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Does one-size-fits-all fit anyone? Allocative inefficiency in copyright for creators

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Abstract

A common view in economic research is that the development of copyright, particularly in the last few decades, has amplified an imbalance existing between access and control that negatively affects output and quality. Copyright is a one-size-fits-all mechanism that serves the interests of a broad spectrum of producers of information and creative works, individuals and large organizations alike. It governs the range of production and dissemination methods within these sectors. There are indications that such one-size-fits-all approach to regulation and control misaligns the varied, and often contrasting, needs of the sectors as well as those of the public. Most research on copyright has focused on the effect of copyright policy on organizations and larger producers. This paper focuses on the rights of artists/primary creators or individual copyright holders seeks to determine whether the current regime matches the level of incentive and protection against perceived need of individual creators. Recent amendments seem to be superfluous to primary creators interests and thus inefficient, according to economic theory. This may justify a proposition that states that there is a call for an operational and conceptual distinction between industrial (institutional) and individual copyright.

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Does 'one-size-fits-all' fit anyone? Allocative inefficiency in copyright for creators.

A common view in economic research is that the development of copyright, particularly in the last few decades, has amplified an imbalance existing between access and control that negatively affects output and quality. Copyright is a one-size-fits-all mechanism that serves the interests of a broad spectrum of producers of information and creative works, individuals and large organizations alike. It governs the range of production and dissemination methods within these sectors. There are indications that such one-size-fits-all approach to regulation and control misaligns the varied, and often contrasting, needs of the sectors as well as those of the public. Most research on copyright has focused on the effect of copyright policy on organizations and larger producers. This paper focuses on the rights of artists/primary creators or individual copyright holders and seeks to determine whether the current regime matches the level of incentive and protection against perceived need of individual creators. Recent amendments seem to be superfluous to primary creators interests and thus inefficient, according to economic theory. This may justify a proposition that states that there is a call for an operational and conceptual distinction between industrial (institutional) and individual copyright.

"Good laws lead to the making of better ones; bad ones bring about worse"

(Jean-Jacques Rousseau, 1762)

INTRODUCTION.

Efficiency is a criterion used to measure how well markets allocate resources. It follows that when a market does not manage the allocation of resources in a manner that can be seen to reach a satisfactory relationship between input and output or costs and benefits a lack of optimality is present. Prices should also represent the marginal utilities of goods to consumers. These are the conditions necessary for optimum welfare and they are violated by various deviations, such as the presence of monopoly and deadweight loss. Or other forms of market failure

Market failure in the production of literary and artistic works has led to government intervention, which provides its own source of distortion. The law imposes enforced or artificial scarcity in order to allow producers to price the products to a level necessary for the recovery of the cost of production, and thus prevent underproduction. Copyright is a form of property right, established and sanctioned by legal statute since the nature of copyrightable goods, their intangibility, makes them non-rival and non exclusive. This unusual form of property right, when put into effect, assumes the function of a monopoly right that allows the rights holder to control the distribution, and the price, of a derivative (tangible) product with limited substitutability.

It is, however, not the inefficiency of the market with copyrightable goods that is under discussion in this paper. The intention is to apply the term allocative inefficiency to the rights themselves and attempt to establish that inefficiency is brought about by the misalignment between the scope and duration of the protection provided by the law on the one hand, and the level of protection needed by individual rights-holders on the other. Also, to suggest, that further inefficiency is created through barriers to enforcement. Direct costs, as well as opportunity costs, such as those included in monitoring and tracing on a national, international and even global level, are in most instances beyond the resources available to artists and creators who, as research has demonstrated, are often already severely economically constrained (see for example Abbings (2002); Throsby (1996); Towse (2001)). Readers are asked to note that this discussion assumes the presence of moral rights stipulations and that the copyright laws under discussion are those governed by the Berne Convention. Moral rights are often contrasted with economic rights, though it has been argued that moral rights also have an economic impact. Insofar as they offer an incentive to artists, they impact on economic efficiency.

The paper continues as follows: it (i) delineates briefly generic rights awarded to individual copyright holders under the international standard, the Berne Convention; (ii) provides a short overview of recent amendments to copyright and extensions to its duration; (iii) discusses the costs and benefits of the current duration, reviews attempts at estimating an optimal duration and describes the effects of a) depreciation of rights over time; b) discounting to present value; c) the cumulative nature of creation, on the value of term extensions; (iv) provides a theoretical insight into the actual needs for protection required by individual rights-holders; (v) provides additional theoretical and empirical insights into required protection; (vi) concludes.

I. What rights do current copyright laws secure individual copyright holders.

Little distinction is made between rights awarded to individual creators and those who acquire copyright by means of contracting, licensing or purchase. In the remainder of this paper, the second category will be termed 'industrial copyright'. The Berne Convention obliges signatories to use the articles of the convention as a base line in their national legislature. Thus an international coherence in copyright law has purportedly been reached with the exception of moral rights (Masiyakurima, 2005). The constitutive function of copyright, that is the incentive to produce creative goods and the power to control distribution by determining the level of reproduction, pertains to both groups. Similarly, the duration of rights, the level of protection and the means and methods of redress are the same.

Article 6*bis* of the Berne Convention is known as the Moral rights clause. The article contains three clauses, each of which describes a set of rights; (1) To claim authorship; to object to modifications and other derogatory actions; (2) After the author's death and (3) Means of redress. Article 6*bis* applies only to individuals; the rights granted under the article are un-

waivable and are not conferred to other legal entities, neither through contract nor in cases where individual creators are commissioned or hired to create for another legal entity. Clause 1 of Article 6*bis* reads as follows: *1) Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.* The rights stipulated in this clause are commonly referred to as (a) the right of paternity; (b) the right of integrity; (c) the right of disclosure and (d) the right of withdrawal.

Despite being members of the Berne Convention the UK and other Common Law countries have only recently involved moral rights into their copyright laws although moral rights can, in some instances, be waived.[1] The US did not implement the full scope of moral rights upon signing the Berne Convention and has yet to do so. US authorities maintain that other legal provisions, such as tort law, property laws and human rights law offer options of redress, comprehensively addressing the rights granted under Article 6bis of the Berne Convention. However, VARA (Visual Arts Rights Act) of 1990 offers a degree of moral rights protection to visual artists and the Creative Commons license offers license options that allow rights holders to assume rights can be seen as direct derivatives of Article 6 bis.[2]

II. The nature and scope of recent amendments and extensions of copyright

For copyright law to promote economic efficiency, its principal legal doctrines must, at least approximately, maximize the benefits from creating additional works minus both the losses from limiting access and the costs of administering copyright protection (Landes & Posner, 1989). In a broad context copyright law should aim at maintaining the balance between the promotion of innovation on the one hand and the (short-term) use of existing works on the other. (Nordhaus, 1969; Plant, 1934).

A narrower context, such as provided in this paper, suggests that creators be awarded rights that provide benefits great enough for the encouragement of creation while being enforceable, so that the creators can indeed fully realize these benefits. Initiated by Arnold Plant in 1934, the discussion of the optimal structure of copyright law has been prominent in economic writing albeit constrained by the "inability of economists to resolve the question of whether activity stimulated by the patent system or other forms of protection of intellectual property enhances or diminishes social welfare…" (Priest, 1986). Early works, written prior to the barrage of digital reproduction and dissemination, examine various aspects such as lead time and stock piling, distribution of written material and non-pecuniary motives of creators (Liebowitz & Watt,

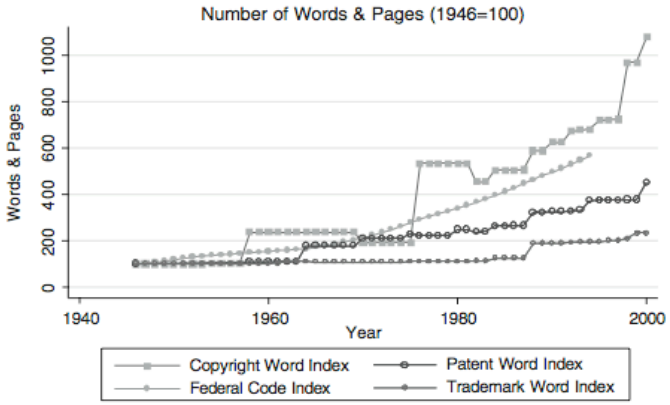
[1] A number of scholars have suggested that waivable moral rights can, in fact, constitute no moral rights as the requirement of a waiver can become a common stipulation, even an industry standard, in contract negotiations.
[2] This may suggest an indirect attempt to introduce and integrate the moral rights paradigm to individual copyright holders creating under the Anglo-American copyright regime. An argument this author would like to expand on, on another occasion.

2006). More recent writing inevitably considers the decisive effect of digitization the optimal configuration of the law, including the option of its abolition. However, in order to determine whether the total favourable effects for society outweigh the total negative effects, an assessment of all the consequences of protection must be made. According to Léveque & Méniére (2004) such an exercise is not yet within reach.

Nevertheless, innumerable amendments, in the form of extensions to the scope and duration of copyright, have been carried out in recent decades. Many of these responded to direct demands placed on the system as new technologies evolved. Others have been implemented in order to harmonize various pre-existing legislation. This, however, explains recent amendments only partially.

Landes & Posner (2004) have demonstrated a rapid growth of intellectual property protection since the introduction of the 1976 Copyright Act (US) and that the statutory expansion in copyrights has been more rapid than other forms of IPR. In fact, copyright is the only area of intellectual property in which statutory expansion appears to be more rapid than the overall growth in federal statutes in the 1946–94 time period, both within established categories and new categories, as well as in scope, duration and strength of enforcement. Landes & Posner applied "a very crude measure of the expansion in intellectual property rights of the increase in the number of words in the principal intellectual property statutes, since most of those statutes expand such rights or create new ones rather than reduce existing rights." Figure 1 confirms that the increase in words has been greatest for copyrights and that this increase was not continuous but coincided with major statutory changes (W. Landes & Posner, 2004).

FIGURE 1
INTELLECTUAL PROPERTY STATUTES AND U.S. CODE



SOURCE: Authors' calculations.

14 amendments to the U.K. Copyright Act were implemented in 1988 to 2007 while the U.S. Copyright act underwent 49 amendments during the same period. Under the aegis of free trade agreements, apropos the 1994 TRIPs agreement, various countries have been spurred on to

fortify copyright law and enforcement (Png & Wang, 2009).

Since 1991 the European Union has attempted to harmonize the differing copyright laws of the member states. The copyright law of the European Union comprises a number of directives that member states are required to enact in their national legislature. Moral rights of authors are not specifically protected by the EU copyright laws as they are seen to be a matter for national law. However, the Droit de Suite, or resale rights, is a European Union directive that establishes a right for artists (visual/fine art) to receive royalties on their works when these are resold. Although an economic right, the Droit de Suite is an unalienable right of the artist, unwaivable and non-transferable except to heirs on death. Duration of copyright under EU copyright laws is, since 2006, the lifetime of the author and seventy years beyond, supported by the rationale that it ensures the rights of the author and two generations of descendents. In September 2011 the EU extended the copyright for sound recordings, adding 20 years to its 50 year term (set in 2006).

Ramello (2004) has argued that the TRIPs agreement was a catalyst for the trend towards copyright extensions. Prior to this, copyright seemed, in Ramello's view, to "adequately balance the public need for access to information with the provision of a private incentive to creators - a state of affairs which, for the sake of simplicity, I have defined as 'minimal copyright'. That original form of copyright, to be absolutely clear, was fully compatible and consistent with its statutory goals--namely promoting the creation of new knowledge through limited private appropriation of information items." The new, or post 1994, copyright is termed 'maximal copyright' by Ramello who perceives the changes as "today progressively altering the equilibrium established by the previous legal framework in balancing knowledge sharing with appropriability." (Ramello, 2004).

Posner (2005) offers a public choice perspective in explaining the expansion of intellectual property rights and draws attention to the asymmetry of interests between owners of such rights and would-be copiers. Since the owners' principal costs are sunk, almost all the revenue from their sale of copies goes directly to the bottom line, giving them a very large stake in extending their rights. In contrast, would-be copiers that avail themselves of works that are in the public domain, can expect only a competitive return, and so they have less incentive to challenge intellectual property rights in the legislature than the owners of such rights have to defend them. Posner suggest that this asymmetry of interests is the probable reason for the practice of extending copyright and patent terms retroactively, despite the fact that such extensions offer almost no incentive for creating additional intellectual property (Posner, 2005).

Viewing the issue from a New Institutional Economics perspective, North (2009) is of the opinion that the development of the intellectual property rights systems has rendered the systems unrecognizable from their original form and intent, that today they are more about the protection of monopolies than encouragement of innovation. North calls for an adaptively efficient structure and indentifies three areas of a general approach to being intelligent about the issue of property rights. Firstly, a better understanding of cognitive science, in particular the way explanations are constructed (i.e. an understanding of property rights and their enforcement based on an understanding of the way the political system has created and specified the property

rights structure). Second, to move away from relying on an economics perspective to include a clearer understanding of the politics of IPR. Finally, a need for a set of models for understanding a dynamic or evolving world. "What made sense and structured the game yesterday does not necessarily work today and tomorrow. And so, we are stuck with the fact that a dynamic system means we have to understand not only where we are, but where we are going." (North, 2009).

III. Duration, optimal duration and the limited value of extensions for individual copyright holders

The optimal duration of copyright has long been debated. While ranging from John Locke's suggestion of lifetime and seventy years (Hughes, 2006) to the full abolition of copyright (Boldrin & Levine, 2002), Lord Macauley's 1841 stern reminder that the evil, as he regarded monopoly rights, and thus copyright, to be "ought not to last a day longer than is necessary for the purpose of securing the good." seems not only astute but irrevocably logical. But, how long is long enough to secure the good?

The argument that the duration of copyright is too long and should be reduced is propagated by most economists. Among the reasons cited are: (1) increases in tracing costs due to length of protection, (2) prohibitive tracing cost if licenses have to be obtained, (3) limited ability of copyright holders to price discriminate, thus encouraging the tendency of both creators and consumers to substitute inputs with either costlier or lower value ones, (4) after an initial protection period incentives to create are not materially affected by shorter protection period because of discounting to present value, (5) retroactive extensions, or the possibility of such extensions, simply produce economic rent that does not affect the incentive to create works already in existence and just encourage rent-seeking (W. M. Landes & Posner, 2003). Akerlöf et al. (2002) describe two further examples of economic inefficiencies caused by an extended duration: (1) lengthening its duration extends the period, during which the copyright holder can determine the quantity produced of a work, increases the inefficiency from above-cost pricing. For new works, the present value of the additional cost is small, just as the present value of incremental benefits is small. The cost of term extension in existing works is much larger in present value, especially for works whose copyrights would soon or already have expired but for extension. (2) An extended period during which a copyright holder determines the production of derivative works, affects the creation of new works that are built in part out of materials from existing works. Cost of access and transaction costs are accrued. By reducing the set of building-block materials freely available for new works, extensions raises the cost of producing new works and reduces the number created.

Commenting specifically on the Copyright Term Extension Act of 1998 ("CTEA"), that granted a twenty-year extension of the copyright term for existing and future works and preceded a comparable extension in many countries in Europe, Akerlöf et al., explained that the

main economic benefit from copyright is to give an author an incentive to create new works and that "The size of this economic incentive depends upon the "present value" of compensation, as anticipated by the author at the time of creation." They proceed to point out that although a longer term for new works may provide some increase in anticipated compensation this compensation occurs many decades in the future and thus the present value is small and offers "at most a very small additional incentive." A term extension for existing works make no significant economic incentive since the additional compensation is granted after the investment has been made (Akerlof, et al., 2002).

Although Landes & Posner (2003) proposed an indefinitely renewable copyright, the idea does not support an indiscriminate extension of all copyrightable works. On the contrary, due to intermittant registration requirements, it facilitates and expedites the fall out rate of works that are seen not to yield economic returns. At the same time it provides the option for extensions for those works that are economically viable for as long as seems beneficial and thus should prevent further rent-seeking and lobbying pressures. Although this system might be highly effective in ensuring appropriate duration for specific works it does not address other prominent problems, such as an imbalance between access and control and problems of enforcement caused by, amongst other, globalization of markets and rising litigation costs (Foray, 2000).

Boldrin, Levin & Sargent (2005) focused on the traditional monopoly undersupply argument and took a general equilibrium approach (in which there were many innovations) when setting about answering the question: In a world in which ideas are of variable quality, what is the optimal level of protection? "In summary, we conclude that if the government is to grant monopolies, they should be limited, as they are, by time limits in the case of both patents and copyright. As the market expands through economic growth and trade, these limits should gradually be tightened, until eventually no grants of monopoly are necessary at all." (Boldrin, Levine, & Sargent, 2005).

The afforementioned system proposed by Landes and Posner (2003) grants an initial protection term of 20 years. The authors, however, do not explain why this number of years is seen to be appropriate although they establish from their empirical work that due to depreciation the average life of a copyright is 15 years. Pollock (2007) contributes to the debate on the optimality of copyright duration by using what he terms a parsimonious model to demonstrate that optimal duration is likely to fall as the production costs of 'originals' decline. Further, that technological change may imply an increase or a decrease in optimal levels of protection (due to reduction in production costs) and finally, that the optimal level of copyright will, in general, fall over time as stock of works increases. Pollock points out that there is a 'frequently significant uncertainty about the optimal level of protection' but underscores that his model demonstrates that 'whatever the optimal level of protection' currently may be 'it will be lower in the future' (Pollock, 2007). This conclusion prompts Pollock to pose the question why, if optimal protection should decline over time, does history (almost entirely) consist of repeated increases in the level of protection over time? The obvious answer, to Pollock, is that 'the level of

protection is not usually determined by a benevolent and rational policy-maker but rather by lobbying'. The result is a policy that favours groups who are owners or prospective owners of valuable copyright over a balanced level of protection that is socially optimal. As an upshot of this logic, extensions will be instituted at an approaching copyright expiery of valuable works (2007). This conclusion corresponds to views expressed by Landes & Posner (2003); Akerlöf et al (2002); North (2009) and others, and as the US Copyright Term Extension Act (CTEA) of 1998, or The Mickey Mouse Protection Act as it is often called, may be said to bear witness to.

In a second paper (2008) Pollock describes a simple dynamic model developed for the analysis of copyright term, claiming that the estimate arrived at by its us is the "first such estimate which is properly grounded, both theoretically and empirically". The estimate referred to used the model "to derive a single equation that defined optimal term as a function of key exogenous variables. Using the estimates for these variables derived from the available empirical data we obtained a value for optimal copyright term of approximately 15 years." Pollock adds that "Furthermore while an exact point estimate is obviously subject to considerable variation due to the uncertainty in the underlying parameters, we confirmed using a variety of robustness checks that current copyrights are almost certainly too long." (Pollock, 2008).

The limited value of term extension for individual copyright holders.

The arguments presented above consider the social value of copyright and view the role of extensions in that light. A final verdict on the benefits accrued by term extensions is still out. A number of factors have to be taken into consideration and it has yet to be established how many of them play out under varyingly contingent circumstances and for different stakeholders. Here the focus turns to the incentive value to individual creators, taking into account three major considerations, depreciation, present value and future creation.

Depreciation

Landes & Posner (2003) demonstrated that a copyright work is subject to significant depreciation. According to their estimation the overall average depreciation is 8.3% annually thus the average life abates to approximately 15 years. They write, that for instance "fewer than 11 percent of the copyrights registered between 1883 and 1964 were renewed at the end of their twenty-eight-year term, even though the cost of renewal was small" and "of 10,027 books published in the United States in 1930, only 174, or 1.7 percent, were still in print in 2001." (Following the CTEA act of 1998 and similar extensions elsewhere, the earliest the copyright for these work could have expired is the year 2000). This demonstrates the rapidity of depreciation and implies that the small effort and low fee demanded by renewal is a decisive inhibitor.

"Yet the estimated depreciation rate of works registered in 1934 is .07, implying that of the works registered that year, 50 percent had fully depreciated by 1944,90 percent by 1977, and 99 percent by 2000; fewer than 1 in 750 works registered in 1934 will have commercial value in

2030. Had renewals been permitted every five or ten years, then after an initial term of twenty or so years, about 99 percent of the works registered in 1934 would have fallen into the public domain by the year 2000, because by then their commercial value had fallen below the cost and inconvenience of renewal. Of course, the 1 percent that would still be under copyright would mainly be the more valuable and enduring works" (Landes & Posner, 2003).

In a CRS Report for the US Congress *Copyright Term Extension: Estimating the Economic Values*, George Rappaport considered a proposals (that later became known as CTEA) to extend the duration of copyright by 20 years. The report reviews the basic economic principles involved in copyright law and gives rough estimates of the value of copyrights on books, music, and movies produced in the 1920s and 1930s — those that would be most immediately affected by an extension of copyright terms (Rappaport, 1998). The estimates are presented in the following tables.

Table 1. Numbers and annual royalties of commercially viable books projected to enter public domain (under current law) during 5-year periods, 1998-2017

Copyrighted	Renewed	To expire	Titles renewed	Titles surviving to expiration	Royalties (million $)
1922-1926	1950-1954	1998-2002	2,840	72	1.2
1927-1931	1955-1959	2003-2007	5,636	918	16
1932-1936	1960-1964	2008-2012	5,562	1,934	48
1937-1941	1965-1969	2013-2017	5,378	2,095	61

Sources: Copyright renewal records, *BiB TV Programming Source Book*, calculations by CRS. See text.

Table 3. Numbers and annual royalties of commercially viable recordings of songs projected to enter public domain (under current law) during 5-year periods, 1998-2017

Copyrighted	Renewed	To expire	Titles renewed	Recordings surviving to expiration	Royalties (million $)
1922-1926	1950-1954	1998-2002	22,592	3,130	3.4
1927-1931	1955-1959	2003-2007	25,794	2,600	2.9
1932-1937	1960-1964	2008-2012	22,427	7,230	8.0
1938-1941	1965-1969	2013-2017	24,641	13,791	15.2

[a]The table shows the projected numbers of "tracks", or recordings, or songs written in the indicated periods. These correspond to an estimated average of 539 viable songs per year with copyrights expiring during the next 20 years.

Sources: Copyright renewal records, Phonolog data base, calculations by CRS. See text.

Table 4. Numbers and annual royalties of commercially viable movies projected to enter public domain (under current law) during 5-year periods, 1998-2017

Copyrighted	Renewed	To expire	Titles renewed	Titles surviving to expiration	Royalties (million $)
1922-1926	1950-1954	1998-2002	2,840	72	1.2
1927-1931	1955-1959	2003-2007	5,636	918	16
1932-1936	1960-1964	2008-2012	5,562	1,934	48
1937-1941	1965-1969	2013-2017	5,378	2,095	61

Sources: Copyright renewal records, *BiB TV Programming Source Book*, calculations by CRS. See text.

It is noteworthy that Rappaport's tables show an increase in titles surviving to expiration. Posner makes a note of this as well and suggests that the development is due to a variety of recording and storage devises that have become available in later decades (Posner, 2005).

Akerlöf et al., acknowledge the possibility that after-the-fact extensions of copyright may increase the incentives of future authors who may expect the same treatment in any subsequent copyright extension. They regard this as a minor influence as do Liebowitz & Margolis (2004) and Watt & Towse (2006).

Liebowitz & Margolis maintain that although the present value of additional revenues to authors might be heavily discounted (and small) this need not imply that the impact of these revenues on the creation of works is small. The change in the number of new titles depends on the additional reward received by authors and on the elasticity of creation with respect to reward. They noted that, of a sample of 236 titles reviewed by *Book Review Digest* in the 1920s, 41% were still in print 58 years later. However, as Liebowitz & Margolis themselves pointed out, a Book Review Digest presents a highly selective fraction of published books. They also suggest that the inferences about depreciation rates of books drawn from overall survival rates are likely to be misleading. " The great majority of books are obscure. They never had much market value. Their demise does not reflect depreciation so much as the fact that they were never really viable. They are unlikely to have significant value in the public domain just as they had insufficient value under copyright to keep them in print. But, for the small number of titles generating the lion's share of economic value, life expectancy is rather long. Extending copyright might have only a small change in expected revenues for these books, but not because they have gone out of print or lost commercial potential." (S. Liebowitz & Margolis, 2003). A similar argument was made by Plant in 1934.

From a model constructed to shed light on how increase in the strength of copyright protection affects the time allocation decision of an author, Watt & Towse (2006) were able to conclude that "before implementing alterations in scope or breadth of protection, assuming that

the overall idea is to increase creativity, it would be best to check the demographic age structure of the population of authors. However, not withstanding the possible negative effect on creativity by older authors, a strengthening of the protection standard will likely have the socially beneficial function of allowing more copyrights to be enjoyed earlier and for longer. (Watt & Towse, 2006)

Present value

To evaluate and compare the magnitude of cash flows that occur in the future, economists use concepts of "present value" and "future value." The expected net present value of a work is determined by discounting the difference between the present and expected future revenues derived from the work and the costs of producing it. For a given amount of money today, future value is the amount that money would be worth at some point in the future. The additional compensation from term extension provides a flow of additional benefits that is far into the future. Such benefits may thus be very small in present value and depend on the applicable discount rate and on the difference between revenue and cost during the extra protection period.

Akerlöf et al., set up an example, applied specifically to the 20-year extension granted by the 1998 Copyright Term Extension Act. Under the assumptions (see above): "the additional compensation provided by the CTEA amounts to a 0.33% increase in present-value payments to the author, compared to compensation without the twenty-year term extension. The above conclusion is based on two assumptions: a constant stream of revenues (The assumption of a constant revenue stream for one hundred years is very conservative, that is, it tends to overstate the amount of compensation, because most works lose economic value over time. As evidence, only a small percentage of copyright registrants bother to renew their works, although renewal costs only a few dollars, 10 and only a fraction of renewed copyrights continue to be valuable to copyright holders.11 If depreciation of value is taken into account, the additional compensation provided by the CTEA is likely to be much less than 0.33%.)And a 7% (Seven percent is meant to be illustrative, but it is a realistic estimate, perhaps even conservative, given the high degree of uncertainty about the revenues resulting from the production of a creative work) interest rate.9 Granting a perpetual copyright would increase compensation by at most 0.12% (at a 7% interest rate), 12 or less once declining revenues are taken into account. " (Akerlof, et al., 2002)

The size of the economic incentive of copyright is determined, at the time of creation, by the present value of compensation. As has been mentioned earlier, few creative works yield substantial rewards while a considerable number yields non at all. This is known to creators, while in other but relatively rare instances, an estimated value of successful works can be predicted. Nevertheless, it is important to stress that at the time of creation the creator does not know if her work will yield recompense, be moderately successful or turn into a blockbuster. Png&Wang, 2006) therefore suggest that copyright should be valued as real options. A

corresponding view is expressed by Balganesh (Balganesh, 2009) who describes foreseeability as an important criteria in copyright infringement cases as foreseeability tailors the cause of action to incentives. Term extension for *existing* works makes no significant contribution to an author's economic incentive to create. In such cases the additional compensation, granted after the relevant investment had already been made, is simply a windfall.

A report commissioned by Industry Canada, on behalf of the Canadian government provides a second example of the present value discount of creative works to the author

For an author who lives another 25 years

Discount Rate	**Percentage gain present value**
4%	2.44%
7%	0.42%
10%	0.06%

For an author who lives another 40 years

Discount Rate	**Percentage gain present value**
4%	1.52%
7%	0.16%
10%	0.01%

For an author who lives another 55 years

Discount Rate	**Percentage gain present value**
4%	0.86%
7%	0.05%
10%	0.003%

The author of the reports makes note that under the more realistic assumption that utilization of a work declines as the work ages, the contribution to present value of term extension becomes even smaller. Furthermore, not all revenue from creative work depends on the existence of copyright. For example, composers may earn substantial income from performing their music. If so, a 0.16% increase in the revenue derived from copyright implies an even smaller increase in the present value of all revenues derived from a work, jointly, these observations imply that the actual increase in present value is likely not to exceed a fraction of 0.16% (Hollander, 2006). Effectively, one can say that the economic rewards from copyright are an incentive but for a great majority of works these are small, even negligible, and warrant a serious consideration of the question whether a duration, indiscriminately awarded to all creative works, is economically justifiable.

The cumulative nature of creation.

The debate on economics of copyright, and intellectual property in general, has focused increasingly on the suspected constraints that the system places on innovative progress (see for example: Jaffe and Lerner, 2004; Benkler, 2006; Bessen and Meurer, 2007; Strandburg, 2007; Boldrin and Levin, 2008; North, 2009; Ramello, 2011).

The debate has two major strains, that is a) the apparently limited incentive that the current structure as well as the current duration exerts on primary creation and the ensuing exploitation of works and b) the cumulative nature of knowledge and creation and the reduction in innovative activity with increasing restrictions on the use of source material. A significant contribution to the prior strain is the increasingly limited additional pecuniary value of copyright due to present value discounting as discussed above. Similarly, it is asserted that an ex ante extension of protection for existing works adds little to author's economic incentive to create, as the compensation is granted after the relevant investment has been made.

The second strain, one that focuses on the cumulative nature of creation (and innovation) and the social cost of monopoly, is discussed at length by various authors (see for example: Nelson & Winter, 1982; Hettinger, 1989; Landes & Posner, 1989; Scotchmer, 1991; Foray, 2000; Ramello, 2004). Akerlof et al., (2002) provide a brief summary: "If building-block materials are copyrighted, there are two sources of inefficiency to consider. If the later innovator must pay for use of the earlier work, this will raise the innovator's cost of making new works, reducing the set of new works produced. In addition, if the process of bargaining and contracting is itself costly, a copyright holder's control over derivative works imposes an additional tax on innovation." Coming to a similar conclusion as Ramello (2004) adds that because of the increasing returns that govern creative technology a efficiency criterion that calls for weak intellectual property rights is preferable whereas, due to the nature of knowledge being collective and indivisible, full propertization can be expected to cause significant harm.

iv. <u>What form of protection do individual copyright holders require.</u>

It is suggested here that individual copyright holders or creator require two forms of benefits from copyright. The first (A) is ability to optimize benefits, pecuniary and non-pecuniary, which can be derived from a particular creation in the shortest time possible. The second benefit (B), both independent and a part of the first, is redress or the means to address abuse by a third party. Such abuse, directly or indirectly, prevents the creator from attaining the utility set out in the first condition. In simpler terms this means that an individual copyright holder require copyright laws that allow her to recover the cost of creation and means to enforce the laws. Foray (2000) suggests that the effectiveness of property rights is inseperable from the creator's capacity to watch over them and that these capacities depend, in turn, on legal facilities, technical

capacities and organizational capacities. In this context it is clear that the globalization of markets clearly has a negative affect on these surveillance capacities.

We shall now address these two conditions, separately, and examine how they play out in the case of individual copyright holders or creators.

A. The optimization of net private and social benefits is the basic justification of copyright. The incentive to the creator is a private one to seek rewards for her time and effort also has the social benefit of increasing the supply of works of art and literature to be enjoyed freely by future generations when they enter the public domain. Copyright theory, which hitherto has been applied to copyright in general without distinguishing between what I call 'industrial' and 'individual' copyright, does not consider the different time horizons of individual creators and the business in the creative industries that exploit their works (Towse, 1999). The notion of harmony between these two interests has been adopted to copyright in general and is accepted within the economic (and legal) study of copyright as an axiom. However, when applied specifically to individual copyright holders or creators today, it is hard to avoid the impression that the theory is akin to an ideal. That simply, this incentives structure that so positively plays out in theory, is more comforting, a vindication even, than truly applicable. To further the argument we will take a quick foray into evidence provided by artists labour market research on the one hand and into an attitudinal survey carried out by the author of this paper.[3]

The most effective method of obtaining rewards from their creations is for creators to assign their rights to a second party through a contract (which is the main method by which organizations and industrial bodies acquire copyright). By doing so, creators receive initial financial compensation and in many instances royalty payments further in the future. However, such contracting is not available to all creators and those who do assign their rights often find that the compensation does not adequately recompense the creative effort. Additionally, it is only rational to assume that organizations that operate under the continuous presence of the 'nobody knows' problem (Caves, 2000); that is, where there is high degree of uncertainty, routinely attempt to spread the risk. Therefore, in a market where there is a continuous, and even rising, over supply of creative works, contracts will not, on the whole, provide creators with optimal compensation. When reading the literature on the economics of copyright it is easy to assume that contracts, publishing and distribution contracts, between creators and organizations are the default situation for the management of creative works. However, if focusing on individual copyright holders, and reflecting on the picture drawn up through artists' labour market studies, a somewhat different reality becomes apparent. Multiple job holdings by artists, frequent alterations between periods of employment and unemployment, the lower than average income and the frequent supplementation of creative work by earnings from a non-artistic jobs bear this out (see Throsby, (1994); Alper & Wassall, (1983); Menger (2005); Wassal et al,

[3] This survey forms the basis of an uncompleted PhD dissertation.

(1996)). The so-called Superstar effect, that is the very high income of a very small number of artist, may suggest advantageous contracting but is, according to artists labour market studies, infrequent (Rosen, 1981). This suggests that either the majority of individual copyright holders (artists) may not be in a situation that allows them to benefit from copyright or that this part of copyrightable works is, in various degrees, lacking in value. It may be partly possible, by use of various evaluation methods (market assessments, comparative valuation, testing and signalling ect.) to determine which factor is the cause for the low return of the works but the cost and the lack of required knowledge will hinder a wider application of such evaluation. Finally, copyright imposes costs as well as benefits. Those are various and aside from the costs of limiting access may be comprised of a set of transaction costs, costs of administering and enforcing. In addition there are costs associated with negotiating, writing and enforcing contracts (Liebowitz and Watt, 2006). Still further costs, in form of diverse opportunity costs, are borne by creators.

It was mentioned at the beginning of this section that individual copyright holders or creator require two types of benefit from copyright with the first being ability to maximize benefits, pecuniary and non-pecuniary, which can be derived from a particular creation in the shortest time possible. It is hoped that the preceding discussion has adequately covered the attainment of pecuniary benefits. The attainment of non-pecuniary benefits, although a definitional party of the first utility, will be discussed in conjunction with issue of redress or enforcement, as the mechanism for such attainment is mainly through this second utility. We will, therefore, turn our attention to the element of time as a conditional part of the first utility.

It is notable that the temporal factor, or to be more precise, early and rapid exploitation as an integral condition for maximizing copyright returns, appears to be neglected in discussion of copyright theory. . If estimations of depreciation and discounting to present value are correct, the typical economic life of a work is short. In addition it can be surmised that, as a result digitization and new technologies, production and distribution costs are declining, providing constant supply of new works in the market and increasing the renewal rate on a continuous basis. This may inflate the costs and effort of exploiting the rights (for most works), in part due to congestion and in part opportunity cost such as the acquisition of specialized knowledge in various forms of contracting and marketing. These factors underpin that time available to the creator for the exploitation of the rights is of the essence, that it is the initial protection period that facilitates the recoupment of costs and thus supports ongoing creation. What the individual creator needs is income in the present in order to be able to devote time to creative work

So, it is suggested that due to:

- insufficient level of advantageous contracting
- levering of risk from principal to actor
- low income levels and volatile employment conditions
- limited capacity to estimate value
- variety of transaction- and opportunity costs
- and the swift depreciation of life of works

individual copyright holders are severely restricted in their ability to maximize the economic benefits from copyright.

B.

Now we shall turn our attention to the second benefit required by individual copyright holders, that is redress or the means to address abuse by a third party.

Copyright allows individual copyright holders, as well as industrial copyright holders, to determine the access others have to their work and the uses of these works permitted. Although infringement, direct and indirect, voluntary and involuntary, has always taken place to some degree, it has been limited by the prohibitive effect of the law itself, the cost of copying and what can be termed copynorms. In applying the concept of the term social norms[4] to copyright, is suggested that the copyright laws are augmented by social norms applied to copying, distribution and use of existing works. (Solum, 2005) Also, that copynorms both moderate and extend the effect of copyright law.(Schultz, 2006) This paper assumes that not only do copynorms exist but also that they have a substantial effect on how individuals perceive copyright and regulate their use of copyrightable goods.

The extent of copyright infringement and the harm suffered by individual copyright holders has not, and probably cannot, be estimated. However, a review of cases brought to the supreme court of Iceland on the basis of the copyright laws since the country became a signatory to the Berne Convention in 1947 show, that only a fraction of these cases involve individual copyright holders and a violation of the economic or moral rights of individuals. This suggests that either the laws (and the copynorms) have traditionally a strong deterrent and that violations have been uncommon, or that individual copyright holders are either unaware of violations or cannot, for one reason or another, seek redress.

Whatever the reason for the fairly uncommon excercise of copyright enforcement through courts by individual copyright holders may have been in the past, they have become irrelevant in the age of digitization. Within the span of two decades hundreds of millions of individuals all over the globe acquired the means to violate copyright law. In spite of copyright law protecting the interests of creators and authors, copyright infringement is clearly present, and indeed is currently at levels that are extremely troublesome (Liebowitz, 2006). Violation of industrial copyright has been shown to be on a massive scale but harm suffered by individual copyright holders has neither been empirically established nor estimated. There is no reason to expect that the situation does not apply, to some degree, to them as well.

Copying is conducted outside of organized markets by anonymous strangers, copied items are almost perfect substitutes and the act of copying has become practically costless. The

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[4] *Social norms* are customary rules of behavior that coordinate our interactions with others. Once a particular way of doing things becomes established as a rule, it continues in force because we prefer to conform to the rule given the expectation that others are going to conform (Lewis, 1969). New Palgrave Dictionary of Economics, 2. ed. at http://www.econ2.jhu.edu/people/young/palgravesocialnormsjuly07jhu.pdf

cost of monitoring and tracing infringement is rising as well as the cost of redress. The technologies of copying obscure the nature of the violations when issues, such as what constitutes a copy and which technologies the laws apply, are not always fully understood by individual copyright owners or copyists. New forms of usage available through novel and emerging technologies are often not immediately recognizable, to copyright holders or users, as identifiable instances (forms) of infringement.

Violations often take place in, what individual copyright holders may well perceive as, space or even nowhere, by persons or institutions unknown, operating in distant and even unlocated territories. It is clearly a complicated matter to determine which laws (national or international) are to be addressed or applied and in which jurisdictions redress is to be sought. Under such conditions copynorms, if operating at all, will erode.

Dinwoodie (2006, 2011) recounts that shortly after the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) was concluded, a group of scholars published a collection of essays under the title GATT or WIPO?, contemplating the extent to which the WTO (GATT/TRIPs) would displace the WIPO (Berne Convention) as the dominant institution of international intellectual property law. Ten years later Dinwoodie's answer to the question was: "..neither the WTO, nor WIPO. It is the WTO and WIPO; and the practices of multinational information industry actors; and technology that operates without regard to territory; and national courts developing for the first time a private international law of intellectual property; and new actors whose authority and remit are not linked to any particular nation-state; and transnational networks of nongovernmental organizations (NGOs); and existing international institutions that now find their work impacted by intellectual property law." (Dinwoodie, 2011) To this discomposing array of international copyright authorities and institutions we can add institutions that affect copyright holders in a direct manner, the European copyright laws and directives and national copyright laws. It is not unreasonable to enquire where the individual copyright holder can find her means of redress, her right to enforcement, in this confounding array of law in the international or global environment that an increasing multitude of creators operate.

Liebowitz and Watt (2006) suggested cautiously, as economists do, that a large and unanticipated increase in copyright infringement could be taken as evidence that that copyright law is not functioning as intended. This, say Liebowitz and Watt, indicates that the design of the system might need to be addressed. They also point out that the cost of monitoring infringement is rising and surmise from that, "In such an environment, copyright loses its effectiveness as a property right." The subject of Liebowitz and Watt's study, and to which their conclusion applies, is referred to here as industrial copyright. How the situation translates to the instance of individual copyright holders is hard to establish although the effect of the development cannot be any less severe. The following proposition is un-cautiously ventured that: due to rising costs of monitoring infringement and enforcing rights; difficulties in establishing infringement; and the geographical and jurisdictional complexity, copyright is near impossible for individual copyright holders to enforce.

The requirement of individual copyright holders in regard to copyright provisions has now been examined. The proposition, that neither is properly met by the current copyright regime and thus the misalignment and/or allocative inefficiency of copyright is established, forms the premise for the following and concluding section.

(v) <u>What form of protection do individual copyright holders require.</u>

In *TRESPASS-COPYRIGHT PARALLELS AND THE HARM-BENEFIT DISTINCTION* (2009), Wendy Gordon introduced what she calls the harm-benefit distinction, based on the hypothesis that "people are less motivated to "capture benefits" than to avoid losing a possession" and that "Similarly, losing an opportunity to profit does not motivate action as strongly as avoiding harm." Gordon's hypothesis provides us with two propositions relevant to the main argument presented in this paper, i.e. that there is a misalignment between the requirements of individual copyright holders and the actual provision of copyright law. The first proposition is offered by Gordon who suggests that: "since owners are likely to be more vigilant in avoiding harms than in pursuing benefits, and since nonharmful benefits are more likely to occur in the case of intangibles, copyright owners are less likely to maximize the social value of their property than are the owners of tangible property."[5] Gordon explains that: "Without the prospect of a "harm" to call attention to a competing use, and without the definiteness of measurement that "harms" can provide to real property owners, copyright owners might be less prone than tangible property owners to engage in privately and socially valuable licensing. When this reluctance is coupled with the effects of nonrivalry, and with the probability that a larger range of potential uses exist for a valuable piece of copyrighted material than for a valuable piece of land, it seems likely that copyright owners, left to the private market, will license a narrower range of their property's potential uses than will the owners of realty. Further, authors' emotional investment in their work may make them (if they own the copyrights) prone to over- estimating the value of their work, setting unrealistically high prices that derail bargaining."(Gordon, 2009). The second proposition that can be drawn from Gordon's contribution is that copyright as an instrument of redress of third party abuse of rights is of primary value to individual copyright holders.

In an attitudinal survey send to all members of all (13) artists associations that make up the Federation of Icelandic Artists, an attempt was made to establish artists' perspective of authors' rights, the value they place on these rights and their attitude towards the laws. The survey comprised 73 questions many of which were replicated but presented with different

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[5] Gordon arrives at this proposition by means of a syllogism; (1) "[*If the non-Coasean observation is accurate that people fear loss more than they desire gain] an owner will respond less readily to opportunities to maximize the beneficial use of her property than she will to opportunities for avoiding harms to it. Although some tangible property can be harmlessly shared, intangibles (such as the patterns that make up "works of authorship") are much more likely than tangibles to be nonrival and inexhaustible.* " (2) "*that copyright is by third parties.*"

wording or emphasis to give a stronger validity to the results. The analysis of the findings is ongoing but here a few preliminary findings are presented.

(i) On the level of protection provided by the current regime:

Q: In your opinion, do authors' rights ensure the rightsholder (see options below):

Op. 1	High level of protection	9.44%
Op. 2	An adequate level of protection	37.17%
Op. 3	Limited level of protection	40.94%
Op. 4	An inadequate level of protection	10.87%
Op. 5	No protection	1.58%

Those who replied to options 3,4 & 5 were asked to give a reason for their answer. 46% named problems with enforcement, 12% mentioned that they saw the laws as either flawed or unclear, 5.4% saw laws abused through contracting as their reason. The number of individuals that mentioned limited duration as a reason was to small to register.

(ii) On the importance of (a) economic rights versus (b) moral rights:

Q: If either of the rights, economic or moral, were to be abolished, which one would be more important to maintain in view of your creative works?

Rights that ensure you the economic benefits that are generated by your creative works	40.78
Rights that ensure your control over where and how your creative works are used and that you are always named as its author	59.22%

(iii) On the duration of authors' rights term:

Q: *The duration of authors' rights is the lifetime of the author and 70 years beyond. Do you find this duration too short, appropriate or too long?*

Considerably too short	4.55%
Somewhat too short	10.78%
Appropriate length	63.83%
Somewhat too long	15.82%
Considerably too long	5.01%

(iv) On creation in the absence of protection:

Q: Would you continue to produce creative works if copyright were to be abolished?

No	8.85%
Yes, but less than before	19.40%
Yes, about the same as before	69.55%
Yes, but more than before	2.20%

(v) On rights as an incentive for creation:

Q: *If all costs incurred by the production of your creative works (wages, materials, services/assistance ect.) were fully reimbursed by other means than through copyright, how would the abolishion of authors' rights affect the volume of your creative works?*

I would produce fewer creative works	21.65%
I would produce the same number of creative works	65.40%
I would produce more creative works	12.95%

(vi) On the central function of authors' rights:

Q: *In your opinion, which of the following statements describes the function of authors' rights the best?*

Authors' rights are laws that are intended to protect the reputation and honour of artists and ensure that they have control over their creative works.	47%
Authors' rights are laws that prohibit the distortion, reproduction and copying of creative works	17.33%
Authors' rights are laws that ensure that artists retain the right to garner economic benefits from creative works	10.18%
Artists' rights are laws that stipulate how and under what conditions copyrighted works can be used by others	25.49%

(vi) <u>Conclusion</u>

.This paper has argued that copyright is not efficient in the sense of providing sufficient incentive to individual creators to supply works of art and literature.

We have seen that individual copyright holders are ill equipped to maximize their economic rewards from copyright. We have also seen that the current duration and further

extension will not improve on this. And finally we have seen that the rights are difficult to near impossible enforce by individual copyright holders. A law that is too costly and complicated to enforce is little or no better than any law at all. This is the situation at a time when the forces of digitization and new and emerging disruptive discoveries have yet to effect their full impact.

The paper has not considered if and how the copyright regime is aligned with the interest of what we call industrial copyright holders (although, judging by the belligerent complaints and relentless lobbying one can be forgiven for assuming a considerable disparity there as well). However, it may be considered that the difference between the needs of primary creators and 'industrial' copyright holders is vastly different and that the misalignment in need and interests suggests that the current copyright system responds insufficiently the requirements of both the groups.

This strongly suggests that the reply to the question posed in the title of this paper is negative and logically warrants yet another question: Are the interests of the two groups so varied that they require a separate mechanism that protects creative works and allows the enforcement of rights, Artist's rights and Industrial copyright?

The author wants to thank the survey participant whose illuminating observation was the motivation for this paper. "I write commercial creative works and the copyright for those has only economic value to me. My artistic work is another matter altogether…these are of an entirely different nature and of very different value".

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