Books off the Shelf & the Problem of Copyright Term Extension: Empirical Analysis of Books Written by Literature Nobel Prize Authors*

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ABSTRACT. The present article examines the impact of copyright term extension on the availability of new printed books written by Nobel Prize laureates in Literature. Building on research like Paul J. Heald's, which suggest that extended copyrights can reduce book availability as publishers stop printing unsold works, the study uses two datasets from Amazon.com (2015 and 2023). The results show that, on average, copyrighted books have fewer printed editions compared to those in the public domain. This contradicts the assumption that copyright extension leads to increased distribution of copyrighted material and challenges the notion of the tragedy of the public domain.

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KEYWORDS: Copyright, Copyright extension, tragedy of the public domain, books out of the shelf.

Libros fuera del estante y el problema de la extensión de derechos de autor: análisis empírico de libros escritos por autores del Premio Nobel de Literatura

RESUMEN. El presente artículo analiza el impacto de la extensión de los derechos de autor en la disponibilidad de nuevos libros impresos de premios Nobel de Literatura. Basado en investigaciones como las de Paul J. Heald, que sugieren que la extensión reduce la disponibilidad al hacer que las editoriales dejen de imprimir obras no vendidas, el estudio emplea dos bases de datos de Amazon.com (2015 y 2023). Los resultados muestran que, en promedio, los libros con derechos de autor tienen menos ediciones impresas que los del dominio público, cuestionando la idea de que extender los derechos mejora la distribución.

PALABRAS CLAVE: derechos de autor, extensión de derechos de autor, tragedia del dominio público, libros fuera de las estanterías.

SUMMARY: Introduction. I. Background. II. Methodology of empirical work. III. Results and implications. Conclusion. References.

Introduction

In recent years, several countries in Latin America have unilaterally extended copyright terms without robust policy justifications. For instance, in 2003, Mexico amended its *Copyright Federal Act* to extend the duration of exploitation rights to the life of the author plus 100 years¹. In 2018, Colombia passed Law 1915, which extended the term of copyrights from 50 to 70 years when the copyright owner is a legal entity. In the United States (US), policymakers and some scholars have supported copyright extension, as evidenced by the enactment of the *Sonny Bono Copyright Term Extension Act*. This support is premised on the assumption that negative consequences may arise when copyrighted works enter the public domain². We have named to this problematic as the tragedy of the public domain. However, US copyright scholars have tested the theory that motivates copyright extension and, in the process, provoking an intense debate among scholars and responses from policy

De la Parra Trujillo, E., "Comentarios a las reformas a la Ley Federal del Derecho de Autor", *Revista de Derecho Privado*, n.º 8, 2004, 95-110.

² Rengifo García, E., Recientes reformas normativas del derecho de autor en Colombia (Boletín virtual de propiedad intelectual, 2012, available at: http://propintel.uexternado.edu.co/Pr0P1n73L-3xT3rNaD0-U3C/wp-content/uploads/2012/11/Recientes-reformas-normativas-del-Derecho-de-Autor-en-Colombia-2.pdf [last visited: February 24, 2016].

makers³. Despite the theoretical assumption that copyright extension would lead to increased distribution of copyrighted material, the empirical research conducted by Paul J. Heald suggests otherwise⁴. In fact, copyright extension may result in a decrease in the availability of books. This phenomenon is often attributed to publishers ceasing to print books that do not sell well, and the subsequent increase in the publishing of works. Once copyrights enter the public domain, works are more likely to be published⁵.

In this paper we extend the discussion by analyzing the effects of copyright term extension in works written by Literature Nobel Prize Winners in the US⁶. We believe that these works would provide a higher standard to the findings, which suggest that copyright extensions have, at certain points, led to the disappearance of some works from print.

The paper begins with a background on Copyrights and Copyright Extension in the US, divided into two parts: Carrots for Authors and Publishers and the Tragedy of the Public Domain. In a nutshell, the first part describes the theory supporting copyright extension in the US and examines the counterarguments presented by scholars that have challenged the policy. The second part explains the methodology used in the research and the research findings. In our view Latin American Copyright scholars could benefit from observing empirical research in US law and applying the methodology to test and support legal assumptions that underpin public policy.

I. Background

A. Carrots for authors and publishers

Copyrights are a form of property created by law or statute. In the US, copyrights were first protected in 1790; nevertheless, the initial copyright laws only protected US citizens and residents. Foreign authors such as Charles Dickens, Jane Austen, Theodor Mommsen, and Victor Hugo, among others were not afforded protection. In fact, when the famous novel *Christmas Carol* was published in London in 1843,

³ Hatch, O. G., and Lee, T. R., "'To Promote the Progress of Science': the Copyright Clause and Congresse's Power to Extended Copyrights", *Harvard Journal of Law & Technology*, vol. 16, n.º 1, 2022. 4.

Buccafusco, C., and Heald, P. J., "Do Bad Things Happen when Works Enter the Public Domain?: Empirical Tests of Copyright Term Extension", *Berkeley Technology Law Journal*, vol. 28, n.° 1, 1-43.

⁵ Heald, P. J., "How Copyrights Keep Works Dissapeared", *Journal of Empirical Legal Studies*, vol. 11, 2014, 829.

The Nobel Prize was the fourth award granted by Alfred Nobel in his will and it is not a recognition for any particular book, such as the Pulitzer Prize, but, for the life work of an author, in other words, the prize is provided in spite of all the assessment of an author, and it's not limited to any individual language such as the Miguel de Cervantes Award or the Man Booker International Prize.

a copy was sold at \$2.50 dollars. However, the same copy in the US was priced at 6 cents ⁷⁻⁸.

The previous example illustrates two main things:

First, without copyrights, it would be less expensive to copy work and just free ride off the work of others. In theory, this would result in fewer incentives for authors and publishers who invest in authors for exclusive rights, thus discouraging their participation in market. As is common in other businesses, certain groups will advocate for policies that benefit their interests. Historical figures such as Victor Hugo⁹, Charles Dickens and Mark Twain in the 19th century have exemplified this. For instance, Mark Twain argued that copyright should be treated as any other property right and should not have a term. He expressed this sentiment at a Congressional committee in Washington D.C., on December 7, 1906, stating:

[t]he excuse for a limited copyright in the United States is that and author who has produced a book and has had the benefit of it for that term has had the profit of it long enough, and therefore the government takes the property which does not belong to it, and generously gives it to the 88,000,000 of people. That is the idea. If it did that, that would be one thing. But it doesn't do anything of the kind. It merely takes the authors property, merely takes from his children the bread and profit of that book, and gives the publisher *double* profit¹⁰.

Secondly, it was necessary to establish a global framework in copyright law to protect authors and business interests across different nations. This was accomplished through the Berne Convention in 1886¹¹ 12.

Nevertheless, U.S. copyright law differed significantly from the provisions outlined by the Berne Convention of 1886 and the *Berlin Act* of 1908¹³. In the late 18th

⁷ Alford, W. P., "Don't Stop Thinking about... Yesterday: Why There Was No Indigenous Counterpart to Intellectual Property Law in Imperial China", Alford, W. P., To Steal a Book in an Elegant Offense, Standford, Standford University Press, 1995, 9-141.

⁸ Moreover, the US extended its copyright protection to foreigners in 1891, when its own book industry and literary culture promoted and encouraged policy changes.

⁹ Victor Hugo founded in 1878 the International Literary and Artistic Association (ALAI). The International Literary and Artistic Association [online], available at: https://www.alai.org/en/information/presentation.html [last visited: March 3, 2019].

¹⁰ Twain, M., Mark Twain Speaking, Iowa City, University of Iowa Press, 1997, 534.

¹¹ In 1886 the first international agreement on copyrights was subscribed among United Kingdom, Tunisia, Switzerland, Spain, Liberia, Italy, Haiti, Germany, France, and Belgium.

¹² Nevertheless, a key issue that remained different was the term of copyright and should be answered by national law of everyone the signatures, until, in the *Berlin Act* in 1908 it was adopted for new members the term the life of the author plus fifty years, evolving in a mandatory rule for all members in 1948 with the *Brussels Act*.

¹³ Craig, J.; Ochoa, T.; Caroll, M., Leaffer, M.; and Jaszi, P., Copyright Law, 10.^a ed., Durham, NC, Carolina Academic Press, 2016, 21-22.

century, the first federal copyright law of 1790 granted creators exclusive rights for an initial term of fourteen (14) years, with the option to renew for another fourteen (14) years. Copyright protection was obtained by depositing a printed copy of the work with the local federal court of the creator's district and providing another copy to the Secretary of State within six (6) months. The term was later extended to twenty-eight (28) years in 1831¹⁴.

The *Copyright Act* of 1909 also adopted the term of twenty-eight years, along with the right to renew the copyright for 28 more years upon the expiration of that period. If a work was published before 1923, is actually in the public domain. For example, Winston Churchill, Nobel Prize winner in 1953, published *The Story of the Malakand Field Force: An Episode of Frontier War* in 1897.

Determining whether a work published between 1923 and December 31 of 1977 is in the public domain or whether it continues holding valid copyrights can be a challenging task, as it requires searching through copyright records and knowing the legal details of copyright law. As an example, consider *Lord of the Flies* a book published in 1954 by Sir William Golding, Nobel Prize winner in 1983. The initial term of twenty-eight (28) years began with the publication of the work, and creators had the right to renew the copyright for an additional twenty-eight years, totaling fifty-six (56) years.

However, in 1976, Congress granted an extension of 19 years to the renewal period of copyright works, so technically, it was now a renewal time of 47 years (28 + 19 = 47), in addition to the initial term. This resulted in a total copyright duration of 75 years. Subsequently, in 1998, Congress further extended the term by an additional twenty (20) years through the *Sonny Bono Copyright Extension Act*, bringing the total duration of copyright protection for works published in 1923 or later to 95 years. The extensions granted by Congress added 67 years to the original copyright term (28 + 19 + 20 = 67), resulting in a total duration of copyright protection of 95 year for works published 1923 or after.

Returning to the term of *Lord of the Flies*, assume, that it was published with notice and copyright was renewed, as you would expect professional publishing companies to do with the rights of Nobel Prize winners. Consequently, the copyright term would extend until 2050.

Fair to say, the 20 years extension was partially supported by the idea that the European Union had extended copyrights by another 20 years in 1993 through the Council Directive 93/98/EEC. A closer look to the 'Council Directive' suggests a policy, in appearance, inspired by an historical legacy, as observed in this statement: "Whereas the minimum term of protection laid down by the Berne Convention, namely the life of the author and 50 years after his death, was intended to provide protection for the author and the first two generations of his descendants; whereas

¹⁴ Friedman, L., A History of American Law, 3.ª ed., New York, Simon & Schuster, 2005, 463-464.

the average lifespan in the Community has grown longer, to the point where this term is no longer sufficient to cover two generations".

It's interesting to observe how the idea of the two generations can clearly be traced to the policy pressure done by authors, like Mark Twain, Victor Hugo and Charles Dickens in the 19th century, as evidenced by the words of Mark Twain when he says:

As I say, this proposed limit is quite satisfactory to me- for the author's life, and fifty years after. In a few weeks, or months, or years I shall be out of it. I hope to get a monument. I hope I shall not be entirely forgotten, and I shall subscribe to the monument myself. But I shall not be caring what happens if there is fifty years added life of my copyright. My copyrights produce annually a good deal more money than I have any use for, but my children can use it. I can take care of myself as long as live. I know half dozen trades, and I can invent half dozen more. I can get along. But I like fifty years extension because that benefits my two daughters, who can't get along as well as I can, because I have carefully raised them as young ladies, who don't know anything and can't do anything. So I hope Congress will extend to them that charity which they have failed to get from me¹⁵.

At that moment, Congress did not back the proposed extension of copyrights, probably, because the balance between the rights of authors and free market interests leaned more towards the latter. The significant question would be why has a public policy of copyright extension been pursued? What have been the side effects of copyright extension?

B. The tragedy of the public domain

In January 2013, Mario Vargas Llosa, Nobel Prize winner in 2010, was asked in an interview about what he was willing to write? He answered that there were a lot of things he would like to write, though, at that moment he was working on an adaptation for theater of *The Decameron* of Giovanni Boccaccio, and then he said that since he read *The Decameron* he was strongly impressed by the peculiar story of the book, because, when the black death reached Florence in 1348 and the presence of death was in every corner of the city, there was a group that could not escape and was trapped physically among the city, deciding to take shelter and scape towards the imaginary. Then he said, "the idea that when everything seems impossible something is always possible using as resource fantasy and imagination [...] because of that we have literature, in order to live what in real life we cannot live" ¹⁶.

¹⁵ Twain, M., Mark Twain Speaking, cit., 534.

¹⁶ Interview with Mario Vargas Llosa: Mario Vargas Llosa and J. J. Armas Marcelo talking in the "Hay Festival Segovia 2013" [online], Segovia (Spain) (Sep. 28, 2013), available at: https://www.cervan-

To appreciate the problem of the tragedy of the public domain, let's consider the previous story. *The Decameron* is a work that is in the public domain. Consequently, Vargas Llosa could use the work and derive from it a new work without being restrained by any property rights, and, as a result no fees to pay. Now let's assume that Boccaccio is actually alive and wrote the book only 30 years ago, valuing the creation of the book at 5 thousand dollars (opportunity cost), and the cost of production and distribution of the book is 2 dollars per copy, with no other costs. What would happen in a world without copyrights?

According to Richard Posner and William Landes, in a competitive market, publishing companies will produce books until the price equals the marginal cost – in this case, \$2 per copy – and will not be able to adequately compensate the author for his creation. This scenario results in a tragedy of the public domain for intangible property, similar to the overgrazing of land commons by Garret Hardin¹⁷. Consequently, publishing companies would need to charge a monopoly price, in theory any price that would not equal the marginal cost, excluding legally outsiders without any relation with the author, in order to provide sufficient revenue for making a business profitable and providing pecuniary emolument to the author¹⁸. Because of that, Posner and Landes argue and predict in "Indefinitely Renewable Copyright", when the say: "[J]ust as an absence of property rights in tangible property would lead to inefficiencies, so an absence of copyright protection for intangible works may lead to inefficiencies because of congestion externalities and because of impaired incentives to invest in maintaining and exploting these works"¹⁹.

Senator Orrin G. Hatch and Thomas R. Lee in "To Promote the Progress of Science": The Copyright Clause and Congress's Power to Extend Copyrights" (2002) claim that copyright extension "promotes the progress of science by encouraging the distribution and dissemination of copyrighted works"²⁰. To sharpen this analysis, it would be helpful to observe in detail the claims and evidence provided by Congress for arguing a copyright extension as a solution to the tragedy of the public domain.

The first claim argues that an extension of copyright creates incentives to distribute work. It utilizes as evidence testimonies from hearings prior to the enactment of the *Copyright Term Extension Act*. To illustrate this, let us examine the words cited from the testimony of Marybeth Peters, formerly the eleventh Register of Copyrights of the US: "In some cases the lack of copyright protection [...] restrains the

tesvirtual.com/obra/vargas-llosa-en-el-hay-festival-de-segovia/ Finally at the begging of 2015 the adaption of Boccaccio, *Tales of the Plague* of Mario Vargas Llosa appeared in the Spanish Theater.

 $^{17 \}quad Hardin, G., "The Tragedy of the Commons", \textit{Science}, vol. 162, n. °3859, 1968, 1243-1248.$

¹⁸ Posner, R. A., and Landes, W. M., "Indefinitely Renewable Copyright", *The University of Chicago Law Review*, vol. 70, n. ° 2, 2003, 471.

¹⁹ Ibid.

²⁰ Hatch, O. G., and Lee, T. R., "'To Promote the Progress of Science': the Copyright Clause and Congresses's Power to Extended Copyrights", cit., 16.

dissemination of the work, since publishers and other users cannot risk investing in the work unless assured of exclusive rights"²¹.

Before Marybeth Peters provided her testimony in Congress, the exact argument was used by Congress for changing the copyright term under the copyright act of 1909 to a single time term under the *Copyright Act* of 1976, when they concluded:

[L]imitations on the term of copyright are obviously necessary, too short a term harms the author without giving any substantial benefit to the public. The public frequently pays the same for works in the public domain as it does for copyrighted works, and the only result is a commercial windfall to certain users at the author's expense. In some cases the lack of copyright protection actually restrains dissemination of the work, since publishers and other users cannot risk investing in the work unless assured of exclusive rights.

Not surprisingly, both arguments present the idea of the tragedy of the public domain without providing empirical evidence. The prediction is that works without copyrights would be abandoned in the ocean of the commons without being known to the public. Therefore, it is desirable to extend the term of copyright and create more incentives for the distribution of copyright work. To illustrate, observe the concluding words of Senator Orrin G. Hatch and Thomas R. Lee when they support the argument of the tragedy of the public domain.

[I]n enacting the CTEA, Congress reasonably concluded that an extension was necessary to create adequate incentives for investment in dissemination throughout any remaining copyright term. Without an extension, the incentive for publishers and other distributors to invest in dissemination could decline toward the end of the copyright term. Accordingly, the CTEA promotes the progress of science by expanding incentives for disseminating protected works at a time when such works might otherwise fall out of circulation²².

The second claim raised by Senator Orrin G. Hatch and Thomas R. argues that Congress considered necessary to provide an extra incentive to digitize the existing copyright works, and the extra incentive, is just more time for existing copyrights. As with the previous claim, the evidence was not extensively empirically tested; nevertheless, it is fair to say that some evidence redounded in statements provided to Congress, as in the case of Bruce A. Lehman²³, who asserted, "[granting a twenty-

²¹ Ibid.

²² Ibid.

²³ See Copyright Term Extension Act of 1996, S. Rep. No. 104-315 (1996) ("[T]he Committee held hearings on September 20, 1995. Bruce A. Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks, and Marybeth Peters, Register of Copyrights and Associate

year copyright term extension will encourage copyright owners to restore and digitalize works that are about to fall in the public domain [...] Without a copyright term extension, copyright owners will have little incentive to restore and digitalize their works"²⁴.

The third claim is more or less, a repetition of the seminal idea that the existence of copyrights for a determined period enhances creativity and intellectual development. Having already expressed the main arguments that supported the *Copyright Extension Act* of 1998, also known as the *Sonny Bono Act*, it is important to notice that Congress has consistently addressed the main issues of Copyright Law with the extension of the term. As Abraham Maslow said, "[i]t is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail" 25-26. The solutions by policy makers in the US have been hammering every policy concern regarding the Copyright Clause²⁷ with extensions of the term.

Let us summarize the problem: the tragedy of the public domain has been addressed with a utilitarian approach. One of the main concerns has been to encourage the distribution of copyrighted material by granting more exclusive rights to works that would otherwise be in the public domain. The answer to the problem has been more of the same, just walking down the same path. In some cases, the same words, such as those in the statement of Marybeth Peters, has been used as confirmation²⁸.

Librarian of Congress for Copyright Services, testified on behalf of the Administration. The Committee also heard testimony from Jack Valenti, president and chief executive officer, Motion Picture Association of America; Alan Menken, composer, lyricist, and representative of AmSong; Patrick Alger, president, Nashville Songwriters Association; and Prof. Peter A. Jaszi, American University, Washington College of Law. In addition, written statements were received for the record from Senator Christopher J. Dodd, the American Society of Composers, Authors and Publishers (ASCAP), the National Music Publishing Association Inc. (NMPA), the Songwriters Guild of America, the Graphic Artists Guild, the National Writers Union, the Coalition of Creators and Copyright Owners, Author Services Inc., the Midwest Travel Writers Association, Donaldson Publishing Co., the American Library Association, the American Film Heritage Association, the Society for Cinema Studies, Lawrence Technology, Bob Dylan Jr., Don Henley, Carlos Santana, Stephen Sondheim, Mike Stoller, E. Randol Schoenberg, Ginny Mancini, Lisa M. Brownlee, Prof. William Patry, and Prof. Dennis Karjala, writing on behalf of 45 intellectual property law professors").

²⁴ Hatch, O. G., and Lee, T. R., "'To Promote the Progress of Science': the Copyright Clause and Congresse's Power to Extended Copyrights", cit., 17.

²⁵ Maslow, A. H., and Wirth, A. G., The Psychology of Science: A Reconnaissance, New York, Harper and Row, 1969.

The point of Maslow was reaffirmed by Abraham Kaplan in the "Law of Instruments", emphasizing, "[g]ive a small boy a hammer, and he will find that everything he encounters needs pounding [...]

The price of training is always a certain "trained incapacity": the more we know to do something, the harder it is to learn to do it differently (children learn to speak a foreign language with less of an accent than adults do only because they did not know their own language so to start with)".

²⁷ United States Constitution, Article I, Section 8, "The Congress shall have Power [...] To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries".

²⁸ See e.g., Karjala, D. S., "Judicial Review of Copyright Term Extension Legislation", Loyola of Los Angeles Law Review, vol. 36, 2002.

But let's go back to the story of Vargas Llosa and Boccaccio. What would happen if Congress backed a policy of indefinitely renewable of copyrights, such as that proposed by Posner and Landes²⁹. Well, as they acknowledge, a work with commercial value would probably become a de facto perpetual copyright. Under that premise, the person entitled to the copyright of Boccaccio would need to decide whether to renew them or not, depending on the commercial value to the public. According to this idea, if the cost of renewing the copyright was greater than the benefits obtained, it would depreciate and enter the public domain. Nevertheless, if the work does not depreciate rapidly given its commercial value, then, it would likely be renewed for the same duration as the copyright owner could continue obtaining profit from the market. In that world, the person entitled to the copyright of Boccaccio would probably renew it because it would continue generating revenue from people like Vargas Llosa.

The interesting part is that, after doing an advanced search on Amazon.com, the largest online bookseller in the world, for new printed editions in English of the Giovanni Boccaccio *The Decameron*, the results produced 126 books editions. Interestingly, prominent publishing companies such as Penguin Classics, New American Library with Signet Classics, W. W. Norton & Company, and Oxford World's Classics, continue printing Boccaccio's work nearly 700 years after its initial publication. Why do companies persist in printing these works when they are in the public domain? Does this suggest that the notion of the tragedy of the public domain is unsupported by empirical evidence and possibly misrepresentative?

Paul J. Heald elevated the discussion to an empirical level by testing the tragedy of the public domain of bestselling novels from 1913 to 1932. He found that books in the public domain actually increased the likelihood of publishing and printing³⁰. Subsequently, in another study Heald revisited the assumption that copyright generates incentivizes publishers and distributors to invest in copyrighted works³¹. He discovered that 72 percent of a random sample of 2266 editions were of works in the public domain; in contrast, only 28 percent were copyrighted. This suggests a correlation between copyrights and the disappearance of works³². Heald concluded that "shortly after works are created and propertized, they tend to disappear from public view only to reappear in significantly increased numbers when they fall into the public domain and lose their owners"³³.

²⁹ Posner, R., and Landes, W., *Indefinitely Renewable Copyright*, cit., 471.

³⁰ Heald, P. J., "Property Rights and the Efficient Exploitation of Copyrighted Works: An Empirical Analysis of Public Domain and Copyrighted Fiction Bestsellers", UGA Legal Studies Research No. 08-014, 2008.

³¹ Heald, P. J., "How Copyrights Keep Works Dissapeared", cit., 829-866.

³² Ibid.

³³ Ibid.

C. Durable copyright? A dynamic view of monopoly

Assume a publisher who is either assigned or licensed the copyrights for a book and is the only provider of the book in a market with multiple buyers. Copyrights compensate the author because the cost of copying is much cheaper than the cost of creation. But how do copyrights incentivize the publisher? Since the book is not substitutable by other publishers without the copyrights and the publisher in this case is the only provider of the book in the market, the classical static monopoly model can be applied. The average revenue (AR) of the publisher for this book corresponds to the demand curve in the market, decreasing as the quantity is increasing and marginal revenue (MR) is lower and more elastic than average revenue in this monopoly case. When prices are higher, fewer people buy the book. To sell more copies, the publisher has to choose a relatively lower price. (Observe this situation in Figure 1).

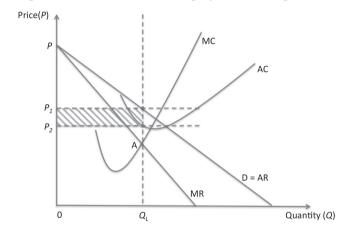


Figure 1. Short-term static monopoly model for a publisher

Source: Own elaboration.

When marginal cost (MC) equals MR in A, the publisher can achieve the maximum profit to sell Q_L . In other words, the publisher can sell at Q_L and charge for P_1 for each book as the maximum amount in a short term. The total revenue is multiplying P_1 to Q_L , and the total cost is multiplying P_2 and Q_L . Then, the profit for the publisher is $Q_L \times (P_1 - P_2)$ shown by the shade.

Nevertheless, Q_L is not a firm quantity of selling for the publisher. In other words, the static model has limitations to explain the incentives of the publisher. The copyright held by the publisher can be considered as a durable property and able to be attached to numerous books before the end of the protection term³⁴. What hap-

³⁴ Coase, R., "Durability and Monopoly", *The Journal of Law and Economics*, vol. 15, n.º 1, 1972, 143-149.

pens when the publisher sells more books before Q_L ? Then, we move a long-term monopoly model.

We assume the publisher is still the only provider of the book in the market. A' shown in Figure 2 is the intersection between MC and average total cost (AC). A' is the lowest level of AC. In right side of A', MC is higher than AC, so the publisher will not sell a quantity that is more than Q^* in a long-term. The total revenue is multiplying P_3 to Q^* , and the profit is $Q^* \times (P_3 - P_4)$ shown by the shade.

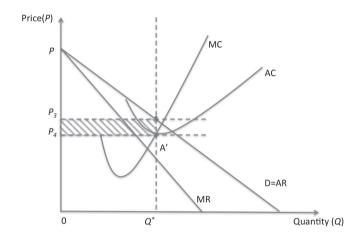


Figure 2. Long-term static monopoly model for a publisher

Source: Own elaboration.

Combining the short-term monopoly and long-term monopoly situations, we observe that the publisher has to decrease the price to P_1 or a lower price in order to sell books more than Q_L in the long run. We assume the publisher print Q_L books for the first edition to sell at the price P_1 . In the long run, we expect to see a supply of more than Q_L books selling at the price P_3 . So do the readers. Then, why would the readers buy the first edition of the book in a price higher than P_3 ? In Figure 3, we magnify the consumer surplus in the short run and the long run in a same figure to show this movement.

According to the price discrimination theory, the first edition can be considered as premium books, since the readers gain access to the book ahead of others awaiting later distribution of the book. This lead-time is the premium aspect. People who value the premium part will accept the price in P_1 and the other people can wait until the next edition in a price lower regardless the promotion strategies applied to the first edition. In this situation, we can consider that the consumer surplus is squeezed $Q_1 \times (P_1 - P_3)$ through the premium as lead-time shown in Figure 3.

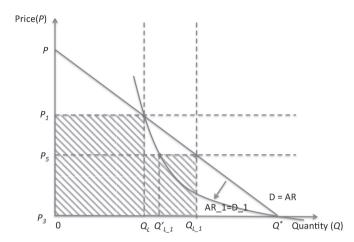


Figure 3. The shift of consumer surplus to a publisher between a short-term and a long-term

Source: Own elaboration.

Low-elasticity readers will accept the price in P₁, while high elastic-readers can wait for the next edition at a lower price lower, regardless of the promotion strategies applied to the first edition.

When the publisher prints the second edition in the quantity of Q_{L_1} - Q_L , the publisher expects people to pay P_5 . However, people who know that P_5 is still higher than P_3 and that they do not have the premium of lead-time. In this situation, only the low elastic readers will accept the price in P_5 and the high elastic readers will still wait until the price is decreased to P_3 . Therefore, the quantity of Q_{L_1} - Q_L may not be sold out in the price of P_5 . Accordingly, in the dynamic situation, the demand curve is a curve rather than a straight line and we assume that the transition point is in somewhere within Q_{L_1} - Q_L . Hence, only Q_{L_1} can be sold out at P_5 .

Ideally, the publisher can gradually collect all the rest consumer surplus in $0.5\times(Q^*-Q_L)\times(P_1-P_3)$ through supplying more books in different editions in the market. Even though the demand curve is adjusted to AR_1, they can still collect a smaller measure of consumer surplus between Q^*-Q_L . Alternatively, the publisher may still charge P_5 to the market size of $Q_{L_1}-Q_L$ and stop supplying a quantity more than Q_{L_1} , since the disposal cost of the durable property of copyright is 0. Therefore, the readers between $Q_{L_1}-Q'_{L_1}$ have to pay P_5 rather than waiting to pay P_1 and the publisher can still collect consumer surplus in $(Q_{L_1}-Q_L)\times(P_5-P_3)$ rather than 0. The publisher is efficient to not supply Q^* for maximizing its profit in the long run, since the increased supplier surplus from consumer surplus can complement the rest profits when selling Q^*-Q_{L-1} .

Nevertheless, without this quantity limitation strategy due to the collection of consumer surplus for price discrimination,

it is also not possible for the publisher to collect the consumer surplus in $P_5 \times (Q_{L_-1} - Q_L)$ after there have been at least Q_L books on the market and when they are selling the second edition in the quantity of $Q_{I_-1} - Q_I$.

In the countries having the first sale doctrine and copyright exhaustion, the publisher cannot abandon the Q_L readers who bought the first edition and the early readers between Q_{L_1} - Q_L to sell their books in a secondary market. The publisher is not a pure monopoly due to the existence of the secondary market. The sellers in the secondary market provide homogeneous books as the publisher. The readers who have bought the first edition in P_1 understand that the market is waiting for a price in P_3 in the long run, so they may release the books in price P_3 , lower than the publisher's price. Those readers lost the consumer surplus of $(Q_{L_1}-Q_L)\times(P_1-P_3)$, but that has been consumed for the lead-time premium.

In this situation, the slope of AR and MR becomes lower elastic because of losing the pure monopoly shown in Figure 4; AR and MR also decrease to a lower degree because of the market size is shared by the secondary market. Hence, MR is moved to MR' and AR is moved to AR'. Since the supplier of the book is still limited because only the publisher has the durable copyright, this situation is monopolistic competition.

With this the dynamic notion moving to monopolistic competition, the publisher is expected to provide Q* to maximize its profit, where AC intersects with MC to be the lowest degree. However, before the supplying quantity achieves Q*, MC intersects MR' in $A_{\rm M}$ to maximize the profit in this the new stage of the publisher when the publisher sells the books in a quantity of $Q_{\rm M}$. The publisher can only sell the book at the price of P_6 to compete with the secondary market. Now, not only is P_6 a price lower than P_3 , but also the maximized profit in $Q_{\rm M}$ is 0 because of the move of AR and MR, since the since the slope and the degree of AR' are lower than AR. This is inevitable due to the existence of the secondary market even if the publisher P_3 at the beginning time of selling.

Therefore, the publisher is always not going to print more than Q_M , which is a degree lower than Q^* . However, this maximized 0 profit for the publisher in the later stage of holding the copyright is always not realistic. Therefore, they will stop printing the books in an early stage between Q_{L-1} to 0 in Figure 3 when the MR and AR do not move as low as the MR' and AR' in Figure 4.

If the publisher does not hold the copyright before printing the books in a quantity of Q_M , the market is not a monopolistic competition market, and we assume the market is a perfect competition market. The other publishers can print the books and provide them on the market without a cost of copyright. Now, it turns to that consumer determines the price and the demand curve becomes infinite elastic as D. We assume that the consumers can accept a price of P_6 right after the original publisher released the copyright. Because of the decrease of AC and MC to the degree of AC_{NC} and AC_{NC} , the original publisher can suddenly realize a short term profit of $(Q_{L_NC}-Q_M)\times(P_6-P_4)$ shown by the shade in Figure 5, higher than the 0 profit in

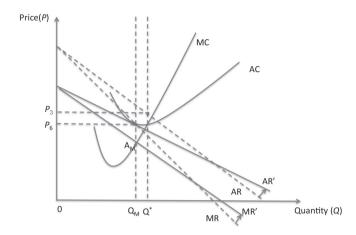


Figure 4. Profitability of monopoly to monopolistic competition

Source: Own elaboration.

Figure 4. However, the original publisher may not be able to realize all of this part of profit in the long run since other publishers will also print the book. Therefore, the market price of the book decreased to P_3 and the demand curve is decreased from D to D', where the maximum profit of the original publisher and other publishers are 0.

While the maximized profit is still 0 for the original publisher in this perfect competition situation, as same as it was in the monopolistic competition situation, the quantity of books sold in the market is different. Taking account of the secondary market and other publishers as rivals, the original publisher will stay printing the books in a quantity of Q_{NC}^* , which is still higher than their prior maximum quantity of printing, Q_M . We would certainly like to see a greater quantity of the books sold on the market, and the original publisher probably does not need durable property right on copyright as long as the current law regulates.

In this paper, we aim to advance the discussion initiated by Heald and test the hypothesis that copyright extension is necessary to prevent the tragedy of the public domain. We focus on the effects of copyright extension in works written by Literature Nobel Prize winners in the US. We would expect that works written by Nobel Prize laureates in Literature will be more likely published. Therefore, we would not anticipate differences between copyrighted works and those in the public domain. Consequently, this study aims to provide a higher standard for the findings suggesting that copyright extension has led to the disappearance of works from the print at a certain point.

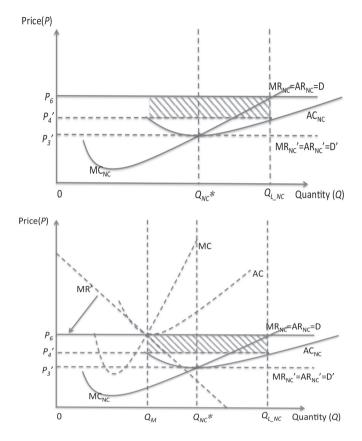


Figure 5. When monopoly moves to perfect competition

Source: Own elaboration.

II. Methodology of empirical work

A. Hypothesis (H1)

H1: the number of available printed books in English on Amazon is related to the independent variables mentioned above.

Null Hypothesis (H0): There is no relationship between the independent variables and the dependent variable.

B. Data and sources

Two samples of book data sets were collected for the present study. Every title was written by a Nobel laureate; in other words, one book per Nobel Prize winner. The

first primary sample, obtained in 2015, consists of 555 book editions, published from 1854 until 1993, and was obtained after searching 112 books written by Nobel Prize laureates in Literature. The secondary dataset corresponds 648 book editions published from 1854 until 1993, obtained in 2023 after searching for 119 books written by Nobel Prize laureates in Literature³⁵.

Titles were obtained in a consistent manner by collecting the first book cited in the Bibliography, or by default in the Biographical section obtained from the official web site of the Nobel Prize organization (www.nobelprize.org). Our particular interest was not to search all the works published by Nobel Prize authors; rather, it was to obtain a convenience sample³⁶. For example, Sinclair Lewis won the Nobel Prize in 1930, and his first book cited by the Nobel Prize Organization was *Hike and the Aeroplane*, actually published as Tom Graham in 1912.

While most Nobel laureates are from non-speaking English countries, in cases where English was not the primary language of an author data was retrieved using the first book translated into English. For instance, Theodor Mommsen, laureate in 1902, his first book cited is *Liederbuch dreier Freunde*, written in 1843. However, the first translated book cited was *History of Rome*, translated during second half of the 19th century. The full set of titles can be found in Appendix 1.

It is worth noting that since the XVIII century, copyright term in the US has been extended to last until the life of the author plus 70 years. The last term extension, the *Sonny Bono Copyright Term Extension Act* in 1998, prolonged copyright protection by an additional 20 years. Additionally, the *Copyright Act* of 1976 which came into effect the first of January of 1978, added 19 years to the copyright term. 28 years of the initial term, plus a renewal time of 47 years (28 + 19 = 47). This resulted in a total copyright duration of 75 years. Later, in 1998, Congress enacted the *Sonny Bono Copyright Extension Act*, which further extended the term by an additional twenty (20) years. To sum up, works published between 1909 and the 31 of December of 1977 were afforded a total copyright protection of 95 years. The extensions granted by Congress added 67 years to the original copyright term (28 + 19 + 20 = 67) For works created on or after January 1,1978, lasts for the life of the author plus 70 years.

Consequently, for the first and second data sets, all works published before 1923 are in the public domain and are not subject to copyright. This is why Heald, in his

³⁵ The Nobel Prize was not awarded in 1914, 1918, 1935, 1940, 1941, 1942 and 1943. In 2017, the Nobel Prize in Literature was awarded to Bob Dylan. Given that Dylan's work primarily revolves around the American sound tradition, we omit the search for his works from our study. According to the Statutes of the Nobel Foundation, "[i]f none of the works under consideration is found to be of the importance indicated in the first paragraph, the prize money shall be reserved until the following year. If, even then, the prize cannot be awarded, the amount shall be added to the Foundation's restricted funds". See, for further information: http://www.nobelprize.org/nobel_organizations/nobelfoundation/statutes.html

³⁶ Lawless, R. M.; Robbennolt, J. K., and Ulen, T. S., Empirical Methods in Law, New York, Aspen Publishers, 2010, 148-149.

2014 research, used 1923 as cut-off year for copyrights and public domain³⁷⁻³⁸. The results, from 112 observations, which are books written by Nobel Prize winners, were 72 books under copyrights, accounting for more than 64 percent of the observations. A total of 40 books are in the public domain, with almost 36 percent of the observations³⁹. After doing the search on Amazon.com of every single book of the first data set, the results, for all the books written by Literature Nobel Prize winners is a total of 555 editions. The results could be observed in Table Number 1⁴⁰.

Table 1. Number of observations of public domain/copyrights

| Observations | Public domain | Copyright |
|--------------|---------------|-----------|
| 40 | 403 | 0 |
| 72 | 0 | 152 |

Source: Own elaboration.

It should be noted that more than 72.61 percent of the offers for sale on books of the total sample of 555 corresponded to books that are under the public domain, in contrast, with only less than 27.39 percent of them with copyrights. In the second half of the 19th century 22 books were published and the number of printed new book editions offered were 287; in the first half of the 20th century 42 books were published with a result of 146 printed new books editions offered; and finally at the end of the 20th century, 48 books were published with a result of 122 printed new book editions offered at Amazon.com (Histogram number 1. New printed books editions on Amazon.com and year of publication).

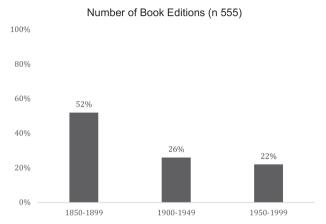
Heald, P. J., "How Copyrights Keep Works Dissapeared", cit., 829-866.

³⁸ By doing this, we think, the data of copyright books written by Nobel Prize laureates in Literature winners has validity given the resource limitations to determine if every work published between 1909 and the first of January of 1978 is in fact in the public domain or copyright, by examining given the necessity to examine the compliance of formalities. It is also important to note, that, works published after 1923 may be in the public domain, assuming, that they did fulfill the legal formalities, whether they are or no, having a cut-off date in 1923 constitutes a higher burden to reject the null hypothesis through statistical analysis.

³⁹ Only one book written by Aleksandr Solzhenitsyn that was published after the cut-off date of 1923 was considered in the public domain. The reasons for this are that *One Day in the Life of Ivan Denisovich* written by Aleksandr Solzhenitsyn was published, and approved to be published by Nikita Khrushchev in 1962, in the literary magazine *Novy Mir* in Soviet Union. However, at that time, the Soviet Union had no international relations in copyright law, including the United States. Therefore, the work could be used without any restriction, as was the case with Max Hayward who translated to English and the Bantam Books, which published in 1963, and copyrighted the work in United States in 1963. It was only until after the fall of the Berlin Wall that United States and the Soviet Union agreed to protect copyrights among themselves. After the disintegration of the Soviet bloc, when Russia joined the Berne convention in 1995, all works copyright in Russia were considered copyrighted in other countries.

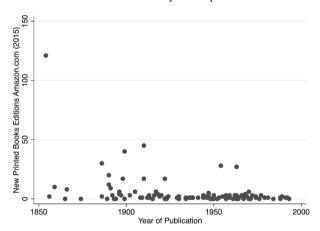
⁴⁰ The results of Amazon.com were retrieve in the month of September and October of 2015.

Histogram number 1. New printed books editions on Amazon.com and year of publication



Source: Own elaboration.

Figure 7. Scatter plot number 1: New printed books editions on Amazon.com and year of publication



Source: Own elaboration.

C. Method

To explore the association and the strength of the association of the number of book editions and copyrights, including other possible independent variables, such as language, gender among others, a linear regression analysis was used⁴¹.

⁴¹ Linear regression is a statistical technique used in empirical legal research to estimate the effects of dependent variables, such as copyrights and gender, on a dependent variable, such as the number of

1. First experiment and dataset

The dependent variable in this study is the number of printed new book editions offered at Amazon.com (Pbook) of each one of the books written by Nobel Prizewinning authors in Literature. The dataset, obtained in 2015, consists of 555 book editions, published from 1854 until 1993. After examination, of the distribution of the dependent variable using a histogram and calculating its standard deviation (13.44), suggested a non-normal distribution given a considerable dispersion of the data around the mean. To address this, we applied a logarithmic transformation to the data in order to obtain a more symmetrical distribution and reduce the impact of outliers.

Several independent variables will be used to explain the dependent variable. The first explanatory variable is Copyright status, which is expected to have a negative relationship with the number of printed new books editions on Amazon.com (for Copyrights 1, Public Domain 0). Because of the logistic and resource difficulties of testing if every piece of material published after 1923, was registered or not, 1923 was chosen as the cutoff date of copyright status. In other words, for the first data set, works published before 1923 are considered the public domain and are not subject to copyright.

The second explanatory variable tested is the Nobel author's US citizenship. Given the fact that Amazon is a corporation based in the US, we expect a positive relationship with the dependent variable (for United States Citizens 1, Foreigners 0). Furthermore, the third and fourth explanatory variables are related to language. It is plausible to expect a positive relationship between English language, as the native language of the Nobel Prize winner and the dependent variable (for English 1, other languages 0). We also have concerns regarding Spanish language, considering that the US is currently the second Spanish-speaking country in the world after Mexico (for Spanish 1, other languages 0)⁴².

The fifth explanatory variable is the GDP per capita of the country of the Nobel Prize author. It could serve as a indicator to observe a correlation between the economic activity of the author's country of origin and the demand satisfied by publishers of the public domain and copyright owners. Assuming that people from countries with higher GDP per capita would demand more books of Nobel Prize Authors on Amazon.com, it is also acknowledged that this relationship could work in the opposite direction, as publishing companies might compete more in markets with higher

new book editions on Amazon.com, through regression coefficients. *See* Lawless, R. M.; Robbennolt, J. K., and Ulen, T. S., *Empirical Methods in Law*, cit., 245-288.

⁴² According to the Cervantes Institute of Language, in United States more than 52 million (41 million as a native language and 11.6 million as a second language) people speak Spanish, that is far away from Spain with 46 million and Colombia with 48 million. Instituto Cervantes, "El español: una lengua viva. Informe 2015" [online], Instituto Cervantes, available at: http://www.cervantes.es/imagenes/File/prensa/El%20espaol%20una%20lengua%20viva.pdf [last visited: December 11, 2023].

GDP per capita. Nevertheless, economic activity is an indicator that would be used as the dependent variable (Current US\$) 43 . In the case of this variable, the Standard deviation = 21984, shows that it is not normally distributed, which is why a logarithmic transformation is applied.

Finally, the sixth explanatory variable is gender. Considering that less than 20 percent of the Nobel Prize in Literature have been awarded to women, it is worth to know if there is any correlation between the number of printed new editions and gender.

III. Results and implications

A. Regression results

Table 2. Regression results to estimate log PBook 2015

| Spanish | 1.10027** |
|--------------|-----------------|
| | (.5408781) |
| Copyright | -1.009146** |
| | (0.348206) |
| R-squared | 0.1217 |
| Obs. | 112 |
| Note: *** p< | 0.01, ** p<0.05 |

 $logPBook_i = \infty - 1.009 \ Copyright_i - 1.100 \ Spanish_i + \beta * other Controls_i + \varepsilon$,

where $i \in (1,...,112)$.

Source: Own elaboration.

The other control variables, such as the Nobel author's citizenship of United States (authorUSA), English language, GDP per capita (LogCurrentUS), and gender, did not produce statistically significant coefficients in the model. The adjusted R-square of this model is 0.080.

The p-values for most variables are not significant. However, the p-value for Copyright is statistically significant in relation to the dependent variable, suggesting a negative association. Since Copyright is a binary variable, a one-unit change is associated with a change in the dependent variable by the coefficient of the independent variable. For instance, a one-unit change Copyright, is associated with a -1.009 unit decrease in the dependent variable, indicating that the numbers of new book

⁴³ This variable captures the gross domestic product of every country and divides it by the midyear population. All the data of GDP Per capita was obtained from the World Bank official web page.

editions on Amazon.com decreases by -1.009 (on average) when Copyright exists. The dependent variable is in log units. When we "un-log" the dependent variable (i.e., take the exponential of the coefficient for Copyrights, which is -1.009), we get approximately 0.364. This result indicates that one more book under copyright is associated with, on average, 0.364 times fewer books available on Amazon.com, even after controlling for gender, language, and other independent variables. The results suggest that new books written by Nobel prize laureates with copyrights have fewer printed books compared to books in the public domain on Amazon.com.

B. Placebo test

In the first data set from 2015, works published before 1923 are in the public domain. But what if we used 1938, the year Pearl Buck won the Nobel Prize, as a cut-off year of public domain? By manipulating the copyright variable and using a different date for copyright termination and the beginning of the public domain, we expect to observe if there is an omitted variable bias, and if we have simply missed an explanatory or influential variable that has affected the number of new printed book editions on Amazon.com.

Regression tesults & placebo test

Table 3. Placebo test regression to estimate log PBook

| Variables | Coefficient | Std. Err. |
|------------------|-----------------------|------------|
| Copyrights | .5739277** | (.3573746) |
| AuthorUSA | .1383591 | (.6442637) |
| English | .5709897 | (.4328139) |
| Spanish | -0.955979 | (.5648442) |
| LogCurrentUS | -0.0521971 | (.1805587) |
| Gende .047342 | • | (.5064821) |
| Constant | | (1.924333) |
| Adj. R-squared | 0.0387 | |
| N | 112 | |
| Note: * | *** p<0.01, ** p<0.05 | 5. |

Source: Own elaboration.

The p-values of all the variables are not statistically significant. The main objective of conducting the placebo test was to change the cut-off period of Copyright to test whether an omitted variable bias appeared while maintaining the results of the initial regression. However, this was not the case. By changing the time period from 1923 to 1938 - only a 15-year difference - and controlling for all other variables, despite the short time frame, the statistical significance of copyrights was lost.

C. Second experiment and its dataset

To assess external validity, a follow-up experiment was conducted in 2023. The secondary dataset consists of 648 book editions, published from 1854 until 1993, and was obtained after searching 119 books written by Nobel Prize laureates in Literature. We conducted a linear regression analysis following the methodological design of the first data set.

The dependent variable corresponds to the number of printed new book editions offered at Amazon.com (Pbook) of each one of the books written by Nobel Prizewinning authors in Literature. After examination, of the distribution of the dependent variable its standard deviation (14.561), suggested a non-normal distribution given a considerable dispersion of the data around the mean. As in the first dataset, we applied a logarithmic transformation to the data (Figure 8. Scatter plot number 2: New printed books editions on Amazon.com and year of publication).

Figure 8. Scatter plot number 2: New Printed Books Editions on Amazon.com and Year of Publication

Source: Own elaboration.

As in the previous study, the first explanatory variable is Copyright status (for Copyright 1, Public Domain 0). As previously stated, in the US for works published before January 1, 1978, the term of copyright is 95 years from publication. Therefore, works published before 1928 are likely to be considered in the public domain. Additionally, given the logistical and resource difficulties of determining whether every piece of material published after 1923 was register or not, the threshold of copyrighted work will be after 1928.

When observing the secondary data retrieved on Amazon.com, from 119 observations of books written by Nobel prize laureates, 72 books correspond to copyrighted works, accounting for 60.5 percent of the sample, while only 47 books were under public domain, representing 39.5 percent of the total sample. From the sample of 119 books, a total of 648 new books editions were retrieved, with 170 correspond-

ing to offerings of copyrighted books and 478 to books in the public domain. The results are presented in Table Number 4.

Table 4. Secondary data dataset - Number of observations public domain/copyrights

| Observations (Books written by Literature Nobel Prize laureates) | Public domain | Copyright |
|--|---------------|-----------|
| 47 | 478 | 0 |
| 72 | 0 | 170 |

Source: Own elaboration.

The other explanatory variables used in the first experiment were employed to explain the dependent variable of the second dataset. The explanatory variables included gender, GDP per capita of the country of the Nobel Prize author and the other independent variables describe previously.

D. Regression results

Table 5. Regression results to estimate log PBook 2023

| Copyright | -1.036739** |
|---------------|------------------|
| | (0.313724) |
| R-squared | 0.1243 |
| Obs. | 119 |
| Note: *** p<0 | 0.01, ** p<0.05. |

 $logPBook_i = \infty - 1.036 \ Copyright_i - 0.000 \ GDP \ per \ capita_i + \beta * otherControls_i + \varepsilon$

where $i \in (1,...,118)$.

Source: Own elaboration.

The results are consistent with the previous results of the first experiment. The coefficient on Nobel author's citizenship of United States (authorUSA), English language, GDP per capita (LogCurrentUS), and gender, but the estimators of their coefficients were statistically significant in the model. The adjusted R-square of this model is 0.086.

The results of p-values of most variables are not significant, as observed above the p-value of Copyrights is statistically significant for the dependent variable. Consistent with the results of the first data set, there is a negative association with the dependent variable. As being a binary variable, when Copyright takes the value of 0, it does not influence the predicted outcome; thus, we reject the null hypothesis of no relationship. Copyright operates as it was expected, aligning with the hypothesis. When Copyright exists, the number of books is associated with a -1.037 united decrease in the dependent variable (i.e., what is e to the 1.036 power). In other words, the results suggest that when Copyright shifts from absent (0) to present (1), the predicted number of book editions written by Nobel Prize laureates in Literature on Amazon.com decreases by 19.2 percent.

Conclusion

This paper extends the discussion by analyzing the effects of copyright term extension in works written by Nobel Prize laureates in Literature in Amazon.com in the United States. The empirical results are aligned with previous research done on the field. Moreover, the results contribute to the discussion of copyright extension and supports the idea that tragedy of the public domain is right only as tragedy for book readers, because, as Paul J. Heald considers the extensions of copyright "stifles the reappearance of works" and "correlates highly with absence from the Amazon shelf"⁴⁴.

The results of the study suggest that a correlation between copyrights and the absence of books by Nobel Prize laureates in Literature. One possible explanation is that publishers stop printing books that they don't sell, even those authored by Nobel Prize in Literature. These findings contribute to the existing literature, suggesting that once copyrighted work written by Nobel Prize laureates in Literature enter the public domain, they are more likely published.

One implication of this study is that the policy assumptions behind copyright extension should not be taken without consideration of their effect on the availability of books. Specifically, within the framework of Amazon.com, the findings indicate that in both datasets obtained in 2015 and 2023, when there is valid copyright, the number of books is associated a decrease in the dependent variable. Further empirical research is needed to better understand the relationship between copyrights and the availability of books in market.

Secondly, the significance of empirical research and methodological techniques in assessing legal assumption underpinning public policy, particularly regarding copyright extension. These findings suggest that Latin American Copyright scholars could enhance public policy by focusing on empirical research and employing similar methodologies to evaluate and support legal assumptions related to copyright extension.

⁴⁴ Heald, P. J., "How Copyrights Keep Works Dissapeared", cit., 829.

A limitation of this paper is the difficulty in obtaining precise data on registered copyrighted works from 1909 to December 31, 1977. Consequently, it is necessary to assume that all works published after 1923 (first dataset) and 1928 (second dataset) are under copyright protection. However, if such data were available and the sample scope could be broadened, the results would be more refined, providing stronger arguments against copyright extension initiatives.

Further research should assess the potential impact of eBooks and compare research findings on Amazon.com in countries where copyright extension has not exceeded the thresholds set by the Berne Convention. For instance, Canada's copyrights duration is typically the life of the author plus 50 years. It is fair to say, the presence of more new books may indicate increased competition among publishers and a social benefit in the dissemination of knowledge without incurring in higher transaction costs. Obviously, determining whether consumers benefit from increased market competition among publishers raises empirical questions that should be considered in future research.

Appendix 1

| Author | Year Nobel Prize Award | Book | Published year |
|--|---------------------------------|--|-------------------|
| 1. Sully Prudhomme | 1901 | Stances Et Poèmes | 1865 |
| 2. Theodor Mommsem | 1902 | History of Rome | 1854 |
| 3.Bjørnstjerne Martinus Bjørnson | 1903 | Arne: A Sketch of Norwegian Country Life | 1866 |
| 4. Frédéric Mistral | 1904 | Mirèio: Pouèmo Prouvençau | 1859 |
| 5. José Echegaray | 1904 | La Esposa Del Vengador | 1874 |
| 6. Henryk Sienkiewicz | 1905 | With Fire and Sword: An Histo- rical Novel of Poland and Russia | 1890 |
| 7. Giosuè Carducci | 1906 | Poems Of Giosuè, Translated with Two Introductory Essays | 1892 |
| 8. Rudyard Kipling | 1907 | Schoolboy Lyrics | 1899 |
| 9. Rudolf Christoph Eucken | 1908 | Main Currents of Modern Thought | 1908 |
| 10. Selma Ottilia Lovisa Lagerlöf | 1909 | Gösta Berlings Saga | 1891 |
| 11. Paul Johann Ludwig Heyse - Paul Heyse | 1910 | Romanische Inedita | 1856 |
| 12. Maurice Maeterlinck | 1911 | Serres Chaudes: Poèmes | 1889 |
| 13. Gerhart Hauptmann | 1912 | Before Dawn | 1889 |
| 14. Rabindranath Tagore | 1913 | Gitanjali | 1910 |
| 16. Verner von Heidenstam | 1915 | King And His Campaigners | 1902 |
| 15. Romain Rolland | 1915 | Les Origines Du Théâtre Lyrique Moderne: Histoire De L'opéra En Europe Avant Lully Et Scar- latti | 1894 |

| Author | Year Nobel Prize Award | Book | Published year |
|-----------------------------|---------------------------------|---|-------------------|
| 17. Karl Gjellerup | 1917 | Minna: A Novel from The Danish | 1913 |
| 18. Henrik Pontoppidan | 1917 | Emanuel; Or, Children Of The Soil | 1896 |
| 19. Carl Spitteler | 1919 | Two Little Misogynists | 1922 |
| 20. Knut Hamsun | 1920 | Hunger | 1899 |
| 21. Anatole France | 1921 | The Crime of Sylvestre Bonnard | 1890 |
| 22. Jacinto Benavente | 1922 | Women's Letters | 1893 |
| 23. William Butler Yeats | 1923 | Mosada: A Dramatic Poem. | 1886 |
| 24. Wladyslaw Reymont | 1924 | The Comédienne | 1920 |
| 25. George Bernard Shaw | 1925 | Cashel Byron's Profession | 1886 |
| 26. Grazia Deledda | 1926 | Grazia Deledda, After the Divorce | 1905 |
| 27. Henri Bergson | 1927 | Time And Free Will: An Essay on The Immediate Data of Cons- ciousness | 1910 |
| 28. Sigrid Undset | 1928 | Gunnar's Daughter | 1936 |
| 29. Thomas Mann | 1929 | Royal Highness: A Novel of Ger- man Court Life | 1916 |
| 30. Sinclair Lewis | 1930 | Hike And the Aeroplane | 1912 |
| 31. Erik Axel Karlfeldt | 1931 | Arcadia Borealis: Selected Poems of Erik Axel Karlfeldt | 1938 |
| 32. John Galsworth | 1932 | From The Four Winds | 1897 |
| 33. Ivan Alekseyevich Bunin | 1933 | Lazarus | 1918 |
| 34. Luigi Pirandello | 1934 | Six Characters in Search Of An Author In Three Plays | 1922 |
| 35. Eugene O'Neill | 1936 | Thirst And Other One Act Plays | 1918 |
| 36. Roger Martin du Gard | 1937 | Jean Barois | 1949 |
| 37. Pearl Buck | 1938 | East Wind: West Wind | 1930 |
| 38. Frans Eemil Sillanpää | 1939 | Meek Heritage | 1938 |
| 39. Johannes Vilhelm Jensen | 1944 | Fire And Ice | 1922 |
| 40. Gabriela Mistral | 1945 | Selected Poems of Gabriela Mis- tral | 1957 |
| 41. Herman Hesse | 1946 | Gertrud And I | 1915 |
| 42. André Gide | 1947 | Prometheus Illbound | 1919 |
| 43. Thomas Stearns Eliot | 1948 | Prufrock and Other Observa- tions | 1917 |
| 44. William Faulkner | 1949 | The Marble Faun | 1924 |
| 45. Bertrand Russell | 1950 | German Social Democracy | 1896 |
| 46. Pär Lagerkvist | 1951 | The Eternal Smile and Other Stories | 1934 |
| 47. François Mauriac | 1952 | The Kiss to The Leper | 1923 |
| 48. Winston Churchill | 1953 | The Story of The Malakand Field Force: An Episode Of Frontier War | 1898 |
| 49. Ernest Hemingway | 1954 | Three Stories & Ten Poems | 1923 |
| 50. Halldór Kiljan Laxness | 1955 | Salka Valka: A Novel of Iceland | 1936 |
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| Author | Year Nobel Prize Award | Book | Published year |
|--------------------------------------|---------------------------------|--|-------------------|
| 51. Juan Ramón Jiménez | 1956 | Fifty Spanish Poems | 1950 |
| 52. Albert Camus | 1957 | The Outsider | 1946 |
| 53. Boris Leonidovich Pasternak | 1958 | Childhood | 1941 |
| 54. Salvatore Quasimodo | 1959 | The Poet and The Politician, And Other Essays | 1964 |
| 55. Saint-John Perse | 1960 | Eloges And Other Poems | 1944 |
| 56. Ivo Andric | 1961 | The Bridge on The Drina | 1959 |
| 57. John Steinbeck. | 1962 | Cup Of Gold: A Life of Sir Henry Morgan, Buccaneer, With Occa- sional Reference To History | 1929 |
| 58. Giorgos Seferis | 1963 | The King of Asine And Other Poems | 1948 |
| 59. Jean-Paul Sartre | 1964 | The Age of Reason | 1947 |
| 60. Mikhail Aleksandrovich Sholokhov | 1965 | Tales From the Don | 1961 |
| 61. Shmuel Yosef Agnon | 1966 | The Bridal Canopy | 1937 |
| 62. Nelly Sachs | 1966 | O The Chimneys: Selected Poems, Including the Verse Play Eli | 1937 |
| 63. Miguel Ángel Asturias | 1967 | The Mulatta and Mr. Fly | 1963 |
| 64. Yasunari Kawabata | 1968 | The Izu Dancer and Others | 1964 |
| 65. Samuel Beckett | 1969 | Whoroscope: Poem on Time | 1930 |
| 66. Aleksandr Isayevich Solzhenitsyn | 1970 | One Day in The Life Of Ivan De- nisovich | 1963 |
| 67. Pablo Neruda | 1971 | Residence On Earth, And Other Poems | 1946 |
| 68. Heinrich Böll | 1972 | Adam Where Art Thou | 1955 |
| 69. Patrick White | 1973 | Thirteen Poems | 1929 |
| 70. Eyvind Johnson | 1974 | Return To Ithaca: The Odyssey Retold as A Modern Novel | 1952 |
| 71. Harry Martinson | 1974 | Cape Farewell | 1934 |
| 72. Eugenio Montale | 1975 | Satura: Five Poems | 1959 |
| 73. Saul Bellow | 1976 | Dangling Man | 1944 |
| 74. Vicente Aleixandre | 1977 | The Cave of Night | 1976 |
| 75. Isaac Bashevis Singer | 1978 | The Family Moskat | 1950 |
| 76. Odysseus Elytis | 1979 | The Axion Esti | 1974 |
| 77. Czeslaw Milosz | 1980 | The Captive Mind | 1953 |
| 78. Elias Canetti | 1981 | Auto Da Fé | 1947 |
| 79. Gabriel García Márquez | 1982 | No One Writes to The Colonel, And Other Stories | 1968 |
| 80. William Golding | 1983 | Lord Of the Flies | 1954 |
| 81. Jaroslav Seifert | 1984 | The Plague Column | 1979 |
| 82. Claude Simon | 1985 | The Wind | 1959 |
| 83. Wole Soyinka | 1986 | A Dance of The Forests | 1963 |
| 84. Joseph Brodsky | 1987 | Elegy For John Donne and Other Poems | 1967 |
| 85. Naguib Mahfouz | 1988 | Midaq Alley | 1966 |

| Author | Year Nobel Prize Award | Book | Published year |
|---------------------------------------|---------------------------------|--|-------------------|
| 86. Camilo Jose Cela | 1989 | The Hive | 1953 |
| 87. Octavio Paz | 1990 | The Other Mexico | 1972 |
| 88. Nadine Gordimer | 1991 | The Lying Days | 1953 |
| 89. Derek Walcott | 1992 | Epitaph For the Young. Xll Cantos | 1949 |
| 90. Toni Morrison | 1993 | The Bluest Eye | 1970 |
| 91. Kenzaburo Oe | 1994 | A Personal Matter | 1969 |
| 92. Seamus Heaney | 1995 | Death Of a Naturalist | 1966 |
| 93. Wislawa Szymborska | 1996 | Sounds, Feelings, Thoughts: Seventy Poems | 1981 |
| 94. Dario Fo | 1997 | The Tale of A Tiger | 1984 |
| 95. José Saramago | 1998 | Baltasar And Blimunda | 1988 |
| 96. Günter Grass | 1999 | The Tin Drum | 1962 |
| 97. Gao Xingjian | 2000 | Fugitives | 1993 |
| 98. Sir Vidiadhar Surajprasad Naipaul | 2001 | The Mystic Masseur | 1957 |
| 99. Imre Kertész | 2002 | Fateless | 1992 |
| 100. John M. Coetzee | 2003 | Duskland | 1974 |
| 101. Elfriede Jelinek | 2004 | The Piano Teacher: A Novel | 1988 |
| 102. Harold Pinter | 2005 | The Proust Screenplay | 1977 |
| 103. Orhan Pamuk | 2006 | The White Castle | 1991 |
| 104. Doris Lessing | 2007 | The Grass Is Singing | 1950 |
| 105. Jean-Marie Gustave Le Clézio | 2008 | The Interrogation | 1964 |
| 106. Herta Müller | 2009 | The Passport | 1989 |
| 107. Mario Vargas Llosa | 2010 | The Time of The Hero | 1966 |
| 108. Tomas Tranströmer | 2011 | Twenty Poems | 1970 |
| 109. Mo Yan | 2012 | Explosions and Other Stories | 1991 |
| 110. Alice Munro | 2013 | Dance of the Happy Shades and Other Stories | 1968 |
| 111 Patrick Modiano | 2014 | Night Rounds | 1971 |
| 112. Svetlana Alexievich | 2015 | War's Unwomanly Face | 1988 |
| 113. Kazuo Ishiguro | 2017 | A Pale View of Hills | 1982 |
| 114. Olga Tokarczuk | 2018 | The Journey of The Book-People | 1993 |
| 115. Peter Handke | 2019 | Die Hornissen | 1988 |
| 116. Louise Elisabeth Glück | 2020 | Firstborn | 1968 |
| 117. Abdulrazak Gurnah | 2021 | Memory of Departure | 1988 |
| 118. Annie Ernaux | 2022 | A Man's Place | 1988 |
| 119. Jon Fosse | 2023 | Raudt, Svart | 1988 |

References

Alford, William P., "Don't Stop Thinking about... Yesterday: Why There Was No Indigenous Counterpart to Intellectual Property Law in Imperial China", Alford,

- W. P., *To Steal a Book in an Elegant Offense*, Standford, Standford University Press, 1995, 9-14.
- Buccafusco, Christopher, and Heald, Paul J., "Do Bad Things Happen when Works Enter the Public Domain?: Empirical Tests of Copyright Term Extension", *Berkeley Technology Law Journal*, vol. 28, n. o 1, 1-43.
- Coase, Ronald, "Durability and Monopoly", *The Journal of Law and Economics*, vol. 15, n.° 1, 1972, 143-149.
- Copyright Office and the Library of Congress, *Catalog of Copyright Entries: Third Series*, Copyright Office & The Library of Congress, 1963.
- Craig, Joyce; Ochoa, Tyler; Caroll, Michael; Leaffer, Marshall; and Jaszi, Peter, *Copyright Law*, 10.ª ed., Durham, NC, Carolina Academic Press, 2016.
- De la Parra Trujillo, Eduardo, "Comentarios a la reformas a la Ley Federal del Derecho de Autor", *Revista de Derecho Privado*, n.º 8, 2004, 95-110.
- Friedman, Lawrence, *A History of American Law*, 3.^a ed., New York, Simon & Schuster, 2005.
- Hardin, Garrett, "The Tragedy of the Commons", *Science*, vol. 162, n.º 3859, 1968, 1243-1248.
- Hatch, Orrin G., and Lee, Thomas R., "To Promote the Progress of Science': the Copyright Clause and Congresse's Power to Extended Copyrights", *Harvard Journal of Law & Technology*, vol. 16, n. ° 1, 1-43.
- Heald, Paul J., "Property Rights and the Efficient Exploitation of Copyrighted Works: An Empirical Analysis of Public Domain and Copyrighted Fiction Bestsellers", *UGA Legal Studies Research* No. 08-014, 2008.
- Heald, Paul J., "How Copyrights Keeps Works Disappeared", *Journal of Empirical Legal Studies*, vol. 11, n.° 4, 2014, 829-866.
- Instituto Cervantes, "El español: una lengua viva. Informe 2015" [online], Instituto Cervantes, available at: http://www.cervantes.es/imagenes/File/prensa/El%20 espaol%20una%20lengua%20viva.pdf [last visited: March 3, 2019].
- Kaplan, Abraham, *The Conduct of Inquiry: Methodology for Behavioral Science*, New York, Routledge, 2017.

- Karjala, Dennis S., "Judicial Review of Copyright Term Extension Legislation", *Loyola of Los Angeles Law Review*, vol. 36, 2002.
- Lawless, Robert M.; Robbennolt, Jennifer K., and Ulen, Thomas S., *Empirical Methods in Law*, New York, Aspen Publishers, 2010.
- Maslow, Abraham H., and Wirth, Arthur G., *The Psychology of Science: A Reconnaissance*, New York, Harper & Row, 1969.
- Posner, Richard A., and Landes, William M., "Indefinitely Renewable Copyright", *The University of Chicago Law Review*, vol. 70, n.° 2, 2003, 471.
- Rengifo García, Ernesto. *Recientes reformas normativas del derecho de autor en Colombia (Boletín virtual de propiedad intelectual)* [online],2012,available at: http://propintel.uexternado.edu.co/Pr0P1n73L-3xT3rNaD0-U3C/wpcontent/uploads/2012/11/Recientes-reformas-normativas-del-Derecho-de-Autor-en-Colombia-2.pdf [last visited: February 24, 2016].
- Senate of The United States, *Copyright Term Extension Act of 1996*, Senate Report. No. 104-315, 1996.
- Twain, Mark, Mark Twain Speaking, Iowa City, University of Iowa Press, 1997.