



Before the
United States House of Representatives Committee on the Judiciary
Subcommittee on Courts, Intellectual Property, and the Internet
Regarding
“Innovation in America: The Role of Copyrights”
July 25, 2013
Statement of the
Computer & Communications Industry Association

The Computer & Communications Industry Association (CCIA) represents large, medium-sized, and small companies in the high technology products and services sectors, including computer hardware and software, electronic commerce, telecommunications and Internet products and services – companies that collectively generate more than \$250 billion in annual revenues.¹ CCIA requests that this statement be included in the record of this hearing.

I. Introduction

The announcement of these hearings indicated a focus on “the positive roles copyrights and technology play in innovation in the U.S.,” and also quoted Chairman Goodlatte and Subcommittee Chairman Coble’s stated intention to focus on “the important role that both the copyright and technology industries play in our nation.” The role of copyright in innovation and the role of these industries in the economy are two very different issues, however. The latter is a relatively straightforward question amenable to objective analysis. Once the contours of the relevant industries are identified, government data concerning them can be gathered and studied. Although there may be some debate concerning what are the “copyright industries,” an economist preparing a report on this topic would disclose the industries she considers to be copyright industries and the information she presents concerning that set of industries (e.g., employment, growth, contribution to GDP, etc.) would be objective and verifiable.

In contrast, the role of copyright in promoting innovation is extremely difficult to quantify. Although encouraging the creation of works is the Constitutional purpose of copyright,

¹ A complete list of CCIA members is available at <http://www.cciagnet.org/members>.

economists have few tools to determine how much innovative activity is attributable to copyright as opposed to other factors, such as competition and the desire for reputational benefit. This inability to quantify the true impact of copyright on innovation makes it difficult for policymakers to make an informed decision on the optimal levels of copyright protection.

This statement offers observations on both questions: the role of the copyright industries in the U.S. economy and the role of copyright in innovation. It identifies difficulties in arriving at any causal conclusions about the specific role of copyright in innovation, and calls for more objective, peer-reviewed research on copyright-policy related issues.

II. The Role of the Copyright Industries in the U.S. Economy

Regardless of how they are defined, the copyright industries play a significant role in the U.S. economy. While the traditional “core” copyright industries – motion pictures, music, and publishing – are relatively small, the software industry is very large, and many other sectors of the information and computer technology industry may arguably be considered copyright industries. Indeed, for this reason, the structure of these hearings may inadvertently imply a false dichotomy between the copyright and tech industries, when in fact there is a degree of both overlap and symbiosis between the two.

However defined, the U.S. copyright industries are healthy. While some copyright industry representatives have claimed that the Internet poses an existential threat to the health of these industries, the evidence shows the opposite. According to the Department of Commerce study *Intellectual Property and the U.S. Economy: Industries in Focus*, employment in copyright-intensive industries increased by 46.3 percent between 1990 and 2011.² A study commissioned by CCIA from analysts at Floor64 found that “[b]y any measure, it appears that we are living in a true Renaissance era for content. More money is being spent overall. Households are spending more on entertainment. And a lot more works are being created.”³ During the first decade of this century, the entertainment industry’s global revenue increased 50 percent. The value of the global music industry rose from \$132 billion in 2005 to \$168 billion in 2010. The value of the global entertainment industry grew from \$449 billion in 1998 to \$745

² Economics and Statistics Administration & U.S. Patent and Trademark Office, U.S. Department of Commerce, *Intellectual Property and the U.S. Economy: Industries in Focus* (2012), at vii.

³ Michael Masnick & Michael Ho, *The Sky is Rising* (Floor64 2012), available at <http://www.cciagnet.org/CCIA/files/ccLibraryFiles/Filename/000000000586/TheSkyIsRising7-130.pdf>.

billion in 2010.⁴ A study issued in June 2013 found that firms in copyright-intensive industries were significantly more profitable than firm in other industries. Additionally, in the ten-year period between 2003 and 2012, the copyright-intensive industries' profit margins on average grew by 3.98%, while the other industries' profit margins on average decreased by 0.75%.⁵

Similarly, the Congressional Research Service (CRS) issued a report on December 9, 2011, concerning the financial condition of the U.S. motion picture industry.⁶ The report found the motion picture industry to be in good health, undercutting claims that online infringement is causing economic devastation. It noted that the motion picture and sound recording industry's value-added share of GDP (0.4%) did not change between 1995 and 2009, suggesting that infringement has not substantially harmed these industries relative to the U.S. economy as a whole. The report also found that gross revenues for the motion picture and sound recording industries grew from \$52.8 billion in 1995 to \$104.4 billion in 2009, that box office revenues for the U.S. and Canada rose from \$5.3 billion in 1995 to \$10.6 billion in 2010, and box office receipts have been growing faster abroad, suggesting a limited impact of foreign infringement on ticket sales. It reported that, according to the Census Bureau, the industry's after-tax profit increased from \$496 million for the second quarter of 2010 to \$891 million for the second quarter of 2011. It also noted that CEO pay has increased significantly over the past 15 years: Walt Disney Company, \$10 million in 1994 to \$29.6 million in 2010; and Time Warner, \$5 million in 1994 to \$26.3 million in 2010. Other industry CEOs also received generous compensation in 2010: News Corp., \$33.3 million; Viacom, \$84.5 million; and NBC Universal, \$21.4 million. In sum, the CRS reported that the financial condition of the U.S. motion picture industry is very solid.⁷

⁴ Derek Slater & Patricia Wruuck, *We Are All Content Creators Now*, The Global Innovation Index 2012, available at http://www.wipo.int/export/sites/www/econ_stat/en/economics/gii/pdf/chapter11.pdf.

⁵ Jonathan Band & Jonathan Gerafi, *Profitability of Copyright Intensive Industries* (2013), available at <http://infojustice.org/archives/29916>.

⁶ Memorandum from Sue Kirchhoff, Congressional Research Service, to Senator Ron Wyden, Dec. 19, 2011, available at <http://www.techdirt.com/articles/20111212/02244817037/congressional-research-service-shows-hollywood-is-thriving.shtml>.

⁷ Motion picture ticket sales have continued to surge since the release of the CRS report. International motion picture tickets in 2011 increased three percent over 2010 and 35 percent over 2006. Richard Verrier, *International movie ticket sales reach new peak in 2011*, L.A. TIMES, March 25, 2012, available at <http://latimesblogs.latimes.com/entertainmentnewsbuzz/2012/03/international-movie-ticket-sales.html>. The Chinese box office grew 35% in 2011 and 36% in 2012. Motion Picture Association of America, *Theatrical Movie Statistics 2011*, available at <http://www.mpa.org/resources/5bec4ac9-a95e-443b-987b-bff6fb5455a9.pdf>; *Theatrical Movie Statistics 2012* available at <http://www.mpa.org/resources/3037b7a4-58a2-4109-8012-58fca3abdf1b.pdf>. In March 2012, *The Hunger Games* set multiple sales records, including the strongest opening weekend for a spring

Calls for more stringent copyright laws generally minimize these favorable trends. With respect to music, complaints may focus on declining CD sales, while failing to acknowledge successes in other parts of the music industry, such as the revenue from digital downloads⁸ and live performances.⁹ When these revenues are included, the music industry as a whole remains highly profitable, even if intra-industry shifts create winners and losers. Moreover, although CD sales have declined since 2000, the number of albums created has increased significantly. In 2000, 35,516 albums were released; by 2007, this number had risen to 79,695.¹⁰ According to Nielsen/Billboard, digital sales have driven total music purchases to record highs.¹¹ Perhaps the clearest indication of the record industry's health is Vivendi's rejection three months ago of an \$8.5 billion offer for Universal Music Group (UMG).¹² Softbank, the Japanese telecommunications company, made an all-cash bid to purchase UMG from the French media conglomerate. In 2012, UMG had \$6 billion in revenue and \$694 million in pre-tax profits.

Similarly, in regard to film, calls for greater regulation may point to the volume of illegal downloads and flat DVD sales, while overlooking rising ticket sales to theatrical performances,¹³ or the fact that the number of feature films released annually worldwide increased from 3,807 in 2003 to 4,989 in 2007. (In the same period, the number of feature film releases in the U.S. rose

release. Brooks Barnes, *'Hunger Games' Ticket Sales Set Record*, N.Y. TIMES, March 25, 2012, available at <http://www.nytimes.com/2012/03/26/movies/hunger-games-breaks-box-office-records.html>. In May 2012, *The Avengers* broke the record for the biggest opening weekend in North America by \$30 million. Brooks Barnes, *'Avengers' Vanquish Box-Office Rivals*, N.Y. TIMES, May 6, 2012, available at <http://www.nytimes.com/2012/05/07/movies/marvels-the-avengers-top-box-office-record.html>. Notwithstanding the market's response to perceived poor quality in certain Hollywood summer offerings this year, the summer box office is nevertheless up 9.9%. Ronald Grover & Lisa Richwine, *'RIPD' Continues Hollywood's Summer of Big Budget Bombs*, REUTERS, July 22, 2013, available at <http://www.reuters.com/article/2013/07/22/hollywood-bombs-idUSL1N0FP1VB20130722>; Brooks Barnes, *Weekend Box Office Reflects a Season of Big-Budget Stumbles*, N.Y. TIMES, July 21, 2013, available at <http://www.nytimes.com/2013/07/22/movies/turbo-and-ripd-open-to-disappointing-results.html>;

⁸ *Album Sales Plunge, Digital Downloads Up*, ASSOCIATED PRESS, Jan. 1, 2009, available at <http://www.msnbc.msn.com/id/28463074/>.

⁹ Felix Oberholzer-Gee & Koelman Strumpf, *File-Sharing and Copyright* (Harvard Business School, Working Paper No. 09-132, 2009), at 20, available at <http://www.hbs.edu/research/pdf/09-132.pdf>.

¹⁰ *Id.* at 23.

¹¹ Nielsen Co./Billboard, *2012 Music Industry Report*, Jan. 4, 2013, available at <http://www.businesswire.com/news/home/20130104005149/en/Nielsen-Company-Billboard%E2%80%99s-2012-Music-Industry-Report>

¹² Ben Sisario, *Vivendi Declined SoftBank's Lucrative Offer for Universal*, N.Y. TIMES, July 18, 2013, available at <http://www.nytimes.com/2013/07/19/business/media/vivendi-declined-softbanks-lucrative-offer-for-universal.html>.

¹³ See CRS Memorandum, *supra*. The MPAA trumpeted record box office receipts of \$29.9 billion in 2009, marking three straight years of solid growth and a 30% increase over 2005. Rob Pegoraro, *The MPAA Says the Movie Business Is Great. Unless It's Lousy*, WASH. POST, March 11, 2010, available at http://voices.washingtonpost.com/fasterforward/2010/03/mpaa_box_office_brassing.html.

from 459 to 590.)¹⁴ Film studio statistics also often ignore ancillary income, such as the sale of \$16 billion of entertainment merchandise.¹⁵ In this manner, policy makers are presented with a skewed, and often alarmist view of the health of certain content industries. In short, industry complaints about the economic harm caused by copyright infringement are frequently exaggerated.¹⁶

III. The Role of Copyright in Innovation

A. Incentives to Innovation

Proponents of increased copyright regulation often advance a qualitative argument about the essentiality of protection, instead of quantitative proof. Intuitively, it makes sense that the absence of IP protection would preclude many types of creative activity. In the absence of copyright restrictions, film studios would likely struggle to recover the cost of production, and would therefore produce far fewer of them.

¹⁴ Oberholzer-Gee & Strumpf, *supra* note 9, at 24.

¹⁵ *Id.* at 20.

¹⁶ In comments submitted to the Intellectual Property Enforcement Coordinator in 2010, the Copyright Alliance cited statistics that cast doubt on the need for an increased level of IP protection by demonstrating the vibrancy of the copyright industries: Expenditures on books, recorded audio, and video media grew in current dollars from \$108 billion in 1998 to \$169 billion in 2007, a 44% growth rate. Copyright Alliance Comments at 6. The online music industry grew by 27% in 2009. *Id.* at 8. Core copyright sales in foreign markets increased by 8% from 2006 to 2007. *Id.* at 10. Between 2000 and 2005, creative industries achieved an annual growth rate in international trade of 8.7%. *Id.* The number of U.S. independent artist-entrepreneurs increased from 509,000 in 2000 to 680,000 in 2007. *Id.* The number of professionals belonging to arts unions in the U.S. increased by 26.4% between 2004 and 2008. *Id.* at 12. There was a 33.6% increase in individual artists in the U.S. from 2000 to 2007. *Id.* Royalties for the performance of musical compositions increased 20% between 2003 and 2008. *Id.* This robust growth indicates that federal dollars are better spent elsewhere. Many studies have demonstrated this conclusion. See Francis Bea, *Study Suggests U.S. Box Office Not Affected by BitTorrent*, DIGITAL TRENDS, Feb. 11, 2012, available at <http://www.digitaltrends.com/international/study-suggests-u-s-box-office-not-affected-by-bittorrent/> (stating that a study by researchers from Wellesley College and the University of Missouri found that U.S. box office sales are not affected by BitTorrent pirating. The study also revealed that movie studios hold the power to curb infringement by decreasing international box office release windows); Timothy B. Lee, *Swiss Government: File Sharing No Big Deal, Some Downloading Still OK*, ARS TECHNICA, Dec. 5, 2011, available at <http://arstechnica.com/tech-policy/news/2011/12/swiss-government-file-sharing-no-big-deal-some-downloading-still-ok.ars>. This report written by the Swiss Federal Council, pursuant to a request by the Swiss legislature, concluded that file-sharing does not have a negative impact on Swiss culture. Because consumers spend a constant share of their disposable income of entertainment, money saved from buying CDs and DVDs are instead spent on concerts, movies, and merchandising, it concluded. More recent reports reaffirm that commercial availability is one of the most effective means for preventing infringement. See, e.g., Spotify, “Adventures in the Netherlands,” July 17, 2013, available at <http://press.spotify.com/uk/2013/07/17/adventures-in-netherlands/> (noting marked decline in piracy in Sweden and Netherlands following introduction of Spotify), see also Joe Karaganis, ed., MEDIA PIRACY IN EMERGING ECONOMIES (Social Science Research Council 2011), available at <http://piracy.americanassembly.org/wp-content/uploads/2011/06/MPEE-PDF-1.0.4.pdf>).

But the fact that certain works or inventions may need some protection to ensure their creation does not inform policy makers about the *contours* of the protection, such as the breadth of the right or the length of the term. Nor does evidence of the need for some protection inform policy makers of the appropriate *form* of protection. The software industry flourished for decades with just copyright protection for computer programs; courts broadly permitted the issuance of software patents only after the industry was established. Evidence as to whether providing software with patent protection in addition to copyright protection has promoted innovation is not encouraging.¹⁷ Too much IP protection prevents competition from follow-on innovation.¹⁸ Balance between protection and competition is the salient feature of our IP system, and a major reason for our global leadership in the development of innovative technologies.¹⁹

Additionally, there are many industries where competition and consumer demand, rather than intellectual property, provide the incentive for innovation.²⁰ These include the furniture, clothing,²¹ and financial services industries. To be sure, companies in these industries rely heavily on their trademarks to differentiate themselves from their competitors and to establish

¹⁷ See JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE 188-193 (2008). The EU Database Directive demonstrates that more protection does not necessarily lead to more innovation. In 1996, the European Union adopted *sui generis* protection for the investment in the assembly of facts in databases. The EU's objective was to increase its global market share of this important industry relative to the United States, which does not provide a similar form of protection. In 2005, the European Commission performed a study on the effectiveness of the Directive. The study found that since the adoption of the Directive, the European share of the global database market had actually decreased. The Commission concluded that the Directive did not have a positive impact on database creation. See DG Internal Market and Services Working Paper, "First evaluation of Directive 96/9/EC on the legal protection of databases," Dec. 12, 2005, available at http://www.europa.eu/comm/internal_market/copyright/docs/databases/evaluation_report_en.pdf.

¹⁸ See Simon Waterfall, *Investigation: Apple vs Nokia vs Google vs HTC vs RIM*, WIRED.CO.UK (May 12, 2010), available at <http://www.wired.co.uk/magazine/archive/2010/06/start/investigation-apple-vs-nokia-vs-google-vs-htc-vs-rim>, for a discussion of how the "patent thicket" on smartphones is causing litigation and impeding innovation in the smartphone industry.

¹⁹ See, e.g., Jonathan Band, *The SOPA-TPP Nexus*, 28 AM. U. INT'L L. REV. 31, 53-58 (2012).

²⁰ A May 11, 2010 statement by the Federal Trade Commission, the Department of Justice, and the Patent and Trademark Office of a joint workshop said: "In recent years, federal agencies and the courts have recognized that patents and competition share the overall purpose of promoting innovation and enhancing consumer welfare. Timely, high-quality patents promote investment in innovation. The competitive drive of a dynamic marketplace fosters the introduction of new and improved products and processes. By contrast, delay, uncertainty, and poor patent quality can create barriers to innovation. Additionally, where standards for violating antitrust law are unclear, or where the threshold for antitrust violations is set too low or too high, innovation can be stifled. The workshop will address ways in which careful calibration and balancing of patent policy and competition policy can best promote incentives to innovate." DOJ, DTC, USPTO Workshop on Promoting Innovation, May 10, 2010, available at http://www.uspto.gov/news/pr/2010/10_16.jsp.

²¹ See CHRISTOPHER JON SPRIGMAN & KAL RAUSTIALA, THE KNOCKOFF ECONOMY: HOW IMITATION SPARKS INNOVATION (2012) (arguing that fashion, among other industries, operates within a low-IP equilibrium in which copying does not deter innovation and may actually promote it).

reputations for quality and reliability, and may also rely on trade secrecy. But product innovation has occurred notwithstanding the absence of copyright (or patent) protection.²²

The focus on the incentive to innovate provided by intellectual property also undervalues the innovation driven by academic research, which often is government-funded. A recent analysis of the 300 most influential innovations in science, commerce, and technology revealed that collaborative academic environments generated more world-changing ideas than the competitive sphere of the marketplace.²³

B. Excessive IP Protection Chills Innovation

Arguments that ever stronger regulation incentivizes innovation also overlook the ways in which excessive protection can inhibit innovation. As Alex Kozinski, Chief Judge of the Ninth Circuit, noted, “[n]othing today, likely nothing since we tamed fire, is genuinely new: Culture, like science and technology, grows by accretion, each creator building on the works of those who came before. Overprotection stifles the very creative force it’s supposed to nurture.”²⁴ For this reason, “[o]verprotecting intellectual property is as harmful as underprotecting it. Creativity is impossible without a rich public domain.”²⁵ Every year that a work is covered by a copyright is a year that subsequent users cannot build on that work. While incremental protection may provide additional reward to the author, society pays for this reward by being deprived of follow-on use, while the author and his or her heirs accumulate profits. For this reason, protection exceeding the amount necessary to incentivize innovation represents a dead weight loss to the economy.²⁶

²² Indeed, open source software demonstrates that even with copyrightable subject matter, the expectation of monetizing creative effort through copyright protection may not be necessary to provide an individual entity with an incentive to innovate. To the contrary, with open source software, copyright acts as the mechanism to *prevent* a single entity from appropriating the value of the innovation. Innovation nonetheless occurs through collaborative development enabled by the Internet. And developers of open source software derive significant revenue from selling their services, rather than their software.

²³ STEVEN JOHNSON, *WHERE GOOD IDEAS COME FROM: THE NATURAL HISTORY OF INNOVATION* (2010).

²⁴ *White v. Samsung Electronics of America, Inc.*, 989 F.2d 1512, 1513 (9th Cir.) (Kozinski, J., dissenting), cert. denied, 113 S. Ct. 2443 (1993). See also WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 326-27 (2003) (“There is also evidence that the patenting of computer software actually retards innovation because most software innovation both builds on and complements existing software. Without the retardation introduced by patenting and the resulting need to negotiate licenses, software manufacturers would innovate more rapidly and each would benefit from the others’ innovations, which, because of the sequential and complementary nature of the innovations in this industry, would enhance the value of the existing products.”)

²⁵ *Id.*

²⁶ See Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031 (2005).

An additional dead weight loss is imposed by defects in the IP litigation system. This committee is well aware of the problems caused by “patent assertion entities,” i.e., patent trolls. Trolls, with the resulting chilling effect on creativity, exist in the copyright system as well. In *Brownmark Films v. Comedy Partners*, the court noted that Brownmark’s broad discovery requests gave it “the appearance of a ‘copyright troll,’”²⁷ observing that “[t]he expense of discovery, which [defendants] stressed at oral argument, looms over this suit. [Defendants], and amicus, the Electronic Frontier Foundation, remind this court that infringement suits are often baseless shakedowns. Ruinous discovery heightens the incentive to settle rather than defend these frivolous suits.”²⁸ In May, a furious federal judge sanctioned attorneys for a prominent copyright “porn troll,” accusing them of having “outmaneuvered the legal system” with unsubstantiated infringement allegations, having

discovered the nexus of antiquated copyright laws, paralyzing social stigma, and unaffordable defense costs. And they exploit this anomaly by accusing individuals of illegally downloading a single pornographic video. Then they offer to settle—for a sum calculated to be just below the cost of a bare-bones defense. For these individuals, resistance is futile; most reluctantly pay rather than have their names associated with illegally downloading porn. So now, copyright laws originally designed to compensate starving artists, allow starving attorneys in this electronic-media era to plunder the citizenry.

Ingenuity 13 LLC v. Doe, Order Issuing Sanctions (C.D. Cal. May 6, 2013).²⁹

Even independent of trolls, litigation costs can prove fatal. The user-generated content site Veoh recently declared bankruptcy due to litigation costs, for example, although it ultimately prevailed over of infringement claims.³⁰

The feature of the copyright system that most incentivizes aggressive litigation postures, encourages trolls, and thereby chills innovation, is the availability of statutory damages in copyright infringement cases. Under 17 U.S.C. § 504, a plaintiff can obtain up to \$30,000 in damages for each work infringed, regardless of the actual injury it suffered. In cases involving

²⁷ *Brownmark Films v. Comedy Partners*, 682 F.3d 687, 691 (7th Cir. 2012).

²⁸ *Id.* Another example of a copyright troll is Righthaven. The Las Vegas Review Journal transferred the right to enforce the copyrights in its articles to Righthaven, which in turn sued bloggers for reposting as little as five sentences from these articles. Righthaven was half owned by the intellectual property attorney suing the bloggers. After numerous lawsuits, a federal district court in Nevada found that Righthaven did not have standing to sue because it was not the legal or beneficial owner of the copyrights. The Ninth Circuit affirmed this ruling. *Righthaven LLC v. Hoehn* (9th Cir. May 9, 2013).

²⁹ Available at <http://bit.ly/18qWU>.

³⁰ *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 667 F.3d 1022 (9th Cir. 2011). Similarly, Perfect 10’s unsuccessful litigation against Google’s Image Search lasted five years and consumed vast attorney and staff resources.

willful infringement, the statutory damages can rise to \$150,000 per work infringed. Because cases involving digital technologies often implicate hundreds, if not thousands, of works, providers of information technology products and services face truly astronomic damages liability.³¹ The threat of enormous damages encourages rights-holders to assert aggressive theories in the hope of coercing quick settlements, and also causes technology companies to withhold new products and services from the market.³² Effort to quantify the amount of innovation caused by IP must also account for the amount of innovation inhibited by remedies of this nature.

C. Economic Contribution of Industries Relying on Balanced Copyright

Just as few grocery stores ever contemplated being sued for patent infringement,³³ the cost of overly expansive copyright could be visited upon unsuspecting sectors of the economy. A broad sector of the economy is regulated by the copyright laws, and a substantial number of diverse industry sectors depend upon the various limitations to copyright in their business. Research commissioned by CCIA in 2011 and recently cited by the National Research Council of the National Academies³⁴ concluded that industries depending upon fair use and related limitations to copyright generated revenue averaging \$4.6 trillion, contributed \$2.4 trillion in value-add to the US economy (roughly one-sixth of total US current dollar GDP) and employ approximately 1 in 8 US workers. Exports of goods and services related to fair use industries increased by 64 percent between 2002 and 2009, from \$179 billion to \$266 billion. Exports of trade-related services, including Internet or online services, were the fastest growing segment, increasing nearly ten-fold from \$578 million in 2002 to more than \$5 billion annually in 2008-2009.³⁵

³¹ See Pamela Samuelson, *Statutory Damages in Copyright Law: A Remedy in Need of Reform*, 51 WM. & MARY L. REV. 439 (2009).

³² The potential for large statutory damages can discourage authors from exploiting their own works. A 1965 book contract between an author and a publisher, for instance, may not address whether the author or the publisher has the rights for digital distribution. The possibility of large statutory damages prevents either the author or the publisher from taking the risk of distributing the book digitally.

³³ Release, *Food Marketing Institute Announces Support for SHIELD Act*, Mar. 15, 2013, available at <http://www.groceryheadquarters.com/2013/03/food-marketing-institute-announces-support-for-shield-act/>.

³⁴ Stephen A. Merrill & William J. Raduchel, *Copyright in the Digital Era: Building Evidence for Policy*, National Research Council (2013), at http://www.nap.edu/catalog.php?record_id=14686 (hereinafter “National Research Council Report”).

³⁵ Thomas Rogers & Andrew Szamosszegi, *Fair Use in the U.S. Economy* at 26-27 (2011) available at <http://www.cciagnet.org/fairusestudy>.

IV. The Need For Objective Data

The aforementioned report by the National Research Council of the National Academies observed that copyright policy debates have been “poorly informed by objective data and empirical research.”³⁶ For years, advocacy for stricter copyright has relied on rights-holder supplied data, some of which has been openly questioned by governments and inter-governmental organizations.

A. Industry Data Lacks Objectivity

Industry supplied data is often of the correlation-is-causation variety, such as a 2010 Chamber of Commerce study which concluded that because IP intensive industries outperform non-IP intensive industries, therefore “the creation of intellectual property is the key factor in sustaining economic growth.”³⁷

Media investigations into the source of such industry-driven statistics have found little or no basis for these numbers, dismissing them as “fiction.”³⁸ Objective analyses indicate that rights-holder-funded research has drastically overestimated counterfeiting and copyright infringement costs. A 2007 study by the Organization for Economic Co-operation and Development (OECD) demonstrated that industry estimates overstated reality by a factor of three.³⁹ A report by the Government Accountability Office (GAO) quoted a 2008 OECD study that found that “data have not been systematically collected or evaluated and, in many cases, assessments ‘rely excessively on fragmentary and anecdotal information; where data are lacking, unsubstantiated opinions are often treated as facts.’”⁴⁰ The GAO added that “industry

³⁶ *Supra* note 34, at ix.

³⁷ Nam Pham, *The Impact of Innovation and the Role of IP Rights on U.S. Productivity, Competitiveness, Jobs, Wages and Exports* 52 (2010), at 52, available at http://ndpgov.com/docs/NDP_IP_Jobs_Study_Hi_Res.pdf.

³⁸ See David Kravets, *Fiction or Fiction: 750,000 American Jobs Lost to IP Piracy*, WIRED, Oct. 3, 2008, available at <http://www.wired.com/threatlevel/2008/10/fiction-or-fict/>; see also Julian Sanchez, *750,000 lost jobs? The dodgy digits behind the war on piracy*, ARS TECHNICA, Oct. 7, 2008, available at <http://arstechnica.com/tech-policy/news/2008/10/dodgy-digits-behind-the-war-on-piracy.ars>; Nate Anderson, *Oops: MPAA Admits College Piracy Numbers Grossly Inflated*, ARS TECHNICA, Jan. 22, 2008, <http://arstechnica.com/tech-policy/news/2008/01/oops-mpaa-admits-college-piracy-numbers-grossly-inflated.ars>. An industry-commissioned “piracy” study, TERA Consultants, *Building a Digital Economy: The Importance of Saving Jobs in the EU's Creative Industries* (2010), was shown to rely on dubious assumptions and incomplete data. See Mike Masnick, *As Expected, Ridiculous, Wrong, Exaggerating And Misleading Report Claims That ‘Piracy’ Is Killing Jobs*, Techdirt, Mar. 18, 2010, available at <http://www.techdirt.com/articles/20100317/1617328605.shtml>.

³⁹ See Hugh Williamson, *Forgery Trade losses ‘under \$200bn’*, FIN. TIMES, May 7, 2007, available at <http://www.ft.com/cms/s/0/acbd064c-fcb9-11db-9971-000b5df10621.html>.

⁴⁰ U.S. GOVERNMENT ACCOUNTABILITY OFFICE, INTELLECTUAL PROPERTY: OBSERVATION ON EFFORTS TO QUANTIFY THE ECONOMIC EFFECTS OF COUNTERFEIT AND PIRATED GOODS; THE IMPACT OF INNOVATION AND THE

associations do not always disclose their proprietary data sources and methods, making it difficult to verify their estimates.”⁴¹

At least as early as the mid-1990s, government officials reportedly acknowledged rights-holder-industries’ “varying degree of commitment to accuracy.”⁴² Notwithstanding the dodgy pedigree of such data, however, they are proffered to regulatory agencies as a basis for action.⁴³ For example, federal officials have been repeatedly presented with the results of an undisclosed study whose inflated findings were revised downward under criticism,⁴⁴ or with other studies that depended upon this discredited research.⁴⁵

The unsupportable numbers proved embarrassing in the context of the debate over the Stop Online Piracy Act (SOPA). House Judiciary Committee Chairman Lamar Smith declared in a January 20, 2012 opinion column on CNN.com that “[i]llegal counterfeiting and piracy costs the U.S. economy \$100 billion and thousands of jobs every year” – a statement which PolitiFact subsequently ruled to be “false.”⁴⁶ Julian Sanchez, a fellow at the Cato Institute, likewise challenged the statistics upon which SOPA’s sponsors justified the legislation.⁴⁷

ROLE OF IP RIGHTS ON U.S. PRODUCTIVITY, COMPETITIVENESS, JOBS, WAGES AND EXPORTS, GAO-10-423 16 (2010) [hereinafter “GAO Report”].

⁴¹ *Id.*

⁴² PETER DRAHOS & JOHN BRAITHWAITE, INFORMATION FEUDALISM 98 (2002).

⁴³ See WILLIAM PATRY, MORAL PANICS AND THE COPYRIGHT WARS 30-36 (Oxford 2009).

⁴⁴ See *MPAA revises study on movie piracy*, Jan. 23, 2008, L.A. TIMES, available at <http://articles.latimes.com/2008/jan/23/business/fi-download23>; see also Carrie Russell, *MPAA Admits Piracy Study Flawed*, COPYRIGHT ADVISORY NETWORK available at <http://librarycopyright.net/wordpress/?p=75>. The contents of the offending study apparently have been withheld from the public notwithstanding a Congressional request for the methodology and data. Compare *The Analog Hole: Can Congress Protect Copyright and Promote Innovation?*, Before the Senate Comm. on the Judiciary, 109th Cong. 15-16 (2006) with Gigi Sohn, *Congress Should Demand MPAA Data on the Cost of Piracy*, Jan. 23, 2008, available at <http://www.publicknowledge.org/node/1363>.

⁴⁵ See LECG, LLC, *Economic Analysis of the Proposed CACP Anti-Counterfeiting and Piracy Initiative*, at 10 (2007) available at http://www.lexisnexis.com/documents/pdf/20080610072737_large.pdf [hereinafter LECG Study]; Stephen Siwek, *The True Cost of Motion Picture Piracy to the U.S. Economy*, at 2, 8, en.14, 18 (2006) available at [http://www.ipi.org/IPI/IPIPublications.nsf/PublicationLookupFullTextPDF/293C69E7D5055FA4862571F800168459/\\$File/CostOfPiracy.pdf?OpenElement](http://www.ipi.org/IPI/IPIPublications.nsf/PublicationLookupFullTextPDF/293C69E7D5055FA4862571F800168459/$File/CostOfPiracy.pdf?OpenElement) [hereinafter IPI Study] (citing MPAA study prepared by LEK).

⁴⁶ See W. Gardner Selby, *Lamar Smith Says Online Piracy and Counterfeiting Costs the U.S. Economy \$100 Billion a Year*, POLITIFACT, Feb. 6, 2012, available at <http://www.politifact.com/texas/statements/2012/feb/06/lamar-smith/lamar-smith-says-online-piracy-and-counterfeiting/>.

⁴⁷ Julian Sanchez, *How Copyright Industries Con Congress*, Cato Inst., Jan. 3, 2012, available at <http://www.cato-at-liberty.org/how-copyright-industries-con-congress/>; Julian Sanchez, *SOPA, Internet Regulation, and the Economics of Piracy*, ARS TECHNICA, Jan. 18, 2012, available at <http://arstechnica.com/tech-policy/news/2012/01/internet-regulation-and-the-economics-of-piracy.ars>.

B. GAO Criticism of the Methodologies of Industry Studies

The GAO observed that in the absence of real data on infringement, methods for calculating estimates of economic losses involve assumptions that have a significant impact on the resulting estimate. Two key assumptions are the rate at which a consumer is willing to switch from an infringing good to a genuine product (substitution rate), and value of the infringing good. The GAO suggested that assuming a one-to-one substitution rate at the manufacturer's suggested retail price could lead to a dramatic overstatement of economic loss. The GAO noted that some copyright industry studies made precisely this problematic assumption.⁴⁸ In other instances, the studies failed altogether to reveal their assumptions.⁴⁹ The GAO stated that “[u]nless the assumptions about substitution rates and valuations of counterfeit goods are transparently explained, experts observed that it is difficult, if not impossible, to assess the reasonableness of the resulting estimate.”⁵⁰

The GAO also criticized rights-holder studies on the impact of infringement on the U.S. economy. The GAO noted that to develop an estimate of the effect of infringement on the overall U.S. economy, rights-holders have applied RIMS II economic multipliers⁵¹ to the estimates of economic loss for specific copyright industries. The GAO found that “using the RIMS II multipliers in this setting does not take into account the two fold effect: (1) in the case that the counterfeit good has similar quality to the original, consumers have extra disposable income from purchasing a less expensive good, and (2) the extra disposable income goes back to the U.S. economy, as consumers can spend it on other goods and services.”⁵² Similarly, the GAO report referred to an expert's view that the “effects of piracy within the United States are mainly redistributions within the economy for other purposes and that they should not be considered as a loss to the overall economy. He stated that ‘the money does not just vanish; it is used for other purposes.’”⁵³ The GAO concluded that “it is difficult, if not impossible, to

⁴⁸ GAO Report *supra* note 19, at 21 (referring to a Business Software Alliance survey).

⁴⁹ *Id.* (referring to a Motion Picture Association of America survey).

⁵⁰ *Id.* at 18.

⁵¹ The Department of Commerce's Bureau of Economic Analysis make multipliers available through its Regional Input-Output Modeling System (RIMS II). These multipliers allow the estimation of the impact of a specific change in one sector on the entire economy.

⁵² GAO Report *supra* note 19, at 23 (referring to an Institute of Policy Innovation study).

⁵³ *Id.* at 28. See Annelies Huygen *et al.*, *Ups and Downs: Economic and Cultural Effects of File Sharing on Music, Film and Games* (2009). See also Joe Karaganis, *Piracy and Jobs in Europe: Why the BASCAP/TERA Approach is Wrong* (2010), available at <http://piracy.americanassembly.org/wp-content/uploads/12010/12/Piracy-and-Jobs-in-Europe-a-note-on-the-BASCAP-TERA-study/pdf>. (“Within any given country, piracy is a reallocation

quantify the net effect of counterfeiting and piracy on the economy as a whole.”⁵⁴ The GAO further stated that the “net effect” of infringement on the economy “cannot be determined with any certainty.”⁵⁵

The GAO was not alone in reaching such conclusions; similar analysis appeared in the independent Hargreaves Review in the U.K., which surveyed U.K. and international data concerning online copyright infringement and “[found] that very little of it is supported by transparent research criteria. Meanwhile sales and profitability levels in most creative business sectors appear to be holding up reasonably well. We conclude that many creative businesses are experiencing turbulence from digital copyright infringement, but that at the level of the whole economy, measurable impacts are not as stark as is sometimes suggested.”⁵⁶

C. The Department of Commerce Study

When the Department of Commerce released its study on *Intellectual Property and the U.S. Economy: Industries in Focus* in 2012, the study’s findings were promptly misstated and misused by government officials. A Department blog proclaimed that the study “showed that intellectual property protections have a direct and significant impact on the U.S. economy.”⁵⁷ The Patent and Trademark Office claimed that the study proved that “when Americans know that their ideas will be protected, they have greater incentive to pursue advances and technologies that help keep us competitive, and our businesses have the confidence they need to hire more workers.”⁵⁸ The PTO further indicated that the study demonstrated that “this Administration’s efforts to protect intellectual property ... are so crucial to a 21st century economy that is built to last.”⁵⁹

In fact, the study did not in any way substantiate these claims. The study itself explicitly stated that it “does not contain policy recommendations and is not intended to advance particular

of income, not a loss. Money saved on CDs or DVDs will be spent on other things—housing, food, other entertainment, etc.”).

⁵⁴ GAO Report, at 16.

⁵⁵ *Id.* at 28.

⁵⁶ Ian Hargreaves, *Digital Opportunity: A Review of Intellectual Property and Growth* (2011), at 47, available at <http://www.ipo.gov.uk/ipreview-finalreport.pdf>. The UK Government’s Response to the Review agreed that “too many past decisions on IP have been supported by poor evidence, or indeed poorly supported by evidence. This is true at an international level as well as domestically.” The *Government Response to the Hargreaves Review of Intellectual Property and Growth 3* (2011), available at <http://ipo.gov.uk/ipresponse-full.pdf>.

⁵⁷ See <http://www.commerce.gov/blog/2012/04/11/intellectual-property-intensive-industries-contribute-5-trillion-40-million-jobs-us->

⁵⁸ See <http://www.uspto.gov/news/pr/2012/12-25.jsp>.

⁵⁹ *Id.*

policy issues.”⁶⁰ Moreover, the study “notes the importance of achieving a balanced system of IP rights that protects innovators and creators from unlawful use of their work while encouraging innovation, competition, and the markets for technology in which IP is transacted. Importantly, using IP rights to support innovation and creativity means recognizing the public domain and limits such as fair use which balance the public’s right to use content legally with IP owners’ interests.”⁶¹

The study did present impressive numbers for the contribution of “IP-intensive industries” to the U.S. economy in terms of employment and value added. But it nowhere asserted a causal connection between IP and the strength of those industries, because such a connection cannot be shown. Moreover, the study includes “trademark-intensive industries” within the definition of “IP-intensive industries,” which include industries such as grocery stores, clothing stores, sporting goods and musical instrument stores, residential building construction, dairy product manufacturing, beverage manufacturing, footwear manufacturing, and gambling.⁶² Indeed, 83 percent of all reported IP-intensive jobs come from trademark intensive industries.⁶³ The study itself conceded that “employment in trademark intensive industries is almost six times as great as employment in patent-intensive industries.”⁶⁴

The study further conceded that “overall employment in IP-intensive industries has lagged behind other industries in the last two decades. While employment in non-IP-intensive industries was 21.7 percent higher in 2011 than in 1990, overall IP-intensive industry employment grew over 2.3 percent over this same period.”⁶⁵ IP-intensive industries’ share of total employment dropped from 21.7 percent in 1990 to 18.8 percent in 2010.⁶⁶ Employment in patent-intensive industries fared even worse than other IP-intensive sectors, shrinking by 30 percent during this period.⁶⁷

Thus, not only did the Department of Commerce study not show that “intellectual property protections have a direct and significant impact on the U.S. economy,” as the

⁶⁰ Economics and Statistics Administration & U.S. Patent and Trademark Office, U.S. Department of Commerce, *Intellectual Property and the U.S. Economy: Industries in Focus* (2012) at vi.

⁶¹ *Id.*

⁶² *Id.* at 36-38.

⁶³ Knowledge Ecology International, *The USPTO/DOC’s liberal and misleading definition of IP-intensive industries is designed to influence policy debates*, available at <http://www.keionline.org/node/1432>.

⁶⁴ *IP and the U.S. Economy*, *supra* note 60, at vi.

⁶⁵ *Id.* at vii.

⁶⁶ *Id.* at 40.

⁶⁷ *Id.*

Department's own blog claimed, it actually suggested that IP-intensive industries are having a *decreasing* impact on the U.S. economy. Furthermore, the study obscured the extent of the decrease by including trademark-intensive industries such as grocery stores.

More broadly, the fact that employment in "IP-intensive industries" has lagged behind other industries over the past twenty years certainly undermines the narrative of ever-increasing IP protection as a mechanism for job creation. While IP protection is undoubtedly important, the available data fails to support this conclusion.

D. An Objective Research Agenda

It is in this context that the National Research Council's report observes that "[t]his debate is poorly informed by independent empirical research." After observing the dearth of empirical evidence, and recognizing that "[n]ot all copyright policy questions are amenable to economic analysis,"⁶⁸ the Report stated that "a robust research enterprise, supported by public and private funders and using a variety of methods – case studies, international and sectoral comparisons, and experiments and surveys – can inform copyright policy by addressing a range of questions. The research we call for is especially critical in light of digital age developments that may, for example, change the *incentive* calculus for various actors in the copyright system, impact *the costs of voluntary copyright transactions*, pose new *enforcement* challenges, and change the optimal *balance* between copyright protection and exceptions."⁶⁹

CCIA supports such a robust research agenda. The Report provides a roadmap for this agenda, which involves an increased role for government agencies in creating and aggregating the necessary information. While CCIA has commissioned research in this area,⁷⁰ peer-reviewed research by disinterested scholars would be invaluable to the policymaking process. Such research should be considered an essential first step in this process of reviewing the Copyright Act.

⁶⁸ National Research Council Report at 1, 2.

⁶⁹ *Id.* (Emphasis in original).

⁷⁰ See, e.g., Thomas Rogers and Andrew Szamosszegi, *Fair Use in the U.S. Economy: The Economic Contribution of Industries Relying on Fair Use* (CCIA 2011).