.businessweek.com/technology/content/jan2004/tc20040116_9177_tc024.htm ("What's clear, though, is that until the music industry gets fully behind online music sales, file-swappers will flock to next-generation sites like eDonkey—which has seen 150% growth in the past year, according to independent tallies by both BayTSP and BigChampagne [polling analysts]."); *see also* Jeff Leeds, *Grokster Calls It Quits on Sharing Music Files*, N.Y. TIMES, Nov. 8, 2005, at C1.

56. OECD REPORT, *supra* note 32, at 78. The OECD Report reviews many such studies concluding that "[m]ost studies remain contested for their methodology and conclusions." *Id.*; *see also* Lee Marshall, *Infringers*, *in* MUSIC AND COPYRIGHT 193-96 (Simon Frith & Lee Marshall eds., 2d ed. 2004).

digital file sharing, it is likely that the RIAA's lawsuits against both individual users and against the developers of file-sharing technology will continue into the unforeseeable future. But therein lies the rub.

### *D. The Costs of Enforcing Copyright Suggest a Need for an Alternative*

Litigation is a notoriously inefficient method of bringing about results. Despite the deterrent effect produced by the lawsuits against individuals, the copyright holders are likely losing money on the lawsuits.[57] As one analyst put it, "[t]he battle over music piracy is like the war on drugs: You can't win it, but you can fight it forever, and spend millions on the battle."[58]

The status quo leaves no party truly satisfied. It is more than the vicious cycle of building a better mousetrap to catch a smarter mouse, though, of course, the problem encompasses this element. Those who support widespread file sharing continue to find ways to do so, and the copyright holders who pursue them are forced to spend more time and money chasing them down.[59] It is more than just a cat-and-mouse game because this cycle has a much greater effect on technological innovation and thus on society as a whole. The recording industry's legal pursuit of P2P file-sharing systems has created a disincentive to produce new systems for data storage and retrieval, communication, and encryption.[60]

### *E. Exploring the Possible Solutions and Defining the Goals They Must Meet*

In response to this problem many policy analysts, industry critics, and academics have spoken out in favor of legalized file sharing. The more conservative advocates lobby for internal change only: they would

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57. *See* Kristina Groennings, Note, *Costs and Benefits of the Recording Industry's Litigation Against Individuals*, 20 BERKELEY TECH. L.J. 571 (2005) (providing a detailed analysis of the cost-benefit ratio).

58. Jesse Berst, *Why Technology Can't Stop Music Piracy*, ZDNET ANCHOR DESK, Jan. 24, 2001, http://www.zdnet.com/anchordesk/stories/story/0,10738,2677668,00.html.

59. *See* Hindo, *supra* note 55 (quoting Michael McGuire, a Gartner G2 analyst ("This stuff is not going to go away. . . . The industry needs to provide a compelling legal alternative.")).

60. Mark A. Lemley & R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 STAN. L. REV. 1345, 1349 (2004) ("Lawsuits against Internet service providers, search engines, telephone companies, and other indirect providers, while not the focus of our attention here, are even more problematic because of the many legal uses of these services. The key policy point is that going after makers of technology for the uses to which their technologies may be put threatens to stifle innovation."); *see also* Andrew J. Lee, Note, MGM Studios, Inc. v. Grokster, Ltd. *&* In re Aimster Litigation*: A Study of Secondary Copyright Liability in the Peer-to-Peer Context*, 20 BERKELEY TECH. L.J. 485, 501-04 (2005).

like to see the music industry self-regulate and develop a feasible online distribution scheme. These advocates point to the success of pay-per-MP3 services, such as the iTunes Music Store,[61] and streaming services, such as Yahoo's Musicmatch On Demand,[62] to argue not only that the industry *should* embrace online distribution, but also that, given time, the industry *will* embrace digital distribution.[63]

The most radical advocates have suggested that we completely reorder intellectual property rights in the realm of music. In this radical view, sharing unauthorized copies of songs should not only be tolerated, but encouraged. These critics believe either that (1) file sharing has had, at worst, no effect on music sales and, at best, a positive effect (by exposing people to new music, which they then purchase), or (2) that the copyright system actually inhibits creation in a digital world, rather than promoting it.[64] Other critics have suggested that a system of intellectual property is not needed to create incentives to produce music. They argue that various other motivations (fame, respect in the community of musicians, and the spiritual compulsion to create) combined with some system of government reward (akin to governmental funding of public art projects) might be a better alternative to the current copyright regime.[65]

In between these two views—the maintenance of the status quo and the complete abolition thereof—are the moderate proposals which involve both legalized file-sharing and compensation systems. The moderate proposals come in two forms: compulsory license schemes and tax-and-reward schemes. This Article focuses on the second type of proposal, specifically, on the feasibility of dividing whatever tax is levied. Part III of this Article describes the subtypes of tax-and-reward schemes, placing the various proposals currently discussed in the literature within this framework, and analyzes these proposals vis-à-vis

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61. iTunes Home Page, http://www.apple.com/itunes (last visited Mar. 20, 2007); OECD REPORT, *supra* note 32, at 78; *see* Peter Cohen, *iTunes Music Store Tops 250 Million Songs Sold*, MACWORLD: NEWS, Jan. 24, 2005, http://www.macworld.com/news/2005/01/24/itunes/index.php (describing the success of iTunes).

62. Musicmatch, http://www.musicmatch.com/home.htm (last visited Mar. 20, 2007).

63. *See, e.g.*, Timothy K. Andrews, Comment, *Control Content, Not Innovation: Why Hollywood Should Embrace Peer-to-Peer Technology Despite the* MGM v. Grokster *Battle*, 25 LOY. L.A. ENT. L. REV. 383, 433 (2005) ("Most importantly, content owners should turn to the market and not the courts if they want to increase profits and meet their customers' needs.").

64. *See, e.g.*, Ku, *supra* note 11, at 263.

65. *See, e.g.*, Steve P. Calandrillo, *An Economic Analysis of Property Rights in Information: Justifications and Problems of Exclusive Rights, Incentives To Generate Information, and the Alternative of a Government-Run Reward System*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 301 (1998).

both the criticisms of the music industry discussed above, as well as the copyright holders' concerns about just compensation.

## III. THE TAX-AND-REWARD PROPOSALS

The basic idea of any tax-and-reward proposal, as the name suggests, is to generate a pool of revenue from consumers (the tax) and then divide that pool among the right holders (the reward). There are several ways to levy a tax: (1) raise the general level of income taxation and earmark part of the federal budget for the reward pool, or (2) levy specific sales taxes on items associated with file sharing (e.g., broadband service, MP3 players, MP3 software, blank CDs, etc.).[66] Both of these suggestions have been explored in the literature. William Fisher, for example, provides detailed calculations of how much revenue would need to be raised and explores the implications of raising it via sales and income taxes.[67] Discussion of the feasibility of how the funds are *raised* is outside of the scope of this Article, because this Article sets out to critique the manner in which the funds are *divided*. Thus, for argument's sake, this Article assumes that enough money can be raised to pay the relevant copyright holders without placing an undue or unjust burden on the taxpayers.

Accepting this as our premise, we can now discuss the various proposals for dividing the revenue. Current proposals can be classified into two types: those that track consumer preference by measuring some form of usage, and those that track consumer preference by allowing consumers to state their preferences. Subpart A discusses the former while Subpart B addresses the latter.

### *A. Determining Consumer Demand by Measuring Usage*

William Fisher's and Neil Netanel's concrete proposals,[68] discussed in detail later in this Subpart, both fall under the category of tax-and-reward schemes: tracking consumer preference by measuring usage. Other academics have also discussed dividing the revenue by measuring

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66. WILLIAM W. FISHER III, PROMISES TO KEEP 216-17 (2004).

67. *Id.* at 205-23 (discussing both possibilities); *see also* Neil Weinstock Netanel, *Impose a Noncommercial Use Levy To Allow Free Peer-to-Peer File Sharing*, 17 HARV. J. LAW & TECH. 1, 36 (2003); Peter Eckersley, *Virtual Markets for Virtual Goods: The Mirror Image of Digital Copyright?*, 18 HARV. J. LAW & TECH. 85, 106-07 (2004); Eric Priest, *The Future of Music and Film Piracy in China*, 21 BERKELEY TECH. L.J. 795 (2006) (discussing the possibility of an ACS scheme in China).

68. FISHER, *supra* note 66, at 223-34; Netanel, *supra* note 67, at 52-60.

usage, but without specifying exactly how such tracking might occur.[69] Raymond Ku, for example, proposes that Congress enact a Digital Recording Act (DRA), analogous to the Audio Home Recording Act of 1992 (AHRA).[70] In Ku's proposal, the funds could be "disbursed based upon the popularity of works."[71] He suggests a number of ways this might be accomplished (programming networks to track downloads, embedding files with information that automatically reports back to a central system each time they are played, etc.), but does not discuss any particular way of measuring usage. Because there are numerous *general* proposals to measure usage, while there are only two commonly discussed *concrete* proposals (Fisher's and Netanel's), and because these two proposals share several features in common, this Subpart will first discuss the possible ways in which usage might be measured, then it will explain how they each combine the different measurements of usage.

There are two basic ways to measure usage: (1) count the number of instances a particular song is downloaded, or (2) count the number of instances a particular song is played.[72] In either case the problem of identity must first be solved. That is, one cannot reliably track a song's usage unless that song has a permanent and unique identity. Thus, the first step in any viable proposal is to create a system of registration where each musical work is assigned a unique and permanent identity.[73]

Fisher compares this idea to barcodes routinely placed on other consumer goods. Though it might seem odd or impossible to place a barcode on an intangible item, the process is not difficult. Almost any commercial CD contains embedded data; this is how the CD, or MP3 player "knows" the name of the songs on the album.[74] Thus, the actual insertion of an ID tag is not difficult. The real problem is with coordination because there must be a one-to-one correspondence between the ID and individual songs. This means that there must be

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69. *See, e.g.*, Glynn Lunney, *The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*, 87 VA. L. REV. 813, 852-69 (2001) (suggesting—and ultimately rejecting—that sampling and survey techniques similar to those employed by the American Society of Composers, Authors, and Publishers (ASCAP) or Broadcast Music, Inc. (BMI) might be used to measure usage).

70. Ku, *supra* note 64; *see supra* Part II (discussing the AHRA).

71. Ku, *supra* note 64, at 313.

72. FISHER, *supra* note 66, at 203.

73. *Id.*

74. Audible Magic, a company that describes itself as providing "technologies, products and information services to protect, track and manage creative works in any electronic form," claims to have a "fingerprint library" that can identify more than 3.5 million different digital audio files. John Borland, *Fingerprinting P2P Pirates*, CNET NEWS.COM, Feb. 20, 2003, http://news.com.com/Fingerprinting+P2P+pirates/2100-1023_3-985027.html.

some agreement as to which song will get which ID (otherwise two songs may end up with the same ID), and any digital copy must bear the same ID as its corresponding original (otherwise two IDs could point to the same song). Fisher suggests that the easiest way to do this is to create a central registry system.[75] This registry might be run by a government agency, akin to the patent registration agency.[76] Alternatively, the registry could be developed by a nongovernmental organization, something akin to The Internet Engineering Task Force (IETF), which has developed many of the protocols with which the Internet operates.[77] But regardless of whether the agency is governmental or nongovernmental, there would be a central place where all artists and copyright owners would be able to register music. Each song would be assigned a unique identification number that would be embedded in the MP3 (or MP3-like file). Of course, this means that there would have to be some form of digital rights management (DRM) associated with the encoding.[78] If users were able to strip the files of their IDs, then the system would have no way of tracking songs and the accounting system would be undermined. One might argue, however, that users would have no incentive to strip the files. Because the DRM would be serving a tracking function, as opposed to a control or locking function, the cultural cache attached to DRM-stripping would be drastically reduced. The public's distrust of DRM is derived, in part, from a lack of sympathy for the record labels, which many believe use DRM to further their control over the dissemination of music.[79] But when DRM serves a tracking, as opposed to controlling, function the reasonable consumer would realize that by stripping files off the DRM, she is denying income to the artist and not the record labels.

Having addressed the issue of identity, the next step is calculating usage. As mentioned above, there are two possible ways to measure usage: (1) count the number of instances a particular song is

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75. FISHER, *supra* note 66, at 203.

76. *Id.*

77. IETF Overview, http:///www.ietf.org/overview.html (last visited Mar. 27, 2007).

78. *See* Netanel, *supra* note 67, at 54 (discussing the technical feasibility of these DMR measures); *see also* Jessica Litman, *Sharing and Stealing*, 27 HASTINGS COMM. & ENT. L.J. 1, 46-50 (2004) (discussing how DRM measures might be used in her proposal of having an alternative compensation scheme work alongside a more standard IP-based market system for the distribution of music).

79. *See, e.g.*, John Stith, *Choosey Kids Choose Illegal File Sharing*, SECURITYPRONEWS, Nov. 29, 2005, http://www.securitypronews.com/news/securitynews/spn-45-20051129ChooseyKidsChooseIllegalFileSharing.html ("[I]t's tough to have sympathy for the music industry when giants like Sony BMG spread rootkits with their CDs. When word got out about this, many people wanted to see the big company suffer painfully.").

downloaded, or (2) count the number of instances a particular song is played.

1. Adding Up Downloads

There are three possible points at which the number of downloads could be measured: (1) a central database through which all downloads are channeled, (2) the various P2P networks, and (3) individuals' computers and MP3 devices. The first point of measurement would require the creation of a central database containing all the registered files. Users could browse and download as much as they wanted, but they would be required to go through the Music Library of Congress (MLC) or be subject to liability. Note, however, that using this point cuts the P2P technology out of the file-sharing equation. Instead of allowing a free flow of information with multiple points of entry and exit, this scheme creates a spoke-like form of communication, where all information is sent to the central point (in the form of registration) and all information is received from that point.

The second point of measurement is the P2P networks. Here, the various P2P software programs would track the number of times each song is downloaded and report this information to a central agency. The agency would compile the data from the various P2P networks and calculate a total number of downloads for each particular song in a given time period. Congress could require all P2P networks to gather and report this information as a requirement of a copyright infringement safe harbor.[80] Moreover, gathering this information is not impossible, nor is requiring P2P networks to do so unreasonable. First, the technology to track downloads already exists and is used by Webcasters.[81] Second, some P2P services have already volunteered to perform this task.[82]

Using the P2P networks as a point of measurement tolerates a large amount of lateral file sharing. That is, it is able to account for downloads passed from user-to-user via a P2P network. But also note that this system does not account for all lateral sharing. Specifically, it misses the sharing that occurs *directly* between users. Just as you might loan a CD to a friend, in a world of legalized file sharing, you might either burn

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80. FISHER, *supra* note 66, at 225 ("[F]ile-sharing services could be required to [gather and report information] as a condition of immunization from liability for copyright infringement.").

81. *Id.* Currently, Webstreamers or Webcasters are required to pay substantial fees to the copyright owners. This differs dramatically from the licensing scheme for traditional radio. For the specifics of the Web casting licensing scheme, see *id.* at 102-10.

82. *Id.* at 225 (noting that KaZaA has already volunteered to gather such information).

them a disc, or just send the files directly. A measurement taken at the P2P level will not account for this sharing because it occurred outside a P2P network.

The third possible point of measurement is at the level of the individual users. There are several possible ways this might be done. MP3 software, such as iTunes, could be required to keep track of which songs a user downloads and/or imports. These products could have an automatic reporting system built into them (just as many computer programs are set up to check for and receive automatic updates), which would send the data to the MLC for accounting purposes. Portable MP3 players, such as iPods, could also be required to report. Note, however, that while using the individual as the point of measurement allows the accounting system to track almost all lateral sharing, it also raises privacy and cost concerns. The privacy concerns could be assuaged by enacting strict laws forbidding the accounting agency from using the information for any other purpose outside of counting downloads.[83] The cost concern could be ameliorated by reliance on sampling techniques, which will be discussed in further detail in the next Subpart.[84] But, as we shall also see, sampling techniques do not accurately measure demand. However, demand may be more accurately measured by examining the number of times a song is *played*.

2. Pay-by-Play

Unlike measuring downloads, this measurement can only be taken at a single point: the individual level. There are several sampling techniques that would make the task of measuring usage at the individual level feasible. Fisher suggests that we build off the techniques of Nielson

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83. *See* Netanel, *supra* note 67, at 55 ("Metering could be subjected to strict technological and legal guarantees against any tabulation or use of the information other than as an aggregate measure of all user downloads and uses of each work."); *see also* FISHER, *supra* note 66, at 228 (discussing the need for guarantees of privacy). Netanel points out that Congress has enacted certain privacy guarantees that serve as rough precedents. These include: the Electronic Communications Privacy Act of 1986, 18 U.S.C. §§ 2701-2709, 2711, 3121-3126 (1994 & Supp. IV 1998) (prohibiting disclosures of electronic communications); the Cable Communications Policy Act of 1984, 47 U.S.C. § 551 (1994) (prohibiting disclosure of viewing habits of cable subscribers); the Telecommunications Act of 1996, 47 U.S.C. § 222 (Supp. IV 1998) (prohibiting disclosure of telephone customer information); and the Video Privacy Protection Act of 1988, 18 U.S.C. § 2710 (1994) (prohibiting disclosure of video rental records). Netanel, *supra* note 67, at 55 nn.184-87 and accompanying text.

84. *See* Netanel, *supra* note 67, at 54 ("But significant cost reductions, with a tolerable diminution in precision, could be obtained by representative statistical sampling of uses."); *see also* FISHER, *supra* note 66, at 227-28 (describing a system of sampling akin to the Nielson ratings for television).

Media Research, Inc.[85] Under Fisher's proposal, the central accounting agency, which in his plan is the Copyright Office, would "randomly select a set of entertainment consumers who were willing to allow the office to monitor what they actually listen to and watch."[86] In order to avoid some of the reporting errors associated with the Nielson system,[87] the reporting would be automated through software programmed to record and transmit the relevant information to the Copyright Office. Creating this sort of software, as we have already seen, is quite feasible.[88] Fisher does discuss the privacy concerns. However, the same privacy measures discussed in the last Subpart could also be used.[89]

Before sampling is accepted as an adequate answer to the pragmatic problem of collecting information, whether sampling can adequately measure demand must first be explored. If not, then there is no point in relying on such technique. The Nielsen sampling technique works adequately for determining television habits, but that does not mean that it will be reliable in the world of music. Indeed, there is one critical distinction between music consumption habits and television viewing habits that critically undermines the reliability of sampling to determine consumer habits in the realm of music: consumer's choice about which television programs they watch is still reasonably constrained; this is not so in the case of music.[90]

Despite the addition of digital cable and satellite services, viewers still choose from a relatively limited amount of content. While it is true

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85. Nielsen describes its rating as follows:

> We collect viewing information for both national and local programs—not only what's being viewed (tuning data), but also the composition of the audience (demographic data).
>
> Daily household minute-by-minute viewing and tuning data, from both the national and local metered samples, is stored in the in-home metering system until it is automatically retrieved by our computers each night. Once the data is relayed via phone lines to our operations center in Oldsmar, Florida, it is processed that same night for release to the television industry the next day.

Nielsen Media Research, Collecting & Processing the Data, http://www.nielsenmedia.com (follow "Inside TV Ratings" hyperlink; then follow "Rating and Data" hyperlink; then follow "Collecting and Processing the Data" hyperlink) (last visited Mar. 27, 2007). Nielson is considered to be the authority on who is watching what. *See, e.g.*, FISHER, *supra* note 66, at 226 ("Nielson Media Research [is] the dominant supplier to television networks and local stations of data concerning the number of households that watch particular broadcasts . . . .").

86. FISHER, *supra* note 66, at 227.

87. These include inadvertent failures to report (forgetting what you watch) and deliberate omission (as Fisher puts it, "leaving out pornographic or juvenile films"). *Id.*

88. *See supra* Part III.A.

89. *Id.*

90. Christopher S. Yoo, *The Rise and Demise of the Technology—Specific Approach to the First Amendment*, 91 GEO. L.J. 245, 279 (2003).

that the number of over-the-air television stations that the average U.S. household can receive has more than tripled over the last twenty years,[91] there is still a relatively small number of channels and only so many hours of programming a day when compared to the consumer's options for purchasing music. Even if we assumed that the average television consumer had access to 200 channels that served programming 24 hours a day, that is only 4800 hours from which to choose. Now consider, for instance, the music catalogue of Rhapsody, an online, subscription-based streaming service that offers more than 735,000 tracks.[92] Assuming an average track length of 2.5 minutes (which is on the short side), that would produce 30,625 hours of music. It is not just the difference in time-volume that matters; there is a difference in the diversity of television viewing options and music listening options. Chris Anderson describes the effect of this diversity in his seminal article, *The Long Tail*.[93] Anderson explains that in a market of scarce entertainment goods, the 80-20 standard typically applies: when looking at the total amount of entertainment goods, only twenty percent of each type will be hits, only twenty percent of major studio films will be blockbusters, only twenty percent of television shows will attract enough viewers to stay on prime time, and only twenty percent of mass-market books will be best sellers. For major-label CDs, the percentage of "hits" is even lower: somewhere around ten percent.[94]

In a scarce market with high capital costs for distribution, it makes economic sense to sell only the small fraction of goods that are hits. But this is not the case in a digital environment where storage and distribution costs are near zero. As long as one person is willing to buy a single copy of a particular song the sale can be profitable. This fact is borne out by the statistics from online music sales:

> Chart Rhapsody's monthly statistics and you get a "power law" demand curve that looks much like any record store's, with huge appeal for the top tracks, tailing off quickly for less popular ones. But a really interesting thing happens once you dig below the top 40,000 tracks, which is about the amount of the fluid inventory (the albums carried that will eventually be sold) of the average real-world record store. Here the Wal-Marts of the world go to zero—either they don't carry any more CDs, or the few

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91. *Id.*

92. Chris Anderson, *The Long Tail*, WIRED MAG., Oct. 2004, at 4, *available at* http://www.wired.com/wired/archive/12.10/tail.html.

93. *Id.* Anderson has since expanded this article into a book: CHRIS ANDERSON, THE LONG TAIL: WHY THE FUTURE OF BUSINESS IS SELLING LESS OF MORE (2006).

94. Anderson, *supra* note 92, at 4.

> potential local takers for such fringy fare never find it or never even enter the store.
>
> The Rhapsody demand, however, keeps going. Not only is every one of Rhapsody's top 100,000 tracks streamed at least once each month, the same is true for its top 200,000, top 300,000, and top 400,000. As fast as Rhapsody adds tracks to its library, those songs find an audience, even if it's just a few people a month, somewhere in the country.
>
> This is the Long Tail.[95]

So what does this mean for reliance on sampling to achieve an accurate measure of demand? It means that sampling, which assumes a more or less normal distribution of preferences, will only accurately account for consumer's preferences in the realm of hits, but will completely ignore consumer's preferences in the "long tail" portion of the market. That is, sampling will accurately account for what percentage of listeners prefer Britney Spears to Christina Aguilera, but it will drastically skew the measurement of preferences when it comes to more obscure or "fringy" music.

This critique, however, is not a death knell for Fisher's and Netanel's proposals. But it does mean that in order to get an accurate measure of the demand, these proposals will have to rely on a different way of measuring usage; either by channeling usage through a central agency that can collect the information, or by tracking individual's habits and compiling the information. While one could build a powerful critique of these proposals based on the practicality of performing such a task, this Article's critique relies on a more fundamental flaw with the proposals: the inability of *usage* to serve as a measure of demand. Without diminishing the importance of the "long tail" critique of sampling techniques, this Article will set aside such a critique for now.

In sum, the number of times a particular song is played could be measured by sampling individuals' listening habits and using software that automatically tracks and reports the information. These measurements are not mutually exclusive, rather they are different axes along which a single concept—usage—might be measured. Consider the following analogy. If someone wants to know how *much* of something there is, say, how much potato salad is in a bowl, we could answer the question in two ways: (1) we could answer by telling them the volume ("There is about two cups in the bowl"), or (2) we could answer by telling them the weight ("There is a half pound or so"). These measurements—volume and weight—are not mutually exclusive; rather

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95. *Id.*

they simply measure different defined properties. The problem with asking how "much" of something exists, is that "much" is not a defined property. The better answer will thus depend on what the inquirer is trying to ascertain. If the inquirer is purchasing potato salad by the pound and is cost-conscious, she will want to know the weight. If the inquirer knows she has to purchase enough potato salad for six people, and she figures that each person will eat around a cup, she will want to know the volume. Bringing this back to the problem of usage, it is important to understand that asking how much a song is used is just like asking how *much* of something there is. The best answer will depend on the context. So what is the context here? Both Fisher and Netanel agree that the context is consumer demand.[96] Keeping this in mind, we can now look at Fisher's and Netanel's proposals.

3. Fisher's and Netanel's Proposals

Under Fisher's proposal, the second axis—counting the number of times a song is played—is the measurement of usage:

> By observing what [consumers] are listening to . . . we can get a decent sense of what they value. (In effect, something like a price system is at work here. Consumers are paying with their time for particular products. Put differently, the cost to them of watching a particular film is the associated opportunity cost—the pleasure they could reap from watching a different film or engaging in some other activity.)[97]

Recall that Fisher proposed using a sampling system similar to the Nielson method in order to gather this data. The sample group would be randomly selected. Listening habits would be recorded and reported automatically. The Copyright Office (the central accounting agency in Fisher's proposal), would determine from this information how many times each particular song was listened to all the way through.[98] Because Fisher believes that in a world of free music the consumer's time serves

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96. Netanel, *supra* note 67, at 52-53 ("[The] proceeds would be allocated among individual copyright holders in line with P2P file sharers' demand for their works."); FISHER, *supra* note 66, at 223 ("The principle on which this pot of money would be distributed among the registrants of audio and video recordings would be the same one that underlies the current system: consumer sovereignty.").

97. FISHER, *supra* note 66, at 224.

98. Fisher believes it is important that the piece be listened to all the way, or nearly all the way through. Because users might accidentally choose the wrong song on their play list, or they may have downloaded a new song, listened to five seconds of it, decided they hate it, and promptly stopped listening to it. Fisher believes these "uses" should not be counted because they do not reflect consumer demand. *Id.* at 224-25 (describing the drawbacks of counting downloads and ignoring instances of play); *id.* at 228 ("[B]ecause the system would only count songs that have been played all the way through, the number of . . . 'false positives' would be limited. . . .").

as a reasonable proxy for what would have been their monetary investment in the world of music-as-a-market good, Fisher also accounts for the lengths of the various works.[99] Thus, his system would take into account the length of a particular work as well as how often that work is played. Fisher considers alternatives, but ultimately argues that the costs of these alternatives outweigh their benefits. He concludes: "We would be better off relying on the imperfect approach outlined above: a simple consumption count, adjusted to take into account differences in the duration of songs and films."[100]

Netanel's proposal is not so different from Fisher's in that it also relies on the second type of measurement—counting the number of times a song is played. His proposal differs from Fisher's in that it gives some weight to the initial download of a file:

> The proceeds should be distributed to copyright holders in proportion to the number of noncommercial P2P downloads, streams, and subsequent uses of their respective works. Subsequent uses, which might entail viewing or listening to a work or copying it onto an MP3 player or other portable device, should be given greater weight than initial downloads.[101]

Like Fisher, Netanel also believes that the measurement should be taken at the individual level, and he suggests using sampling techniques as well.

As noted above, Fisher's and Netanel's proposals are the two most popular proposals that base their distribution model on consumer usage. Part III.A.4 will analyze these proposals, keeping in mind that these tax-and-reward schemes represent a compromise between those in favor of file sharing and the copyright holders who seek to protect their revenue streams. Thus we will need to ask two questions: (1) How well does the proposal track consumer preference?, and (2) How well does the plan promote the goals of the industry critics? In answering the first question, this Article will analyze how closely the proposals mimic a market. If copyright holders are to be satisfied, they will want a rational basis for the division of funds, and they will want a basis that is tightly correlated with consumer preference in the same way that record, cassette, and CD sales were correlated with consumer preference prior to the

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99. *Id.* at 229 ("Generally speaking, longer recordings provide more value to consumers than shorter recordings. . . . Viewed from another angle, the former demand from consumers more of their scarce time than the latter; the fact that consumers are willing to pay that price is indicative of the greater value they derive from the former.").

100. *Id.* at 234.

101. *See* Netanel, *supra* note 67, at 53.

popularization of file sharing.[102] Thus, they want a system that closely parallels the market. In answering the second question, this Article will examine whether the proposal is likely to help, hurt, or have a neutral effect on the independent or nonradio-friendly artist. The status quo is used as the baseline for comparison.

Ultimately, neither proposal meets either of the above goals. First, usage is not an adequate proxy of consumer demand because there are inherent flaws associated with each of the two kinds of measurements discussed above, and these flaws cannot be neutralized by blending these two kinds of measurement. Second, even if some combination of the measurements could serve as adequate proxies, neither proposal would solve the problems raised by the critics of the music industry.

4. Usage Is Not a Proxy for Demand

a. Adding Up Downloads: The Overcompensation Problem

There are two problems with using an aggregate of all downloads of a song as a measure of usage: the first is overcompensation. The second, which is related to the first, is the ease with which the system could be gamed, that is, actively exacerbating the overcompensation problem. In a market system where musical works are copyrighted, the intellectual property rights create ratification scarcity, which in turn raises the price of music. Consumers wishing to purchase music legally are thus constrained by the effort involving the act of purchasing extracts and, more importantly, the cost of the purchase.

Under a system of legalized file sharing, both the effort to obtain music and the costs to the user are reduced to near zero. This, of course, does not mean every consumer will download every song—after all people pass up free items all the time.[103] What it means is that there is really no disincentive to download any particular song. Thus, consumers will inevitably download far more music than they would be willing to pay for in a market system. Though the point may seem obvious, it is worth taking the time to understand the three reasons a consumer might

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102. Neil Netanel makes the same point in discussing his tax-and-reward proposal. *See id.* at 43 (proposing that the tax be "levied upon commercial providers of all consumer products and services whose value is substantially enhanced (as determined by the Copyright Office) by P2P file sharing"); *see also* FISHER, *supra* note 66, at 223-24 ("At least in the view of most Americans and Western Europeans, distributive justice requires giving each person in a collective enterprise . . . a share of its fruit proportional to his or her contribution to the venture. Applied in this context, that belief justifies adjusting artists' rewards to match their relative contributions to consumer's enjoyment of entertainment products.").

103. Free samples in the grocery store, free coffee in the waiting room of the oil change garage, items in the "free box" at garage sales, etc.

download songs with only marginal value. To ground these reasons in concrete examples, I will use a hypothetical consumer, Joe.

First, under a free-sharing regime, users are more likely to experiment with artists with whom they are unfamiliar. For example, Joe hears a song on the radio by a new artist and is intrigued by it. Upon returning home he downloads the new artist's album. But as he listens to each song, he finds that each is vastly inferior to the song he heard on the radio. In Joe's opinion, this artist is a one-hit wonder. Thus, he keeps the one song he had heard on the radio in his library and deletes the other fourteen.[104]

Second, under a free-sharing regime, users are more likely to download music they need for a one-time use. Suppose Joe is having his boss over for dinner. Earlier that day he noticed that his boss had framed posters of Miles Davis and Thelonious Monk in her office. He figures that a good way to impress his boss would be to play some jazz as background music. But, unfortunately, his entire music collection consists of punk rock and heavy metal. He does not worry about this, however, because he knows that just a few hours before his boss arrives, he can download *Kind of Blue*[105] and *Straight, No Chaser*.[106] After the dinner is over, he deletes Davis and Monk from his library.

Third, there are instances in which a consumer actually wants music *in* her library even though she never listens to it. For example, Joe wants to be the kind of person that likes Indie music.[107] Or more likely perhaps,

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104. Fisher makes this same point, which is part of the reason he rejects downloads as a measure of usage. FISHER, *supra* note 66, at 225 (noting that relying on downloads to measure usage is problematic because "many consumers currently use file-sharing systems to try out music").

105. MILES DAVIS, KIND OF BLUE (Columbia Records 1959).

106. THELONIOUS MONK, STRAIGHT, NO CHASER (Columbia Records 1966).

107.

> As a style label, indie is not particularly useful, although it does carry connotations of sensitive, somewhat introspective personas who generally lack strong vocal projection. Indie music eschews overt commerciality and relies on dense, overdriven guitar chords rather than riffs, alongside the presence of thousands of small-time dedicated bands. In the late 1980s the term became particularly associated with a new wave of Manchester bands such as Inspiral Carpets, Happy Mondays, New Order and Stone Roses. By the mid-1990s the best of indie was regularly on show at large-scale festivals, such as Glastonbury and Reading in the UK and Lollopallooza in New York.

Allen F. Moore, *Indie Music*, *in* GROVE MUSIC ONLINE, http://www.grovemusic.com/index.html (type "Indie music" in search field and follow hyperlink). Ian MacKaye, lead singer of punk rock band, Minor Threat, explained in American Hardcore (a documentary of the American punk and hardcore scene) the shortness of his band's songs: "I just wanted to say exactly what was on my mind—in 32 seconds." AMERICAN HARDCORE (Sony Pictures Classics 2006); Louis R. Carlozo, *Dylan's Folk Poetry and Punk's Mad Energy on Two New DVDs*, CHI. TRIB., Mar. 6, 2007 (reviewing the film and quoting MacKaye).

Joes wants people to *think* that he likes Indie music. So Joe downloads every song Ani DiFranco[108] has ever written. But secretly, when he is at home, he listens to The Misfits and Anthrax.[109]

In each of the cases above, Joe downloaded music that was only of marginal value to him. In a market system, Joe would have been more hesitant to purchase the new artist's entire album after hearing only one song on the radio. He might have also decided to go with no background music, rather than shell out the extra money or waste the time on a trip to the store. He might have purchased a single DiFranco album and prominently displayed it in his apartment, but he probably would not have invested in her whole collection. The point of all this is that a system that measures usage by downloads cannot distinguish between downloads with marginal value and those with greater value. This creates overcompensation. In a system where usage is measured by downloads, there is an additional avenue to overcompensation.

Recall Fisher's observation that measuring downloads does not distinguish between short and long songs. Fisher argues that longer songs have a greater value to consumers because they entertain consumers for a longer period of time.[110] If this is true, then a system which accounts only for downloads will count two songs of differing lengths equally, even though the shorter song may have less value to the consumer than the longer song. But even if Fisher's hypothesis is *not* true, that is, that shorter songs are no less valuable to consumers than longer ones, overcompensation will still occur at the level of artists' discographies. Consider, for instance, the fact that the average punk rock song is much shorter than the average top-forty song.[111] Assume for the

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108. Ani DiFranco has a well-publicized dedication to remaining an independent artist. *See* Ani DiFranco's official Web site: Biography, http://www.righteousbabe.com/ani/bio.asp (last visited Mar. 27, 2007).

109. Fisher makes a somewhat similar point. He states while a consumer might be deterred in a market system from buying a collection of works that he likes just "barely enough to keep a copy of it in their collections," the same consumer is more likely, in a world of free file sharing, to have "the entire collection gathering virtual dust on the virtual shelves of [his] computer." FISHER, *supra* note 66, at 226.

110. *Id.* at 229 ("Generally speaking, longer recordings provide more value to consumers than shorter recordings. The former keep people entertained longer than the latter.").

111. Punk rock is

> [a]n aggressive style of rock that was part of a deeply contradictory movement initiated in London by Malcolm McLaren in 1975. Having managed the U.S. glam rock band the New York Dolls, McLaren moulded the Sex Pistols, gaining them notoriety through astute management. The music blended established techniques of instrumentation, forms and chordal repertory, but articulated them with abandon and ferocity. From pub rock bands like Eddie and the Hot Rods came simple chord structures and a disdain for slick performance; from American precursors like Iggy Pop and Lou Reed came

sake of argument that because of this, the average punk rock album has roughly five more songs than the standard top-forty album.[112] Now put this in the context of our hypothetical consumer. Imagine that prior to the institution of a tax-and-reward scheme for music, Joe had purchased every album by The Clash—widely considered to be the most influential punk rock band.[113] Suppose further, that Joe's brother, Adam, who loves pop music, had purchased every album by Britney Spears, the so-called Princess of Pop.[114] In a market system, if Joe and Adam purchase the same number of albums, then The Clash and Spears are compensated the same (assuming the prices of the albums are roughly equivalent). Now imagine this same scenario in the world of file sharing compensated by downloads. Again, both Joe and Adam download the same number of *albums*, but because The Clash albums contain more songs than the Spears albums, The Clash is compensated more. So whether or not Fisher's hypothesis is true, we see that a system which accounts only for downloads (and not track length) will result in some form of overcompensation. Fisher's system, of course, does account for variances in track length, solving this particular problem. However, this also means that Fisher's system will have to keep track of one more variable: whether or not a long song is played all the way through. Looking at track length will do no good if it turns out that the majority of listeners

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> challenging lyrics and a sense of confrontation; echoes can be found of the Who and the early Kinks in an aggressive instrumental attack and use of minimal riffs. . . . By the end of 1977 punk had been stylistically co-opted into the New Wave, but remained part of a much larger culture of resistance, most visible through fanzines praising punk's do-it-yourself aesthetic, confrontational dressing and the independent labels' challenge to the major labels' stranglehold on the industry.

Allen F. Moore, *Punk Rock*, *in* GROVE MUSIC ONLINE, http://www.grovemusic.com/index.html (type "Punk Rock" in search field and follow hyperlink).

112. This is not an unreasonable assumption. Consider that The Clash's *London Calling*, one of the most influential albums in the punk rock genre, contains nineteen songs. One the other hand, Britney Spears' debut album, *...Baby One More Time*, which stayed at number one on the American billboard charts for six weeks, and which is considered by almost any measure "top-forty" or "pop music," contains only eleven tracks. *Compare* THE CLASH, LONDON CALLING (CBS Records 1979), *with* BRITNEY SPEARS, ...BABY ONE MORE TIME (Jive 1999).

113. "The Edge, from U2, and Mr. Morello [of the alternative rock band, Rage Against the Machine] both said their bands would not have existed without the Clash. "They combined revolutionary sounds with revolutionary ideas," Mr. Morello said, "and their music launched thousands of bands and touched millions of fans." John Pareles, *Clash, Costello and Police Enter Rock Hall of Fame*, N.Y. TIMES, Mar. 11, 2003, at B6 (discussing The Clash's induction to the Rock and Roll Hall of Fame).

114. Lana Berkowitz, *No 'OOPS' ABOUT IT; Princess of Pop Prepares for Motherhood—And We Can't Take Our Eyes Off Her; From* Mickey *to Mom*, HOUS. CHRON., Apr. 14, 2005, at E1.

are skipping the last four minutes of Led Zeppelin's eight-minute-long song, *Stairway to Heaven*.[115]

Arguing that the alternative compensation schemes result in overcompensation of artists means very little unless overcompensation is a problem. But it is easy to see that it is a problem. Alternative compensation schemes work off a fixed pool of rewards; thus, if one artist gets more than her share, somebody, perhaps everybody, is getting less than their share. This is problematic from the perspective of both fairness and efficiency. The fairness point is obvious. As discussed in Part II, any viable alternative compensation scheme must mimic the market in terms of compensating artists according to user preferences. A system that does not perform such a function is more aptly described as a system of wealth redistribution or cross-subsidization.[116] Some critics of the music industry (those working from a more aesthetic perspective) would argue that this more radical measure is needed to correct a system they believe to be overly geared towards the production of low-value music with mass appeal. But this is not the type of proposal we are exploring, as Fisher's and Netanel's proposals were intended to fall within the moderate category of alternative compensation schemes. Fairness, in terms of compensating each artist according to the demand she generates, is an important factor in measuring the success of an alternative compensation scheme and, thus, overcompensation of some artists (which results in the undercompensation of other artists) is problematic.

The efficiency point may be less salient, but it is no less important. Recall that part of the aesthetic critique of the current recording industry model is that it is geared towards the creation of pop music.[117] This is because the physical constraints of production create economies of scale that cannot profitably capture the preferences of a disperse group of consumers with quirky or, as Anderson puts it, "fringy" tastes. A truly efficient market would be able to account for these more obscure preferences and capture that consumer market. Such a system would also compensate those artists producing the "fringy" work. A system which overcompensates some artists is inefficient because it is falsely depicting users' consumption habits and sending the wrong pricing

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115. LED ZEPPELIN, *Stairway to Heaven*, *on* IV (Island Records 1971).

116. Netanel, *supra* note 67, at 58-59.

117. Brett J. Miller, Comment, *The War Against Free Music: How the RIAA Should Stop Worrying and Learn To Love the MP3*, 82 U. DET. MERCY L. REV. 303, 328-29 (2005) (juxtaposing the Indie rock scene and large recording labels).

signals to the producers of music, resulting in an imperfect pairing of supply and demand and skewed production.

Granted, some of this inefficiency also occurs in the current system, but it occurs in a different manner and to a lesser extent. The status quo market is inefficient because of its inability to capture the "long tail" market. But this problem is corrected through market-based digital distribution (such as iTunes and Rhapsody), and does not require the more radical solution of establishing an alternative compensation scheme.

As for the problems with fairness, it is true that the current system also occasionally overcompensates artists when a consumer purchases a CD and upon listening to it discovers that it was not worth her investment. This problem, however, is mitigated by two factors. First, the comparatively high prices of CDs deter users from buying music unless they are relatively confident they will like it. Thus, many users only purchase a CD if they are already familiar with the artist, have heard a song on the radio, or have listened to a friend's copy. Second, the used CD market corrects much of the overcompensation that occurs. If a listener does not like a CD she has purchased, she can resell it. And because the subsequent sale does not produce royalties,[118] the artist is only compensated for the value produced by the single listener. In essence, the first purchaser generates income for an artist that gave that listener no value, and the subsequent purchaser compensates the original purchaser for the lost value, while receiving the previously uncaptured value from the artist.

This is not the case in a world of free music. If usage is measured by downloads, when a consumer downloads an artist's work with marginal value, the artist captures the difference between the value received by the consumer and the full value as measured against other downloads. Some might argue, however, that overcompensation is also canceled out in the digital environment because even though there is not a used digital goods market, the user downloading a particular song with an idiosyncratic, low marginal value will balance the user who downloads a copy of the same song and assigns it an idiosyncratic high value. This is not a satisfactory answer. The reason the used CD market partially corrects overcompensation in the market in physical music products is that there is near-perfect parity between the original low marginal-value purchase and the secondary purchaser. Suppose our

118. The first-sale doctrine prevents copyright holders from capturing royalties on subsequent sales of CDs. When used CDs became a hot market commodity, the record labels complained and tried to lobby Congress to find a solution.

hypothetical consumer, Joe, buys a copy of Criteria's *When We Break*,[119] and decides to sell it because it is Emo.[120] When another consumer comes along and purchases Joe's copy of *When We Break*, the original instance and *only* that instance of overcompensation is corrected. But we have no way of matching up the instances of overcompensation in a world of free (to the consumer) digital goods. There is no guarantee that for every Joe who downloads *When We Break* and finds just enough marginal value to keep it (recall, people like Joe sometimes keep music to impress people with his "eclectic" tastes), there will be another user also downloading *When We Break* and assigning an idiosyncratically high value to the album. Thus, the overcompensation created by the Joes of the world is not necessarily corrected in a system of free downloads.

In addition to the overcompensation problem, Fisher points out that using downloads as a measure of usage makes it very easy for artists, or enthusiastic fans, to game the system:

> In the simplest version of this tactic, artists could program their computers to download their own registered songs or films continuously, deleting each copy as soon as it was saved. Many more complex schemes can be imagined. Originally, I thought that "ballot stuffing" of this sort could be kept to manageable levels (though of course not eliminated entirely) by disregarding multiple downloads to a single IP number and by penalizing people who were found to have engaged in such deliberate deception. But I have now been persuaded . . . that such checks would be ineffectual.[121]

Eugene Volokh makes a separate point: the system could be manipulated not only to overcompensate artists, but also to channel funds intended for artists to entirely unrelated social or political causes.[122] To demonstrate this possibility, Volokh offers the following hypothetical:

1. The NRA records a song called "Those Second Amendment Blues." It doesn't even have to be good.
2. Gun rights advocates start online campaigns—"Download this song, even if you don't want to listen to it, since the NRA gets a tenth of a penny each time it's downloaded." They also distribute simple programs or scripts that let you automatically download it and throw

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119. CRITERIA, WHEN WE BREAK (Saddle Creek Records 2005).

120. Emo is short for emotional hardcore rock. Emotional hardcore is commonly considered to have begun as a subgenre of hardcore punk music. In the last decade, however, the term "Emo" began to encompass more of the Indie scene influenced by bands such as Fugazi and Sunny Day Real Estate. *See* Helen A.S. Popkin, *What Exactly Is 'Emo,' Anyway?*, MSNBC.COM, Mar. 26, 2006, http://www.msnbc.msn.com/id/11720603 (providing a history of Emo).

121. FISHER, *supra* note 66, at 226.

122. Posting of Eugene Volokh to Volokh Conspiracy, http://volokh.com/2003_09_07_volokh_archive.html#106314198323180349 (Sept. 9, 2003, 14:13:03 EST) ("Download Tax").

> it away; if the metering system doesn't keep track of every downloader's IP address (consider the possible privacy problems if it does), the program can also keep downloading the song again and again, though perhaps only when it senses that the computer isn't being used for other purposes.
> 3. The Second Amendment Blues now gets tens of millions of downloads, more than the latest Britney Spears song. The NRA gets a huge stash of taxpayer money, quite unrelated to actual consumer demand for the song.[123]

It should be noted that these two "gaming" problems are, in principle, different from the overcompensation problem discussed above. The problem is caused by people *abusing* the system. The solution, therefore, is merely a matter of policing. The actual enforcement may be more or less difficult, but that is a question of the system's feasibility. But when Joe downloads music to which he assigns marginal value and keeps it in his library, he is in no way abusing the system. He is not stripping the DRM, trying to fake out the recording labels, or skewing compensation to favor his friend's band. Joe is acting rationally and in accordance with social norms. The overcompensation problem, on the other hand, is not a matter of abuse. The overcompensation created by his behavior is therefore not the sort of thing that can or *should* be policed. Thus, while the gaming problem may at first seem to be the more troubling problem because the issue of policing may seem pragmatically infeasible, the overcompensation problem is actually the far more difficult problem, because it is a core *structural* failure of the system.

Let us pause here and recap the different kinds of overcompensation we have just discussed:

1. Nonmalicious, consumer-created overcompensation occurs when a consumer downloads a work of only marginal value to that consumer.
2. Nonmalicious, artist-created overcompensation occurs because the system does not distinguish between songs of varying lengths.
3. Avid, artist/fan-created overcompensation occurs when an artist or group of overzealous fans attempts to game the system to favor a participant.
4. Avid, lobbyist-created overcompensation occurs when political or social groups attempt to use the system to fund their agendas.

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123. *Id.*

Acknowledging many of these problems, Fisher ultimately concludes that counting downloads is not a reliable measure of usage.[124] Netanel reaches a similar conclusion: measuring downloads *in isolation* is not enough.[125] However, his calculus of usage does give some weight to downloads. Recall, though, Netanel, like Fisher, relies on sampling techniques to take his measurements. Would it solve some of the overcompensation problems to tweak Netanel's proposal so that the measurement of downloads takes place at the individual level, as opposed to the P2P level? Certainly this would minimize the effect of the first form of gaming (artist-created). To a lesser degree it would ameliorate the effects of lobbyist-created gaming. If the political group attempting gaming is small, then there is a small probability that any member will be randomly selected in the sampling. But if the political group has a large membership (like the NRA) or, for example, the social cause has a large number of supporters (for example, the pro-life and pro-choice movements), then sampling does not completely solve the problem of lobbyist-created gaming.

Additionally, sampling does nothing to solve the problem of nonmalicious, artist-created overcompensation, because measuring an individual's downloads still does not distinguish between the lengths of the songs. Arguably, however, one could take Fisher's lead and include both the length of the song and the number of times it has been downloaded into the value calculus. Finally, sampling brings up the "long tail" problem discussed above.

There is a final solution that one might suggest to solve these problems: instead of counting an individual's actual downloads, one could count the songs actually contained in their libraries. This solution would only minimize the effects of overcompensation if the following two assumptions were true: (1) consumers delete songs from their libraries when they downloaded it only to try it out and have discovered they do not like the song, and (2) consumers delete songs from their libraries when the one-time purpose for which they had downloaded it has been fulfilled. These may or may not be reasonable assumptions, but even assuming that they are reasonable, an overcompensation problem remains. There will be songs that a consumer likes just barely enough to keep in her library even though these songs may, as Fisher put it, gather "virtual dust on the virtual shelves of [her] computer."[126]

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124. FISHER, *supra* note 66, at 224.
125. Netanel, *supra* note 67, at 53-54.
126. FISHER, *supra* note 66, at 226.

Thus, none of these three patches (measuring at individual level, using the actual contents of libraries via sampling methods, and including the length of the song in the calculus) fixes the fundamental problem of overcompensation, nor provides a satisfactory response to the avid, lobbyist-type gaming. Having established that there are several problems with using downloads as a measurement of usage, even when other factors are relied upon, we can now turn to the other measure of usage: the actual number of times a song is played.

b. Pay-by-Play: The Undercompensation Problem

It is commonly said that time is the greatest equalizer: no amount of money can turn twenty-four hours into thirty-six. Furthermore, time is a scarce resource. While a listener may keep two songs in her library to which she assigns drastically different values, she will not be able to listen to both songs simultaneously.[127] Both Fisher and Netanel argue that the time devoted to listening to a song may serve as a substitute for money in terms of the calculation of consumers' valuation of different songs. Fisher, but not Netanel, takes this premise one step further and includes the length of the song in his value calculus.

But time, in a world of free downloads, only serves as a substitute for money in a world of music-as-market good if the following assumption is true: in a world of perfect price discrimination, consumers would pay more for songs they played more often than for songs they played less often. If this assumption is true, then measuring the number of times a song is played is a good proxy for consumer demand. I will critique this assumption momentarily, but first note that the pay-by-play method still does not solve all of the overcompensation problems discussed above.

Specifically, it does not prevent the two forms of gaming (avid artist-created and avid lobbyist-created). Again, sampling techniques will ameliorate the first type of gaming and will only have an effect on the second type of gaming if the lobbying group is small and therefore unlikely to have its members included in the samples. Returning to the pro-life and pro-choice example, suppose a spokesperson for each group recorded a song, registered it, and publicized it. Suppose further that many members of each of the movements follow the plan and download it. They can generate revenue for their cause just by setting the song to loop automatically on their home computers and turning the volume down before they leave for work. Fisher suggests that this distortion

127. Assuming, of course, the consumer in question is not a D.J. trying to mix two tracks.

might be tolerable. Or if it turned out that it was intolerable, the central accounting agency could "adopt a rule that no more than three 'plays' of a given song . . . within a twenty-four-hour period would be counted."[128] But this no-more-than-three-plays rule will not correct the "long tail" problem. Compensation will still be skewed towards the top hits, undercompensating those songs found in the "long tail" market.

Accepting Fisher's response to the gaming problem and setting aside the "long tail" critique, let us return to the fundamental assumption of the pay-by-play measurement of value: consumers will listen more often to songs that they value highly compared to songs that they value less.[129] In economic terms, in a world of perfect price discrimination, consumers would pay a higher price for songs they played more often and a lower price for songs they played less often. If this assumption is true, then pay-by-play is a fine measure of value; but if the assumption does not hold, then the pay-by-play calculus not only has the familiar overcompensation problem, but also a new problem: undercompensation.

There are at least two dimensions of value that price captures but which usage does not. The first is the consumer's engagement with the music; the second is the consumer's opinion of the music's aesthetic value. Fisher acknowledges that the pay-by-play system ignores the first dimension, but he does not address the second.[130] To explain the first dimension, *engagement*, let us return to our hypothetical consumer, Joe. Suppose that Joe is a computer programmer who works in a cubicle all day. People are constantly walking by, using the photocopier, talking on the phone, etc., so Joe usually plays background music to block out the office noise. He picks something quiet, mellow, and not too jarring. He does not really care what it is, as long as it is not too distracting. As it turns out, he most often plays a New Age[131] album that someone left at

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128. FISHER, *supra* note 66, at 229.

129. Netanel, *supra* note 67, at 53.

130. FISHER, *supra* note 66, at 231.

131. For a description of the genre, see Diane Schreiner, *New Age*, *in* GROVE MUSIC ONLINE, http://www.grovemusic.com/index.html (type "New Age" in search field and follow hyperlink).

> As a contemporary musical genre New Age has generated important revenue for the international record industry. The term was introduced to the industry in 1976 with Will Ackerman's first release of acoustic guitar solos, In Search of the Turtle's Navel. Retrospectively the first New Age album was Tony Scott's Music for Zen Meditation (1964), where, as in so many later New Age albums, Asian and western musical instruments and styles are combined. In other respects the stylistic range is broad. Early New Age pioneers included progressive rock groups (Pink Floyd, Harmonium), jazz musicians (Paul Horn, Paul Winter Consort) and composers of electronic music

his house. Joe does not even know the name of the artist or the album but it happens to be Enya's[132] *The Memory of Trees*,[133] which won a Grammy for best New Age Album in 1996.[134] But when Joe is at home, he listens to punk rock. His favorite album is *It's Alive*[135] by The Ramones.[136] Further assume that in any given month Joe ends up listening to both albums roughly the same number of times. Under the pay-by-play system each "use" is measured equally. Enya will receive just as much compensation as The Ramones will receive from Joe's consumer habits. The point here is obvious, indeed Fisher makes it himself:[137] Joe does not value the two albums the same. In a market system, this difference in valuation would manifest itself. Joe would not seek out an Enya album in a record store and given the choice between purchasing *It's Alive* and *The Memory of Trees*, he would choose the former album. In the pay-by-play system, however, Enya receives extra compensation in the sense that she receives the difference between Joe's actual valuation and the pay-by-play system's measurement of Joe's usage. Thus, we are back to the overcompensation problem.

One might respond that this is a bit of a straw man argument. If Joe prefers to use music as a means of blocking out background noise (as opposed to earplugs or a white-noise generator), then according to economists, he *is* deriving value from it. Of course, he may *aesthetically*

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(Wendy Carlos, Klaus Schultze). New Age also recognizes legacies from French impressionism and minimalism.

*Id.*

132. Though Enya does not classify her music as New Age, she is widely considered to be iconic of the genre. *See* Sven Philipp, *Enya: Amarantine*, BILLBOARD, Nov. 26, 2005, at 64 (describing Enya as a "chilled-out synth-pop, new-age vocalist").

133. *See* ENYA, THE MEMORY OF TREES (Reprise/Wea 1995).

134. Grammy Award Winners for the Year 1996, http://www.grammy.com/GRAMMY_Awards/winners (last visited Mar. 27, 2007).

135. THE RAMONES, IT'S ALIVE (Warner Bros/WEA 1995) (1979). Many critics consider this album to be one of the best live albums ever recorded. *See* Paul Connolly, *Pintsized Kylie Falls a Bit Short; Pop's Princess Is Live but Not Very Lively*, THE EVENING STANDARD (London), Jan. 8, 2007, at 28 (listing the Ramones' *It's Alive!* as only one of five live albums to have "vaulted the barrier of documentary worthiness to become interesting, exciting records in their own right").

136. The Ramones are considered to be part of the first wave of Punk Rock and have been extremely influential both in the Punk Genre and outside of it. *See* Carlozo, *supra* note 107 ("It's easy to forget—and any true punk knows this—that the Ramones were not only perhaps the first true punk band anywhere, but also launched U.K. punk with their famous July 4, 1976, concert at London's Roundhouse. In attendance that day: future members of the Sex Pistols, Clash, and other nascent British luminaries. Without that moment, American hardcore music simply does not exist. Period.").

137. Fisher calls this dimension of value *intensity*. FISHER, *supra* note 66, at 231. This Article hesitates to use this term because it unnecessarily confuses the second dimension of value, *aesthetic value*.

value Enya less, but this is not much of a critique. After all, the same problem would arise if Joe walked into a brick-and-mortar record store, chose a New Age album off the shelf at random, and then played it over and over again. And the same would be true if he went to iTunes and purchased the ten most popular New Age songs without caring at all what they were. Thus, the overcompensation problem in the pay-by-play system might not be as problematic as it first appeared.

Nevertheless, there is another problem with the pay-by-play system that is not present in the adding-up downloads system: undercompensation. Undercompensation occurs because the pay-by-play system does account for the fact that one can highly value an object or experience, without wishing to experience it every day. Examples of this kind of behavior are plentiful in our ordinary experiences. One might enjoy fine dining, but not wish to eat at a fancy restaurant every night of the week. One might enjoy attending a Broadway show, but not want to see a show every weekend. The same is true of artwork as well. Consider, for example, the paintings of Oscar Kokoschka. Kokoschka was known for his intense portraits, which often have an unsettling effect on the viewer. As one art historian described his painting style:

> Kokoschka used the hands of his sitters expressively, often investing them with an energy and power lacking in the faces. This tension between hands and faces is reinforced by the immateriality of the figures, whose contours are interrupted by or disappear into the surrounding space, and by the agitated surface of the painting where the thinly painted, transparent ground emerges through the heavily impasted opaque brushstrokes. The overall effect in Kokoschka's portraits is a new focus on nervous, hesitating in-between states of being, those moments when it is unclear which psychological impulses are in control.[138]

Most people would not wish to hang one of Kokoschka's portraits on their walls. His work is not the kind of art that is meant to be encountered every day. And yet it has tremendous value. Similarly, there are musical works that may invoke intense, uneasy, or overstimulating aesthetic experiences, experiences that many consumers value highly but do not wish to repeat every day.

Let us return to Joe. Suppose Joe is not only a computer programmer and a punk rocker, but also a devote Anglican. Every year on Maundy Thursday Joe spends the day in prayer and meditation. As part of this experience Joe listens to The Hillard Ensemble's recorded

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138. D. Hamburger, *Oscar Kokoschka*, *available at* http://www.oberlin.edu/allenart/collection/kokoschka_oskar.html (last visited Nov. 9, 2006).

performance of Thomas Tallis's *Lamentations*.[139] Joe believes The Hillard Ensemble's performance to be one of the most beautiful pieces of music he has every heard; in fact, he describes the experience as "sublime." But Joe does not listen to *Lamentations* every day, every week, or even every month. He listens to it exactly once a year. Nonetheless, he values this musical work highly. In a world of music-as-a-market good, Joe would have been willing to pay the same price for The Hillard Ensemble's *Lamentations* as he would pay for The Ramones' *It's Alive*, even though he listens to the former less than the latter. But the pay-by-play system does not account for this similarity in value. Joe listens to *Lamentations* infrequently and the pay-by-play system translates this to low consumer value, thus Joe's listening habits result in the undercompensation of The Hillard Ensemble. This undercompensation problem, moreover, cannot be solved in any accounting system that accords the frequency of play a substantial amount of weight.

c. Usage Cannot Measure Demand: Overcompensation Does Not Cancel Out Undercompensation

Given that a usage measurement based on downloads produces overcompensation and a measurement based on frequency of play produces undercompensation, the natural question is: can these two effects cancel each other out in the same way that one sound wave might be used to cancel out the noise of another sound wave of the same frequency but with a 180 degree difference in phase? That is, could an accounting system that combines both measures of usage, like Netanel's, produce a good proxy for demand? Unfortunately, the answer to this question is no. To understand why, first we must note that all tax-and-reward schemes are inherently closed systems of compensation. Because funds are divided among the relevant players, compensation under any tax-and-reward system is a zero-sum game. This means that there is no analytic distinction between an undercompensation problem and an overcompensation problem: they are two sides of the same coin. This is immediately obvious when an artists' compensation is visualized as slices on a pie chart. Any overcompensation of $X$ means that someone, perhaps everyone, is getting less than they deserve. Likewise, any undercompensation of $Y$ means that someone, perhaps everyone, is getting more than they deserve. These two effects will only cancel each

139. HILLARD ENSEMBLE, LAMENTATIONS (ECM Records 2000). Thomas Tallis (1505–1585) was an English composer known for his religious music. The settings for *The Lamentations (of Jeremiah the Prophet)* are the first two lessons for Maundy Thursday.

other out if each instance of overcompensation is matched in value by an instance of undercompensation.

This is highly improbable. Consider a world in which there are 101 artists and only two instances of skewed compensation: (1) artist *X*, who gets 100 utiles more than he deserves; and (2) artist *Y* who gets 100 utiles less than she deserves. Further suppose that the costs of this overcompensation is borne equally by all the others (including *Y*) and, likewise, that the benefits of *Y*'s undercompensation are shared equally by all (including *X*). (This is not an unreasonable assumption unless *Y* is somehow the victim of a concerted effort on the part of *X* and his fans to deprive her of compensation. Otherwise, there is no reason to think that his loss and her gain are causally connected.) Now consider an arbitrary member of the pool, that is, an artist who is neither *X* or *Y*, call him *P*. Artist *P* pays for his share of *X*'s overcompensation (1/100 of 100, or 1 utile). But artist *P* also gains his share of the windfall created by *Y*'s undercompensation (again, 1/100 of 100, or 1 utile). Thus artist *P* suffers no loss and gains no benefit, the net effect on him and on the rest of the 98 artists who are neither *X* nor *Y*, is zero. But now consider the situations of *X* and *Y*: the net effect on the rest of the group is zero, but *X* has still been overcompensated by 100 utiles and *Y* still has been undercompensated by 100 utiles. If the incomes of *X* and *Y* are ever to be righted there must be other instances of over- and undercompensation that somehow result in *Y* capturing exactly 100 utiles from benefits of undercompensation and *X* paying 100 utiles of the costs of overcompensation. There is no reason for us to believe that in a system with so many different causes of over- and undercompensation the effects would balance out.

To make this point more explicit, consider the overcompensation of Criteria (discussed in Part III.A.1) and the undercompensation of The Hillard Ensemble (discussed in Part III.A.2). It does not matter what weight we choose to assign to the initial download and what weight we choose to assign to the frequency of play, in a hybrid system, The Hillard Ensemble gets doubly slammed. On one hand, if we assign a lot of weight to the initial download, The Hillard Ensemble's share of the pie is reduced by the overcompensation of Criteria that occurs when Joe downloads Criteria's *When We Break*, discovers he hates it, and deletes it. On the other hand, if we give more weight to frequency of play, then The Hillard Ensemble's share of the pie is reduced when The Ramones and Enya get compensated more because Joe play's *Memory of Trees* to block out the office noise and then comes home and rocks out to *It's Alive*.

But maybe we should not shed any tears for *Lamentations*. After all, it is not as if The Hillard Ensemble is selling a great number of CDs under the current system. But as we shall see shortly, the market for physical music goods should not be the baseline. Rather, we should look to the emerging market of digital goods.

The success of any alternative compensation scheme is measured along two axes. The first axis is how closely the compensation scheme tracks consumer demand. The second axis is how well the alternative scheme promotes the goals of the industry critics.[140] As we have just demonstrated, compensation plans based on usage have serious flaws in regard to the first axis. However, if they are extremely successful along the second axis, there might exist other policy reasons for adopting the compensation scheme in spite of its mediocre performance along the first axis.

5. Relying on Usage Does Not Promote the Goals of Industry Critics

In evaluating the success of an alternative compensation system in promoting the goals of the industry critics, we must examine whether the proposal is likely to help, hurt, or act neutrally towards the independent or nonradio-friendly artist. This, of course, is a comparative measure that requires a baseline. The status quo is the obvious choice: if an alternative compensation system is no better than the system currently in place, then there is no reason to adopt it. Thus, before we begin critiquing the proposals, we will first explore how the current system affects artists and their incentives to create.

a. The Status Quo

Modern recording artists disseminate their music through one of two ways: major record labels and independent record labels. The majors, known as the Big Four, are Universal Music Group, Sony Music Entertainment, EMI Group, and Warner Brothers Music. Taken together, these four companies control seventy-nine percent of the domestic market[141] and seventy-three percent of the global market.[142] Thus, given

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140. *See supra* Part II.A (discussing the positions and goals of anti-industry critics).

141. OECD REPORT, *supra* note 32, at 40; *see also Dominating the Music Industry*, BBC WORLDSERVICE.COM, http://www.bbc.co.uk/worldservice/specials/1042_globalmusic/page3.shtml (last visited Mar. 7, 2007) (calculating a much higher global dominance of almost ninety percent).

142. Press Release, Int'l Fed'n of the Phonographic Indus. (IFPI), IFPI Releases Definitive Statistics on Global Market for Recorded Music (Aug. 2, 2005), http://www.ifpi.org/content/section_news/20050802.html ("Universal maintains its position as the world's biggest recording company, with a 25.5% share of the world market. Sony BMG is next with a 21.5% share

the market dominance of the major record labels, this Article will focus on how these four companies' acts affect artists and their incentives to produce.

Let us begin by describing how record labels find "new" talent.[143] The first step a record company takes is sending their scouts into the field to scope out unsigned local bands and artists or those signed with small independent labels. They also rely on their subsidiary labels to do some of this initial scouting. Subsidiary labels provide some small promotional support for their bands, which is usually limited to a geographical area. This essentially creates a test market for the major labels.[144]

In evaluating this new talent, scouts are not necessarily looking for the next Mick Jagger or Britney Spears; they are looking for artists that have the potential to produce several well-received, that is, widely purchased, albums. The record labels know that the majority of artists they sign will never accomplish this, indeed, they expect that most artists they sign will actually create losses for the label. A record company is considered to be extremely successful if ten percent of the artists it signs become profitable.[145] It is only when the record label successfully releases a big hit that their artist-generated revenue becomes significant. Because the popularity of music is unpredictable, it is in the record companies' interests to cast a wide net and sign a relatively large and indiscriminate number of musicians with the hope of catching one hit-producing artist or band.

If record companies do not expect to make money off most of the artists they sign, how can they afford to offer a lucrative contract? In reality, they cannot afford it, but this is not a problem for the label because the industry standard for signing new artists is hardly lucrative. A new artist is typically offered a $100,000 advance.[146] This may seem to be quite a bit of money (especially from the perspective of the artist who is usually relatively unfamiliar with the recording business and almost always unrepresented[147]), but the artist contracts away more of her rights

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followed by EMI at 13.4% and Warner at 11.3%. The independent sector holds steady with a 28.4% global share.").

143. "New" in this sense means new to the general public. The majority of artists that get signed by major labels have already built up some fan loyalty, which is usually, but not always, limited to a geographical region.

144. GEOFFREY P. HULL, THE RECORDING INDUSTRY 123-27 (1998).

145. OECD REPORT, *supra* note 32, at 41.

146. Morrow, *supra* note 16, at 44.

147. Todd M. Murphy, Comment, *Crossroads: Modern Contract Dissatisfaction as Applied to Songwriter and Recording Agreements*, 35 J. MARSHALL L. REV. 795, 808 (2002) ("An artist's intense desire to obtain a recording contract at the beginning of his or her career often

than she realizes. For a new artist, the standard deal is called the "one firm plus six."[148] Essentially, the record label agrees to produce the band's first album, retaining the *right* to produce the next six but withholding any *obligation* to produce those albums if the first release, or any thereafter, underperforms or if the record label believes the timing of the release will detract from its profitability.[149] Additionally, new artists are expected to pay for the promotion and production costs of a new album, which are deducted from the artist's royalties, including royalties on future albums. Given that the standard royalty on the sale of an album is only twelve to fourteen percent of the retail price of the CD[150] and that the production/promotions costs are deducted from that amount, many artists barely break even, and many of them actually end up in debt.

Even artists who "make the big time" receive very little of their income from royalties. In a speech before the Digital Hollywood Conference, recording artist Courtney Love worked out the royalties for a hypothetical band with a twenty percent cut of sales from their album that went platinum (i.e., sold over a million copies). After the standard industry deductions, the band would just break even.[151] Lynn Morrow, an entertainment lawyer working in Nashville, Tennessee (dubbed the "home of country music"), developed a more sophisticated breakdown of royalties. In Morrow's analysis, artists would still lose money on their first platinum album, but would stand to make over six million dollars if their album reached diamond level or they produced a second successful album.[152]

But what about Britney Spears and Madonna? Are the megastars better off than their up-and-coming counterparts? The answer is a qualified yes. Recall that an artist's first record deal is usually a "one firm plus six." That means that the successful artist must produce a total of seven albums under the same terms as their first album. For a pop star

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hampers the pursuit of a contract that is legally sound and financially fair. Increased success leads to dissatisfaction over time. This desire, coupled with the artist's lack of business savvy, makes deviation from usual contract formation and interpretation a necessity." (footnotes omitted)).

148. Cook, *supra* note 16, at 42-32.

149. *Id.*

150. *See* Steve Albini, *The Problem with Music*, http://www.negativland.com/albini.html (last visited Nov. 9, 2006); FISHER, *supra* note 66, app. A (detailing the breakdown of CD prices).

151. *See Courtney Love Does the Math*, SALON.COM, June 14, 2000, http://dir.salon.com/tech/feature/2000/06/14/love/index.htm; *see also* Jennifer A. Brewer, Note, *Bankruptcy and Entertainment Law: The Controversial Rejection of Recording Contracts*, 11 AM. BANKR. INST. L. REV. 581, 582 (2003); Cook, *supra* note 16, at 41 (discussing the industry practices of advances and royalty deductions); HULL, *supra* note 144, at 130 (analyzing the debt owed by an artist for an album that sells 500,000 copies).

152. Morrow, *supra* note 16, at 51.

to maintain his or her popularity for that long is truly a feat. But even if the star has staying power, they often lack the bargaining power to renegotiate their contracts. The exception being that sometimes record labels will renegotiate a contract if an artist threatens to file for bankruptcy.[153] But, of course, if the artist is at that point, then they can hardly be said to be successful in terms of making money.

Despite the fact that very few artists get signed (and of those who make it, very few make it big), there seems to be no lack of young, ambitious, would-be musicians. This is because there are three very important factors that the above economic analysis has ignored. The first is revenue from sources other than CD sales. Most artists make the majority of their income from proceeds of live performances. This revenue can allow even unsigned artists to make enough money to keep performing. The second, equally important factor is fame. Record labels may not pay their artists very well, but in general, they do an excellent job promoting them.[154] While there are plenty of one-hit wonders, the pop stars that manage to maintain the public's favor wield a surprising amount of influence in our society. The lure of being famous is often enough, without promise of money, to keep a young artist going. The third factor, which should not be underestimated, is that many artists create music because they are artists and are, in some sense, compelled to create.

### b. Tax-and-Reward Systems Based on Usage Are Not an Improvement

Some critics use the foregoing factors of performance revenue, fame, and artistic drive to argue that copyright protection is unnecessary for the creation of incentives. Therefore, the best solution to the problem of unauthorized sharing is to abrogate the copyrights of the relevant parties, that is, to legalize file sharing. What this argument misses is that people do not, in general, buy tickets to see a band they have never heard of. Live performances generate money because record labels have invested a great deal of money in promoting the performing artist. Even

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153. Brewer, *supra* note 151, at 586.

154. Morrow, *supra* note 16, at 51 ("Independent, unsigned artists still may be able to use the Internet and other methods of marketing to reach a limited number of fans and potential record buyers. Nevertheless, without the money, marketing and distribution of an established record company, it is extremely unlikely that an artist will break through the cluttered market and reach the level of success necessary to sustain a career, much less to become an international superstar. Major record companies are in the business of promotion and international distribution. Courtney Love's assertions aside, the strength and expertise of these companies remain indispensable to recording artists.").

if the current copyright system only protected the record labels' compensation, as opposed to the artists' compensation, copyright would still be valuable to artists by providing an incentive for the record labels to promote them, thus increasing artists' ability to make money from performances.[155] Furthermore, arguing that copyright is unnecessary to protect incentives because artists will create out of pure love is not only naive, but also ignores one of the major criticisms of the current state of the recording industry: talented, but unsigned, musicians may be able to create music without the support of a label, but without access to the label's network of promotion, no one will hear it.

On the other hand, these critics might retort that the decentralized nature of a free file-sharing system would allow word-of-mouth advertising to replace the recording industry's profit-driven system of promotion. This is not an implausible statement. In fact, many established artists have noted that unauthorized file sharing either helped to establish them in the first place, as in the case of John Mayer,[156] or helped to create an audience for new or experimental music that could not easily be promoted on the radio, as in the case of Radiohead.[157] And yet, this retort seems to ignore the fact that Mayer was eventually signed by a major label, and Radiohead's nonradio-friendly albums have still been promoted by their record label in alternative forums. If P2P file sharing is just a means for unsigned and nontraditional artists to gain the end of access to the record label's promotion networks, then why should we adopt a legalized system of file sharing that undermines the record label's promotion capabilities?

But what if P2P distribution is something more than just a means to an end? The "long tail" phenomena suggests that it might be. Recall that it is not just the top 100,000 tracks that get played on Rhapsody, it is almost all of them.[158] Thus, one might argue that a band's probability of being heard by a wider audience is actually higher in a world of freely distributed music. But before one gets too excited about this point, we should first understand that the "long tail" market works because online distribution allows physically remote and widely distributed consumers to establish a market that is not geographically based. Obscure artists can make money on Rhapsody even though they only have five fans living in Austin, Texas, two in Omaha, Nebraska, one in Lamoni, Iowa, and six in Pullman, Washington. We have already discussed that these

155. *Id.* at 51.
156. *See, e.g.*, Kot, *supra* note 13 (quoting John Mayer).
157. *Id.* (quoting Ed O'Brien, lead guitarist of Radiohead).
158. *See supra* Part III.A.2.

obscure artists will be hurt if we use sampling techniques to determine usage, but if every individual's library is accounted for, the artists residing in the "long tail" will receive compensation. But this has nothing to do with their ability to make money off of live performances, which, as we have already discussed, is how most bands support themselves. There is no "long tail" economy for live performances because concerts still require a locally aggregated fan base. Having a few fans in Austin, a few in Omaha, one in Lamoni, and a couple in Pullman is not enough to support a tour. For a tour to be successful, an artist must generate a critical mass of fans in multiple regions. Local bands can still do an adequate job of establishing fan bases within a small radius of their residence. Consider, for example PCP Berzerker[159] in Salt Lake City in the mid-90s, Murder City Devils[160] in Seattle in the late 90s, REDLeTTER[161] in Palmdale, California, in the early 2000s, and The AV Club[162] in New Haven, presently. Some of these bands engaged in online promotion, some did not, but none of these bands have had a nationwide tour, and the first three are officially defunct. This is, of course, merely anecdotal evidence. And there are other stories, such as John Mayer's, that suggest the opposite is true. It is enough, however, to point out that the effect of online distribution on the ability of artists to establish concentrated fan bases that can support a tour is not yet

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159. Interview with Bryan Carr, Keyboardist, PCP Berzerker (May 1, 2006) (on file with author) ("Q: Where would you say your central fan base was located? Was it centered in a geographical area or are your fans more widely dispersed? A: We bestrode the tiny pond of SLC, UT [Salt Lake City, Utah] like a colossus. Most of our fans were there or elsewhere in the Utah valley, but because we also played several gigs in LA and environs, we began to have a number of fans there. Every once in a while someone will still contact one of us (usually Eric Hunter, lead vocalist) online and surprise us with a question from Pittsburgh or the Everglades."); *see also* Bill Frost, *Hope, Love & PCP: Are PCP Berzerker Suffering from Rock Star Complex, or Are They Just Complex Rock Stars?*, WEEKLYWIRE.COM, Nov. 3, 1997, http://weeklywire.com/ww/11-03-97/slc_scene.html.

160. Murder City Devils, http://www.subpop.com/bands/murdercity/website (last visited Nov. 9, 2006).

161. Interview with David Harris, Lead Vocalist and Guitarist, REDLeTTER and Co-president, No Exit Records (May 1, 2006) (on file with author) ("Well, superficially, our fan base was always centered in our hometown, Palmdale, California. It was people from Palmdale that showed up to see us play, purchased our albums, etc. However, that being said, I have found that people outside of our hometown often tend to take our music more seriously. I think this strange paradox is merely a product of proximity: it is harder for you to take the guys in a band seriously when you know them to be the guys who deliver your pizza, play video games with you, etc. The less you know about someone, the easier it is to be a 'fan' in the traditional sense of that word."); *see also* The REDLeTTER, http://www.noexitrecords.com/bands_redletter.htm (last visited Nov. 9, 2006).

162. The AV Club, http://www.avclubmusic.com/ (last visited Mar. 7, 2007).

established[163] and that the majority of artists are still relying on record labels to engage in the important function of promotion and channeled distribution.

Another question that critics of the recording industry should ask before endorsing a system of legalized file sharing is whether such a system that compensates on the basis of usage will, on average, compensate these independent, unpromoted, nonradio-friendly artists more or less than the current system. As a starting point, look at the kinds of music that are currently downloaded with authorization from the copyright holder. As it turns out, the most popular downloads are also the most popular songs according to Billboard Magazine, which has been tracking the popularity of music in the domestic market since 1936.[164] Billboard tracks users' downloading habits and publishes a weekly rating of the top downloads. A comparison of this list with Billboard's Hot 100 chart (measuring the overall popularity of songs) shows a substantial similarity. Of course, this is not a pure comparison, as the Hot 100, as of February 2005, began incorporating information from authorized download services (such as Yahoo Music) as one of the factors when compiling the Hot 100 chart.[165] Nonetheless the comparison is still

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163. *See supra* note 161 and accompanying text. Harris's view on the utility of online promotion and distribution:

> [W]e were some of the first people that I know of to engage in online promotion in our hometown. That being said, I really don't know how much of an impact that had on getting people to our shows—having a website is far different from having a website that people look at. Some people certainly looked at our website, and eventually we had a mailing list filled with people we could email about upcoming shows, etc. But, I think in the grand scheme of things, the website was more for show (it sounded official) than for useful promotion.

164. Ken Schlager, *Billboard: Always No. 1*, BILLBOARD.COM, at 3, http://www.billboard.com/bbcom/about_us/bbhistory.jsp (last visited Mar. 7, 2007) (providing a history of Billboard Magazine and the Billboard Charts).

165. *See* Billboard Methodology: How Does Billboard Chart the Hits? Let Us Count the Ways, http://www.billboard.com/bbcom/about_us/bbmethodology.jsp (last visited Mar. 7, 2007).

> Most of the charts in Billboard are either sales charts or radio charts. The only exceptions in which we try to mingle sales numbers with radio data are three of our signature charts: The Billboard Hot 100, Hot R&B/Hip-Hop Songs and the recently launched Billboard Pop 100.
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> . . . .
>
> These three hybrid charts each use formulas to mix Neilsen SoundScan sales with BDS audience. The Hot 100 and the Pop 100 each utilize the a la carte sale of downloaded tracks with sales of the few retail-available singles that are still shipped to stores. The former chart also factors in audience from all popular formats monitored by BDS—from top 40 and hip-hop to country, Latin and rock—while the Pop 100 confines its radio panel to mainstream top 40 stations.
>
> The Hot R&B/Hip-Hop Songs chart meshes audience data from R&B and hip-hop stations with sales from the core R&B/hip-hop panel.

probative for two reasons. First, this overlap was present in comparisons between lists of the most popular downloads and the Hot 100 chart, prior to the period when the Hot 100 accounted for downloads.[166] Second, while information from downloads is only one of numerous other axes taken into account in the Billboard Hot 100 chart, there is still a substantial overlap between the list of most popular downloads and the list of most popular songs in general.[167] The point here is that consumers are downloading what they were already listening to anyway.

Of course, this is not necessarily reflective of what would happen if all file sharing were legal. This data is rendered less relevant by three factors (aside from the overlap in measurement discussed above). First, for-profit download sites produce the same deterrent effect that the current market system does: people are more likely to spend money on songs that they are already confident they will like. Second, legal download services are relatively limited in the music they offer for sale. Though this is slowly changing, it is still the case that more obscure music, especially music from independent labels and artists, is not generally available on for-profit sites. The question is then, whether the relationship between the top-forty playlists and the most popular downloads will continue to hold in a system of legalized sharing, or whether that correlation will be broken.

While it appears that the less popular artists will gain some advantage in a world of legalized sharing, in that more people will be listening to their music, it is not likely that their levels of compensation will be greater in such a system. The reason for this is quite simple: while more people will be downloading works by these underprivileged artists, more users will also be downloading works from the more established artists. Because a system of tax-and-reward compensation is a zero-sum game (if you get more of the pie, I get less, and vice versa),

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*Id.*

166. Press Release, RealNetworks, Inc., RealNetworks' Rhapsody Users Play More Than 1 Million songs On-Demand Per Day in November (Dec. 10, 2003), *available at* http://www.realnetworks.com/company/press/releases/2003/rhapsody_nov.html ("The Rhapsody Top 10 artists for the month include many acts currently at the top of the Billboard 200 album chart, including November's number 1 artist, Sarah McLachlan.").

167. Take for example the Billboard Hot 100 and Hot 100 Digital Songs charts for the week of November 4 to November 10, 2006. Of the top 10 listings on the Billboard Hot Digital Songs, 8 were also present in the top 10 on the Hot 100 Digital Tracks. The two songs on the top 10 of the Hot 100 Digital Tracks that were not in the top 10 of the Billboard Hot 100—Weird Al Yankovic's *White and Nerdy* and Nelly Furtado's *Maneater*—came in at numbers 15 and 16, respectively. Billboard Hot 100, Nov. 4, 2006; Billboard Hot 100 Digital Songs, Nov. 4, 2006 (full Billboard archives are available through subscription to billboard.biz).

underprivileged artists are not likely to see any real monetary gains in the new system.

6. Rejecting Usage: Is There an Alternative?

Thus far we have examined the possibility of assessing consumer demand by analyzing aggregated levels of consumer usage. We explored two possible measurements of usage—adding up downloads, and counting the number of times a song was played—and we looked at proposals that relied solely on one measurement or the other, or a mixture of the two. We found that the first form of measurement, adding up downloads, created an overcompensation problem. Because there is no marginal cost to the listener under a legalized file-sharing scheme, people will tend to download far more music than they currently purchase, including music that they value just enough to keep in their collection. Thus, artists who produce marginally valuable work will receive more money than they would under the current system. The second measurement of usage, the pay-by-play system, on the other hand, created an undercompensation problem because the accounting system undervalues songs that a user may value highly but listen to infrequently. Finally, we looked at a system which combined the two measurements of usage. We discovered that the over- and undercompensation problems could not cancel each other out because of the zero-sum nature of any tax-and-reward scheme. That is, an overcompensation problem is, in a sense, an undercompensation problem and vice versa. If you make more than your share, then everybody else is making less. Likewise, if an artist is getting less than her share, then all the other participants are benefiting from her loss. The chances of these pluses and minuses adding up in an equitable way are slim.

This brings us back to the problem of relying on usage as a measure of consumer demand. All such systems lack a critical piece of information: the listener's personal assignment of value. Attaching a nontrivial price to music helps gather that information. The next set of proposals seeks to mimic the informational gathering abilities of a pricing system, without imposing monetary costs on the end user, by simply asking the user to assign a value to the music they listen to.

### *B. Determining Consumer Demand Through Contingent Value Methodology*

Contingent Value Methodology (CVM) is often employed to measure the value of nonmarket or public goods, such as environmental

safety, biodiversity, or natural resource preservation.[168] For example, CVM might be employed to determine how much a community is willing to pay in extra taxes to improve the fish ladders in a local dam so that more wild salmon successfully make the trip upriver to spawn. Typically, CVM involves surveying the relevant population and directly asking them about their willingness to pay certain amounts given certain scenarios. Statistical analysis is then used to hone in on an accurate evaluation.[169] Neither proposal at issue employs CVM directly to determine the value of a particular song or album to users. Nonetheless, the proposals are based on the central tenet of CVM: it is possible to accurately assess how much the public values a resource by asking them.

The first proposal we will look at—Peter Eckersley's *Virtual Markets or Virtual Goods: The Mirror Image of Digital Copyright?*[170]—replaces the survey data of CVM with an automated voting system. The second proposal—the Blur/Banff proposal, which developed from a series of conversations and workshops at the April 2002 Blur conference on "Power at Play in Digital Art and Culture," and was formalized by James Love in *Artists Want To Be Paid: The Blur/Banff Proposal*[171]—replaces the survey data of CVM with something akin to stock options.

Each proposal will be examined to determine whether (1) the proposal compensates artists in a manner rationally connected to consumer demand and (2) whether the proposal fosters the goals of the recording industry critics. Both proposals do a better job of meeting the goals of the industry critics than the previous proposal that distributed funds according to usage. However, neither Eckersley's proposal nor the Blur/Banff proposal adequately evaluates consumer demand. There are two reasons for this. First, users have no incentive to cast their votes or

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168. *See* David A. Dana, *A Behavioral Economic Defense of the Precautionary Principle*, 97 NW. U.L. REV. 1315, 1343 (2003).

169. *Id.* at 1315-45; Richard T. Carson et al., *Contingent Valuation: Controversies and Evidence*, 19 ENVTL. & RESOURCE ECON. 173 (2001), *available at* http://weber.ucsd.edu/~rcarson/cvconfinal.pdf.

170. Eckersley, *supra* note 67, at 85.

171. James Love, *Artists Want To Be Paid: The Blur/Banff Proposal*, Mar. 25, 2003, http://www.nsu.newschool.edu/blur/blur02/reports/blur02_user_love.pdf. Note that several different proposals came out of this conference. Though Love mentions some of these, his article nonetheless focuses on a single proposal, which this Article refers to as the Blur/Banff proposal.

Other scholars have discussed these two proposals. *See, e.g.*, FISHER *supra* note 66, at 231-32 (discussing the Blur/Banff proposal); *id.* at 232 (discussing Eckersley's proposal); Peter K. Yu, *P2P and the Future of Private Copying*, 76 U. COLO. L. REV. 653, 655 n.11 (2005) (discussing Eckersley's proposal); Joseph Gratz, Note, *Reform in the "Brave Kingdom": Alternative Compensation Systems for Peer-To-Peer File Sharing*, 6 MINN. J.L. SCI. & TECH. 399, 426 n.132 (2004) (discussing the Blur/Banff proposal); Eckersley, *supra* note 67, at 98 n.47 (2004) (discussing the Blur/Banff proposal).

place their investments in accordance with how they value what they consume. Second, even if users faithfully tried to assess the value of the music they actually listen to or keep in their libraries, they would not be very good at making those assessments.

1. Virtual Votes To Create a Virtual Market: The Eckersley Proposal

Of the proposals discussed in the literature, Eckersley's proposal comes the closest to a pure voting system. I say "closest-to," because it is not as pure a voting system as usage in the form of counting downloads, which still factors into the calculus for dividing revenue. However, usage plays a very minimal role in the distribution of revenue unless the voter specifically chooses to base her vote on usage.

There are four questions that need to be asked about any voting system: (1) How should the right to vote be distributed among the population?; (2) How often should citizens be allowed to vote?; (3) Would users be prompted to vote and if so, would they be offered voter guides?; and (4) Would there be any restrictions on the way in which a voter casts her ballot? To explain Eckersley's proposal we look at his answers to these questions.

a. Distributing Votes

Eckersley identifies two possible ways in which taxpayers could be assigned votes. The first method he calls "one user, one vote."[172] In this scenario, every taxpayer would be allowed to register with the system, and each of their votes would be accorded equal weight. This system would be very easy to administer. The same entity that registered artists for participation in the distribution program could maintain a voter registration list as well. Every person who files a tax return (even if they ultimately do not pay any net tax) could be issued a unique identification number that would function as their voter registration number. That number could be used to access a secure online voting site, but would not be linked to any choices the voter actually made.

The other method for distributing voting rights is to do so according to the proportion of the download tax levied upon each taxpayer. Eckersley calls this system "one dollar, one vote."[173] Of course, deciding how to calculate that proportion depends on how the tax that pays for the alternative compensation scheme is levied. If the alternative compensation scheme is funded by surcharges on ISP services, it would

172. Eckersley, *supra* note 67, at 111.
173. *Id.*

be easy to allocate votes (for example, a user could earn one vote for one dollar spent on surcharges). If, however, the tax is generated via an increase in the general income tax, then determining the relative weight of taxpayers' votes would be slightly more difficult and less causally connected with the proportion of revenue that each taxpayer was contributing. However, votes could still be apportioned, for example, by assigning each tax bracket a certain number of votes. Finally, if the alternative compensation scheme is funded by a set of taxes levied on Internet-related goods and services (e.g., MP3 players, bandwidth, DSL subscriptions, etc.), it would be very difficult to assess how much of the system each taxpayer accounted for. Theoretically, one might issue a voucher with the sales receipts, or have the user turn in the sales receipts to earn a vote (like a rebate system), but this proposal is complicated and therefore pragmatically untenable. Eckersley does not give an opinion about which method—"one person, one vote" or "one dollar, one vote"—of allocating votes is the best.[174] This Part will critique both methods, but for now will leave them both as possibilities and move to discuss the remainder of Eckersley's proposal.

b. Frequency of "Elections" or Ballot Casting

Eckersley suggests that users should, to borrow a phrase, vote early and vote often. Under a "one person, one vote" system each "voter" might be given a certain number of points or votes to allocate each month. He writes:

> By giving [the hypothetical voter] a certain number of votes (say 100 per month), she could express her preferences in a more accurate fashion. If she has read a novel which is particularly disappointing, she might not reward it at all, or she might give it only a symbolic vote or two. On the other hand, when a novel is extraordinary, she might give it all 100 votes or an ongoing reward each time she re-reads it.[175]

The advantage of frequent voting is that it mitigates the negative effect of time on consumers' memories and their evaluations of enjoyment. That is, if voting took place only once a year it would be difficult for most users to recall all the songs that they had listened to and enjoyed. But frequent opportunities to vote will not necessarily solve the problem if users do not take these opportunities and cast ballots, or if it turns out that voters are not very good at assessing their own listening habits.

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174. *Id.*
175. *Id.* at 101.

c. Metered Usage as a Voting Guide

To solve these problems, Eckersley suggests a system that would (1) automatically prompt users to vote; (2) at the time of prompting, relay information to the user about her own listening habits as a way of providing guidance on vote allocation; and (3) cast a default ballot if the user explicitly refuses to vote. Eckersley explains his proposal in the following hypothetical:

> To illustrate this idea, imagine that Alice [the hypothetical user] intends to download a few new songs for her collection. Because she has not voted for the past month, her download client pops up with a notice mentioning that she should do so. Alice now has three choices. She could refuse to vote completely (in which case her downloads alone would be counted). She could spend the time to vote carefully, considering which works had been of the most value to her recently. Finally, she could allow her computer to suggest a vote. In this last case, the software and devices she uses to read, listen to, and watch information goods have been collecting statistics on her recent preferences—which songs she has picked out of her play list, which e-books she has spent hours poring over, and so on. Instead of shipping this information straight off to the virtual market, it is simply handed to Alice on a digital platter. If she wishes, she only has to vote to reward the particular musicians and writers who have been contributing to her life.[176]

Note, as we mentioned above, usage does play a role in Eckersley's proposal. But it is a very small role, which the user can override if she chooses. The ability of the user to ignore usage when casting her ballot begs the question: would there be any restrictions on how users vote?

d. Restrictions on Ballot Casting

In elections for political office in the United States, candidates typically go through some certification process before their name is placed on the ballot. Despite the fact that voters have a limited number of named candidates to choose from, they are not always restricted to voting for one of the named candidates. In many districts, voters may cast their ballot for anyone by naming their choice as a "write-in" candidate. Some districts, in fact, allow write-in candidates for the office of the President of the United States of America.[177] In districts that allow write-in candidates, voters have no *de jure* restrictions on the manner in

176. *Id.* at 101-02.

177. *See, e.g.*, North Dakota's Certificate of Write-in Candidacy: President of the United States, http://www.nd.gov/sos/forms/pdf/18440.pdf (last visited Mar. 7, 2007).

which they cast their ballot. Nonetheless, write-in campaigns are rarely successful.[178] Thus, it might be argued that voters in political elections have *de facto* restrictions on who they can vote for. This is not the case in Eckersley's proposal, however. Because an artist does not need a minimum number of votes to qualify for compensation (unlike, for example, the electoral college system where it is a winner-take-all approach within each state), each voter directly influences how artists are compensated. This appears to be an advantage of a direct voting system, since it mirrors the market in that individual choices affect artist compensation directly. However, upon further examination, the fact that there is no restriction on the way a user casts her ballot is actually quite problematic. The problem with a system that gives voters complete freedom is that there is no guarantee that a user's vote will have any connection to her actual consumption. In Eckersley's system, there are no restrictions, *de jure* or *de facto*, on how users cast their ballots.

2. The Blur/Banff Proposal

If Eckersley's proposal is something akin to a system of direct democracy, the Blur/Banff proposal is much more like a republic, or representative democracy. In the Blur/Banff proposal, users do not really vote in the ordinary sense of the word. Instead, their activity might be described as investing. One analogy might be the system of privatized social security in Chile, where workers are compelled to invest a set portion of their income in a retirement fund, but are given some freedom in choosing where to invest that income.[179] Private investment firms, which are regulated by the government, compete for workers' retirement investments thus creating competition that theoretically optimizes the market for investors. Another analogy comes from Bruce Ackerman and Ian Ayres, *Voting with Dollars: A New Paradigm for Campaign Finance*.[180]

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178. One recent exception to this rule was Donna Frye's campaign, as a write-in candidate for Mayor of San Diego in November 2004. Frye won a plurality of votes in the election, but ultimately lost on a technicality. Frye ran again for mayor in February 2005 (in a special election), this time as a named candidate. She again won a plurality, but not the majority needed to win the election. In the ensuing run-off election, held in November 2005, Frye lost by a very close margin to Jerry Sanders, carrying forty-six percent of the vote to Sander's fifty-four. Matthew T. Hall & Philip J. LaVelle, *Sanders Wins Decisively; Governor's Agenda Battered*, SAN DIEGO UNION-TRIB., Nov. 9, 2005, at A1.

179. Muricio Olavarria-Gambi, *Social Security in Perspective: A Parallel Between Chile and the United States*, 5 GEO. PUB. POL'Y REV. 165 (2000) (providing an overview of the Chilean privatized Social Security system).

180. BRUCE ACKERMAN & IAN AYRES, VOTING WITH DOLLARS: A NEW PARADIGM FOR CAMPAIGN FINANCE (2002).

As with all the preceding tax-and-reward systems, users would be compelled through taxes to generate funds. This is similar to the manner in which workers are compelled to set aside a portion of earnings for retirement purposes in a system of privatized social security. In the Blur/Banff proposal, each user would be able to choose from a slate of government-regulated intermediaries that would be the entities in charge of distributing the funds to the individual artists. These intermediaries, like the private investment firms in a system of privatized social security, would compete against each other. As Love puts it, the intermediaries (or intermediators as he calls them) would compete by "offering listeners different alternatives for how the money would be distributed. In this model, each intermediator could propose very different systems, and listeners would decide (and continually reevaluate) where to put their money, effectively choosing between the groups that did the best job in supporting artists."[181] Love offers a few examples of the ways in which these firms might decide to distribute the money entrusted to them by users:

1. Give all the money to performances of a specific genre of music, such as African music, American jazz, or performances of classical music.
2. Ensure that 15 percent of the revenue supported retired blues artists that are down on their luck.
3. Allocate all money on the basis of the volume of downloads.
4. Allow the listeners to directly allocate fees to specific artists.[182]

Furthermore, the federal government would regulate these intermediaries to ensure transparency and accountability. Love suggests that part of this regulation be substantive as well as procedural. That is, in addition to requiring complete records of how funds have been distributed and full disclosure of those records to the investing public, the government might require that at least some funds be distributed in a particular fashion. Love gives the following examples:

> [G]overnments might require that:
> 1. At least 30 percent [of the funds] be allocated on the basis of traditional usage based distributions.
> 2. At least 10 percent support noncommercial music productions.
> 3. At least 5 percent be contributed to a retirement fund for burned-out musicians.
> 4. There be a minimum contribution to session musicians.[183]

181. Love, *supra* note 171, at 9-10.
182. *Id.* at 10.

Thus, the Blur/Banff proposal leaves open the possibility that usage could play a role in the distribution of funds to the artist. Nevertheless, the role of usage in this proposal, like the role of usage in Eckersley's proposal, is a limited one. To summarize, the Blur/Banff proposal attempts to incorporate consumers' assessments of the value of music in their collections by giving consumers the choice of where to "invest" their portion of the levied tax. That is, consumers would express their valuations by choosing between competing intermediaries that distribute the funds to the artists in a multitude of different ways.

Having described the two most widely discussed proposals that take into account users' assessments of the value of music in their collections, we now turn to the critique.

3. Neither Voting nor Investments Are Proxies for Contingent Value

As discussed, measurements of usage play only a minimal role in both proposals. Users are given a large amount of freedom in directing the distribution of the revenue. This freedom is extremely problematic because it allows users to divorce the distribution of funds from their actual consumption. It is true that users in these proposals are in some sense paying for music, but they are not necessarily paying for the music they consume. This raises the question of fairness. Recall that a good tax-and-reward scheme embodies a compromise between those in favor of file sharing and the copyright holders who seek to protect their revenue streams. Neither Eckersley's proposal nor the Blur/Banff proposal will be able to satisfy many copyright holders, especially the popular artists whose music is widely consumed but also derided or criticized for being overvalued.

In some sense, both Eckersley and Love recognize that giving freedom to users may produce a disconnect between consumption and compensation. Eckersley, however, quickly dismisses any ill-effects of this as de minimis, while Love suggests that this disconnect may be desirable.

Eckersley writes, "A . . . possible cause of inaccurate preference revelation in a [voting scheme] is conscious misrepresentations of preferences in votes . . . . [I]n the absence of clear incentives to do otherwise, a combination of self-interest and cultural factors should

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183. *Id.* Session musicians, sometimes called "studio musicians," are musicians who work almost exclusively in a studio environment. They are typically employed when musical skills are needed on a short-term basis, such as playing violin on a track for a band that has no violinist, or providing vocal backing for an established artist or band.

make accurate voting a default behavior."[184] Love writes, "[The Blur/Banff proposal] would seek to liberate the art from the consequences of marketing art as a commodity."[185] The behavior that Eckersley so easily dismisses is exactly the behavior that Love is praising: users would be free to redirect revenue from the creators of "commercial" or "commodified" music to the creators of "artistic" music. To make this assertion more clear, let us return to our hypothetical user, Joe. Recall that Part III.A.4.a discussed several reasons why relying on Joe's downloads was not a good method of calculating his valuation of the music. One of the scenarios was the following: "Joe wants to be the kind of person that likes Indie music. Or more likely perhaps, Joe wants people to *think* that he likes Indie music. So Joe downloads every song Ani DiFranco has ever written. But secretly, when he is at home, he listens to The Misfits and Anthrax."[186] Under the Eckersley proposal, when Joe is prompted to vote, the fact that he has listened only to The Misfits and Anthrax will be made apparent to him. Perhaps Joe cares only about how others view his musical tastes, but privately he wants to support his favorite bands. In that case, Joe might very well vote in accordance with his usage. However, it is also equally possible that Joe feels guilty about his musical tastes. He may *want* to like Indie music, and he may like the *idea* of Indie music, and this may make him choose to support Indie music even though he himself never actually listens to it. Under the Eckersley proposal he could do this by simply overriding the default vote based on his usage and assigning his votes to Indie musicians instead. In the Blur/Banff proposal he would choose an intermediary that gave a high percentage of its funds to Indie musicians. Joe's behavior—his choice to support musicians he does not listen to—is not that odd. In fact, we see similar behavior in every day life. People buy lemonade at lemonade stands not because the lemonade is particularly good, but because they like the idea of kids selling lemonade at a lemonade stand.

An economist would say that the lemonade stand patron is still paying for something of value: perhaps the patron is paying for the experience of making a child happy, perhaps the patron is paying for the sense of nostalgia, or perhaps the patron is paying for the satisfaction of having done a charitable act. Whatever it may be, the point is that the patron finds something of value in the purchase, even if that valued item is not the lemonade. Arguing by analogy, Joe is "paying" for something

184. Eckersley, *supra* note 67, at 145.
185. Love, *supra* note 171, at 10.
186. *Supra* Part III.A.4.a (internal citations omitted).

of value, even if what he values is not the Indie music itself. There is, however, an important difference between the lemonade stand patron and Joe: the lemonade stand patron pays for the transaction with his money, whereas Joe, in a sense, pays with someone else's money. As demonstrated previously, tax-and-reward systems are zero-sum games. If artist *X* is overcompensated, then other artists are undercompensated. By choosing to support Indie musicians, Joe refuses to support the musicians he listens to. In the context of lemonade stands, this would be like ordering lemonade at Starbucks, but paying the money to the kid selling lemonade outside. In a sense, you paid for your lemonade, but you also redistributed wealth, which may be a good thing in your eyes, but probably not in the eyes of Starbucks.

Eckersley argues that "a combination of self-interest and cultural factors should make accurate voting a default behavior."[187] Here Eckersley uses the term "accurate" to mean in accordance with user consumption. Yet Eckersley also acknowledges that artists might try to manipulate these cultural factors "[i]n much the same way that successful street performers cajole their audiences into making payments."[188] He admits "[i]t could be argued that this creates an incentive distortion that disadvantages artists who are either unable or unwilling to guide their audiences in this manner,"[189] but then counters, "[the] argument is certainly valid, but perhaps it applies almost as extensively to copyright-based markets as it does to their virtual alternatives."[190]

Eckersley's rejoinder is not satisfactory for two reasons. First, it underestimates the ability of a vocal minority to make policy choices for a disinterested or unorganized majority. James Madison worried about the danger of factions, but he believed that a republican form of government would temper the ability of factions to influence the public or trample the rights of the minority.[191] Modern political scientists, however, have a more sophisticated view of the problem of tyranny of the minority.[192] They recognize that a well-organized minority can successfully influence the legislature (and thus set public policy). This is especially easy when those who disagree with the policy in question are too widely dispersed to engage in lobbying activities themselves or those

187. Eckersley, *supra* note 67, at 145.
188. *Id.*
189. *Id.*
190. *Id.*
191. THE FEDERALIST NO. 10 (James Madison).
192. *See, e.g.*, JAMES M. BUCHANAN ET AL., TOWARD A THEORY OF THE RENT-SEEKING SOCIETY (1980); John O. McGinnis, *The Original Constitution and Its Decline: A Public Choice Perspective*, 21 HARV. J.L. & PUB. POL'Y 195, 199-200 (1997).

who disagree with the policy do not disagree strongly enough to be moved to engage in lobbying activities. In Eckersley's proposal, at least, there is a real danger that "lobbying groups" might gain too much influence. Consider, for example, the reaction of Fionna Apple fans to rumors that her album was being "held hostage" by her record label.[193] It is quite reasonable to believe that the very same zeal that drove these fans to push for the release of Apple's album could be harnessed to generate a larger share of revenue for Apple. On the other hand, consider an artist whose fan base consists mostly of senior citizens, a group that has historically been resistant to adopt new technology.[194] It is also reasonable to believe that this group of fans either will not make a concerted effort to channel their votes towards the artist in question or will fail to use the technology in the first place, removing their preferences from the redistribution calculus altogether.

Eckersley's counterargument fails because it is ultimately nonresponsive. The argument that the same bias in favor of aggressive artists (or artists with aggressive fans) might apply as "extensively to copyright-based markets as it does to their virtual alternatives" does not address the real problem of users like Joe. Indubitably, artists who engage in aggressive marketing (or more commonly record labels that aggressively market their artists) fare better in the sense that they sell more albums. In this system, if artist *X* does better than artist *Y*, it is because more people listen to artist *X*. Moreover, it is not necessarily the case that the more fans that artist *X* has, the less fans artist *Y* has; artist *Y* could increase her revenue stream without diminishing artist *X*'s. On the other hand, in a system that distributes revenue on the basis of votes, if artist *X* receives more revenue than artist *Y*, then it may be because users, sympathetic to artist *X*, have *redistributed* wealth from artist *Y* to artist *X*. As we discussed above, that may not be a problem if the goal of an alternative compensation scheme is to provide public support for underappreciated artists. But if the goal of an alternative compensation scheme is to create a working substitute for the current copyright system that does not derogate the economic benefits currently reaped by copyright holders, then this redistribution is quite problematic.

As noted above, Love embraces the redistributive effects of the Blur/Banff proposal: "[The Blur/Banff proposal] would seek to liberate

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193. *See supra* text accompanying note 12.

194. *See* Satya Brink, *Digital Divide or Digital Dividend? Ensuring Benefits to Seniors from Information Technology*, *in* NATIONAL ADVISORY COUNCIL ON AGING, WRITINGS IN GERONTOLOGY: SENIORS AND TECHNOLOGY 17, 24 (2001), http://www.naca-ccnta.ca/writings_gerontology/writ17/pdf/techno17_e.pdf.

the art from the consequences of marketing art as a commodity."[195] Even though such redistributive effects derogate the economic rights of current copyright holders, Love's proposal can also be criticized from an internal perspective. That is, the Blur/Banff proposal would not really "liberate the art from the consequences of marketing art as a commodity."[196] The cajoling behavior discussed by Eckersley[197] might, ultimately, be no different than the aggressive marketing currently undertaken by the major record labels. Another possibility is that the intermediaries, in addition to the record labels, would engage in marketing, which might commodify music to a further degree. Ultimately, the Blur/Banff proposal might be better characterized as a form of public subsidization of art, as opposed to an alternative compensation scheme that creates an ersatz market.

Setting aside this observation momentarily, and giving both Eckersley's and the Blur/Banff proposal the benefit of the doubt, these two proposals might be successful if users sincerely tried to assess the value of the music they consumed and honestly acted accordingly. That is, if social norms became strong enough, and users voted or invested in accordance with the music they listen to, could either proposal serve as an ersatz market? Could either proposal meet the potential objections of the current rights holders? In the following discussion, it will become clear that the answer to both of these questions is no.

4. Contingent Value Is Not a Proxy for Demand

This discussion must begin by defining the terms sincerity and honesty. Sincerity occurs when a user makes an assessment of the value of the music in her library and does so on the basis of her actual listening preferences. This notion of sincerity is similar to that of Thomas Merton's conception: "A man of sincerity is less interested in defending the truth than in stating it clearly, for he thinks that if the truth can be clearly seen it can very well take care of itself."[198] It is also captured by Peter Berger:

> It would be a complete misunderstanding of what has just been said if the reader now thought that we are presenting a picture of society in which everybody schemes, plots and deliberately puts on disguises to fool his fellow men. On the contrary, role-playing and identity-building processes are generally unreflected and unplanned, almost automatic. The

195. Love, *supra* note 171, at 10.
196. *Id.*
197. Eckersley, *supra* note 67, at 145.
198. THOMAS MERTON, NO MAN IS AN ISLAND 10:8 (1955).

> psychological needs for consistency of self-image just mentioned ensure this. Deliberate deception requires a degree of psychological self-control that few people are capable of. That is why insincerity is rather a rare phenomenon. *Most people are sincere, because this is the easiest course to take psychologically.* That is, they believe in their own act, conveniently forget the act that preceded it, and happily go through life in the conviction of being responsible in all its demands. *Sincerity is the consciousness of the man who is taken in by his own act. Or as it has been put by David Riesman, the sincere man is the one who believes in his own propaganda.*[199]

Merton's notion of sincerity captures the idea that the sincere man believes that he has correctly assessed the world, he does not need to persuade anyone of his beliefs, nor defend them, any more than he would need to defend the assertion that two plus two equals four. Berger qualifies this notion by pointing out that a *sincerely* held belief is not necessarily a *true* belief.[200]

What does the assumption of sincerity look like in the context of our hypothetical user, Joe? It means that if he sincerely evaluates his preferences he will acknowledge that even though he *wants* to like Indie music, the truth is that he does not like it. Joe will admit that he prefers The Misfits and Anthrax to Indie music.

Honesty is the absence of intentionally deceptive or manipulative behavior. In the context of voting or investing, honesty is likened to good sportsmanship. An honest user will acknowledge the purpose of the alternative compensation system and will play according to both the law and the spirit of its rules. In Joe's situation, that means he will cast his votes for, or invest in, intermediaries that support the artists he likes: The Misfits and Anthrax.

Assuming that all users will sincerely assess their personal valuations of the music they listen to and that they will honestly cast their ballots or make investment choices accordingly, can either Eckersley's proposal or the Blur/Banff proposal create an ersatz market that mirrors consumer demand? The answer is, unfortunately no. The reason stems from the fundamental flaw associated with any form of CVM.

To understand why this is, let us return to Berger's qualification of sincerity: A *sincerely* held belief is not necessarily a *true* belief. It is this disconnect between *sincerity* and *honesty* that prevents measures of contingent value from being proxies for consumer demand. There is an old joke that illustrates this point: Two economists are driving in a VW

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199. PETER L. BERGER, INVITATION TO SOCIOLOGY: A HUMANISTIC PERSPECTIVE 109 (1963) (emphasis added).

200. *Id.*

bug on their way to a conference. As they are sitting at a stoplight a cherry red Ferrari pulls up next to them. The driver of the VW bug says to his passenger, "Man, I'd give anything for one of those." The other economist pats the dash board of the bug and says, "Obviously, you wouldn't."

The joke is only funny if you understand that the second economist, the passenger, is invoking the theory of revealed preferences. That theory dictates that the best way to determine the value a person assigns to an object is not to ask them, but to look at their spending habits. If the driver of the VW really would "give anything" to own a Ferrari, he would do so; the fact that he is still driving his VW bug demonstrates that he does not value the Ferrari as much as he says he does. This same principle is found in the following hackneyed adages: "If you're going to talk the talk, you better be able to walk the walk," "Put your money where your mouth is," and "Talk is cheap."

The point of all this is that in a world where music is a market good, it is easy to determine consumers' revealed presence. If a consumer buys an album at the market price then she values it at least that much; if the consumer does not purchase the album, she values it less than the market price. But all tax-and-reward schemes necessarily transform music from a market good into a nonmarket good. CVM has been widely criticized on the ground that people are just not very good at assessing how much they value nonmarket goods.[201] This is not to deny that consumers can tell the difference between their obvious likes and obvious dislikes. Some people love anchovies, some people hate them. And the people that hate them still would not consume them even if anchovies suddenly became a free nonmarket, nonscarce good. The problem with any CVM, however, arises when consumers are asked to judge the "close calls," that is, when consumers must rank goods that are close in value.

Consider the BBC radio program, *Desert Island Discs*. Each week the host of the program invites a different famous or influential person to be a guest on the show. The guest is asked to choose eight and only eight

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201. *See, e.g.*, Donald J. Boudreaux et al., *Talk Is Cheap: The Existence Value Fallacy*, 29 ENVTL. L. 765, 783 (1999) ("The entire notion of contingent value rests on a mistaken understanding of the nature of prices."); Donald J. Boudreaux & Roger E. Meiners, *Existence Value and Other of Life's Ills*, *in* WHO OWNS THE ENVIRONMENT? 153, 158-61 (Peter J. Hill & Roger E. Meiners eds., 1998) (discussing failures of CVM in the context of environmental public goods); Peter A. Diamond & Jerry A. Hausman, *Contingent Valuation: Is Some Number Better than No Number?*, J. ECON. PERSP., Winter 1994, at 45 (discussing the flaws of contingent value surveys); Charles J. Cicchetti & Neil Peck, *Assessing Natural Resource Damages: The Case Against Contingent Value Survey Methods*, NAT. RESOURCES & ENV'T, Spring 1989, at 6 (discussing the problems with using CVM in legally contested proceedings).

pieces of music they would take with them if they were to be stranded on a desert island.[202] The host probes the guest on his or her choices and uses them as an entry to significant moments or events in the guest's life.[203] *Desert Island Discs* was first broadcast on January 29, 1942, and has been on the air ever since.[204] The key to the enduring success of *Desert Island Discs* lies in this: what people choose to listen to tells us much about who they are. The program would not be nearly as interesting if it were not difficult to make the decision about which eight musical works to bring on the hypothetical island. And if it is difficult to choose eight songs that one values above all others, imagine how much harder it would be to divide into ranks everything else in a music library.

What this tells us is that, even assuming that users will be sincere and honest in their voting/investing behavior, there is no assurance that such behavior will mirror people's actual valuations. Thus, like the proposals discussed in Part III, with the Eckersley and Blur/Banff proposals there is also a fundamental disconnect between market allocation and the manner in which the funds are divided under the proposals.

## IV. THE AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY

Setting aside the issues of fairness discussed above, this Part will analyze the alternative compensation schemes[205] along a different axis: compliance with international copyright law. Though there are several treaties that could be analyzed, the Agreement on Trade Related Aspects of Intellectual Property (TRIPs) is the most important.

### *A. TRIPs: A Brief Introduction*

TRIPS contains many provisions potentially applicable to the schemes described above. In order to limit the scope of this Article, however, only articles 13 and 14 of the TRIPs Agreement will be analyzed.

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202. Guests are also asked to choose one book (excluding the Bible and the works of Shakespeare) and one "luxury" item which must be inanimate and have no practical use.

203. To listen to an episode of *Desert Island Discs*, visit BBC Radio Web Site, http://www.bbc.co.uk/radio4/factual/desertislanddiscs.shtml (last visited Nov. 9, 2006).

204. According to the Guinness Book of Records, *Desert Island Discs* is the longest running music program in the history of radio.

205. The following analysis, of course, does not pertain to noncompulsory licensing schemes such as Noank Media, Inc., founded by Harvard Law professors William Terry Fisher and Paul Hoffer. *See* Noank Media, http://www.noankmedia.com (last visited Mar. 27, 2007).

### *B. Article 14*

Article 14, entitled *Protection of Performers, Producers of Phonograms (Sound Recordings) and Broadcasting Organizations*, covers all sound recordings, including recordings that are in digital format, such as MP3s. In pertinent part, it reads: "2. Producers of phonograms shall enjoy the right to authorize or prohibit the direct or indirect reproduction of their phonograms."[206]

Section 2 creates an immediate problem for Fisher's and Netanel's proposals. Under their tax-and-reward schemes, users are free to download music files that have been copied without the permission of the right holder. The whole point of the system is to stop the negative effects of legal battles by shifting the consumption model from a market system to a tax-and-reward system.[207] Copyright holders are not compelled to register their works with the system nor are they restrained from making and selling authorized copies. They are, however, restrained from suing users who download their works. Registration is the only way for them to receive money from the tax-generated revenue. It seems obvious that a tax-and-reward system diminishes the right to "prohibit the direct or indirect reproduction of their phonograms." Having concluded that the proposals violate article 14, section 2, the next question is whether the scheme can be justified by the "exceptions" provision: "Any Member may, in relation to the rights conferred under paragraphs 1, 2 and 3, provide for conditions, limitations, exceptions and reservations to the extent permitted by the Rome Convention."[208]

Article 14 thus allows that there be some variance from section 2's strict prohibition, but article 14 does not describe the bounds of that variance. That is the function of article 13.

### *C. Article 13*

Entitled *Limitations and Exceptions*, article 13 reads: "Members shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder."[209]

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206. Agreement on Trade-Related Aspects of Intellectual Property Rights, art. 14, § 2, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round, 33 I.L.M. 1125, 1197 (1994) [hereinafter TRIPs].

207. *See id.*

208. *Id.* art. 14, § 6.

209. *Id.* art. 13.

The conditions set forth in article 13 are commonly referred to as "the three-step test." Each of the prongs is independent from the others. That is, it is possible to have an exception that complies with the "special case" prong but not the "normal exploitation prong." The prongs are also necessary conditions on exceptions: failure to comply with any one of the three conditions makes the exception impermissible.

This Article's interpretation of article 13 is based on the only Dispute Settlement Body (DSB) report in which the article 13 three-step test has been interpreted with regard to copyright: European Community-United States: section 110(5) of U.S. Copyright Act (the "Section 110(5) Dispute").[210] In this dispute, the European Community (EC) filed a formal complaint with the WTO alleging that the United States had created exceptions to copyright when it amended section 110(5) of the United States Copyright Act of 1976, by enacting the Fairness in Music Licensing Act (FMLA),[211] which allowed small businesses to retransmit, perform, or display musical works without having to pay royalties or licensing fees.[212]

Note that the DSB is not bound by prior precedent. That is, future interpretations of treaties are not confined to the interpretations of past DSB panel reports (decisions).[213] Nevertheless, while the DSB is formally free to assert a new interpretation of the article 13 three-step test, from a legal realist perspective, its past interpretations remain the best available guide to future interpretations.[214] Because the panel report in the Section 110(5) Dispute is the only report that discusses article 13, it is worth a closer look.

1. A (Very) Brief Overview of the Section 110(5) Dispute

The FMLA amended section 110(5) of the Copyright Act of 1976 by (1) narrowing an exemption already contained in the unamended Act and (2) adding a new exemption. The exemption contained in the unamended Act was known as the "homestyle exemption."[215] This

210. Panel Report, *United States—Section 110(5) of the U.S. Copyright Act*, ¶¶ 6.108-.110, WT/DS160/R (June 15, 2000), *available at* http://www.wto.org/english/news_e/news00_e/1234da.pdf [hereinafter Section 110(5) WTO Panel Report].

211. Fairness in Music Licensing Act of 1998, Pub. L. No. 105-298, §§ 202-205, 112 Stat. 2827, 2830-2834 (codified as amended in scattered sections of 17 U.S.C.).

212. Section 110(5) WTO Panel Report, *supra* note 210.

213. Understanding on Rules and Procedures Governing the Settlement of Disputes, WTO Agreement, art. 19.

214. *See* Raj Bhala, *The Myth About Stare Decisis and International Trade Law (Part One of a Trilogy)*, 14 AM. U. INT'L L. REV. 845 (1999) (arguing the stronger thesis that the DSB operates according to the principle of stare decisis).

215. 17 U.S.C. § 110(5)(A) (2000).

exemption allowed businesses to retransmit works over a "single receiving apparatus of a kind commonly used in private homes,"—a basic boom box, or single speaker radio—without paying royalties or licensing fees.[216] The FMLA narrowed the scope of the homestyle exemption by excluding performances or displays of "dramatic musical works"[217] from its scope.[218]

The second effect of the FMLA, and the one significant to the WTO dispute, was to add a second, new exemption, which became known as the "business exemption."[219] As the short name suggests, the new exemption allowed certain business establishments, under certain conditions, to transmit or retransmit performances or displays of nondramatic musical works intended to be received by the general public, to the patrons of their establishments.[220] To qualify for either the homestyle or business exemption, businesses could not charge patrons a fee to view or hear the transmission/retransmission (for example, a sports bar could not charge a fee to see the Super Bowl broadcast) and said transmission could not be rebroadcast.[221] Finally, neither exemption allowed businesses to use recorded music, such as CDs.[222]

A House Report that accompanied the Copyright Act of 1976 explained that, as originally intended, section 110(5)

> applies to performances and displays of all types of works, and its purpose is to exempt from copyright liability anyone who merely turns on, in a

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216. *Id.*

217. Dramatic musical works would include renditions of music written for an opera and broadcasts of musicals. A single song taken from a musical and played in isolation, however, would not count as a dramatic musical work. While neither the Copyright Act nor Supreme Court case law defines "dramatic musical work," both parties to the Section 110(5) Dispute agreed that "the expression 'nondramatic musical works' in subparagraph (B) excludes from its application the communication of music that is part of an opera, operetta, musical or other similar dramatic work when performed in a dramatic context." Section 110(5) WTO Panel Report, *supra* note 210, ¶ 2.8.

218. Fairness in Music Licensing Act of 1998, Pub. L. No. 105-298, § 202(a)(1)(A), 112 Stat. 2827, 2830 (codified as amended at 17 U.S.C. § 110(5)). The FMLA reproduced the text of the original "homestyle" exemption contained in the unamended section 110(5) but moved that text to a new subparagraph (A) and added the words, "except as provided in subparagraph (B)." Because subparagraph (B) applied to "a performance or display of a *nondramatic* musical work," the FMLA's addition of the introductory phrase "except as provided in subparagraph (B)" effectively narrowed the scope of the homestyle exception to *exclude* dramatic musical works.

219. *Id.* § 202(a)(1)(B).

220. 17 U.S.C. § 110(5)(A).

221. Fairness in Music Licensing Act of 1998, Pub. L. No. 105-298, § 202(a)(1)(B)(iii)-(iv), 112 Stat. 2827, 2831 (codified as amended at 17 U.S.C. § 110(5)).

222. *Id.* § 202(a)(1)(B). The exemption applied only to performances or displays that "originated by a radio or television broadcast station licensed as such by the Federal Communications Commission, or, if an audiovisual transmission, by a cable system or satellite carrier." *Id.*

> public place, an ordinary radio or television receiving apparatus of a kind commonly sold to members of the public for private use. The basic rationale of this clause is that the secondary use of the transmission by turning on an ordinary receiver in public is so remote and minimal that no further liability should be imposed.[223]

A later Conference Report elaborated on the rationale by noting that the intent was to exempt a small commercial establishment "which was not of sufficient size to justify, as a practical matter, a subscription to a commercial background music service."[224]

In response to the FMLA, the EC lodged a formal complaint with the WTO, arguing that (1) the homestyle and business exemptions of section 110(5) violated various articles of TRIPs, specifically, article 9.1 of TRIPs together with articles 11(1)(ii) and 11bis(1)(iii) of the Berne Convention (1971) (as incorporated into TRIPs); and (2) such exemptions could not be justified under any express or implied exception or limitation permissible under the Berne Convention (1971) or article 13 of TRIPs.[225] The DSB formed a panel to adjudicate the complaint. The panel agreed that the exceptions to copyright granted by FMLA clearly violated article 14. The DSB panel then focused its analysis on whether the exceptions were covered by article 13.

As we discussed above, it is likely that a DSB panel would find that the tax-and-reward proposals clearly violate provisions of TRIPs, most notably article 14. Thus, as in the Section 110(5) Dispute, the acceptability of the tax-and-reward schemes will hinge on whether the exceptions they create pass the article 13 three-step test.

### 2. "Certain Special Cases"

#### a. The Panel's Interpretation

In interpreting the first prong of the three-step test, the Section 110(5) Dispute panel relied on the ordinary meanings of the words *certain*, *special*, and *case*:

> The ordinary meaning of "certain" is "known and particularised, but not explicitly identified", "determined, fixed, not variable; definitive, precise, exact". In other words, this term means that, under the first condition, an exception or limitation in national legislation must be clearly defined. . . .

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223. H. REP. NO. 94-1476, at 86 (1976).
224. H. REP. NO. 94-1733, at 75 (1976) (Conf. Rep.).
225. Section 110(5) WTO Panel Report, *supra* note 210, ¶ 3.1.

> . . . The term "special" connotes "having an individual or limited application or purpose", "containing details; precise, specific", "exceptional in quality or degree; unusual; out of the ordinary" or "distinctive in some way". This term means that more is needed than a clear definition in order to meet the standard of the first condition. In addition, an exception or limitation must be limited in its field of application or exceptional in its scope. In other words, an exception or limitation should be narrow in quantitative as well as a qualitative sense. This suggests a narrow scope as well as an exceptional or distinctive objective. . . .
>
> The ordinary meaning of the term "case" refers to an "occurrence", "circumstance" or "event" or "fact". For example, in the context of the dispute at hand, the "case" could be described in terms of beneficiaries of the exceptions, equipment used, types of works or by other factors.[226]

From this interpretation we can glean that to determine whether an exception passes the first "special case" prong, we must ask three questions:

1. Is the exception well defined, in that it is fixed and particularized?
2. Is the exception qualitatively narrow in scope?
3. Is the exception quantitatively narrow in scope?

What does it mean to be qualitatively and quantitatively narrow? The Section 110(5) Dispute panel summarized its interpretation as follows: "In our view, the first condition of article 13 requires that a limitation or exception in national legislation . . . should be narrow in its *scope* and *reach*."[227] However, this is not a particularly helpful analysis. While the panel's positive analysis of the definitions of qualitative and quantitative narrowness were lacking, the panel's negative limitations on the definitions were more thorough. In regard to what qualitatively narrow does *not* mean, the panel wrote:

> As regards the parties' arguments on whether the public policy purpose of an exception is relevant, we believe that the term "certain special cases" should not lightly be equated with "special purpose". It is difficult to reconcile the wording of Article 13 with the proposition that an exception or limitation must be justified in terms of a legitimate public policy purpose in order to fulfill the first condition of the Article.
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> . . . [A] limitation or exception may be [a special case] even if it pursues a special purpose whose underlying legitimacy in a normative sense cannot be discerned. The wording of Article 13's first condition does

226. *Id.* ¶¶ 6.108-.110.
227. *Id.* ¶ 6.112.

> not imply passing a judgment on the legitimacy of the exceptions in dispute. However, public policy purposes stated by law-makers when enacting a limitation or exception may be useful from a factual perspective for making inferences about the scope of a limitation or exception or the clarity of its definition.[228]

Thus, the qualitative narrowness of an exception is entirely divorced from its normative purpose. It does not matter if there is an overriding public policy rationale for an exception in terms of determining a *special* case.[229]

In regard to *quantitative* scope, the panel emphasized the empirical data about the scope of the exception. The panel in the Section 110(5) Dispute relied heavily on information about the number of beneficiaries that would qualify for the exemption relative to the number that would not:

> [W]e ascertain whether the exemptions are narrow in scope, *inter alia*, with respect to their reach. In that respect, we take into account what percentage of eating and drinking establishments and retail establishments may benefit from the business exemption under subparagraph (B), and in turn what percentage of establishments may take advantage of the homestyle exemption under subparagraph (A). On a subsidiary basis, we consider whether it is possible to draw inferences about the reach of the business and homestyle exemptions from the stated policy purposes underlying these exemptions according to the statements made during the US legislative process.[230]

Thus, quantitative does not refer to the actual number of people who benefit from the exemption, but rather the potential number of beneficiaries.

b. Are the Tax-and-Reward Proposals Special Cases?

Having analyzed the meaning of the first prong of the article 13 test, we are now in a position to determine whether a tax-and-reward proposal can meet it. On its face, the alternative compensation scheme creates an exemption far broader than a special case because it is not qualitatively narrow. The exemption from the degradation of the copyright holder's control over unauthorized copying affects all published

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228. *Id.* ¶¶ 6.111-.112.

229. There is one small caveat. Lawmaker's intentions can come into play "from a factual perspective," that is, when the statements are useful "for making inferences about the scope of a limitation or exemption or the clarity of its definition." Thus, in assessing narrowness, a panel might draw inferences about the reach of the exemptions from the legislative history of the exemption.

230. Section 110(5) WTO Panel Report, *supra* note 210, ¶ 6.113.

musical works; and the beneficiaries of this degradation do not need to meet any special criteria that would make it qualitatively narrow (for example, an exemption which allowed blind persons to make Braille translations of published works would probably count as a special case). Further, the exemption is not qualitatively narrow. The class of potential beneficiaries is boundless.

Because the copyright holders are remunerated, the system is akin to a compulsory license, which the three-step test permits.[231] However, even compulsory licenses must meet the special case prong. India, for example, has a system of compulsory licenses to foster the translation of works.[232] However, before a work can be translated and republished without the copyright holder's permission, the would-be translator/ publisher has to meet a specific limited set of requirements.[233] These requirements narrow the reach of the compulsory license placing it within the scope of a special case. Thus, even if the tax-and-reward scheme could be sufficiently likened to a compulsory license, it would still be a "general license affecting the whole right of reproduction [and thus] lies beyond the scope of the three-step test."[234] The fact that the copyright holder is remunerated is irrelevant vis-à-vis the special case prong, though, as we shall see in Part IV.C.4, it is important to the "unreasonable prejudice prong."

Having found that the alternative compensation scheme does not qualify as a special case, the TRIPs analysis could stop here, as failure to meet any of the prongs of the three-step test places the exemption outside of the scope of article 13. However, like the Section 110(5) Dispute panel did, this Article will analyze the alternative compensation schemes under the other two prongs.

3. No "Conflict with a Normal Exploitation of the Work"

In analyzing the second step of article 13, the DSB panel again began by defining the terms:

> The ordinary meaning of the term "exploit" connotes "making use of" or "utilising for one's own ends". . . .
>
> We note that the ordinary meaning of the term "normal" can be defined as "constituting or conforming to a type or standard; regular, usual, typical, ordinary, conventional . . .". In our opinion, these definitions

231. MARTIN SENFTLEBEN, COPYRIGHT, LIMITATIONS AND THE THREE-STEP TEST: AN ANALYSIS OF THE THREE-STEP TEST IN INTERNATIONAL AND EC COPYRIGHT LAW 75-83 (2004).

232. Copyright Act, 1957, tits. 31A, 32 (1999) (India).

233. *Id.*

234. SENFTLEBEN, *supra* note 231, at 80.

> appear to reflect two connotations: the first one appears to be of an empirical nature, i.e., what is regular, usual, typical or ordinary. The other one reflects a somewhat more normative, if not dynamic, approach, i.e., conforming to a type or standard. We do not feel compelled to pass a judgment on which one of these connotations could be more relevant. Based on Article 31 of the Vienna Convention, we will attempt to develop a harmonious interpretation which gives meaning and effect to both connotations of "normal".
>
> If "normal" exploitation were equated with full use of all exclusive rights conferred by copyrights, the exception clause of Article 13 would be left devoid of meaning. *Therefore, "normal" exploitation clearly means something less than full use of an exclusive right.*[235]

Note that it is not only *commercial* uses of a work that can conflict with the normal exploitation of the work: the panel allows for the possibility that noncommercial uses might be in conflict. Thus, even if the alternative compensation scheme would not allow users to *sell* unauthorized copies, that fact would likely be irrelevant:

> On the basis of the information provided to us, we are not in a position to determine that the minor exceptions doctrine justifies only exclusively non-commercial use of works and that it may under no circumstances justify exceptions to uses with a more than negligible economic impact on copyright holders. On the other hand, non-commercial uses of works, e.g., in adult and child education, may reach a level that has a major economic impact on the right holder. At any rate, in our view, a non-commercial character of the use in question is not determinative provided that the exception contained in national law is indeed minor.[236]

The second factor that is significant is that copyright holders normally have exclusive rights over primary *and* secondary uses of published material vis-à-vis publication. That is, while the first sale doctrine bars copyrights from interfering with the used CD market, it does not keep copyright holders from enjoining consumers from republishing a CD without authorization. The United States, in the Section 110(5) Dispute, attempted to persuade the DSB that this distinction was important. It argued that the difference between the original broadcast on the radio and the business's playing of that transmission over its sound system was significant because most copyright holders *expected* that the primary exploitations of the work would generate the majority of their income as opposed to the secondary exploitations. The United States thus reasoned that whether an exemption interfered only with secondary uses is relevant

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235. Section 110(5) WTO Panel Report, *supra* note 210, ¶¶ 6.165-.167 (emphasis added).
236. *Id.* ¶ 6.58.

to whether the exemption passes the no conflict prong.[237] The DSB rejected this line of reasoning: because TRIPs provides for exclusive rights over both primary and secondary exploitations of copyrighted works, *all* exemptions to exclusive rights must pass each prong of the three-part test.[238]

The lesson of this discussion is that any new exemptions to copyright must consider the effects of that exemption when markets for secondary exploitation already exist. In the case at hand, such secondary markets do exist in the form of venues that sell authorized digital copies. These include (1) services such as iTunes, which sell single copies that the consumer is free to place on her hard drive or portable MP3 player, or burn to CD format, and, (2) subscription-streaming services, which are akin to radio in that consumers are provided with a stream of music, but not a copy (physical or digital). Thus, it is unlikely that an alternative compensation scheme would pass the second prong of article 13.

4. "Unreasonable Prejudice to the Legitimate Interests of the Right Holder"

The Section 110(5) Dispute panel began, as it did with the other two prongs, with definitions:

> The ordinary meaning of the term "interests" may encompass a legal right or title to a property or to use or benefit of a property (including intellectual property). It may also refer to a concern about a potential detriment or advantage, and more generally to something that is of some importance to a natural or legal person. *Accordingly, the notion of "interests" is not necessarily limited to actual or potential economic advantage or detriment.*
>
> The term "legitimate" has the meanings of "(a) conformable to, sanctioned or authorized by, law or principle; lawful; justifiable; proper; (b) normal, regular, conformable to a recognized standard type." Thus, the term relates to lawfulness from a legal positivist perspective, but it has also the connotation of legitimacy from a more normative perspective, in the context of calling for the protection of interests that are justifiable in the light of the objectives that underlie the protection of exclusive rights.
>
> We note that the ordinary meaning of "prejudice" connotes damage, harm or injury. "Not unreasonable" connotes a slightly stricter threshold than "reasonable". The latter term means "proportionate", "within the

237. *Id.* ¶ 6.168.
238. *Id.* ¶ 6.171.

> limits of reason, not greatly less or more than might be thought likely or appropriate", or "of a fair, average or considerable amount or size".[239]

In the Section 110(5) Dispute, the United States did not question the "legitimacy" of the copyright holders' interests in exercising their rights for economic gain. The question was essentially whether the copyright holders' interests extended to exploiting their rights in secondary uses. Based on the panel's interpretation of "normal exploitation" vis-à-vis secondary exploitations, it is likely that the panel would decide that the copyright holder's interest in secondary exploitations is legitimate.[240]

Deciding that an interest is legitimate is only the first step in the analysis. A legitimate right may still be negatively affected, provided that the negative effect is not *unreasonable*. Thus we must ask whether the effects of the alternative compensation scheme are unreasonable.

As with the analysis of "quantitatively narrow," analysis of "unreasonableness" relies on empirical evidence. Loss of income is vital to determining whether an exception that affects the pecuniary interest of the right holder has been prejudiced. The Section 110(5) Dispute panel specifically noted that "prejudice to the legitimate interest of right holders reaches an unreasonable level if an exemption or limitation causes or has the potential to cause an unreasonable loss of income."[241]

As mentioned in Part IV.C.1, this is where remuneration becomes important. In theory, the alternative compensation scheme is supposed to serve as a reasonable proxy for the current market in terms of revenue distribution. If, in practice, this holds true, that is, if right holders actually do make the same amount of money or more from the exploitation of their works under the alternative compensation scheme, then such a scheme might very well pass this prong of the test.

### *D. Summation*

The alternative compensation system violates at least one provision of TRIPs, namely article 14. Such a scheme does not fall within the scope of article 13 because it fails two of the prongs of article 13's three-

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239. *Id.* ¶¶ 6.223-.225 (emphasis added) (internal quotations omitted).

240. The DSB panel used "legitimate" in the descriptive rather than normative sense of the word, distinguishing between rights explicitly conferred by the system of copyright and de facto advantages that such rights sometimes produce.

The difference between legitimate rights and de facto advantages can be most clearly seen in the context of patent law. With complex or state-regulated patented inventions, a patent holder often has a de facto market monopoly for a period after the legally mandated monopoly (the life of the patent) has expired. The patentee's interest in this post-patent market exclusivity is not a "legitimate" interest protected by TRIPs.

241. Section 110(5) WTO Panel Report, *supra* note 210, ¶ 6.229.

step test. But given that the problems with the status quo (rampant uncompensated file trading and expensive, inefficient, and, ultimately, ineffective litigation tactics), one should not give up hope on the alternatives. In the last Part of this Article, several possible avenues for developing such alternatives will be suggested.

## V. CONCLUSION

Part III.A of this Article explored the reasons why measuring the number of downloads did not effectively measure consumer demand.[242] The main thrust of the argument was that once consumers have paid into the system (in the form of taxes), there is no price difference between downloading one song or one million songs. Thus, downloads were not really a scarce resource, like money, that consumers would be forced to allocate. Fisher acknowledged this problem, which is why he proposed that an alternative compensation system distribute revenue on the basis of how many times a song is *played*. Fisher argued that because time, like money, is a scarce resource, it can serve as a proxy for money:

> By observing what [consumers] are listening to . . . we can get a decent sense of what they value. (In effect, something like the price system is at work here. Consumers are paying with their time for particular products. Put differently, the cost to them of watching a particular film is the associated opportunity cost—the pleasure they could reap from watching a different film or engaging in some other activity.)[243]

Despite time's scarcity, it still does not serve as an adequate proxy for money, because people can assign a high aesthetic value to a piece of art without wishing to engage it frequently.[244] Netanel's proposal combined both a measure of downloads and of frequency of play. Combining two measures did nothing to solve the problem, however, because of the zero-sum nature of the compensation system. Overcompensation problems, as we learned, are also undercompensation problems and instead of one bad effect canceling out the other, each problem compounded the other.

The Eckersley and Blur/Banff proposals intended to avoid these difficulties by *asking* consumers to assess the value we assigned. Part III.B of the Article explored whether these proposals, which essentially rely on some form of contingent value methodology, were capable of solving the problems raised by reliance usage. Using contingent value as a basis for tracking consumer demand took us even further away from

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242. *Supra* Part III.A.4.a.
243. FISHER, *supra* note 66, at 224.
244. *Supra* Part III.A.

our goal of finding an alternative compensation scheme that adequately mirrored the current market system. Finally, Part IV put aside all the theoretical difficulties with the alternative compensation proposals and looked at the very real pragmatic difficulty of reconciling these proposals with international law.

This Article began with the assumption that the status quo is unsatisfactory for current copyright holders, music industry critics, and those concerned with technological innovation. And yet the ultimate conclusion of the Article seems to be that a system of legalized file sharing is unworkable. This negativity, however, may be seen in a more positive light. Tax-and-reward proposals are just one form of alternative compensation schemes. Having excluded one solution to the problem of unauthorized file sharing does not remove other solutions from the realm of possibility. Indeed, by critiquing one solution, this Article may help academics, policy analysts, and governments focus their efforts on other viable solutions, such as working with the music industry to adopt voluntary changes, or with the legislature to create a compulsory licensing system.

Ultimately, the former option, encouraging the industry to adopt voluntary changes, is the most plausible one and most likely to help artists in the long run. Already we have seen many changes in the recording industry's approach to the digital distribution of music. As long as online music delivery systems such as iTunes and Rhapsody continue to prove their market viability, the recording industry will become more interested in working with digital distributors, instead of against them. This should not frighten anti-industry critics. If it turns out that free distribution helps emerging artists establish themselves, there is nothing to prevent these artists from distributing their works over the same channels without cost. Moreover, the "long-tail" economics described by Anderson suggests that as more music is offered in online catalogues, a greater number of artists, even obscure artists, stand to benefit.