

Hudson Institute

# Property, Copyrights, and Economic Growth

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# Property, Copyrights, and Economic Growth

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**ABSTRACT:** Economists have long noted the importance of clear laws and property rights to facilitate transactions and promote economic activity and growth. Intellectual property including copyrights is part of the fabric of property both in the United States and around the world. Empirical studies support the relationship between copyright industries and various measures of economic growth and economic freedom. Copyrights contribute to American economic growth and benefit the American consumer.

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## I. Introduction

The businesses of creating and distributing creative content face significant challenges in the digital age. Pervasive piracy coupled with challenges in enforcement undermines a copyright's value. Consequently, many copyright-related businesses reduce investment and innovation in new works and distribution platforms. Consumer choice of these copyrighted creative works is subsequently reduced.

Not everyone sees the challenges to copyrights as harmful. Some advocates of lesser copyright protections contend that copyright, and even all intellectual property, is little more than an artificial privilege created by the government and should not be afforded the same protections as "real property." The paper will examine the following:

- the role of property rights in facilitating markets and efficient allocation of resources;
- copyright as a property right and its role in facilitating markets; and

in economics. The concept is as ancient as recorded history. Yet "property" is rarely mentioned in formal definitions of economics. To understand the centrality of property to economics, consider first the definition of economics and then see how property helps resolve certain central issues in economics.

### A. Definition

Although economics has no single definition. Paul Samuelson, a Nobel Laureate, once defined economics as follows:

The study of how [individuals] and society end up *choosing*, with or without the use of money, to employ *scarce* productive resources that could have alternative uses, to provide various commodities and distribute them for consumption, now or in the future, among various people and groups in society. It analyzes the costs and benefits of improving patterns of resource allocation.<sup>2</sup> [*italics in the original*]

As Samuelson emphasizes, economics is about *choices* with *scarce* resources. Most economists also emphasize these two concepts. It turns out that *property* helps bridge both concepts of *scarcity* and *choice*.

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<sup>2</sup> P. Samuelson, *Economics*, McGraw Hill Book Company, New York, 1973, at 3.

## 1. *Economic choices*

Samuelson emphasizes that economics is about choices, choices made by individuals and society. Extreme cases either where individuals have no choices in a form of serfdom, or where individuals are unconstrained in their choices in a form of tyranny, are not of particular interest in economics. To an economist, choices are usually made in the context of markets with buyers, sellers, and prices. Economists study how prices are determined in markets and how individual buyers and sellers make decisions in markets. Choices often require certain control aspects over an asset or item:

- *Authority to determine how an asset or item will be used* – It does little good to make a choice if one has no authority to do so. Even if we have no formal assets, we still may have some control over how we spend our time, or periods of time. There are no particular limits on how far the authority reaches or requirements of physical possession. An individual may have authority to use a parcel of land half way around the world, or a bank account in another country, or any number of other assets that are not directly in her physical possession. Authority over an asset can be either for exclusive use or for non-exclusive use. Robert Frost describes with some skepticism his view of the value of fences everywhere to promote exclusive use.<sup>3</sup> An individual may have a ticket to a theatrical performance that entitles the holder to a seat, but a non-exclusive seat. There may be hundreds, even thousands of such tickets. Yet the individual holder still controls the use of the ticket, whether to attend or not, and when to enter a queue to select a seat.
- *Authority to obtain the benefits from the choice of how an asset is used* – Even if one has authority to determine how an asset will be used, it does little good if one cannot also obtain the benefits of that decision. If we choose to work, we expect to be compensated for our time. If we choose to use an asset, we expect to be compensated for that use. Of course, there are limits to the ability to appropriate the benefits of an asset. Thus, Robert Frost penned a different poem in which he says, rather furtively about the owner of some woods, “He will not see me stopping here To watch his woods fill up with snow,”<sup>4</sup> almost as if to say the owner might mind if he knew he were taking the indulgence of watching woods fill up with snow. Frost does not suggest that the owner would not mind him obtaining benefits other than watching snow such as trespassing or cutting down trees or occupying the woods or any use for which the owner benefitted.

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<sup>3</sup> Robert Frost, “Mending Wall.” in *Poetry X* 16 Jun 2003, <<http://poetry.poetryx.com/poems/219/>>. (accessed, 12 January 2014).

<sup>4</sup> Robert Frost, “Stopping By Woods On A Snowy Evening.” in *Poetry X* 16 Jun 2003, <<http://poetry.poetryx.com/poems/247/>> (accessed, 12 January 2014).

- *Authority to transfer the asset* – Often the best use of an asset is to sell it, or to buy it, or to lease it, rent it, or create an option for it, or to transfer some or all of the rights to the asset. One is substantially economically limited if one has no authority to transfer an asset.

Although economics texts rarely explicitly state these concepts, they are implicit in most discussions of economic choices made by individuals or larger entities.

Economic choices are not merely about the authority that an individual or entity has with respect to various assets but also about the general respect and acceptance that the individual or entity has for prevailing market conditions. Thus, economists rarely consider scenarios where a buyer or a seller simply ignores a market or circumvents a market by setting his own price. A thief steals an item impervious to the actual price of the item and implicitly sets a price of zero to the item. Theft is a real world phenomenon, but the setting of the price to zero is not a market outcome. Implicit in the concept of economic choices is that individuals and entities make choices within the realm of prevailing laws.

Economists often consider how prices are set in a market, and economic choices are made based at least in part on those prices. The economic choices that individuals and larger entities make are rarely about the ability unilaterally to dictate prices. A buyer cannot go into a shop and unilaterally dictate the prices of goods, much less unilaterally announce that the price for everything is zero. Even in the extreme case where the cost to the seller is zero, or zero marginal cost, the market price may be substantially greater than zero.

## 2. *Scarce resources*

To an economist, scarcity implies that prices are not zero. Every day, consumers purchase at positive prices food, clothing, and an endless array of goods or services. The positive prices paid by consumers reflect the reality that the goods and services are scarce, and the reality that the sellers would not simply give the goods and services away free. Of course, consumers would prefer to pay lower prices, even zero prices, for their purchases, but the prices are not set by consumers alone.

If prices were zero and resources were scarce, demand would likely exhaust the resource. There are of course instances when individuals encounter zero prices where scarcity is absent. We do not pay for the air we breathe because it is not scarce. It is free of charge. Individuals give old unwanted clothes away, implicitly a zero price, because the cost of storing them is greater than their value to the owner. The assessment of scarcity or surplus is made by the owner of the clothes, not by those who will receive them. It does not follow that individuals give away all of their clothes or that the price of all clothes is zero.

Zero prices may reflect factors other than an absence of scarcity. One can go to Starbucks and take a napkin, without additional charge, when one purchases a cup of coffee. The price of the napkin is actually bundled with the price of the coffee. Napkins are still scarce and are given away to Starbucks customers as an implicit part of the price of coffee. It does not follow that Starbucks gives away napkins to individuals who do not purchase coffee, or the price of all napkins is zero. Broadcast television and radio are free because they are supported by advertisers who are willing to pay for the broadcasting of programming with advertising inserts to reach wider audiences. If broadcast television and radio could not insert advertisements accessible to audiences, the broadcast services would not be free. Broadcast programming itself is scarce, and consumers often pay substantial sums for video and audio programming with less advertisements.

There are other instances when nothing is paid by anyone, but the absence of payment may reflect a lawless transaction. A store robber does not pay for the items stolen, even though the stolen item presumably is scarce.

Zero prices do not mean that the individual taking something away necessarily benefits. A reckless driver runs over a bush and destroys it. The driver deprives the owner of the bush but does not benefit from it. Unless the driver compensates the owner for the lost bush, it is as if it had zero price.

Shakespeare described the potential ill effect of taking something of profound value with no price—one's good name:

Good name in man and woman, dear my lord,  
Is the immediate jewel of their souls:  
Who steals my purse steals trash; 'tis something, nothing;  
'Twas mine, 'tis his, and has been slave to thousands;  
But he that filches from me my good name  
Robs me of that which not enriches him  
And makes me poor indeed.<sup>5</sup>

Shakespeare addresses the irreparable harm and the lack of benefit of the theft of one's good name, but the same might be said of other assets, including intellectual property. Once stolen, intellectual property is much more difficult to defend, benefitting the thief only a little while doing substantial harm to the intellectual property holder.

Samuelson's *choices* of how to allocate *scarce* resources are not made by one individual, or made only for the distribution of resources, but include choices about how "to employ *scarce* productive resources that could have alternative uses." If the initial result is that scarce resources will have little or no value as they would with zero prices, the owner of the resources will employ them in some other manner.

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<sup>5</sup> William Shakespeare, *Othello*, Act 3 scene 3.

## **B. Property**

Since before recorded history, societies around the world have developed an elegant solution to avoid universal zero prices: property. When an individual controls a resource and it has alternative uses at least one of which is valuable, the resource is unlikely to have a zero price. From Adam Smith to contemporary economists, economic thought has consistently found that economic welfare is enhanced by the efficient use of resources and that property and contract are often at the core of that efficiency. The Nobel Laureate Milton Friedman observed that the role of government in a free society is to enforce property and contracts.<sup>6</sup>

Property has specific meanings, and Armen Alchian, another Nobel Laureate, identified three characteristics usually associated with property: (1) authority to determine how an asset is used; (2) right to the benefits of the asset; and (3) authority to delegate, rent, or sell all or a portion of the rights to the asset.<sup>7</sup> Notice that these are the same three concepts of control over an asset that, as discussed above, are necessary for meaningful economic choices in the definition of economics.

Alchian's concept of property does not require exclusivity. Property is a subtle concept that includes exclusive rights as well as varying degrees of non-exclusive rights from part-ownership of a house to a ticket for the theatrical exhibition of a motion picture to a parking pass in a parking lot to a lottery ticket to a copy of recorded music. In each of these instances, the property is not purely exclusive: a handful of other others, or billions of others, may have similar or even identical property. Also, in each of these instances, despite the absence of pure exclusivity, the market price for the property is usually substantially greater than zero. In each instance, Alchian's three principles apply.

## **III. Copyright as property**

In the previous section, we reviewed the importance of property to a well-functioning economy. Legal scholars have long recognized that intellectual property generally, and copyrights in particular, are part of property.<sup>8</sup> In this section, we examine how copyrights are part of the economic fabric of property. Consumers choose to purchase copyrighted works even though works without copyrights are often available at lower prices.

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<sup>6</sup> See, M. Friedman, "The Role of Government in a Free Society," *Capitalism and Freedom*, University of Chicago Press, Chicago, 1962. Pp. 22-36.

<sup>7</sup> See, e.g., A. Alchian, "Property Rights," *The Concise Encyclopedia of Economics*, at <http://www.econlib.org/library/Enc/PropertyRights.html>.

<sup>8</sup> See, e.g., Richard A. Epstein, "Liberty versus Property - Cracks in the Foundations of Copyright Law," 42 *San Diego Law Review* 1 (2005); "Is Copyright Property?," 42 *San Diego Law Review* 29 (2005).

## **A. Copyrights are an integral part of the broader economic fabric of property and contract law in America**

### *1. Copyright as property*

Milton Friedman identified certain types of government-created rights that, from an economist's perspective, should not be enforced, but he did not include copyrights on the list.<sup>9</sup> In Friedman's powerful framework of the mutual reinforcement of capitalism and freedom, copyrights are no less an integral part of property, and no less a part of the foundation of freedom.

There is no coincidence that a *copyright* is a form of intellectual *property* giving the copyright holder the right to control the copying of a work. Property has specific meanings in law and economics that reinforce the concept of copyright.

To varying degrees, Alchian's three characteristics of property apply to copyrights. In its purest form, a copyright allows the creator of a work, or her agent, (1) to determine how her work will be used, (2) to receive the benefits of her work, and (3) to sell or lease some or all of the rights to the work.

Not all of three of these characteristics operate purely for every form of copyrighted work. For example, a compulsory license for recorded music on radio is not a pure form of determining how a work will be used. A copyright holder for music, however, has the right to prevent the recording from being used at all on radio. But once the recording is made available for radio, the copyright holder must grant a compulsory license and cannot pick and choose which radio stations will have access to it. Similarly, a software developer can license software but has little if any control over how the software will be used. Still, the copyright holder has unfettered control over characteristics (2) and (3) above. The control of subsequent use of the work is primarily achieved through a license agreement. Under the license agreement, the user agrees not to use the work in ways specified by the copyright holder.

Another example of a limitation on property rights is a copyright owned by a government or quasi-government entity. A public broadcaster, for example, is limited in terms of selling rights for public broadcasts or selling the copyrights to its programming. Thus, characteristic (3) is limited.

Alchian's three characteristics presume a system of laws that protect and enforce copyrights. In many countries, only little, discriminatory, or no such protection or enforcement exists.

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<sup>9</sup> See, M. Friedman, "The Role of Government in a Free Society," *Capitalism and Freedom*, University of Chicago Press, Chicago, 1962. pp 22-36.



## 2. *Reduction of copyright protection and reduction of property rights*

Property and contract law vary by state and by country. Thus, in the United States, most owners of physical property can substantially limit access to and trespass on the property. In contrast, in the United Kingdom, public footpaths are common on private property. Property owners cannot easily prohibit others from access to at least part of their property. Despite these and many other differences in property law, most observers consider both the United States and the United Kingdom as having strong and enforceable property rights. The same holds true for copyrights.

Obviously, for effective property rights, the corresponding statutes, legal precedents, and enforcement must all be strong. Property has little meaning without clear and predictable rules and clear and predictable enforcement of those rules. The same is true for copyrights, which need both clear rules and predictable enforcement to be effective.

Various groups create indexes or measurements of property rights in different countries. In one such index, the United States has consistently higher rankings for intellectual property rights than for other forms of property.<sup>10</sup> Internationally, the United States is considered to have strong intellectual property laws, including those for copyrights.

Critics of copyrights have an unrealistic view of how markets operate with and without clear property rights. From North Korea to Somalia, and many places in between, property rights are scarce and rarely enforced. These countries with reduced or no property rights have not become meccas for property investors. Not surprisingly, the same pattern holds for copyrights. Reduced or no copyrights have not turned North Korea and Somalia into magnets for innovators.

Nor do reductions in copyrights create well-behaved public commons for creative works any more than reductions in property rights create well-behaved public commons. Where governments have expropriated property, investment and maintenance languish, and public access to property is diminished. One might argue that the dozens of governments that have taken property away in varying degrees from private ownership over the past century simply implemented their plans poorly, but the consistent failures of the past do not auger well for success in repeating the effort in the future.

Nor does it follow that reduced private control over creative works will transform those works into something more useful to the public than they already are. Much of the world has little or no copyright protection, and these countries have smaller—not larger—bodies of creative works than do those countries such as the United States with stricter

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<sup>10</sup> See the intellectual property index within the *International Property Rights Index, the 2013 Report*, at <http://www.internationalpropertyrightsindex.org>.

copyright laws. Moving American law towards the law of these countries will not likely lead to greater bodies of creative works.

Economists have long recognized that, while information is often a form of a public good,<sup>11</sup> private individuals and entities can often provide public goods efficiently and even exclude others in the process.<sup>12</sup> As noted above, private property can at times have non-exclusive attributes. As with other forms of property, private ownership, from an economic perspective, does not lessen the value of a work, and, indeed, quite likely enhances both its production and distribution.

Although information often is used as an example of a public good, it does not follow that works that could be copyrighted are pure public goods. As noted earlier, copyrighted works are often excludable as are other forms of property. To say that a government can compel access to a work and prevent exclusion is to say that government can compel access to any form of property and prevent exclusion; it is merely a statement of the potential power of the state, not a peculiar characteristic of creative works.

Of course, one can examine creative works as property even when copyrights have expired or are unenforceable. Property rights still exist. Even without copyrights, copies of creative works are often excludable and can be treated as other assets. Thus, an owner with control over assets may sell a copy of a songwriter's score, a work of art, or packaged software. A willing buyer, otherwise without access to these assets, will pay for them, even in the absence of a copyright structure.

Nor in even the most communistic societies are copies of creative works treated as pure public goods. They are still treated as private goods. Thus, even where copyrights are unknown, citizens still pay, essentially market rates, for books, newspapers, magazines, theatrical releases, sheet music, etc. Many forms of software are effectively free, not because the state owns the copies and organizes them in a public common, but because pirates beyond the reach of the state steal the software and give it away.

Copyrights do not transform an otherwise public good into a private good. Rather, copyrights transform one form of property into a more complex and subtle form of property, whether the work is considered a public good or not. The work without copyright has no limitations on its use and no residual value for its creator. The copyrighted work has limitations on copying and use and retains residual value to the creator, or to her agent or assignee.

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<sup>11</sup> Non-excludability is one of the characteristics of a public good. See P A. Samuelson, "The Pure Theory of Public Expenditure," *Review of Economics and Statistics*, 1954, vol. 36, 387–389.

<sup>12</sup> Indeed, Demsetz specifically notes that, if non-purchasers can be excluded, private production of a public good at different prices is efficient. See H. Demsetz, "The Private Production of Public Goods," *Journal of Law and Economics*, Vol. 13, No. 2 (Oct., 1970), pp. 293-306.

American law, and the laws of other countries, are filled with complex contracts outside of copyrights that transform private assets. Real estate law, labor law, and finance are but a few examples. Few would suggest that the availability of contracts, even complex contracts, lessen private property rights. Indeed, contracts complement property.<sup>13</sup> In much the same way, the terms and conditions of copyrights complement the property rights associated with creative works.

From an economic perspective, contracts and transactions are usually beneficial to each party. Each party receives something of value from the transaction. In the case of copyrights, creative artists seek copyrights in the hopes of remunerating themselves for their creative efforts. In return, the purchaser seeks a creative work and is willing to pay the copyright holder for a work that might otherwise not be available.

Like other forms of economic activity, creative works are not guaranteed a success. Many real estate investments lose money; many employment opportunities prove fruitless; and many creative works yield little or no income. For these works, the copyright has little or no value. The revelation that a particular creative work has little market value does not lessen the value of the overall construct of copyright law.

To the contrary. It is the chance, no matter how small, that a creative work will yield substantial value, to offset the great many that have no value, that provides artists with some hope of financial return. For every Rowling who makes vast riches from copyrights, millions of writers toil in obscurity and penury. For every band of Beatles reaping wealth from copyrights, countless musicians play in poverty. For every Bill Gates with software royalty billions, many a software engineer still toils in garages and attics dreaming of someday earning copyright royalties. Adam Smith once wrote that the returns for certain professions were high because a great many individuals had sought to enter the profession and failed;<sup>14</sup> so too with the value of copyrights.

### 3. *Distinguishing fair use and other copyright exceptions*

Copyright laws differ across countries. One of the distinguishing characteristics of American copyright law is our concept of *fair use*—roughly, how much and for what purposes may a copyrighted work be used before copyright exclusions and royalties are applicable. The concept of fair was introduced in the 1976 Copyright Act, but never precisely defined.<sup>15</sup> The United States tends to have a greater application of fair use than

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<sup>13</sup> For a discussion of the broader concepts of property rights and contract rights, see, e.g., R. A. Posner, *Economic Analysis of Law*, 1973, Boston: Little Brown, 1<sup>st</sup> edition.

<sup>14</sup> See A. Smith, *The Wealth of Nations*, 1776, Book I, Chapter 10.

<sup>15</sup> 17 U.S.C. 107.

many other countries. Although other countries have considered changing their copyright laws to incorporate the American concept of fair use, only a few have taken that step.<sup>16</sup>

*Fair use*, of course, is a creature of copyright law. Without copyright law, there would be no concept of fair use—all uses, “fair” or not, would be presumably beyond legal exclusion.

Fair use assigns to users, rather than copyright holders, some limited rights to determine the use of a copyrighted work. The user’s limited power to control how a work is used is a reduction in the first of the three of Alchian’s characteristics of property. Thus, fair use is a reduction in property rights.

Economically, the important distinction between copyright and fair use is that the former is a right assigned to the creator of a work, or her assignees, rather than a right, such as fair use, assigned to a user or consumer of the work. The creator of a work can choose to abandon or not enforce copyrights, but, as we shall see below, that abandonment is the exception rather than the rule. Copyright holders may and do enforce their copyrights against infringement, unlawful use, and piracy. Individuals and businesses with copyrights may and do notify the public that copyrights are in place and will be enforced. Whether on the screen, in print, in the studio, or online, works are often accompanied by copyright notifications. Many companies describe themselves as engaged in businesses involving or directly related to copyrighted works. It is economically consistent to consider the size of industries afforded some copyright protections. That is precisely the structure of the WIPO series of studies measuring copyright industries in various countries.<sup>17</sup>

Fair use is different. It is conceptually impossible for the creator of a work to seek to enforce fair use of her work. Disputes over fair use involve creators of works seeking to limit the unauthorized use of their works. While some businesses may employ fair use of the works of others for commercial purposes, such businesses rarely disclose much less advertise that fact. Few if any businesses in America describe themselves as engaged in “fair use” or the activities related to “fair use.” Consequently, it makes little economic sense to speak of a “fair use” business, much less a “fair use” industry.

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<sup>16</sup> Those countries include Singapore, Israel, Korea, and the Philippines. For review of international consideration of the fair use doctrine, see G.R. Barker, “Agreed Use and Fair Use: The Economic Effects of Fair Use and Other Copyright Exceptions in the Digital Age.” Paper Presented to the 2013 Annual Congress of the Society for Economic Research on Copyright Issues, July 2013, at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2298618](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2298618).

<sup>17</sup> See World Intellectual Property Organization (“WIPO”), *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*. Geneva, 2003.

I reviewed the home web sites for ten companies with substantial online presences.<sup>18</sup> Each of the home web pages has a copyright notice. None of the home web pages has a description of the web site’s fair use policies—either how the company employs through “fair use” the works of others, or how the company views limitations on the “fair use” of its works. This is not to say that these and other companies do not engage in the fair use of the works of others or that others do not fairly use their works. Rather, fair use is not central to their web site, at least not central enough to warrant a notice. Copyright, on the other hand, is central to their web sites, and presumably to their entire businesses.

Yet the designation of “fair use” industries is exactly what some researchers have attempted. Some observers have argued that this expansive use of fair use has promoted innovation and economic growth in the United States and elsewhere.<sup>19</sup> These studies, however, do not meaningfully distinguish between the economic contributions of copyrights and the economic contributions of fair use.<sup>20</sup> Nor can they. The claimed findings of substantial economic value of fair use are actually the economic contribution of copyrights with the value added of a few other industries such as education thrown in for good measure. I have yet to see an economic study that meaningfully distinguishes the economic contributions of an industry with full copyright protection and one with “fair use” limitations.

#### *4. Copyright enforcement and piracy*

Like other forms of property, copyrights primarily have value only to the extent government authorities are willing to enforce those rights. In many countries, copyrights are not well protected. In these countries, piracy, the unauthorized copying and use of copyrighted works, is rampant. Even in the United States, with among the strongest anti-piracy laws in the world, piracy is widespread.

#### **B. Copyrights are not ubiquitous, and consumers can choose copyrighted works, or avoid them**

Although copyrights are part of the framework of property, they are far from ubiquitous. In countries where copyrights are not protected, consumers and businesses can only choose works without copyright protection. In America, consumers and businesses can

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<sup>18</sup> The 10 companies are Amazon, CBS, Comcast, Disney, E-Bay, Google, Microsoft, Netflix, PayPal, and Yahoo.

<sup>19</sup> Thomas Rogers & Andrew Szamoszegi, “Fair Use in the U.S. Economy: Economic Contribution of Industries Relying on Fair Use” (CCIA: 2010) available online at ccianet.org. Messrs. Rogers and Szamoszegi define a group of “fair use industries” and reach the remarkable conclusion that these industries account for 1/6<sup>th</sup> of U.S. economic activity, at 6. See also Roya Ghafele and Benjamin Gibert. 2012. "The Economic Value of Fair Use in Copyright Law. Counterfactual Impact Analysis of Fair Use Policy On Private Copying Technology and Copyright Markets in Singapore" The Selected Works of Roya Ghafele Available at: [http://works.bepress.com/roya\\_ghafele/12](http://works.bepress.com/roya_ghafele/12).

<sup>20</sup> For example, the Rogers and Szamoszegi study includes as “fair use” industries practically all copyright industries. The growth of one becomes almost identical to the growth of the other.

and do choose between works that are copyrighted, often at a higher price, and those that are not. The choice is important. For practically every type of copyrightable work—movies, software, books, music, etc.—American consumers and businesses choose some that are copyrighted and some that are not, and even some that volunteer to lesser forms of copyright protection.<sup>21</sup>

Many Americans choose some works without copyright protection. There are many reasons for such choices.

- Some works are simply of a vintage beyond copyright protection and have entered the public domain. The written works of Shakespeare fall in this category. So too are those of Beethoven and Mozart. But for every well known classic beyond copyright protection, countless thousands of works beyond the vintage of copyright protection languish in obscurity. They are little known to American consumers not because of the cost of copyright royalties—there are none, but because no one sees value in promoting those works and making them available to consumers.
- Other works are in the public domain not as a result of their vintage but because of the studied efforts of their creators. Thus, open source software is written to be in the public domain.<sup>22</sup> It is widely available, and sometimes widely in use. Some music, videos, and other works of art are created with an intent of placing them in the public domain. These works are widely available.
- Some works are in the public domain because they were created by or for a government agency which stipulates that these works are in the public domain.
- Still other works are available without the full benefit of copyright protection, often the result of piracy.

The many works outside of the copyright system are widely available in America. Their prices range from free to a price at or near that of a fully copyright-protected work. Despite the price and availability of uncopyrighted works, American consumers and businesses, more often than not, choose the more expensive alternative of copyrighted works, almost entirely from private businesses.

American consumers and businesses are not coerced into choosing or purchasing copyrighted works. They are free to choose the un-copyrighted works as well as copyrighted works, and they choose a combination of the two, but primarily copyrighted works.

The availability of this choice in America stands in contrast with the absence of such a choice in much of the world. To billions of people around the world, the choice is either not available at all, or available only in narrow circumstances, such as the purchase of un-

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<sup>21</sup> See discussion of 14-year copyright limits at [www.creativecommons.org](http://www.creativecommons.org).

<sup>22</sup> See, e.g., <http://sourceforge.net> and <http://opensource.org>.

copyrighted works or pirated works that are copyrighted in other countries but unprotected in the country of sale. In international comparisons of intellectual property protection, the United States, Western Europe, and a few Pacific Rim countries have more protections than other countries in the world.<sup>23</sup>

#### **IV. Copyrights contribute to economic growth and employment**

Copyrights are important partly because they are part of property and thus to the efficient functioning of a market. Not surprisingly, copyrights also contribute to the economic growth of countries.

##### **A. Economic growth and copyright industries**

The World Intellectual Property Organization developed a template to measure the economic contribution of copyright industries in a country.<sup>24</sup> Economists have conducted studies for many countries and find growing copyright industries with contributions to economic growth and employment. It is difficult to review these or other studies and conclude that copyright industries do not contribute to economic growth or that countries with lesser copyright protection are generally growing more rapidly than those countries with more copyright protection.

Several studies have measured the size of consumer spending on copyrights and their contributions to the American economy.<sup>25</sup> In 2012, Americans spend more than \$1 trillion on core copyrighted industries and more than \$1.7 trillion, or 10% of GDP, on a broader measure of copyrighted works and related products and services.<sup>26</sup>

The direct economic contributions of a music composer, software developer, poet, sculptor, and other creative artists are perhaps easy to understand. But the economic values of their creative works are disseminated through the economy in many different ways, primarily through copyrights. Examining only the direct economic contribution of these artists--misses much if not most of their contribution to the economy. Similarly, the loss to creative artists by limiting their copyrights is only a part, likely a very small part, of the economic loss with reducing copyrights. Below I review just a few of these reasons.

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<sup>23</sup> See, e.g., *International Property Rights Index, the 2013 Report*, at <http://www.internationalpropertyrightsindex.org>.

<sup>24</sup> See World Intellectual Property Organization (“WIPO”), *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*. Geneva, 2003.

<sup>25</sup> See S. Siwek, *Copyright Industries in the U.S. Economy: the 2013 Report*, prepared for the International Intellectual Property Alliance, at [http://www.iipa.com/pdf/2013\\_Copyright\\_Industries\\_Full\\_Report.PDF](http://www.iipa.com/pdf/2013_Copyright_Industries_Full_Report.PDF). That report also lists several of studies on the topic by Mr. Siwek. For the economic contributions of intellectual property generally, see U.S. Chamber of Commerce, Global Intellectual Property Center, at <http://www.theglobalipcenter.com/jobs-map/>.

<sup>26</sup> Siwek, *Copyright Industries in the U.S. Economy: the 2013 Report*, at 3.

*1. Many works contain more than one copyright.*

A single work can contain or reflect multiple copyrights. A copy of newspaper may be copyrighted, but so too likely are each of the stories and photographs in it. Similarly, the broadcast transmission of a recorded song may contain, among others, the following copyrights: (1) the broadcast transmission itself; (2) the record label copyright to record the specific music; (3) performance rights for the artists to perform the music; and (4) a variety of copyrights for music composer, lyricist, and others involved creating the underlying music. There are far more copyrights, and far more complex bundles of rights, associated with a single motion picture. Similarly, a single copy of packaged software may be copyrighted in its entirety as well as embody a great many other copyrighted works.

The combination of copyrights in a single work or service means that reductions in property rights, such as limitations on the control of use or piracy, reduce the rights of not one copyright holder but many.

*2. Copyrights are embedded in many products and services that are not themselves copyrighted*

Copyrighted works are not always directly sold to the public. A smartphone itself is not copyrighted, but a smart phone may contain hundreds of components with copyrights. Some are chips with copyrighted integrated circuit designs on them. Other components embed copyrighted software or images in them. The smartphone is a complex collection of intellectual property— including patents, trademarks, trade secrets, and copyrights. They all contribute to the value of the smartphone.

Copyrights are ubiquitous in the packaging and advertising materials of almost any branded product one can purchase is copyrighted. From Starbucks to store brands, these materials contain a copyright. Quite possibly, they are covered by trademark protection and trade secret protection, but copyrights are visible as well.

Reductions in the property rights of the product or service containing copyrighted works thus affect not only the owner of the product or service but also the holders of the embedded copyrights, who may be entirely different entities.

*3. In addition to the artists creating a work, many segments of the economy contribute to the value and usefulness of copyrighted works.*

Many of the traditional copyright business models are applied in the *core copyright industries*. The core copyright industries create, produce, distribute, and exhibit



copyrighted works; they are important and growing in the United States.<sup>27</sup> The core copyright industries consist of motion pictures, television and radio programming, computer software, recorded music, and books and other publishing. Stephen Siwek has conducted many studies on behalf of the International Intellectual Property Alliance and has consistently found that the core copyright industries contribute substantially more than 6% of American GDP and employ more than 5 million Americans.<sup>28</sup> Rather than shrinking and disappearing with the advent of the Internet, these industries collectively have remained strong.<sup>29</sup> These industries have also often grown faster than other segments of the American economy and account for a disproportionately large share of exports and the overseas sales of American goods and services.<sup>30</sup>

In contrast, in China in 2006, for example, core copyright industries accounted for 3% of GDP and just 0.26% of exports.<sup>31</sup> The corresponding values in Russia in 2004 were 2.4% of GDP and approximately 1% of exports.<sup>32</sup> Core copyright industries were simply not nearly as important to the Chinese or the Russian economy as to the American economy.

Less well understood are the substantial contributions of copyrights to hundreds of thousands of American businesses, large and small, that are not part of the core copyright industries. The World Intellectual Property Organization describes these other industries as interdependent copyright industries, partial copyright industries, and non-dedicated support industries.<sup>33</sup> Siwek has estimated the importance of these industries to the U.S. economy at slightly less than 5% of GDP.<sup>34</sup>

To many Americans, these businesses are the places where we work and where we shop. We see copyrighted works outside of the context of the core copyright industries in our day-to-day lives. We buy and wear clothes with licensed copyrighted images. Our children play with toys with licensed copyrighted works. Goods from household furnishings to automobiles can have licensed copyrighted works embedded in them. We eat at restaurants filled with licensed copyrighted images. We use countless apps on our smartphones with licensed copyrighted software. We work on computers and absorb

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<sup>27</sup> For the general delineation of segments of copyright industries, see World Intellectual Property Organization (“WIPO”), *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*. Geneva, 2003.

<sup>28</sup> See S. Siwek, *Copyright Industries in the U.S. Economy: the 2013 Report*.

<sup>29</sup> Of course, some copyright industries, such as newspapers, have been adversely affected by the internet. Collectively, the entire segment of copyright industries has remained strong.

<sup>30</sup> S. Siwek, *Copyright Industries in the U.S. Economy: the 2013 Report*.

<sup>31</sup> See WIPO, “The Economic Contribution of Copyright-Based Industries in China,” Table 6, December 2009, at

[http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/econ\\_contribution\\_cr\\_cn.pdf](http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/econ_contribution_cr_cn.pdf).

<sup>32</sup> See WIPO, “The Economic Contribution of Copyright-Based Industries in Russia,” 2007, Table 2.2.1.1. at [http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/econ\\_contribution\\_cr\\_ru.pdf](http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/econ_contribution_cr_ru.pdf).

<sup>33</sup> WIPO, *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*. Geneva, 2003.

<sup>34</sup> S. Siwek, *Copyright Industries in the U.S. Economy: the 2013 Report*.

ourselves on our smartphones to manipulate and enjoy information often with the help of copyrighted tools and copyrighted information.

We Americans consume licensed copyrighted works in our daily lives not out of necessity but out of choice. We often have a choice of products with or without licensed copyrighted works, and we often choose those with copyrighted works. Why? The copyrighted images appeal to us. They are familiar, and the familiarity gives many consumers comfort in making a purchasing decision. In signaling product quality, copyrighted images and works are helpful.

#### *4. Copyrights accompany American works around the world*

“Made in America” once was the norm for the vast majority of products sold in our country. Imports were the exception rather than the rule. Today, imported products are available for practically every consumer need, from clothes to home furnishing to electronic equipment. In today’s competitive global market, American consumers can choose products from around the world, or at least from those countries with markets in place to enable those goods to be produced and distributed to America.

Goods and services from approximately 200 countries compete in the global market. Some American goods and services are competitive globally; others are not. American goods and services tend not to dominate global markets. There are a few exceptions. The most notable are copyrighted works: the motion pictures, the computer software, the websites, the music, and countless other works that people around the world seek. One might even call it American exceptionalism.

Consumers everywhere employ computer software licensed by American companies, rely on search engines licensed by American companies, watch movies licensed by American studios, listen to music licensed by American record labels, and in countless other ways rely on American copyrighted works. People see, hear, and understand the world around them through the medium of American copyrighted works. American industries creating copyrighted works contribute disproportionately to the American economy. In international markets for intellectual property ranging from motion pictures to packaged software, from recorded music to live performances, American copyrighted works lead world markets.

Sadly, not everyone pays for the privilege of using American copyrighted works. Copyright piracy is rampant. It is aimed primarily at American copyrighted works because American copyrighted works are strong in most global markets.

5. *Economists find consistent result that copyrights contribute to economic growth*

WIPO has reviewed the economic contribution of copyrights in dozens of countries around the world.<sup>35</sup> The findings of WIPO are striking:

- The economic contributions of copyrights in all of the countries studied are substantial ranging from less than 2% in Brunei to more than 10% in the United States;<sup>36</sup>
- Copyrights also contribute substantially to employment, with employment shares exceeding 10% in Mexico and the Philippines;<sup>37</sup>
- WIPO finds a strong positive correlation between the copyright share of GDP and international measures of intellectual property protection;<sup>38</sup>
- WIPO finds a strong positive correlation between the copyright share of GDP and international measures of economic freedom;<sup>39</sup>
- WIPO finds a strong positive correlation between the copyright share of GDP and international measures of freedom from corruption;<sup>40</sup>
- WIPO finds a strong positive correlation between the copyright share of GDP and international measures of competitiveness;<sup>41</sup> and
- WIPO finds a strong positive correlation between the copyright share of GDP and international measures of innovation.<sup>42</sup>

In each instance, WIPO finds a strong relationship between indicia of economic growth and economic freedom on the one hand and copyright contributions on the other.

**B. Less copyright protection would harm the American economy**

It would be difficult to find a credible body of research demonstrating that clear property rights lessen economic activity and growth. For intellectual property, however, academic claims of such rights reducing economic growth are not uncommon. Some critics, largely without evidence, suggest that current copyrights lack foundation in free market capitalism, slow economic growth, and even conflict with the constitution.<sup>43</sup> For many years, anti-copyright advocates have generated research reports claiming that copyrights

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<sup>35</sup> WIPO, 2013 WIPO Studies on the Economic Contribution of Copyright Industries, 2013, WIPO, at [http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/economic\\_contribution\\_analysis\\_2012.pdf](http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/economic_contribution_analysis_2012.pdf).

<sup>36</sup> *Ibid.*, at 2.

<sup>37</sup> *Ibid.*, 3.

<sup>38</sup> *Ibid.*, 6-7.

<sup>39</sup> *Ibid.*, 7-8.

<sup>40</sup> *Ibid.*, 8-9.

<sup>41</sup> *Ibid.*, 9-10.

<sup>42</sup> *Ibid.*, 10-11.

<sup>43</sup> For a list of web sites hostile to copyright, see [www.anticopyright.org](http://www.anticopyright.org) or an aptly named web site, <http://www.mayhem.net/copyrightfr2.html>. For a more mainstream hostility to current copyright laws, see, e.g., EEF.org. and Creative Commons at [http://wiki.creativecommons.org/Founders\\_Copyright](http://wiki.creativecommons.org/Founders_Copyright).

lessen innovation<sup>44</sup> and that relaxing copyright laws could spur economic growth.<sup>45</sup> Larry Lessig even claims that allowing greater “remix culture”—using electronically the music of others—by lesser copyright protection would spur economic growth in an essay aptly titled “In Defense of Piracy.”<sup>46</sup> Professor Lessig calls for “sharing economies” rather than ones that rely on strict property rights.<sup>47</sup>

The arguments of the anti-copyright advocates fall short. We can examine how far they fall short several ways:

- If copyrights harmed creators, they would reasonably shun copyrights. Do creators choose to shun copyrights?
- If copyrights harmed investors, they would reasonably shun investments in copyrights. Do investors choose to shun copyrights?
- If copyrights discouraged new business models and innovation, new businesses would reasonably shun copyrights. Do new business models gravitate away from copyrights?
- If copyrights discouraged economic growth, industries with concentrations of copyrights would grow more slowly than the remainder of the economy. Do the creative industries in countries with substantial copyright protections have poor economic growth?

To read essays against copyright laws in the United States, one would assume that the answer to all of these questions would be unambiguously “yes.” As it turns out, the answer to each is “no.”

*1. Do creators choose to shun copyrights?*

We can answer this question by examining two different issues: (1) do individual authors and innovators choose not to accept copyrights, and (2) do authors and innovators seek to leave the United States to avoid our copyright laws?

a. Artists choose copyright protection for their works

In the United States, authors of creative works have a choice: to seek copyright protection for their works or to shun such protection. Nothing compels these innovators to avail themselves of the benefits of copyrights. As noted above, America has a visible non-copyright movements, and creators seeking to avoid copyrights for their works can do so.

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<sup>44</sup> See, e.g., M. Boldrin and D.K. Levine, *Against Intellectual Monopoly*, Cambridge University Press, 2008. See also J. Boyle, *The Public Domain*, Yale University Press, 2008. K. Raustiala and C. Sprigman, *Knockoff Economy: How Imitation Sparks Innovation*, Oxford University Press, 2012.

<sup>45</sup> See, e.g., “Promoting Innovation in the On-Line World: The Problem of Digital Intellectual Property,” a report by the Digital Connections Council of the Committee for Economic Development, March 2004, at <http://www.ced.org/pdf/Promoting-Innovation-and-Economic-Growth.pdf>.

<sup>46</sup> L. Lessig, “In Defense of Piracy,” *Wall Street Journal*, October 11, 2008, at <http://online.wsj.com/news/articles/SB122367645363324303>.

<sup>47</sup> See L. Lessig, *Remix: Making Art and Commerce Thrive in the Hybrid Economy*, Penguin Press, 2008.

Yet one can visit many art galleries, bookstores, motion picture theaters, and websites offering creative works without finding any works without copyright protection. For an artist to seek to shun copyright protection appears to be the exception rather than the rule. In practice, most works have copyright protections, even those whose content decries copyrights.<sup>48</sup>

Open source for software programming is one major exception where a substantial body of work has been specifically created to remain outside of copyright.<sup>49</sup> Android, for example, is largely an open source environment, and software created from open source software is intended to remain open source.

Although many software programs are written in open source, open source does not create an environment free of copyrights. Android is an open source operating system,<sup>50</sup> but developers can and do develop software and applications that operate on Android that have copyright protection. For example, one can visit the Android App store and find a large number of copyrighted works as well as some that are not.<sup>51</sup> Practically every major copyrighted software package is available in a version that operates in an Android operating system. Piracy of software and applications appears to have been widespread on Android, but Google has taken some steps to provide greater copy protection.<sup>52</sup> Piracy is present on all mobile operating systems but appears to be greatest on Android.<sup>53</sup>

b. Innovators do not migrate to countries with lesser copyright protection

Much of the academic literature that purports to find that copyrights lessen innovation never addresses a simple empirical test: do innovators flock to countries with little or no copyright protection? Innovators flocking to countries with less copyright protection would support the notion that innovators are attracted by less copyright protection. The opposite pattern yields the opposite result.

The International Property Rights Index provides an index of intellectual property rights, and the United States, together with other industrialized countries, tend to be at the top of that list.<sup>54</sup> I am not aware of an exact index of innovators, much less migratory patterns of innovators, but the countries that rank near the bottom of the International Property Rights Index—such as Georgia, Moldava, Libya, Bangladesh, Armenia, Lebanon,

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<sup>48</sup> I should note that the works of all of the references from major publishing houses cited in this report are subject to copyright.

<sup>49</sup> See, e.g., <http://sourceforge.net> and <http://opensource.org>.

<sup>50</sup> See <http://source.android.com>.

<sup>51</sup> See <https://play.google.com/store/apps?hl=en>.

<sup>52</sup> See M. Działkiewicz, “Preventing Android Applications Piracy possible, requires diligence, planning,” *Fierce Developer*, August 14, 2013, at <http://www.fiercedev.com/story/preventing-android-applications-piracy-possible-requires-diligence-planning/2012-08-14>.

<sup>53</sup> *Ibid.*

<sup>54</sup> See, e.g., *International Property Rights Index, the 2013 Report*, at <http://www.internationalpropertyrightsindex.org>.

Venezuela, Albania, Azerbaijan, Algeria, and Serbia—are not widely known as centers of innovation or destinations for the best and brightest innovators in America.<sup>55</sup> To the contrary, America in general and California in particular are regarded as the destination of choice for young innovators from around the world. While there is a substantial literature on the contributions of immigrants to innovation in the United States,<sup>56</sup> I am not aware of a large literature on the contribution of immigrants to innovation in countries with little copyright protection, much less guidance to innovators in the United States to migrate to those countries.

In theory, an entrepreneur could establish innovation centers in countries or jurisdictions with little or no copyright protection. One sees, however, the opposite: innovation centers in the United States with substantial copyright laws.

The remix of other people’s artistic work, that Larry Lessig claims would generate economic growth, may not be legal in the United States, but it is legal in large parts of the world with lesser copyright protection.<sup>57</sup> No doubt the remix culture exists in other countries, but it is difficult to see that it has led to any significant economic growth. American artists do not flock abroad to engage in remix culture, and the product of that culture, while perhaps appealing to some, has not generated an enormous following countries with copyright protections such as the United States.

## 2. *Do investors choose to shun copyrights?*

It is hypothetically possible that individual innovators do not shun copyrights but that large corporations and aggregators of innovations do. To test this possibility, we can examine whether (1) major corporations have developed business models on distributing and marketing works without copyrights, or (2) major corporations have focused investments for creative works in countries with little or no copyright protection.

America has many large businesses that, in part or in total, either (1) create works, (2) distribute creative works, or (3) provide products and services that are used in combination with creative works. I am not aware that any of the larger corporations deals primarily, much less exclusively, with works without copyright protections. As noted above, sites of major online companies have copyright notices, but not fair use policy disclaimers. Although doubtlessly some small businesses have developed business models focused on creating and distributing works without copyright protection, that does not appear to be the direction of major companies.

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<sup>55</sup> One exception is Korea, which mysteriously ranks low on the International Property Rights Index. It appears to be a case of missing information as Korea has strong copyright laws.

<sup>56</sup> See, e.g., M. Mobarak, “Immigration and Innovation,” *New York Times*, February 12, 2013, at [http://economix.blogs.nytimes.com/2013/02/12/immigration-and-innovation/?\\_r=0](http://economix.blogs.nytimes.com/2013/02/12/immigration-and-innovation/?_r=0).

<sup>57</sup> See L. Lessig, *Remix: Making Art and Commerce Thrive in the Hybrid Economy*, Penguin Press, 2008.

To reduce costs, many American businesses have moved a wide variety of activities to other countries, such as manufacturing, call centers, and contract software. Less common is moving the development of creative works to other countries. Works with copyright protection are still heavily concentrated in the United States.

As noted above, the United States tends to be a substantial net exporter of products subject to copyright protection. This pattern suggests that the investors are not seeking to invest in other countries for the purpose of avoiding American copyright laws.

3. *Do new business models gravitate away from copyrights?*

New business models emerge daily in the United States. It is hypothetically possible that these new models favor non-copyrighted works and that copyrights are simply dated, even obsolete business models. To examine this issue, I look at some new business models for various works that could have copyright protection.

a. The growth of major licensing companies in the Internet Age

One of the phenomena of the Internet age has been the continued growth of copyright licensing companies: companies that license the images and properties of copyrighted works to other companies for a wide range of applications. Licensing of copyrighted works long predates the Internet, but licensing activities have continued to grow with the Internet. The Internet has created a global familiarity with iconic images and global demand for products with these images, almost always copyrighted. Of course, many of these works have trademarks and even patents, but copyrights are always present.

Licensed copyrighted works are important to American businesses as well as consumers. The magazine *Global License!* presents the top global licensing companies for consumer licensed merchandise in 2012.<sup>58</sup> Some of these firms are household names such as Disney, Warner Brothers, MLB, and Ferrari. These firms license the rights to copyrighted works embedded in more than 100 different types of consumer products including clothes, accessories, home décor, games, books, toys and food. Disney is the largest licensor of consumer products with more than \$39 billion in global retail sales. All but 6 of the top 25 firms are American.

Table 1 presents summary information derived from the 150 leading licensees of consumer copyrighted works. These firms accounted for more than \$230 billion in global retail sales in 2012. Out of these 150 firms, 108 were American, and these accounted for

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<sup>58</sup> Source: "Top 150 Global Licensors," *Global License!*, May 1, 2013, at <http://www.licensemag.com/license-global/top-150-global-licensors>.

82% of global sales. Only 16 countries are on the list, and all of these countries have strong copyright protections.

Table 1  
Statistics for Countries with 150 Top Licensors in 2012

<u>Headquarters Country</u>	<u>Number of Top Licensors</u>	<u>Mean global sales per licensor (\$Billions)</u>	<u>Total global sales (\$Billions)</u>
AUSTRALIA	2	0.13	0.25
BELGIUM	2	0.25	0.49
BRAZIL	1	0.78	0.78
CANADA	2	0.62	1.23
DENMARK	1	0.59	0.59
FINLAND	1	2.00	2.00
FRANCE	3	0.46	1.38
GERMANY	2	0.08	0.15
ITALY	5	1.62	8.12
JAPAN	5	1.87	9.35
NETHERLANDS	1	0.25	0.25
NEW ZEALAND	1	0.05	0.05
SWEDEN	1	3.10	3.10
UK	14	0.89	12.48
USA	108	1.75	188.98
USA, JAPAN	1	0.07	0.07
Total	150	1.53	229.27

Source: “Top 150 Global Licensors,” *Global License!*, May 1, 2013, at <http://www.licensemag.com/license-global/top-150-global-licensors>.

Of course, the economic activity generated by these licensed copyright works is much more than just the licensing company. These licensed consumer products are distributed by countless wholesale and retail outlets, both in the United States and abroad, both in physical stores and through online sites.

The copyrights of companies represented in Table 1 are not limited to large corporations. Many small businesses located in every town in America also license copyrighted works. Photographers, recording studios, art shops, local radio stations, newspapers, start-up computer software firms, applications developers, and countless small businesses across America license, or have the potential to license, their works.



b. Mobile software apps

Not all new copyright business models are based on large corporations. A burgeoning business in the United States, and around the world, is the development of mobile software applications often by small companies and start-ups. Mobile apps are a big business. In the first five years of Apple's App Store, app developers were paid \$10 billion.<sup>59</sup> Apple alone has 6 million registered software developers, 900,000 apps available at its App Store.<sup>60</sup> Other operating systems also have substantial app development programs.

Although mobile apps are developed around the world, American-developed apps still dominate in the United States.<sup>61</sup> App developers range from individuals working part-time to corporations with large staffs focused on app development. Because of their small size and start-up nature, not all app developers will appear in the government's statistics used to measure the size of core copyright industries such as computer software. No doubt, these applications developers benefit for American copyright law to develop new business models, and American copyright laws help application developers with some security of receiving compensation for developing popular apps.

c. Distribution of copyrighted works over the Internet

The Internet has also created many new business models for the legitimate licensing and distribution of copyrighted works in addition to mobile apps. From recorded music to videos, from books to magazines, from computer software to sheet music, the Internet has seemingly countless sites distributing legitimate, licensed copyrighted works.<sup>62</sup> Online retail sales in the United States were more than \$225 billion in 2012,<sup>63</sup> and many of these sales were for licensed copyright works. Online wholesale sales were also substantial. Before the Internet, these sales and the business models to support them did not exist.

Many of the largest online stores have substantial sales of copyrighted works such as Amazon or the Apple Store. Although piracy of copyrighted works is heavily online, online sites are also the location of increasing volumes and shares of legitimate sales and licenses of copyrighted works.

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<sup>59</sup> "Apple WWDC Statistics Claim Developers Paid \$10 Bln from App Store," Electronista, June 10, 2013, at <http://www.electronista.com/articles/13/06/10/over.6m.registered.developers.1.million.apple.store.visitors.per.day/>.

<sup>60</sup> Ibid.

<sup>61</sup> M.E. Gordon, "Android Speaks Spanish, but Brands Don't Speak Android," Flurry Blog, October 3, 2013, at <http://blog.flurry.com>. See also "Flurry: Just 36% of mobile apps are made in the U.S.A.," Fierce Mobile IT, August 29, 2013, at <http://www.fiercemobileit.com/story/flurry-just-36-mobile-apps-are-made-usa/2013-08-29#ixzz2hHfBrkVV>.

<sup>62</sup> Of course, many sites also offer pirated works as well.

<sup>63</sup> K Evans, "E Commerce Grew more than 16% in 2012," Internet Retailer, February 15, 2013, at <http://www.internetretailer.com/2013/02/15/e-commerce-grows-16-2012>.

The United States is the global center of much of the commercial use of the internet, from online search engines to online business-to-business activities, to retail outlets for consumers to financial institutions. America's centrality to commercial activities is partly attributable to a range of laws, including copyright laws, that give both buyers and sellers some comfort and security for using the Internet for various commercial activities.

4. *Do the creative industries in countries with substantial copyright protections have poor economic growth?*

The world provides a natural economic experiment to test whether strong copyright laws help or hinder the creation and dissemination of intellectual property. Not all countries take copyright law as seriously as does the United States. None of the top 150 licensing companies reflected in Table 1 is based in one of the countries that the United States Trade Representative has designated as a "Priority Foreign Country" or "Priority Foreign Watch List."<sup>64</sup> These countries include China and Russia.

Each country on the U.S.T.R. "Watch List" has a large number of artists, computer programmers, writers, and others who likely create works that would be copyrighted and licensed if they were in the United States. Each country on the U.S.T.R. "Watch List" has a large number of entrepreneurs and businesses, large and small, that would reasonably develop business models to create and disseminate intellectual property if strong laws were in place to protect such business models. But these countries do not have such copyright laws, and the opportunities to create, develop, distribute, and license copyrighted works are limited.

No doubt, consumers in China and Russia and other countries on the U.S.T.R. "Watch List" have access to imitations or pirated copyright works. The piracy of intellectual property harms not only the legitimate copyright holders in the United States and other countries, but it also harms the would-be artists, creators, and entrepreneurs in China and Russia and other countries who, in the presence of better copyright protection, would create more copyrighted works and oversee the protection and dissemination of those works.

China is the second largest economy in the world and one of the largest exporters of goods and services to the United States. American consumers and businesses purchased more than \$425 billion dollars worth of Chinese goods and services in 2012.<sup>65</sup> But Chinese films, books, software, and other copyrighted works are not commonly

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<sup>64</sup> See U.S.T.R., "2013 Special 301 Report," released May 2013. The "Priority Foreign Country" is the Ukraine. The "Priority Watch List" is Algeria, Argentina, Chile, China, India, Indonesia, Pakistan, Russia, Thailand, and Venezuela. See <http://www.ustr.gov/sites/default/files/05012013%202013%20Special%20301%20Report.pdf>.

<sup>65</sup> See Census Bureau, Foreign Trade Statistics, at <http://www.census.gov/foreign-trade/statistics/product/enduse/imports/c5700.html>.

purchased by American consumers and appear to account for less than 1% of imports. In the global market for creative works, Chinese works are not competitive. The same situation holds for every country that is on the USTR “Watch List.”

The intellectual property embodied in creative works gravitates to those countries that will protect those creative works through copyrights. Chief among those countries is the United States.

Finally, are there any credible empirical studies that demonstrate that economic growth increases measurably with lesser copyright protection? I have searched, but I have not found such studies.

#### 5. *Copyrights are good for economic growth and the American economy*

In sum, I have examined five different questions, a positive answer to each of which would provide a basis to conclude that lesser copyright protection would lead to greater economic growth. The answer to each question is negative.

Copyright industries in the United States remain vibrant and growing in the Internet age. Rather than leading to the demise of copyrights, the Internet has enhanced copyright values and created many opportunities for the development of new business models. Some of these new business models are for licensing activities by large companies that have large portfolios of copyrighted works. But many new business models, such as the development of mobile apps, are for small companies and start-ups. In competitive global markets, American companies still continue to compete effectively in copyright industries. New opportunities for copyright business models in the Internet Age tend to favor America rather than other countries.

### **C. Copyrights benefit consumers**

Copyrights benefit consumers. Anti-copyright advocates might argue that it is hypothetically possible that copyrights are good for the producers and distributors of creative works but bad for consumers. It would be difficult to find a credible body of research demonstrating that clear property rights lessen consumer welfare. But for intellectual property, anti-copyright advocates claim such rights reduce economic growth. Some suggest that copyrights harm the American consumer.<sup>66</sup> Other critics suggest that copyright law is obsolete in the Internet Age, even though the concept of intellectual property and copyright are specifically mentioned in the Constitution. The Internet and electronic media have facilitated, among other illegal activities, the unlawful copying of

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<sup>66</sup> Larry Lessig alleges that current copyright laws harm consumers. See L. Lessig, *Free Culture, How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, Penguin Press, 2004. See also L. Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World*, Random House, 2001. L. Lessig, *Remix: Making Art and Commerce Thrive in the Hybrid Economy*, Penguin Press, 2008.

copyrighted works. The Internet, or so the story goes, has made information free, copying costless, and copyrights obsolete.

Do copyrights really harm consumers? We can examine this question in several ways:

- If copyrights harmed consumers would shun copyrighted works. Given a choice, do consumers shun copyrighted works?
- If copyrighted works were valuable to consumers, businesses would focus on distributing non-copyrighted works to consumers. Have businesses developed substantial legitimate channels to distribute non-copyrighted works to consumers?
- If copyrights reduced consumer choices, consumers would have greater choices where there are fewer copyrighted works. Do consumers have more choices where copyrights are less binding?
- If copyrighted works harmed consumers, empirical evidence should reveal greater consumer welfare where there are fewer copyrights. Does empirical evidence support the conclusion that consumers are better off with less copyright protection?

If copyrights harmed consumers, the answer to each of these questions is “yes.” As it turns out, the answer to each question is actually “no.” Thus, I conclude that copyrights benefit rather than harm consumers.

*1. Given a choice, do consumers shun copyrighted works?*

Americans can watch homemade videos on the Internet with little copyright protection, or they could watch copyrighted video works on television or in movie theaters. Americans can obtain information about practically any topic either from web sites with traditional copyright protection or from web sites with little copyright protection. For video entertainment and information, Americans tend to watch copyrighted works.

Some software is copyrighted; some is open source software. While complex packages of software tend to contain some of each, American consumers tend to gravitate to software and applications with copyrights. Similar patterns hold for other types of works with the potential for copyrights.

Economists have long looked to consumers to reveal their preferences through their spending patterns,<sup>67</sup> not through their answers to pollsters, much less through the empathetic writings of academics. Relative consumer expenditures on different choices reveal the consumer’s preferences; in the area of creative works, American consumers spend a great deal more on copyrighted works than on non-copyrighted works. American consumers are revealed to prefer copyrighted works.

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<sup>67</sup> See, e.g., P. Samuelson, “A Note on the Pure Theory of Consumers' Behaviour,” *Economica* 1938, vol, 5, p. 61-71.

It is difficult to measure how much American consumers spend on works that are not copyrighted, either lawfully as material outside copyright protection or unlawfully as pirated works. Although some uncopyrighted work may be free, consumers may pay for other works without copyrights, such as a copy of a Shakespeare play.

Given a choice between copyrighted works and works without copyrights, Americans apparently choose to pay substantial sums for copyrighted works. This result undermines the notion that copyrights harm consumers.

2. *Have businesses developed substantial legitimate channels to distribute non-copyrighted works to consumers?*

If copyrights were bad for consumers, one might expect successful business models to develop to distribute uncopyrighted works to consumers. Although several sites are dedicated to uncopyrighted works,<sup>68</sup> the vast majority of legitimate web sites that distribute music, videos, software, and other works do so with partly or exclusively copyrighted works. Indeed, the most popular web sites appear to deal primarily if not exclusively with copyrighted works. It is difficult to find a major company that distributes non-copyrighted works, other than classic works whose copyrights have expired. One possible exception is YouTube, which handles many videos, most with copyright protection but some without direct copyright protection. YouTube, however, is likely quite sensitive to copyright issues as it has been involved in several major litigation matters involving copyrights.

If American copyright laws were bad for American consumers, one might expect to see substantial piracy tours, Americans going to countries with lesser copyright protection to purchase uncopyrighted works, and even pirated works. No doubt, such tours occur in small numbers, but they are far from the norm.

3. *Do consumers have more choices where copyrights are less binding?*

One reason that there are few piracy tourists is that there is little evidence to support the notion that consumers have more choices where copyrights are less binding. The local artists and engineers in such a country are simply not creating vast portfolios of works of interest to American consumers but which are not available in the United States with or without copyright protection. In some countries, it doubtlessly is easier than in the United States to acquire pirated software and pirated works of other forms. But the availability of pirated works abroad at a lower price than that of pirated works in the United States does not appear to be a substantial reason for tourism.

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<sup>68</sup> See, e.g., <http://www.partnersinrhyme.com>.

4. *Does empirical evidence support the conclusion that consumers are better off with less copyright protection?*

Finally, are there any credible empirical studies that demonstrate that consumer welfare increases measurably with lesser copyright protection? I have searched, but I have not found such studies.

In sum, I have examined four different questions, a positive answer to each of which would provide a basis to conclude that lesser copyright protection would lead to greater consumer welfare. The answer to each question is negative.

## **V. Conclusion**

Clearly defining and enforcing property rights have long been recognized as important to the smooth functioning of an economy and a democracy. Copyrights are an important part of the structure of property in the America, and their enforcement contributes both to broader economic growth and consumer welfare.

Creative artists and authors have a choice. They can choose copyright protection, or they can shun it. Overwhelmingly, those who can obtain copyright protection do so. Securing property rights including copyrights enhances both private and broader public economic interests.

Business models based on the potential to license copyrighted works are part of the fabric of American business and—for many Americans—central to the American dream. Those of us who aspire to be artists or software developers or writers or engage in practically any activity related to works that can be copyrighted are better off because of copyright laws that permit licensed copyrights and their enforcement.

The abundance of legal choices for copyrighted works, which continues to grow unabated, demonstrates copyright's vital role in facilitating new markets in the digital age as opposed to stifling them. Copyrights contribute substantially to the growth of the American economy. Although limitations and exceptions to copyrights such as "fair use" have a role to play in copyright, they are the exception rather than the rule. It is the copyrights themselves, not their exceptions, that promote growth and innovation.