

THE HARMONIZATION MYTH IN INTERNATIONAL INTELLECTUAL PROPERTY LAW

Sarah R. Wasserman Rajec*

There is a dominant narrative in international intellectual property (“IP”) law of ever-increasing harmonization. This narrative has been deployed in ways descriptive, prescriptive, and instrumental: approximating the historical trend, providing justification, and establishing the path forward. Appeals to harmonization are attractive. They evoke a worldwide partnership and shared sacrifice to meet the goals of innovation and access to technology through certainty, efficiency, and increased competition through lowered trade barriers. Countries with strong IP protections consistently and successfully tout the importance of certainty and lower trade barriers when seeking new and stronger protections from countries with lower levels of protection. Yet the harmonization narrative is a myth. Harmonization can account for only some attributes of international IP law development, and even those are often better explained by a maximalist account of IP protection.

Maximization of IP rights better explains much of the substance of international IP law development, including the Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS”), which sets floors—but not ceilings—for IP protections. Maximization is particularly evident in the forum-shifting behavior that has resulted in a proliferation of IP commitments in investment, bilateral, and regional trade treaties in the years since the TRIPS Agreement went into effect. These commitments often increase IP protection in signatory countries in ways that bring them out of

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harmony with the majority of the world. As a result, prior commitments to harmonization are discarded for maximization.

Through the lens of duration, this Article describes the harmonization narrative and its strength leading up to the TRIPS Agreement before showing the explanatory superiority of a maximization narrative, even in the provisions of TRIPS. Next, the Article shows how maximization of IP has driven many of the post-TRIPS treaties and agreements at the expense of harmonization. Recognizing maximization instead of harmonization as the chief explanatory story has a number of implications for the future of international IP law. It challenges the normative presumption that all countries should have the same level of IP protection and weakens arguments that countries ought to sacrifice their own national agendas in order to bring their IP protection into harmony with other countries. Ultimately, correctly identifying the trajectory of international IP law allows scholars and stakeholders to address complicated problems with realistic expectations, rather than attractive—but flawed—rhetoric.

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INTRODUCTION

The history of international IP law is often told as a story of harmonization.¹ It is a story with initially varied systems of protection, each geared towards domestic

1. This Article uses the term “harmonization” to mean an effort to make laws more uniform in both procedure and substance. The usage is generally in line with other scholarly treatments of harmonization. *See, e.g.*, *Eldred v. Ashcroft*, 537 U.S. 186, 195–96 (2003) (discussing the U.S. interest in harmonizing copyright law with the European Union);

industrial policy. Over time, these systems have become connected, inter-dependent, and seemingly convergent through a series of treaties. These treaties originally required only reciprocity but now specify minimum standards of protection and enforcement provisions. The costs of abandoning domestic policy priorities—particularly for developing and least developed countries (the Global South)—were worth it, proponents of the treaties assured, because of the benefits of harmonization.² Even skeptics adopted the harmonization framing in discussions of required IP protections and flexibilities.³

But this explanatory story, while attractive, is inaccurate. Time and again, developed countries that benefit from high levels of protection (the Global North) have chosen maximization of IP rights over harmonization.⁴ As it turns out, the treaties that were hailed as instruments of harmonization were actually designed to allow for unharmonized increases in protection. The real story is one of maximization, not harmonization. Piecemeal increases of IP protections have defined the last 25 years, but the harmonization myth persists.

This Article seeks to pull back the curtain on the harmonization myth and argues that doing so carries important implications for the future. Recognizing harmonization as a myth creates space in policymaking for giving increased weight to considerations that were previously swept aside, such as meeting domestic interests and encouraging increased experimentation in IP lawmaking.

The harmonization myth's origin story is telling. International harmonization was not a consideration in early iterations of IP rights.⁵ The default rule for IP law is that it is territorial. Early copyright laws bolstered domestic publishing industries and encouraged the development and dissemination of

Kenneth D. Crews, *Harmonization and the Goals of Copyright: Property Rights or Cultural Progress?*, 6 IND. J. GLOBAL LEGAL STUD. 117, 117 (1998) (describing “the desire to conform U.S. law to the laws of other countries”); Jerome H. Reichman & Rochelle Cooper Dreyfuss, *Harmonization Without Consensus: Critical Reflections on Drafting a Substantive Patent Law Treaty*, 57 DUKE L.J. 85, 89 (2007) (noting that the TRIPS Agreement “took a major step toward substantive patent law harmonization” but did not result in “a uniform or deeply harmonized global patent regime”).

2. See, e.g., KEITH E. MASKUS, *INTELLECTUAL PROPERTY RIGHTS IN THE GLOBAL ECONOMY* 186–94 (2000) (describing the potential trade gains from harmonization measures contained in TRIPS); John F. Duffy, *Harmony and Diversity in Global Patent Law*, 17 BERKELEY TECH. L.J. 685, 694–703 (2002) (discussing three rationales for harmonization: reducing free-riding by low-protection countries, the potential for economies of scale in governance, and preventing destructive protectionism); John Gladstone Mills III, *A Transnational Patent Convention for the Acquisition and Enforcement of International Patent Rights*, 88 J. PAT. & TRADEMARK OFF. SOC'Y 958, 961 (2006) (asserting that many scholars “endorse complete harmonization of the world's patent laws in order to create a single global patent” and that “the signing of the TRIPS Agreement gave support to the complete harmonization approach”); Amy Kapczynski, *Harmonization and Its Discontents: A Case Study of TRIPS Implementation in India's Pharmaceutical Sector*, 97 CAL. L. REV. 1571, 1572–73 (2009) (describing the “refrain” of TRIPS as a harmonizing instrument and critiquing harmonization).

3. See, e.g., Kapczynski, *supra* note 2, at 1573.

4. See discussion *infra* Part III.

5. See discussion *infra* Section II.B.

particular forms of expression in countries that chose to implement them. Copyright rationales were generally domestic, whether centered on the local printing industry, authors, or national culture. Early patent systems, too, furthered domestic interests in developing new technologies, developing industries that employed those technologies, and introducing new goods to their local populations.⁶ These patents were grants by monarchs, countries, or states allowing exclusive rights to manufacture and sell inventions for a limited time, and often designed for training apprentices to make the goods widely available once the patent expired.

Instead, an interest in harmonization developed slowly and in parallel with increasing international trade. The post-World War II General Agreement on Trade and Tariffs (“GATT”)⁷ led to growth in trade,⁸ and IP-intensive industries were no exception to growing globalization. Domestic industry groups that had been fostered by local IP protection expanded their interests and lobbied for protection in foreign markets.⁹ By the late twentieth century, variations in IP laws were seen as a non-tariff barrier to trade, setting the stage for the negotiations that led to the inclusion of IP in the Uruguay Round Agreement (a.k.a. the “WTO Agreement” forming the World Trade Organization (“WTO”) in 1994).¹⁰

Harmonization was a driving force behind the Agreement on Trade-Related Aspects of Intellectual Property Rights (the “TRIPS Agreement”),¹¹ an annex to the WTO Agreement and one of a number of treaties addressing non-tariff barriers to trade.¹² The idea behind TRIPS was that firms would hesitate to locate manufacturing centers in a country without IP protection because of the potential

6. See discussion *infra* Section I.B.

7. General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

8. See Douglas Irwin, *The GATT in Historical Perspective*, 85 AM. ECON. REV. 323, 326–27 (1995) (describing the post-war economic expansion in trade and income and attributing it in part to the GATT).

9. E.g., STEPHEN P. LADAS, *THE INTERNATIONAL PROTECTION OF LITERARY AND ARTISTIC PROPERTY* 615–16 (1938) (noting how “the interests of producers and consumers of copyrighted works are now truly of an international character” as an explanation for “the large number of international associations and organizations that are now attempting to promote copyright and the interests concerned with copyright”).

10. See Marrakesh Agreement Establishing the World Trade Organization, art. I, Apr. 15, 1994, 1867 U.N.T.S. 154 [hereinafter Marrakesh Agreement].

11. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 [hereinafter TRIPS Agreement].

12. See JOHN H. JACKSON ET AL., *LEGAL PROBLEMS OF INTERNATIONAL ECONOMIC RELATIONS: CASES, MATERIALS & TEXT* 410–12 (4th ed. 2002); Sarah R. Wasserman Rajec, *Free Trade in Patented Goods: International Exhaustion for Patents*, 29 BERKELEY TECH. L.J. 317, 319 (2014) [hereinafter Rajec, *Free Trade*] (noting that concerns over non-tariff barriers to trade resulted in the inclusion in the WTO of “agreements addressing subjects as diverse as telecommunication, industrial and product safety standards, and intellectual property”).

misappropriation of their IP rights.¹³ Varied and uncertain levels of IP protection could also present high information costs to those trying to conduct business on the Internet.¹⁴ These increased information costs can include determining the different levels of IP protection in multiple jurisdictions before determining where to place manufacturers and distributors, and in which fora to sell—or to avoid sales. Companies often tailor their activities to avoid liability under IP laws, so more jurisdictions with largely different protections means more determinations and potential changes in manufacture and distribution to comply with the varied rules. Differences in IP protection would therefore thwart one of the purposes of lowering trade barriers, which is to allow for countries with competitive advantages in certain sectors—e.g., manufacturing—to specialize, while other countries specialize in other industries.¹⁵ In addition to thwarting specialization, differential IP protection would increase border costs and prove to be a barrier to trade because of the need to stop imports of infringing goods manufactured abroad. Ultimately, in return for the promise of greater access to foreign markets for textiles and other goods, countries in the Global South agreed to implement certain minimum standards of IP protection through the TRIPS Agreement. The standards generally tracked the levels of protection available in the Global North, even requiring some developed countries to expand their protection to match that of other developed countries. Overall, the TRIPS Agreement required sweeping changes and steep increases of IP protection of many countries and provided the possibility of harmonization. By requiring protection for specified subject matters and for specified terms, the basic scope of IP rights was set. And all this change, we are told, was made pursuant to a goal of harmonization, the key to lowering barriers to trade in creative and innovative industries.

This Article joins the voices that have noted the ways that the TRIPS Agreement has served as a “floor” for IP rights while allowing for future increases; it does so by examining the course of one of the centerpieces of IP rights harmonization: duration. Of all the reforms to IP rights pursued in the name of harmonization, term is arguably the most important. The minimum standards set for copyright and patent terms were among the strongest harmonizing provisions of the TRIPS Agreement, particularly when coupled with subject matter requirements. This is because the term of protection is, essentially, an on-off switch with respect to IP rights. If terms differ between countries, then there will be some period of time

13. See, e.g., Katherine J. Strandburg, *Evolving Innovation Paradigms and the Global Intellectual Property Regime*, 41 CONN. L. REV. 861, 892 (2009) (describing the trade purposes behind TRIPS and critiquing it as static and drawn towards exploiting developed countries’ “comparative advantage in production of intangible knowledge goods”).

14. See, e.g., ANUPAM CHANDER, *THE ELECTRONIC SILK ROAD: HOW THE WEB BINDS THE WORLD IN COMMERCE* 142–43 (2013).

15. See PAUL R. KRUGMAN ET AL., *INTERNATIONAL ECONOMICS: THEORY & POLICY* 24 (Sally Yagan et al. eds., 9th ed. 2012). The book explains the general idea of comparative advantage and how lower trade barriers result in greater efficiency in manufacture because the costs associated with cross-border trade are lowered. *Id.* If IP constitutes a barrier to placing manufacturing in the country with an advantage in manufacturing, then the differences in IP protection constitute a barrier to trade. *Id.*

in which there is protection in one country and not the other. This is precisely the type of non-tariff barrier that TRIPS was meant to address.

Imagine the inefficiency of setting up a factory in a country to manufacture innovative widgets, knowing that five years before the patent term ends in the rest of the world, it will expire in the country of manufacture. Inventors (and investors) would be less likely to place a factory in such a country, thwarting the aim of specialization entirely. Similarly, if countries barred entire subject matters from patentability that were protected elsewhere, it would distort trade and investment decisions around that industry.¹⁶ To ensure harmonized protection, the TRIPS Agreement specified required subject matter protection for patents and copyrights as well as minimum terms of protection. In the case of patents, the term of protection “shall not end before” 20 years from the effective filing date of the patent application.¹⁷ For copyright, the required term is no less than life of the author plus 50 years,¹⁸ and for works not based on the life of a natural person, no less than 50 years from publication.¹⁹

And yet even for questions of term—where the case for harmonization is the strongest—a gentle push exposes that harmonization was not indeed the motivating force. For example, it is certainly curious that, given the push for harmonization, while the TRIPS Agreement was being negotiated, the European Union (“EU”) was negotiating to increase copyright terms by 20 years.²⁰ If harmonization were indeed as valuable a goal as interest groups and the Global North suggested before the TRIPS Agreement, one would expect that further treaty-making would be focused on, well, further harmonization. Instead, however, a strong trend in treaty-making resulted in increased copyright and patent terms—changes that have brought countries out of harmonization with other WTO member countries.²¹

This Article pulls on that thread. It traces term requirements to TRIPS—and then beyond—to show that when faced with a choice between lower-but-harmonized protection and higher-but-disharmonized protection, the countries and industry groups that have pushed for changes in the name of IP rights “harmonization” over the years regularly chose maximization instead.

16. The TRIPS Agreement also specifies requirements to be eligible for protection. For patents, those requirements state that “patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application,” whereas for copyrights, the TRIPS Agreement requires protection extend to expressions, but not to “ideas procedures, methods of operation or mathematical concepts as such.” TRIPS Agreement, *supra* note 11, arts. 9, 27.

17. *Id.* art. 33.

18. The Berne Convention for the Protection of Literary and Artistic Works, art. 7, Sept. 9, 1886, as revised at Paris on July 24, 1971, and as amended Sept. 28, 1979, 102 Stat. 2853, 1161 U.N.T.S. 3 [hereinafter Berne Convention], incorporated through TRIPS Agreement, *supra* note 11, art. 9.

19. TRIPS Agreement, *supra* note 11, art. 12.

20. See discussion *infra* Part III.

21. See discussion *infra* Section II.B.

The maximization story continues. Copyright term increases spread from the EU to the United States, bolstered by a TRIPS Agreement exception from the rule of reciprocity which allowed European countries to grant American authors shorter terms of protection than their own nationals, consistent with the American term.²² The United States responded by increasing its copyright term. Now, the United States has included the requirement of a longer copyright term in a number of bilateral and regional trade treaties.²³ Patent term extension provisions have also become a part of post-TRIPS Agreement treaties. These provisions require countries to allow for the extension of patent terms under certain circumstances. In contrast to copyright, these extensions can result in even more diversity among terms because each extension is subject to an administrative procedure and these procedures are more likely to vary from country to country. Nevertheless, countries of the Global North have insisted on including these provisions that result in a lack of harmonization between countries.

The harmonization narrative, thus, is ultimately an unsatisfactory explanation for international IP rights. And because harmonization does not justify many of the recent changes in IP commitments, its force as a determinant of future-looking policy deserves scrutiny and skepticism. The treaty provisions that result in pressure to maximize rights, such as the so-called rule of the shorter term, become particularly suspect. For example, the United States' decision to increase the copyright term was directly tied to the notion that American creators were disadvantaged in European markets because they were granted shorter copyrights than European nationals.²⁴ When the myth is busted, one can make a more nuanced calculation of costs and benefits for term changes. Increases in copyright terms can result in an "upward ratchet"²⁵ of rights that is unmoored from the ideal term of protection.

Similarly, recognizing the harmonization myth also calls for reevaluating the benefits of variation among IP regimes. Diversity among IP regimes can be important to respond to domestic needs that vary from country to country. It also allows for some amount of experimentation. There is no strong empirical data showing that the current terms of copyright or patent protection are ideal, so

22. See discussion *infra* Section II.A.

23. See, e.g., United States-Korea Free Trade Agreement, June 30, 2007, 46 I.L.M. 642, <https://ustr.gov/trade-agreements/free-trade-agreements/korus-fta/final-text> [hereinafter KORUS]; North American Free Trade Agreement, Dec. 17, 1992, 32 I.L.M. 289 [hereinafter NAFTA]; Trans-Pacific Partnership, OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE, <https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text> (last visited July 13, 2020); Comprehensive and Progressive Agreement for Trans-Pacific Partnership, GOVERNMENT OF CANADA, <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/cptpp-ptppg/index.aspx?lang=eng> (last visited July 13, 2020) [hereinafter CPTPP].

24. See *infra* note 197 and accompanying text.

25. See generally SUSAN SELL, THE GLOBAL IP UPWARD RATCHET, ANTI-COUNTERFEITING AND PIRACY ENFORCEMENT EFFORTS: THE STATE OF PLAY (2008), <http://www.ip-watch.org/files/SusanSellfinalversion.pdf>.

allowing for some diversity allows for more information to be gathered in a “laboratories of experimentation” kind of way.²⁶

None of this is to suggest that harmonization has no role to play in international IP protection. There are efficiencies when the general structure of rights available are the same, both to IP rights holders and to third parties for whom standardization can lower information costs.²⁷ Rather, what this Article suggests is a recalibration of the weight that should be given to harmonization. Because there is not consistent interest in a unified system of IP protection, there is room for variation. And that variation may well provide value. Removing the implicit preference for harmonization—and revising the narrative that harmonization is what has been happening all along—will allow for clearer evaluation of the international IP regime. All myths eventually clash with reality; harmonization is no exception.

I. THE HARMONIZATION NARRATIVE

Patent and copyright law both developed as highly localized laws, focused on the needs and interests of local populations. However, as international trade has increased, one potential barrier to trade is variation in IP protection between countries. “International intellectual property law” is admittedly a misnomer because “there are no intellectual property rights that are international in scope.”²⁸ Instead, patents and copyrights remain territorial rights—that is, each country’s laws govern the grant of IP rights in that country, which in turn apply to goods and activities within their borders.²⁹ Early IP laws were both territorial and diverse. Over time, however, a steady stream of bilateral and multilateral treaties has imposed requirements of reciprocity, national treatment, and eventually, minimum standards of protection on members. These commitments have smoothed out differences between the various countries’ protections. As a result, the substance of IP rights and procedures for procuring them have become more similar and standardized than their early forms, which varied even among municipalities.³⁰ Bilateral and multilateral treaties culminating in the TRIPS Agreement have included requirements that have shaped IP rights into similar forms, scopes, and durations. Post-TRIPS, regional IP agreements have included more specific requirements for the grant of patents and copyrights, even as their implementation and enforcement

26. See, e.g., Lisa Larrimore Ouellette, *Patent Experimentalism*, 101 VA. L. REV. 65, 121 (2015) (suggesting that the “biggest hurdle to experimentation with substantive patent law is the international TRIPS agreement”).

27. See Duffy, *supra* note 2, at 700.

28. DANIEL C.K. CHOW & EDWARD LEE, *INTERNATIONAL INTELLECTUAL PROPERTY: PROBLEMS, CASES, AND MATERIALS* 2–3 (2d ed. 2012).

29. See, e.g., *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 527, 531 (1972). For discussions of extraterritorial application of U.S. patent laws, see, for example, Bernard Chao, *Patent Imperialism*, 109 NW. U. L. REV. ONLINE 77 (2014); Timothy R. Holbrook, *Boundaries, Extraterritoriality, and Patent Infringement Damages*, 92 NOTRE DAME L. REV. 1745, 1746 (2017); Sapna Kumar, *Patent Damages Without Borders*, 25 TEX. INTELL. PROP. L.J. 73 (2017); Sarah R. Wasserman Rajec, *Infringement, Unbound*, 32 HARV. J.L. & TECH. 117 (2018).

30. Sarah R. Wasserman Rajec, *Evaluating Flexibility in International Patent Law*, 65 HASTINGS L.J. 153, 163 (2013) [hereinafter Rajec, *Evaluating Flexibility*] (discussing the early protections granted by Venice and municipalities within Germany).

remains a matter for national legislatures and courts.³¹ Many of the changes required to meet minimum standards resulted in developing and least developed countries significantly increasing the level of protection embodied in their IP laws³²—at times implementing entirely new systems of protection.³³ Time and again, countries and interest groups seeking such changes justified them as necessary for the purposes of harmonization.³⁴

This Part first describes the purposes served by patent and copyright law, generally. Next, the Part traces the development of so-called international IP protection; the emergence of relatively similar systems—ultimately enshrined in international treaties—of IP protection that have been promulgated globally; and the justifications offered for those protections. It ends with a discussion of the role of divergent term length in international IP protection.

31. See, e.g., Convention on the Grant of European Patents (European Patent Convention), Oct. 5, 1973, 13 I.L.M. 268 (establishing the European Patent Office); Eurasian Patent Convention, Aug. 12, 1994, available at Industrial Property and Copyright (July/Aug. 1995) (International Bureau of WIPO trans.), compiled in Industrial Property Laws and Treaties: Multilateral Treaties, WIPO Pub. No. 609(E) (establishing Eurasian Patent Organization and Eurasian Patent Office); Agreement on Andean Subregional Integration (Cartagena Agreement), May 26, 1969, 8 I.L.M. 910 (the Andean Pact to “make decisions” regulating IP and its 1994 Decision harmonizing much of the patent law and Decision 351 harmonizing copyright and neighboring rights); Agreement on the Creation of the African Regional Industrial Property Organization (ARIPO), Dec. 9, 1976, http://www.wipo.int/clea/doc_new/en/zz/zz001en.html (processes patent applications under 1984 protocol); Bangui Agreement Relating to the Creation of an African Intellectual Property Organization (OAPI), Mar. 2, 1977, <https://wipolex.wipo.int/en/treaties/details/227> (last visited July 21, 2020) (administers patents and copyrights in French-speaking African countries). All discussed in PAUL GOLDSTEIN & MARKETA TRIMBLE, INTERNATIONAL INTELLECTUAL PROPERTY LAW: CASES AND MATERIALS 174 (4th ed. 2015).

32. For example, South Africa, India, and Brazil treated pharmaceutical products differently than other inventions under their patent systems prior to the TRIPS Agreement and had to modify their respective positions to comply with TRIPS. See M. Monirul Azam, *The Experiences of TRIPS-Compliant Patent Law Reforms in Brazil, India, and South Africa and Lessons for Bangladesh*, 7 AKRON INTELL. PROP. J. 61, 96–97 (2015). The change to granting patent protection over pharmaceutical products was non-trivial. See generally Jean O. Lanjouw, *The Introduction of Pharmaceutical Product Patents in India: “Heartless Exploitation of the Poor and Suffering”?* (Nat’l Bureau of Econ. Research, Working Paper No. 6366, 1998) (discussing the controversy around requiring pharmaceutical patent protection in the TRIPS Agreement).

33. Least developed country members of the TRIPS Agreement remain under a grace period that is meant to last until they reach “a sound a viable technological base,” a grace period that has been extended numerous times. INNOVATION IN THE LEAST DEVELOPED COUNTRIES: GOING BEYOND INTELLECTUAL PROPERTY RIGHTS, UNITED NATIONS CONFERENCE ON TRADE & DEV. 2 (2007), https://unctad.org/en/Docs/ldcrh2_en.pdf. Most recently, the grace period was extended with respect to pharmaceutical products until 2033. *WTO Members Agree to Extend Drug Patent Exemption for Poorest Members*, WORLD TRADE ORG. (Nov. 6, 2015), https://www.wto.org/english/news_e/news15_e/trip_06nov15_e.htm.

34. See discussion *infra* Section I.C.

A. *The Varied Purposes of IP Rights*

Patents for inventions and copyrights for creative works are exclusive rights of limited duration, which are justified, to varying extents, by a combination of utilitarian goals and theories of moral rights in creations. Prospective, exclusive rights are certainly not the only means of encouraging or rewarding inventors and artists,³⁵ and countries have varied greatly in when and how they have given such encouragement in the past. Patents and copyrights are both government-granted rights that embody policy goals of encouraging and rewarding artistic creation and scientific discovery and dissemination. And although the goals and the balances they strike in achieving those goals differ, they have come to be grouped together and collectively termed “intellectual property.”

Whatever the merits of this grouping, there are some characteristics that patents and copyrights share. Both encourage the creation of information—and goods embodying that information. The information embodied in such goods is nonrivalrous and nonexclusive; that is, new embodiments can be made by studying existing embodiments, without incurring the costs of creation. Absent protections, then, investments in the creation of such goods may be appropriated, leading to an underproduction. Copyright law, therefore, is intended to encourage original expression through art, literature, and other media and its distribution through the grant of exclusive rights to copy and distribute artistic works. Patent law is intended to encourage investment in innovation and the sale of inventive goods through the grant of exclusive rights to make, use, and sell goods that embody inventions.

Both patents and copyrights are rights of limited duration, ensuring that the ideas embodied in artistic and inventive works will ultimately become part of the public domain, available for enjoyment or to be built upon in future works. By granting exclusive rights to authors and inventors, copyright and patent laws represent a trade-off, decreasing public access and use of the protected information during the term of the right. However, as rights of limited term, the subject matter reverts to the public domain. Copyright term now lasts for generations, whereas patents generally have a term of 20 years from the date an application is filed.³⁶

There are competing justifications for copyright law, both within and among jurisdictions, that have shaped the characteristics of the rights granted. It is generally understood that the continental European tradition of copyright law is based on a natural rights theory that requires protections of authors’ moral rights while common law countries take a more utilitarian approach.³⁷ The natural rights

35. See generally Daniel J. Hemel & Lisa Larrimore Ouellette, *Beyond the Patents-Prizes Debate*, 92 TEX. L. REV. 303 (2013) (discussing various methods of encouraging innovation).

36. See discussion *infra* Part IV.

37. See GOLDSTEIN & TRIMBLE, *supra* note 31, at 193; PAUL GOLDSTEIN, *COPYRIGHT’S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX* 138 (1994) (discussing the “hard, utilitarian calculus that balances the needs of copyright producers against the needs of copyright consumers.”); see also B. Zhorina Khan, *An Economic History of Copyright in Europe and the United States*, ECON. HIST. ASS’N (Mar. 16, 2008), <https://eh.net/encyclopedia/an-economic-history-of-copyright-in-europe-and-the-united-states/>.

theory of copyright draws from a labor theory of property and suggests that authors gain rights through their creative acts. According to the utilitarian view, encouraging the production and dissemination of art benefits society, and exclusivity results in more artistic activity than would exist without the inducement.³⁸ These are oversimplifications, and each tradition carries strains of both philosophies. Moreover, even within each tradition, there is much room for fashioning different forms of exclusive rights in artistic creations.

In the United States, modern copyright law protects “original works of authorship fixed in any tangible medium of expression,” with no requirement of publication.³⁹ Copyright is the right to exclude others from reproduction, preparation of derivative works, distribution of copies, and public performances of work, *inter alia*.⁴⁰ Copyright duration is 70 years after the death of the last surviving author of a work or, in the case of works made for hire, 120 years from creation.⁴¹ Many of these characteristics are shared with the scope of copyrights elsewhere in the world—often due to multilateral, regional, and bilateral treaty requirements.⁴² However, as discussed below, these general contours were not always standardized, among or within countries.

Patent law shares some of the same purposes as copyright, and like copyright law, developed from an early field of diverse, territorial incentives to become a more homogenous set of rights. Patents have long had a utilitarian justification,⁴³ although the labor theory⁴⁴ and prospect theory⁴⁵ provide alternate—and sometimes complementary—justifications. Still, early patent grants were not necessarily incentives for invention as much as they were incentives to introduce new technologies to a country. Currently, governments encourage invention and investment in innovation through the time-limited rights to exclude of patents. Patent rights impose social costs—primarily, reduced access to the invention during the term of the patent, resulting from elevated, noncompetitive pricing. Countries implementing patent systems generally considered these costs justified, reasoning that inventions that would not have existed but for the patent system would otherwise not have been available at any price, and that patents, by requiring public

38. Shyamkrishna Balganesh, *Foreseeability and Copyright Incentives*, 122 HARV. L. REV. 1569, 1576–77 (2009); Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745, 1750–52 (2012); William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326–27 (1989).

39. 17 U.S.C. §§ 101, 102(a) (2018).

40. *Id.* § 106.

41. *Id.* § 302.

42. See discussion *infra* Section III.B.

43. See, e.g., Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1597–99 (2003); Fromer, *supra* note 38, at 1750.

44. See, e.g., Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 296–330 (1988).

45. Edmund Kitch suggested that patents are prospect rights, like mineral claims, and an inventor discloses the boundaries of her claims and manages subsequent investment, use, and research. Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265, 272–76 (1977).

disclosure and limited terms, ultimately advance scientific progress.⁴⁶ Like copyright law, competing justifications for—and arguments about—these theories and their application shaped the structure of early patent law.

In the United States, modern patents are exclusive rights to make, use, sell, offer for sale, or import new, useful, and nonobvious products or processes.⁴⁷ Patent duration is 20 years from the effective filing date of an application.⁴⁸ There are, however, a few opportunities for extensions of the term. The Drug Price Competition and Patent Term Restoration Act of 1984 (the “Hatch-Waxman Act”) allows for extensions to patent term to make up for the time it takes to obtain clinical approval.⁴⁹ However, the baseline rule is that the patent term is 20 years. The 20-year term was a change for the United States, made in order to comply with the TRIPS Agreement. And in fact, many of the characteristics of the scope and duration of patents have been standardized as a result of bilateral, multilateral, and regional agreements on trade and IP.⁵⁰

B. Early IP Laws: Territorial and Diverse

Early versions of copyright and patent laws had diverse characteristics. Countries developed laws granting IP rights of different scopes, in different forms, at different times, and for different durations, depending on their domestic interests. Copyrights were sometimes granted to printers and sometimes seen as authors’ rights, and early versions had durations based on a fixed number of years. Patents were not always based on invention so much as a willingness to introduce a new type of manufacture to a particular country.

The early forms of copyright that originated in Europe were not standardized. The need for some sort of protection against copying rose with the introduction of the printing press, but the specifics of how countries implemented this protection varied.⁵¹ Generally, printing privileges for literary works resulted from individual petitions by authors, printers, or publishers; varied “in geographical scope, duration, and breadth of coverage;” and could be granted by religious orders, universities, political figures, and representatives of the Crown.⁵² Most often, privileges were granted by a monarch.⁵³ In fifteenth- and sixteenth-century France, for example, privileges lasted from a typical two or three years up to ten years and

46. See MASKUS, *supra* note 2, at 29 (“[IP rights] generate monopoly positions that reduce current consumer welfare in return for providing adequate payoffs to innovation, which then raises future consumer welfare.”); Michael Abramowicz & John F. Duffy, *The Inducement Standard of Patentability*, 120 YALE L.J. 1590, 1595 (2011) (arguing that patents are meant to induce innovations that would not have been made absent the promise of a patent).

47. 35 U.S.C. §§ 101, 271 (2018).

48. *Id.* § 154(a)(2).

49. *Id.* § 156 (providing patent term restoration for patented products or methods that have been subject to regulatory review).

50. See discussion *infra* Section I.C.

51. See Peter Burger, *The Berne Convention: Its History and Its Key Role in the Future*, 3 J.L. & TECH. 1, 3–5 (1988).

52. B. ZHORINA KHAN, *THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT 1790-1920*, at 226 (2005).

53. *Id.*

were held by authors of new books and works in translations, along with other tangible, artistic work.⁵⁴ In England, too, it was the Crown that issued licenses to print books in the fifteenth century, censoring critical works along the way.⁵⁵

As copyright evolved in different countries, the relevant requirements and scope of the rights remained varied, though there was a shift away from publishers' rights and towards authors' rights.⁵⁶ For example, an eighteenth-century decree in France made copyright duration dependent on ownership.⁵⁷ Authors who kept their privileges retained them in perpetuity, whereas once a publisher bought the privilege, it expired after at least ten years, with a term dependent on its value.⁵⁸ Meanwhile in England, the Statute of Anne became the world's first copyright law in 1709, granting rights to authors for a term of 14 years with the potential of renewal.⁵⁹ Some have suggested that the term of 14 years was "a vestige of the time when privileges were awarded as a means of encouraging printers" because that duration allowed for training two sets of apprentices in printing.⁶⁰ The United States modeled its first federal copyright law on the Statute of Anne.⁶¹ The 1790 statute allowed for a copyright duration of 14 years from the date of publication, with the option of renewal if the author was living when the first term expired.⁶² Prior to the passage of the federal law, all states except Delaware had laws granting copyright of differing durations—some granted a 14-year term with renewal of 14 years, while others granted a single term of anywhere from 14 to 21 years.⁶³

In the nineteenth century trade increased, and it became more desirable for authors to obtain copyrights in foreign countries that had become markets for their work (and in which unauthorized copies were being sold). Promises of reciprocity became a feature of bilateral treaties: each country would grant authors from the other signatory country the same rights as its own nationals received.⁶⁴ These

54. *Id.*

55. GOLDSTEIN & TRIMBLE, *supra* note 31, at 193; Burger, *supra* note 51, at 4–5.

56. Burger, *supra* note 51, at 5. This period also saw the beginning of the split between civil law countries and their inclusion of moral rights with the rights granted to authors and common law countries that generally protect economic rights and provide less for moral rights. *Id.*

57. Khan, *supra* note 37.

58. *Id.*

59. 8 Ann. c. 19 (Gr. Brit.).

60. Herman Finkelstein, *The Copyright Law—A Reappraisal*, 104 U. PA. L. REV. 1025, 1033–35, 1042 (1956); see also ROBERT L. BARD & LEWIS KURLANTZICK, COPYRIGHT DURATION: DURATION, TERM EXTENSION, THE EUROPEAN UNION, AND THE MAKING OF COPYRIGHT POLICY 10 (1999).

61. GOLDSTEIN & TRIMBLE, *supra* note 31, at 193.

62. See COPYRIGHT OFFICE, LIBRARY OF CONGRESS, BULLETIN NO. 3 (REVISED), COPYRIGHT ENACTMENTS: LAWS PASSED IN THE UNITED STATES SINCE 1782 RELATING TO COPYRIGHT 1–21 (1973).

63. BARD & KURLANTZICK, *supra* note 60, at 11.

64. Burger, *supra* note 51, at 8–9. The Berne Convention requires that authors in signatory countries receive "the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specially granted by this Convention." The Berne Convention for the Protection of Literary and Artistic Works, art. 5, Sept. 9, 1886, as revised

reciprocal agreements did not dictate the scope or content of rights but required merely that they be available to foreigners, too. The result was a complicated patchwork of rights, particularly because the treaties often had expiration dates. As a result, a rights holder who wanted to enforce a foreign copyright would need to work out whether a treaty existed, whether she had satisfied the requirements for a copyright, and what the scope and content of her rights were in each relevant foreign country. France became an early leader in international copyright law by unilaterally granting protection under French copyright to foreigners in a move that resulted in a number of bilateral copyright treaties.⁶⁵ France also had a strong interest in increasing global protection for its authors because French works were heavily pirated. These early moves towards bilateral reciprocity provided momentum that led to the first Congress of Authors and Artists in Brussels that eventually became the landmark multilateral agreement on copyright—the Berne Convention for the Protection of Literary and Artistic Works (the “Berne Convention”).⁶⁶

The history of patent law is one of granting privileges for the benefit of domestic interests, although the specifics of those benefits varied. Patent grants likely originated in Italy in the fourteenth century.⁶⁷ Florence granted an exclusive monopoly for a barge with hoisting gear in 1421, and the Venetian Senate ruled in 1474 that inventors who registered their inventions with the Senate would have the sole benefit of the invention for ten years.⁶⁸ Venetian craftsmen—often glassblowers—then spread the practice throughout Europe through emigration conditioned on protection against local competition and guild restrictions.⁶⁹ The German states were among the first to take up the idea, with England coming along to grant exclusive rights in glass- and soap-making thereafter.⁷⁰ In seventeenth-century England, patent grants were made by authority of the throne and recorded on the patent rolls, giving the person named in the grant the exclusive right to make and sell goods within the country.⁷¹ The rights holder was required to practice the patent and take apprentices, bolstering local manufacturing and availability of

at Paris on July 24, 1971, and as amended Sept. 28, 1979, 102 Stat. 2853, 1161 U.N.T.S. 3 [hereinafter Berne Convention].

65. *French International Copyright Act, Paris (1852)*, PRIMARY SOURCES ON COPYRIGHT (1450–1900), http://www.copyrighthistory.org/cam/tools/request/showRecord.php?id=record_f_1852.

66. See LADAS, *supra* note 9, at 29, 71–72, 86.

67. CHRISTINE MACLEOD, *INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT SYSTEM, 1660–1800*, at 10 (1988).

68. *Id.* at 11.

69. *Id.* (“Emigrant Italian craftsmen, seeking protection against local competition and guild restrictions as a condition of imparting their skills, disseminated knowledge of their patent systems around Europe.”).

70. *Id.* In 1565, the first Scottish patent for salt-making was issued and in 1586, the first Irish patent for glass-making was issued. *Id.*

71. Letters patent were used for grants of other benefits in addition to exclusive privileges over inventions. See Oren Bracha, *Owning Ideas: A History of Anglo-American Intellectual Property* 9–10 (June 2005) (S.J.D. dissertation, Harvard Law School), <https://law.utexas.edu/faculty/obracha/dissertation/pdf/chapter1.pdf> (contrasting the grant of “letters patent” or “litterae patentes,” which were “made by the king through an open official document” and “litterae clausae,” which were “sealed closed documents”).

goods.⁷² The duration of a patent under this system was 14 years—or two generations of apprenticeships. These benefits to domestic consumers and industry were prized above the inventiveness or novelty of the goods or processes described by the patent.⁷³ Early English practice also shows that patents could—and did—become a means for rewarding political patrons rather than rewarding innovation or increased consumer access.⁷⁴

Patents have remained more territorial than copyrights, and it took longer for international considerations to affect domestic laws. Petra Moser explains that in the mid-nineteenth century, “large differences in patent systems existed across countries” and “[p]atenting abroad was prohibitively expensive and countries discriminated heavily against foreign patentees.”⁷⁵ Some countries offered no patent protection at all for periods of time. For example, Switzerland did not grant patents at all between 1850 and 1888.⁷⁶ However, difficulties arose for foreign inventors because publication of a new discovery by an inventor—or display at a World Fair or other convention—would generally render that invention no longer “new” in the eyes of any given patent office. The problems associated with exhibiting inventions at international conventions provided some of the pressure necessary for the first major multilateral patent treaty to come into being—the Paris Convention for the Protection of Industrial Property (the “Paris Convention”).⁷⁷

There are many different ways to design systems that encourage or reward creation. The diverse systems used by territories, states, and countries from the fourteenth century to the nineteenth varied widely in terms of the relevant rights holder, the granting authority, requirements for protection, and the scope and duration of the right. However, as international trade increased and scientists and artists had more interaction with foreign contemporaries, industries and governments became more invested in securing their interests abroad.⁷⁸ As a result, the piecemeal, bilateral treaties that were based on reciprocity gave way to more

72. See, e.g., P.J. Federico, *Origin and Early History of Patents*, 11 J. PAT. OFF. SOC'Y 292, 304 (1929) (“The term of apprenticeship was seven years. Fourteen years may have been chosen as the proper duration of a patent to allow for the teaching of several generations of apprentices.”); Ramon A. Klitzke, *Historical Background of the English Patent Law*, 41 J. PAT. OFF. SOC'Y 615, 624 (1959) (describing how taking apprentices was a condition for patent grants); MACLEOD, *supra* note 67, at 18.

73. See sources cited *supra* note 72.

74. See, e.g., Oren Bracha, *The Commodification of Patents 1600–1836: How Patents Became Rights and Why We Should Care*, 38 LOY. L.A. L. REV. 177, 185–86 (2004); Klitzke, *supra* note 72, at 632–33; Rajec, *Free Trade*, *supra* note 12, at 335 (discussing mercantilism and its expression through early English patent law).

75. Petra Moser, *How Do Patent Laws Influence Innovation? Evidence from Nineteenth-Century World's Fairs*, 95 AMER. ECON. REV. 1214, 1216 (2005). The article goes on to analyze data from two World Fairs to find that countries with patent laws tended to have more innovation in certain industries—specifically industries that do not lend themselves to trade secrets—than countries that do not. *Id.* at 1222–31.

76. GOLDSTEIN & TRIMBLE, *supra* note 31, at 102–03.

77. Paris Convention for the Protection of Industrial Property, Mar. 20, 1883, as revised at Stockholm, July 14, 1967, 21 U.S.T. 1583, 828 U.N.T.S. 305 [hereinafter Paris Convention].

78. See Rajec, *Evaluating Flexibility*, *supra* note 30, at 163–69.

elaborate, multilateral agreements in the nineteenth century—in particular, the Berne Convention and the Paris Convention that paved the way for further agreements.

C. The Golden Age of Harmonization: From Berne and Paris to TRIPS

The period from the late nineteenth century through the end of the twentieth is the best demonstration of the harmonization narrative. Prior to this time, laws were diverse and territorial; following the TRIPS Agreement, maximization and fragmentation have reigned. But in the late nineteenth century, countries—particularly in the Global North—became interested in and pursued protection for the artistic and technological exports of their citizens and industries.⁷⁹ There were numerous reasons that international protection was desirable for countries with creative and innovative industries. Harmonization became a central justification once there was a potential for a major, multilateral treaty that included developing and least developed countries, and once differences in IP regimes were viewed as barriers to trade. But it was not yet the main point of discussion when the Berne and Paris Conventions were negotiated.⁸⁰ These major developments in international IP law came at the end of the nineteenth and twentieth centuries, respectively, through large, multilateral treaties.⁸¹ The Berne Convention⁸² of 1886 and the Paris Convention⁸³ of 1883 have now been widely adopted. The agreements represented advancements in international IP law both through their form—as multilateral treaties that would allow for future negotiations and changes—and through their substance, which included requirements for the administration and grant of patents and copyrights. Both treaties are now administered by the World Intellectual Property Organization (“WIPO”), one of the 15 specialized agencies of the United Nations,⁸⁴ and have been revised numerous times and incorporated into the TRIPS Agreement.⁸⁵

When negotiations for more substantive reform to the IP treaties stalled in discussions at WIPO, advocates for greater IP protection brought the negotiations to a new organization—including IP rights in the negotiations for a revision of the

79. *See id.*

80. Even as late as 1986, the Berne Convention was perceived as “still a Eurocentric instrument, with a number of hangers-on,” and only with its incorporation in TRIPS has it become “a truly universal instrument.” SAM RICKETSON & JANE GINSBURG, *INTERNATIONAL COPYRIGHT AND NEIGHBOURING RIGHTS: THE BERNE CONVENTION AND BEYOND* at ix (2d ed. 2005).

81. *Id.*

82. *See generally* Berne Convention, *supra* note 64.

83. *See generally* Paris Convention, *supra* note 77.

84. Sisule F. Musungu & Graham Dutfield, *Multilateral Agreements and a TRIPS-Plus World: The World Intellectual Property Organisation (WIPO)*, QUAKER UNITED NATIONS OFFICE & QUAKER INT’L AFFAIRS PROGRAMME, 4–5 (TRIPS Issues Papers No. 3, 2003) (WIPO was created under the Stockholm Convention and has the status of a specialized agency of the United Nations).

85. TRIPS Agreement, *supra* note 11, art. 2.

General Agreement on Tariffs and Trade (the “GATT”).⁸⁶ This regime-shifting move tied IP rights protection to access to markets that were desirable to developing countries and made it possible for the Global North to get many of the IP concessions it sought.⁸⁷ Those negotiations led to the WTO and its related agreements, including the TRIPS Agreement. The TRIPS Agreement took up where the Berne Convention and Paris Convention left off, including minimum standards of protection in IP law and enforcement measures and backing up the requirements with a dispute settlement understanding that gives the agreement teeth. As the TRIPS Agreement was being negotiated, justifications for its extensive requirements relied on the importance of harmonization to international trade.⁸⁸

The Berne Convention and the Paris Convention were both major steps forward in creating international standards of IP protection. The Berne Convention, covering literary and artistic works,⁸⁹ imposes a national-treatment obligation on its members that each member country must treat the nationals of other member countries no less favorably than its own citizens.⁹⁰ Thus, a provision in a member country’s law that grants relevant protections only to its citizens and not to foreign nationals of member countries would violate a national treatment provision.⁹¹ The Berne Convention also requires that members provide rights without requiring formalities (such as registration) and lays out minimum rights that countries are required to grant.⁹²

The Paris Convention⁹³ includes a national-treatment provision and requires specific periods of priority for filing. The national-treatment provision requires member countries to grant the same privileges to nationals of other member countries⁹⁴ as they grant to their own nationals.⁹⁵ This is a reciprocity requirement, not a requirement of minimum standards of protection. In contrast to the Berne Convention, the Paris Convention did not include minimum standards of protection. Under reciprocity, if a member country grants a patent term of just ten years, the

86. See, e.g., Donald P. Harris, *The Power of Ideas: The Declaration of Patent Protection and New Approaches to International Intellectual Property Lawmaking*, 6 U.C. IRVINE L. REV. 343, 378 (2016) (discussing regime-shifting in intellectual property law).

87. See generally Laurence Helfer, *Regime-Shifting: The TRIPS Agreement and the New Dynamics of Intellectual Property Policymaking*, 29 YALE J. INT. L. 1 (2004).

88. See *supra* note 2 and accompanying text.

89. The Berne Convention does not apply to “neighboring rights,” which Anglo-American law generally includes in its copyright definition but which civil law countries distinguish from “authors’ rights.” See Berne Convention, *supra* note 64, art. 2, 5.

90. See *id.*

91. See, e.g., Joined Cases C-92/92 & C-326/92, *Phil Collins v. Imtrat Handelsgesellschaft mbH*, 1993 E.C.R. I-5145 (finding violation of EU national treatment art public performance rights).

92. See Charles R. McManis, *Intellectual Property and International Mergers and Acquisitions*, 66 U. CIN. L. REV. 1283, 1287 (1998).

93. Paris Convention, *supra* note 77, art. 2–4; see also GOLDSTEIN & TRIMBLE, *supra* note 31, at 428.

94. The provision also applies to persons domiciled in a member country or who have industrial or commercial establishments in a member country. Paris Convention, *supra* note 77, art. 3.

95. *Id.* art. 2.

Paris Convention requires only that foreigners who are nationals of member countries be granted the same term, on the same conditions as citizens. National treatment is less of an imposition on domestic lawmaking than minimum standards, but it still can affect domestic laws. For example, it would have prohibited a short-lived “domestic working” provision in early American patent law that required foreigners to practice their patents within the country in order to maintain a U.S. patent, whereas U.S. citizens had no such obligation.⁹⁶ The provision relating to priority drove the negotiations of the Paris Convention, which was in part spurred by inventors’ concerns about presenting their work internationally.⁹⁷ Inventors were rightly concerned that a public presentation would count as “public use” in a country, which would then render the invention no longer “new” and therefore ineligible for patent protection. But countries benefit from scientific exchanges, and inventors may not always have time or resources to file in every country to which they travel. The Paris Convention therefore provides that filing for a patent in one member country preserves that filing date in other countries for 12 months.⁹⁸

The national treatment and priority dates prescribed by the Paris Convention do not require harmonization of substantive laws as they are substance-neutral provisions.⁹⁹ Measures aimed at substantive harmonization in patent law came later. Still, procedural harmonization received another big boost with the Patent Cooperation Treaty (the “PCT”), which entered into force on January 24, 1978.¹⁰⁰ The PCT simplifies the filing process for inventors who are interested in procuring patents in multiple countries.¹⁰¹ The PCT is not substantive, except, of course, that questions of procedure and entitlement to file or receive a patent greatly affect the substance of any patent holder’s rights.

The TRIPS Agreement continued the momentum of prior multilateral IP agreements. It focused more heavily on substantive law and enforcement mechanisms than prior treaties.¹⁰² However, TRIPS is an annex to the Uruguay Round Agreement forming the WTO. The lowered trade barriers that followed the

96. See, e.g., *Cont’l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 429 (1908) (noting the brief period in which a working requirement was enacted for foreign patentees).

97. GOLDSTEIN & TRIMBLE, *supra* note 31, at 428 (explaining that the need for international protections became apparent when “several foreign firms decided not to participate [in an 1873 international exhibition of inventions in Vienna] out of concern that by exhibiting their inventions they would jeopardize protection for them”).

98. Paris Convention, *supra* note 77, art. 4.C. The Convention also provided a priority period of six months for industrial designs and trademarks. *Id.*

99. Frederick M. Abbott, *Intellectual Property, International Protection*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW ¶ 21 (2010) (“The Paris Convention does not define a patent or what criteria are used for granting it. It does not prescribe subject-matter coverage, it does not set a minimum—or maximum—term of a patent, it does not define the rights of patent holders, and it was perceived as having a weak dispute settlement mechanism.”).

100. Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645, 1160 U.N.T.S. 231.

101. See Gladstone, *supra* note 2 (“The PCT permits a citizen of any member nation to submit a patent application for review and to designate the nations where he would later seek to obtain a national patent. This treaty enables a single application to be transferred and registered with a number of countries for later examination and national patent grant.”).

102. See Rajec, *Evaluating Flexibility*, *supra* note 30, at 166–70.

GATT had led to increased transnational production and the formation of many multinational enterprises.¹⁰³ The WTO agreement was constrained and harmonized trading practices among nations to further reduce barriers, thus allowing the free flow of goods across borders.¹⁰⁴ In this context, harmonizing IP laws was an important way to lower barriers to trade, resulting in lower costs to global companies that exist across and move between legal regimes.¹⁰⁵ The harmonization language makes sense both because it justified the inclusion of IP rights in a trade agreement and because it mirrored the European efforts at harmonization at the time. The EU was harmonizing its laws to form a common market. This effort included the harmonization of IP laws¹⁰⁶ through a series of directives.¹⁰⁷ The language of harmonization is therefore very much tied up in the decision to negotiate the TRIPS Agreement as part of a large, multilateral trade agreement rather than a separate IP treaty through WIPO. It is also worth emphasizing that, at the same time the WTO was being formed, smaller, regional trade agreements also began to play a strong role in shaping IP rights. As mentioned above, the EU was formed in 1993, building on the European Economic Community and bringing into effect much more sweeping, and true, harmonization of laws to form a single trading market. In the Americas, too, increased trade led to the formation of a trading bloc in the form of the North American Free Trade Agreement (“NAFTA”). NAFTA also included provisions about IP rights.¹⁰⁸ While IP was important to countries, trade interests were the driving force behind much of the international cooperation at the time.

The TRIPS Agreement has been described as a harmonizing agreement and justified as such—as have a number of the treaties following the TRIPS Agreement.¹⁰⁹ Examples of this harmonization in TRIPS span procedural and substantive provisions of copyright and patent law.¹¹⁰ One view of the harmonization argument is that countries with strong IP protection (developed

103. *Id.* at 166.

104. *See* CHARAN DEVEREAUX ET AL., CASE STUDIES IN US TRADE NEGOTIATION 2 (Inst. for Int’l Econs. ed., 2006).

105. Margot E. Kaminski, *The Capture of International Intellectual Property Law Through the U.S. Trade Regime*, 87 S. CAL. L. REV. 977, 983 (2014).

106. Jan Corbet, *The Law of the EEC and Intellectual Property*, 13 J. L. & COMM. 328–36 (1994), *reprinted in* GOLDSTEIN & TRIMBLE, *supra* note 31, at 162–79.

107. *See, e.g.*, Council Directive 92/100/EEC of 19 Nov. 1992 on Rental Right and Lending Right and on Certain Rights Related to Copyright in the Field of Intellectual Property, 1992 O.J. (L 346/61) (EC); 1994 GRUR Int. 141, 1994 O.J. (L 290/12) (EC) (24 November 1993) (addressing duration of copyright term and related rights); Directive 2004/48/EC of the European Parliament and of the Council of 29 Apr. 2004 on the Enforcement of Intellectual Property Rights, 2004 O.J. (L 195/16) (addressing enforcement of rights); Directive 2006/116/EC of the European Parliament and of the Council of 12 Dec. 2006 on the Term of Protection of Copyright and Certain Related Rights, 2006 O.J. (L 372/12).

108. NAFTA, *supra* note 23, at ch. 17.

109. *See supra* note 2 and accompanying text.

110. For example, the TRIPS Agreement includes substantive patent provisions through subject matter requirements for patent protection and does not allow for laws that discriminate based on the subject matter of inventions. TRIPS Agreement, *supra* note 11, art. 27. Similarly, the TRIPS Agreement requires that computer programs be protected under copyright. *Id.* art. 10.

countries) created positive externalities (innovation) for countries with lower IP protection, and these countries were “free riding” on the information produced in the developed countries.¹¹¹ This view assumes that producers in developed countries are undercompensated, though it is unspecific as to whether the under compensation is based on notions of moral entitlement or an argument that worldwide protection and the resulting compensation is necessary to encourage an ideal level of creation.¹¹² The question of whether inventors and creators are entitled to internalize all the benefits produced by their activities, such that any actor benefiting from those activities is a “free rider,” is not just an international IP question. It is also relevant to any debate about the appropriate levels of IP protection.¹¹³ This is because the insight that creation and innovation create positive externalities is true domestically and globally—and the insight shows nothing about the ideal level of compensation for creators and innovators.

Another view simply casts differences in levels of IP protection as barriers to efficient trade that are undesirable because they lower social welfare globally. Modern international trade law aims to lower trade barriers and encourage competition in order to increase global welfare.¹¹⁴ Lowering trade barriers allows for specialization in countries that can lead to the scaling of industries in ways that achieve greater efficiency.¹¹⁵ Tariffs are one example of barriers to trade that reduce global social welfare by artificially inflating the prices of goods from abroad. The GATT, predecessor to the WTO Agreement, had the purpose of reducing “tariffs and other trade barriers and . . . the elimination of preferences, on a reciprocal and mutually advantageous basis.”¹¹⁶ The agreement resulted in tariff reductions¹¹⁷ and led to negotiations to establish the WTO and associated agreements as a way to reduce tariffs and non-tariff barriers to trade to enhance global welfare.¹¹⁸

Yet another justification for the stringent measures required by the TRIPS Agreement focuses on the potential benefits to developing countries, suggesting that harmonization would not only lower barriers to trade but also would benefit

111. E.g., John F. Duffy, *Harmony and Diversity in Global Patent Law*, 17 BERKELEY TECH. L.J. 685, 695–96 (2002).

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

113. See *id.*

114. Rajec, *Free Trade*, *supra* note 12, at 328.

115. See, e.g., KRUGMAN ET AL., *supra* note 15, at 24.

116. General Agreement on Tariffs and Trade, *opened for signature* Oct. 30, 1947, 61 Stat. A-3, 55 U.N.T.S. 187, pmb. 1.

117. See Douglas A. Irwin, *International Trade Agreements*, in THE CONCISE ENCYCLOPEDIA OF ECONOMICS 298 (David R. Henderson ed., 2008), <http://www.econlib.org/library/Enc/InternationalTradeAgreements.html> (explaining that the “annual gain from removal of tariff and nontariff barriers to trade as a result of the Uruguay Round Agreement . . . has been put at about \$96 billion, or 0.4 percent of world GDP”).

118. See Marrakesh Agreement, *supra* note 10, pmb. (stating desire of members to substantially reduce tariffs and other barriers to trade in order to raise standards of living and employment levels, expand the production of and trade in goods and services, and allow for optimal use of world resources).

developing and developed countries by increasing foreign direct investment.¹¹⁹ The rationale behind this idea was that technology-intensive industries were more likely to invest in countries with stronger IP protection because they would not fear theft of their technology. Developing countries and least developed countries were not swayed by this argument, as other pressure was needed to secure their agreement.¹²⁰ Regardless of its effectiveness at achieving the goals of investment and technology transfer, the stated goals are included in the TRIPS Agreement text.¹²¹

Ultimately, a drive to harmonize IP laws was frequently cited but was not the only motivating factor for any of the participants in the WTO negotiations.¹²² Protection of IP abroad is valuable to IP-intensive industries in developed countries. Developing and least developed countries had reason to object to the requirements for creating strong IP regimes that may not have fit their human rights or development agendas. However, because the TRIPS Agreement was linked to trade, concessions relating to IP were worthwhile for countries that sought unrelated trading benefits in other industries, such as textiles.¹²³ In addition to the “carrots” of opening markets, there were “sticks” that drove developing countries to make concessions on IP rights in order to avoid placement on the United States Trade Representative’s Special 301 report.¹²⁴ Harmonization—or harmony—may “carr[y] a positive charge,”¹²⁵ but there are reasons to be wary of it. Not least of all are the ways that the relevant agreements, from Berne and Paris to TRIPS, have failed to impose it.

II. THE HARMONIZATION MYTH

Globally, IP laws appear more harmonized than 500 years ago because they are—in procedure, form, and even substance. Differences remain, such as the

119. Kaminski, *supra* note 105, at 983–84 (“The creation of a global floor for IP protection has also been argued to incentivize IP-intensive companies to export and invest abroad.”).

120. See *infra* note 123 and accompanying text.

121. Article 7 of the TRIPS Agreement listing objectives of the agreement includes the importance of technology transfer and dissemination. TRIPS Agreement, *supra* note 11, art. 7 (“The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.”).

122. Rajec, *Evaluating Flexibility*, *supra* note 30, at 168 (“Although the negotiations and resulting agreement evidenced a strong tide toward harmonization and increased intellectual property rights worldwide, there were other undercurrents to the story.”).

123. GRAEME B. DINWOODIE & ROCHELLE C. DREYFUSS, A NEOFEDERALIST VISION OF TRIPS: THE RESILIENCE OF THE INTERNATIONAL INTELLECTUAL PROPERTY REGIME 32 (2012) (explaining that the TRIPS Agreement was an intellectual property “tax” on developing countries that allowed them to do business in other sectors).

124. HOLGER HESTERMAYER, HUMAN RIGHTS AND THE WTO: THE CASE OF PATENTS AND ACCESS TO MEDICINES 39–40 (2007) (describing the United States’ withdrawal of certain trade benefits and its threats of trade sanctions under Section 301 of the Trade Act in retaliation against countries that refused to grant certain patent rights).

125. BARD & KURLANTZICK, *supra* note 60, at 193.

variations in rules of ownership,¹²⁶ existence of moral rights,¹²⁷ and application of legal standards.¹²⁸ However, the view of harmonization as a general goal of international IP negotiations, with occasional deviations when needed for public health or other reasons, persists.¹²⁹ But developments in the years since the TRIPS Agreement came into force show that harmonization is not the best explanation for the development of international IP law.

The better explanation is maximization. The TRIPS Agreement was notable because it required countries to meet certain minimum standards of IP protection.¹³⁰ However, upon conclusion of the agreement, interest groups and member countries immediately stepped up efforts to tailor protection.¹³¹ For developed countries with strong creative or innovative industries—the Global North—this meant strategic moves to increase protection through forum-shifting and bilateral or regional trade agreements.¹³² It is an effort that has continued to the most recent regional trade agreement negotiations. At the same time, developing countries and scholars concerned about access to medicine and other potential problems associated with high levels of IP protection began exploring interpretations of the TRIPS Agreement that allowed for more flexibility in the agreement's implementation.¹³³ Least developed countries joined some of these

126. Intellectual property ownership is affected by property law, which is generally considered territorial and rarely addressed by intellectual property treaties between countries. Even so, inheritance, labor, and contract laws interact with choice of law rules, rendering ownership a central and variable part of understanding global intellectual property rights. One example is how countries vary in their default rules about intellectual property ownership of works made for hire. *See, e.g.,* *Itar-Tass Russian News Agency v. Russian Kurier, Inc.*, 153 F.3d 82, 84, 88–92 (2d Cir. 1998) (applying choice of law rules and looking to Russian law to determine the ownership of U.S. copyright over works created for hire in Russia).

127. Peter K. Yu, *Moral Rights 2.0*, 1 TEX. A&M L. REV. 873, 874–76 (2014) (summarizing the history and differences between moral rights in Anglo-American copyright and continental copyright regimes).

128. For example, while the TRIPS Agreement includes a requirement that countries grant patents to inventions that are new, useful, and non-obvious, standards for non-obviousness differ globally. *See, e.g.,* TRIPS Agreement, *supra* note 11, art. 27.1. *See generally* Amy Nelson, *Obviousness or Inventive Step as Applied to Nucleic Acid Molecules: A Global Perspective*, 6 N.C. J.L. & TECH. 1 (2004) (providing a comparative study of obviousness standards in patent law).

129. *See* discussion *supra* Part I.

130. *See* discussion *supra* Section I.C.

131. *See* discussion *infra* Section II.B.

132. Intellectual property reliant industries have also pursued forum shifting IP maximization through investment treaty arbitration. These strategies are generally beyond the scope of this project, although they are likely to increase. *See generally* Brook K. Baker & Katrina Geddes, *The Incredible Shrinking Victory: Eli Lilly v. Canada, Success, Judicial Reversal, and Continuing Threats from Pharmaceutical ISDS*, 49 LOY. U. CHI. L.J. 479 (2017) (discussing the investor-state dispute settlement process in Eli Lilly's challenge to Canada's amendments to its patent law).

133. The 2001 Ministerial Declaration at the WTO Ministerial Conference in Doha is one example of attempts to clarify that exceptions incorporated in the TRIPS Agreement were meant to allow for countries to address public health problems within their countries. *See* World Trade Organization, Ministerial Declaration of 14 November 2001, WTO Doc. WT/MIN(01)/DEC/1, 41 I.L.M. 746 (2002) [hereinafter Doha Declaration].

interpretive efforts but have also sought to extend the period of transition, thereby postponing the date on which they need to comply with the minimum requirements.¹³⁴ But ultimately, the developed countries have been more successful in increasing global IP protection. This is because various provisions in the TRIPS Agreement are geared towards maximization. There was a flurry of post-TRIPS treaties, termed TRIPS-plus by many, that resulted in new—and higher—minimum standards of IP protection that were pushed on developing countries piecemeal, rather than going through the onerous and difficult processes established for amending the TRIPS Agreement.¹³⁵ While this trend runs counter to the stated harmonizing purposes of the TRIPS Agreement, it is enabled by TRIPS provisions. This Part discusses how the TRIPS Agreement and other treaties allow for disharmonization only for changes that increase IP rights protection and describes the proliferation of IP treaties, following the TRIPS Agreement, that increase levels of IP protection.

A. *IP Treaty Provisions: Tools of Maximization, Not Harmonization*

The TRIPS Agreement, like the Berne Convention, requires members to grant certain minimum rights; it does not require all members to grant the same rights.¹³⁶ The TRIPS Agreement had a strong harmonizing effect as countries with diverse IP laws made changes to meet those minimum standards; but by including no ceiling, TRIPS left room for future disharmony. Member countries must comply with the TRIPS requirements but are left free to provide stronger levels of protection. Once bilateral agreements increase the minimum standards of IP protection, for example, those new levels are often included in future bilateral agreements, eventually making their way into regional agreements.¹³⁷ Moreover, in

134. The TRIPS Agreement included a ten-year grace period for least developed countries that has been extended twice. TRIPS Agreement, *supra* note 11, art. 24. Most recently, a 2013 Decision of the Council for TRIPS extended the transition period under Article 66.1 until July 2021 or when a country moves out of least developed country status, whichever is earlier. Council for Trade-Related Aspects of Intellectual Property Rights, *Extension of the Transition Period Under Article 66.1 for Least Developed Country Members*, WTO Doc. IP/C/64 (June 12, 2013), https://www.wto.org/english/tratop_e/trips_e/ta_docs_e/7_1_ipc64_e.pdf.

135. See, e.g., J.H. Reichman, *From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement*, 29 N.Y.U. J. INT'L L. & POL. 11, 77–78 (1997) (explaining that further increases to the IP protection requirements in TRIPS would run against the interests of developing and least developed countries).

136. See TRIPS Agreement, *supra* note 11, art. 12 (describing minimum term for copyright), art. 33 (describing minimum patent term).

137. Graeme Dinwoodie discusses how powerful countries, such as the United States, can trade commitments to increased IP protection for foreign aid in bilateral negotiations and those commitments will then proliferate without political accountability or multilateral agreement. Graeme B. Dinwoodie, *Copyright Lawmaking Authority: An Internationalist Perspective on the Treaty Clause*, 30 COLUM. J.L. & ARTS 355, 390–91 (2007) (“[I]t is not difficult for the United States to secure an agreement with a single country regarding a slew of copyright commitments, and such bilateral obligations are effectively made multilateral through the mechanism of the most favored nation provision of the TRIPS Agreement. Such a lawmaking mechanism contains close to no political checks at the international level.”).

copyright laws, a provision found in the various multilateral treaties grant exceptions to national treatment. The remnant of reciprocity rules from earlier treaties, embodied as the rule of the shorter term, provides even more incentive to countries to increase copyright duration, forming the “one-way ratchet” that leads to ever-increasing copyright terms.

The various international treaties that are justified as tools of harmonization all have set floors, not ceilings, with regard to term. The Berne Convention, for example, provides in general that its provisions “shall not preclude the making of a claim to the benefit of any greater protection which may be granted by legislation in a country of the Union”¹³⁸ and allows member countries entering into agreements to grant more extensive rights than those provided by the convention.¹³⁹ As for term, the Berne Convention provides a term of the author’s life of plus 50 years, with a term of 25 years from creation for photographic works and works of applied art.¹⁴⁰ These are floors, and the convention provides that members “may grant a term of protection in excess of those provided by the preceding paragraphs.”¹⁴¹

National-treatment provisions have been a part of copyright treaties since the Berne Convention, though they are also a staple of trade-related treaties as well. National treatment requires that each member country treat the nationals of other member countries no less favorably than its own citizens. A provision in a member country’s law that grants IP protections to its citizens and not to citizens of member countries violates national treatment.¹⁴² However, the Berne Convention provided for an exception to national treatment that has resulted in pressure on countries to increase their terms of copyright protection. This provision, known as “the rule of the shorter term,” provides that copyright term will be governed by the law where the copyright is claimed, except that “the term shall not exceed the term fixed in the country of origin of the work.”¹⁴³ This provision is a glaring exception to national treatment, providing a default rule that works of foreign origin will receive the shorter of terms, not necessarily the full term as provided to works of domestic origin. At first blush, by potentially granting shorter terms to works of foreign origin, the provision may be copyright minimizing—after all, it is a rule of *shorter* term. However, as discussed below, the effect of the provision has proven to be maximizing.¹⁴⁴

The Paris Convention did not impose minimum standards of protection like the Berne Convention did. While the Paris Convention required national treatment with respect to patent protection,¹⁴⁵ it did not dictate a minimum term of protection and therefore allowed countries a fair amount of flexibility. As a result, member countries needed only to extend the same protection to nationals of other member

138. Berne Convention, *supra* note 64, art. 19.

139. *Id.* art. 20.

140. *Id.* art. 7.

141. *Id.* para. 6.

142. Joined Cases C-92/92 & C-326/92, *Phil Collins v. Imtrat Handelsgesellschaft mbH*, 1993 E.C.R. I-5145.

143. Berne Convention, *supra* note 64, art. 7, para. 8.

144. *See* discussion *infra* Part III.

145. Paris Convention, *supra* note 77, art. 2.

countries as they granted to their own members.¹⁴⁶ The important temporal provision in that agreement—the requirement of a one-year priority period—was precise and did not allow for longer grace periods for patent filings. The convention allows anyone who files a patent application in any member country a one-year period of time in which to file in other member countries while still referencing the first filing date for purposes of showing an invention to be new and nonobvious.¹⁴⁷ The practical effect of this was that the invention need only be new as of the earliest filing date, and inventors did not need to have a strategy of simultaneous filing in all countries to ward off claims that their filings elsewhere were disclosures that rendered the same invention unpatentable. However, the provision demonstrates something else: countries are perfectly capable of agreeing to precise time periods when a single rule appears to be the most efficient way of governing international patent interests. Still, it was not until the TRIPS Agreement that stringent, substantive patent law requirements were agreed to in a multilateral treaty. But when they were, it was again in terms of minimum rights, with an open-ended ceiling.

The TRIPS Agreement sets out the minimum protections members must grant.¹⁴⁸ Indeed, before any specific requirements are laid out, the first article to the agreement provides, “[m]embers may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement.”¹⁴⁹ Throughout the agreement, then, all of the requirements provide floors, but not ceilings, on what rights countries must grant to those seeking IP rights. The TRIPS Agreement imposes a minimum copyright term of life plus 50 years¹⁵⁰ and in the case of works without flesh-and-blood authors, a required minimum term of 50 years.¹⁵¹

While incorporation of the Berne Convention’s minimum term and inclusion of other works had the potential to harmonize copyright term, the EU countries were already working on an extension of term.¹⁵² In the years since TRIPS, the law of copyright term has therefore become disharmonized.¹⁵³ Similarly, the term of protection for performers and producers of phonograms was required to last “at least until the end of a period of 50 years” from the end of the year of creation.¹⁵⁴

146. *Id.*

147. *Id.* art. 4.

148. WORLD TRADE ORG., A HANDBOOK ON THE WTO TRIPS AGREEMENT 13 (Antony Taubman, Hannu Wager & Jayashree Watal eds., 2012) (“[T]he TRIPS Agreement sets out minimum standards of protection to be provided by each Member. Article 1.1 makes it clear that Members may, but are not obliged to, implement in their law more extensive protection than required by the Agreement, provided that such protection does not contravene its provisions. For example, Members may provide for longer terms of protection than that mandated by the TRIPS Agreement but they are not required to do so.”).

149. TRIPS Agreement, *supra* note 11, art. 1.

150. The TRIPS Agreement requires compliance with the minimum standards of the 1971 revision of the Berne Convention. *Id.* art. 9(1) (although the TRIPS Agreement provides an exception for the moral rights in the Berne Convention’s Article 6bis). Thus, the Berne Convention requirement of life plus fifty is also required by the TRIPS Agreement. Berne Convention, *supra* note 64, art. 7(1).

151. TRIPS Agreement, *supra* note 11, art. 12.

152. *See* discussion *infra* Section III.B.

153. *Id.*

154. TRIPS Agreement, *supra* note 11, art. 14.5.

In contrast, for member countries that seek to implement exceptions to the required protection, the TRIPS Agreement specifies that such exceptions should “confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder.”¹⁵⁵ Thus, while members are free to deviate upward in levels of protection, without limit, downward deviations are carefully constrained.

Patent rights are similarly open-ended. While minimum levels of protection are required, member countries may deviate upwards from those standards, even if the deviation results in disharmony among countries. The TRIPS Agreement provides that the term of patent protection “shall not end before the expiration of a period of twenty years” from the filing date, but it does not give any limit on how long a patent term can last.¹⁵⁶ While member countries have adhered to the 20-year term contemplated as a minimum, other means of extending patent terms exist and have become more common in the years since the TRIPS Agreement was negotiated.¹⁵⁷ As with copyright, members seeking to implement exceptions are constrained. The TRIPS Agreement provides that members may implement “limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.”¹⁵⁸ The other permitted exceptions require that certain conditions be met in order to allow exceptions for certain subject matter¹⁵⁹ or in the case of compulsory licenses for public health needs.¹⁶⁰

The problem is not just that the TRIPS Agreement provides floors and not ceilings for IP rights. There are other provisions of the TRIPS Agreement that work against harmonization or uniformity. It is worth noting that although harmonization was used as a justification for the agreement, it is not included as an objective—rather, the objectives are “protection and enforcement of intellectual property rights” in order to “contribute to the promotion of technological innovation and to the transfer and dissemination of technology.”¹⁶¹

One example of the TRIPS Agreement ignoring harmonization is that it explicitly leaves out the issue of the exhaustion of IP rights—a question that is central to cross-border trade in goods subject to IP rights.¹⁶² Many countries have rules of domestic exhaustion, providing that the first authorized sale of goods subject to patents or copyright exhaust those rights. As a result, a patent holder cannot, for example, sue the purchaser of a used car for patent infringement. The first sale of

155. *Id.* art. 13.

156. *Id.* art. 33.

157. *See* discussion *infra* Section III.C.

158. TRIPS Agreement, *supra* note 11, art. 30.

159. *Id.* art. 27.2–27.3 (exceptions include if prevention “is necessary to protect *ordre public* or morality,” as well as diagnostic methods of treatment).

160. *Id.* art. 31.

161. *Id.* art. 7.

162. *Id.* art. 6 (“[N]othing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights”). For a discussion of how an international rule of exhaustion would lower barriers to trade, see Rajec, *Free Trade*, *supra* note 12.

the car to an authorized buyer exhausts the patent holder's rights and the purchaser can use and resell the car without engaging in infringement. The rule of exhaustion allows for a robust resale market and for consumer autonomy in the use and disposition of chattel. However, when the TRIPS Agreement was negotiated, the United States, European countries, and others did not have a rule of international exhaustion. As a result, rights holders who had patents in multiple countries could sue to stop the importation of goods lawfully purchased abroad, thereby engaging in geographic price discrimination and providing a barrier to trade.

Although harmonization of an international exhaustion rule would have lowered a significant barrier to trade in goods subject to IP rights, countries in the Global North were unwilling to sign on. The United States has since adopted rules of international exhaustion for patents¹⁶³ and copyrights,¹⁶⁴ unilaterally and through Supreme Court opinions rather than legislative initiative.

In contrast, the EU maintains a rule of exhaustion only within the common market, allowing rights holders to stop the importation of goods lawfully purchased abroad. The inability to agree to implement—or revisit—a rule of international exhaustion demonstrates how countries in the Global North were able to hedge on some aspects of harmonization that did not fit domestic interests.

The TRIPS Agreement also maintains the permissive stance towards the rule of the shorter term from the Berne Convention. This provision undercuts national treatment by treating works of foreign origin differently from those of domestic origin. Moreover, its effect undercuts harmonization. On its face, perhaps, the rule minimizes the length of copyright protection, correspondingly hastening the entry of works into the public domain. From this perspective, it is not a maximizing provision. However, the effect of the rule of the shorter term is to put pressure on countries to increase copyright term so that domestic authors are not at a disadvantage in foreign markets.¹⁶⁵ As discussed below, this is precisely the effect the rule had on the United States when the EU implemented a longer copyright term together with a rule of the shorter term.¹⁶⁶

As a result of the TRIPS Agreement merely setting floors on rights requirements, along with other provisions that allow for ever-increasing levels of protection, some have critiqued the TRIPS Agreement for failure to achieve long-

163. See, e.g., *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1563 (2017).

164. See, e.g., *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1352 (2013).

165. Edward Lee, *Copyright, Death, and Taxes*, 47 WAKE FOREST L. REV. 1, 15 (2012) (“The rule of the shorter term thus puts pressure on countries to increase their copyright terms to whatever is the longest term of copyright recognized by a Berne country.”).

166. See discussion *infra* Section III.B.

term stability of patent rights¹⁶⁷ and for allowing changes and escalations in copyright protection.¹⁶⁸

B. The Proliferation of Trade and Investment Treaties Following the TRIPS Agreement

The IP laws of the past 25 years have been more harmonized in procedure and substance than at any time since their emergence some 500 years ago. However, in ways that were merely apparent earlier but inescapable now, the treaties that made this harmonization possible have also left significant room for disharmony in IP law protections.¹⁶⁹ In particular, the treaties have left room for countries to increase the protections they offer, individually and without regard to whether other countries pursue such changes.¹⁷⁰ As a result, through a proliferation of bilateral investment and trade treaties as well as regional and other multilateral treaties, standards of IP protection have fragmented, albeit within the boundaries allowed by the TRIPS Agreement. Many countries have agreed to increased minimum standards of protection, moving themselves out of harmony with those countries that continue to implement the TRIPS minimum standards.

The ever-increasing levels of IP protection, labelled as an “upward ratchet” by Susan Sell, trace to the years after the TRIPS Agreement.¹⁷¹ Developed countries with IP-dependent industries, such as the United States, often see trade agreements as an opportunity to “export” their law, or ask foreign countries to harmonize *to them*, rather than as an opportunity to negotiate and compromise.¹⁷² Almost immediately after the TRIPS Agreement was signed, the United States and others began negotiating new bilateral and multilateral treaties that increased IP protection. Ruth Okediji suggests that developing countries had hoped the TRIPS Agreement would diminish the use of bilateralism to achieve stronger IP protection; this did not happen.¹⁷³ Instead, countries that are net exporters—particularly the United States—have included robust IP chapters in many of their trade agreements, whereas

167. See, e.g., Mohammed K. El-Said, *Trips-Plus, Public Health and Performance-Based Rewards Schemes Options and Supplements for Policy Formation in Developing and Least Developed Countries*, 31 AM. U. INT’L L. REV. 373, 408 (2016) (arguing that “TRIPS failed to achieve stability in the global regulation of intellectual property rights” because it allows for higher levels of protection).

168. See Eric Schwartz, *Session II: The Impact of International Copyright Treaties and Trade Agreements on the Development of Domestic Norms*, 40 COLUM. J.L. & ARTS 339, 339 (2017) (“International copyright is an interlocking set of national laws for which the treaties set norms—often floors (minimum levels of protection).”). See generally SELL, *supra* note 25.

169. See discussion *supra* Section II.A.

170. *Id.*

171. See, e.g., SELL, *supra* note 25 (“Ever since the WTO TRIPS negotiations that ended in 1994, [IP maximalists] have been using every opportunity to increase intellectual property protection and enforcement beyond TRIPS. They have been relentless, focused, and have devoted untold resources to their quest for higher global standards of intellectual property protection and enforcement.”).

172. Kaminski, *supra* note 105, at 991.

173. See, e.g., Ruth L. Okediji, *Back to Bilateralism? Pendulum Swings in International Intellectual Property Protection*, 1 U. OTTAWA L. TECH. J. 127, 140–41 (2004) (noting post-TRIPS bilateralism as a means of forum-shifting).

countries that are net importers generally have not.¹⁷⁴ Rochelle Dreyfuss has shown how each treaty, whether bilateral, multilateral, or megaregional,¹⁷⁵ can then serve as a template for future treaties in ways that increase protection and constrain countries from exploring the flexibilities that are still currently available.¹⁷⁶ Even countries that do not join new treaties “find themselves operating in a new legal landscape,” Dreyfuss explains, because the effects of these agreements extend beyond the domestic domain of the member countries.¹⁷⁷

Many of the bilateral trade agreements that the United States concluded with trading partners following the TRIPS Agreement included IP provisions. The free-trade agreement between Korea and the United States is one example of how bilateral treaties can be used to introduce new, higher levels of IP that are then likely to be included in future regional agreements.¹⁷⁸ The EU also began negotiating with trading partners and entering into a number of agreements that included IP and TRIPS-plus provisions.¹⁷⁹ More recently, a push towards regional or megaregional agreements has allowed for another round of increases to minimum standards of protection. These result in disharmony between the countries that are entering the regional agreements and countries that maintain the TRIPS Agreement minimum standards that were once considered so high. The next Part takes up these agreements and traces the way that term of protection has been increased—and disharmonized—in the past quarter century.

III. THE MAXIMIZATION REALITY

The proliferation of bilateral and multilateral treaties following the TRIPS Agreement reflects an agenda of rights maximization. Countries engaged in treaty negotiation have abandoned harmonizing measures in favor of maximizing measures in a number of circumstances. One such area is in IP rights duration. Even as the TRIPS Agreement was under negotiation, the EU was negotiating a directive that would require a term of IP rights to last 20 years longer than the duration required by the Berne Convention, which was ultimately incorporated into the TRIPS Agreement. The duration of IP rights protection is a useful lens through

174. Peter Drahos, *Weaving Webs of Influence: The United States, Free Trade Agreements and Dispute Resolution*, 41 J. WORLD TRADE 191, 196–97 (2007).

175. This refers to agreements such as the now-defunct Trans-Pacific Partnership, which, with the withdrawal of the United States, has become the Comprehensive and Progressive Agreement for Trans-Pacific Partnership. The original negotiating group included Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam, and the United States. See sources cited *supra* note 23.

176. Rochelle C. Dreyfuss, *Harmonization: Top Down, Bottom Up—And Now Sideways? The Impact of the IP Provisions of Megaregional Agreements on Third Party States* 15 (Inst. For Int’l Law & Justice, Working Paper 2017/2, 2018), <https://www.iilj.org/publications/harmonization-top-bottom-now-sideways-impact-ip-provisions-megaregional-agreements-third-party-states/> (explaining that bilateral agreements such as the Korea-US FTA were a template for the TPP, which could then serve as a template for future agreements).

177. *Id.* at 3.

178. See Schwartz, *supra* note 168, at 342 (referring to the U.S. Korea FTA as a “high water mark” of bilateral agreements with respect to intellectual property protection and describing the various IP-increasing measures contained therein).

179. See discussion *infra* Part III.

which to examine competing narratives of harmonization and maximization. Earlier Sections have shown the diversity of terms among countries during the early development of IP law. This Part focuses on term length requirements in order to explore and understand international IP governance. This Part explains the role of rights duration in IP protection and then traces the inclusion of term-extension measures in post-TRIPS treaty-making. These measures systematically eschew harmonization for diversity and maximization.

A. *The Role of Duration in IP Rights Protection*

IP rights are typically of limited duration—in the United States, this characteristic is imposed by the constitutional provision authorizing Congress to craft rights in science and the useful arts.¹⁸⁰ The benefits of limiting the term of a copyright or a patent include the assurance that as the store of knowledge grows, future inventors and creators will not forever be bound by myriad, overlapping rights granted to prior generations of inventors and creators. Further, the public domain will grow as works lose their protection and become available as building blocks for future creative and innovative works.

Term is at once deeply important to the substance of global IP rights and fairly neutral as to that substance.¹⁸¹ That is because longer terms correlate with greater rewards to IP rights holders, whereas shorter terms correlate with earlier entrance into the public domain. At the same time, calculating the term of a right is generally straightforward and not based on the substance of the underlying work. In the case of copyright, term traditionally commences on the date of publication of a work, whereas expiration is based either on the year in which the author died or the year of publication. For patents, term expiration is now uniformly based on the date an application is filed, which is available on the face of an issued patent and therefore fairly easy to calculate.

The “ideal” term of protection for IP rights is the subject of empirical and normative debate within and among countries.¹⁸² It is uniformly applied in patent and copyright, respectively, and as such, contributes to uniformity costs, which Michael Carroll has argued are the central problem of IP laws.¹⁸³ He explains that “perfectly tailored rights that promise innovators only the expected value required to induce socially desirable innovation would be theoretically optimal,” but IP laws fall short for reasons including “uncertainty about innovation, information

180. U.S. CONST. art. I, § 8, cl. 8 (“The Congress shall have Power . . . [t]o 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 . . .”) (emphasis added).

181. For an article suggesting that term and substance should be explicitly linked, see Joseph P. Liu, *Copyright and Time: A Proposal*, 101 MICH. L. REV. 409, 410 (2002) (“[T]his Article argues that the older a copyrighted work is, the greater the scope of fair use should be—that is, the greater the ability of others to re-use, critique, transform, and adapt the copyrighted work without permission of the copyright owner.”).

182. See generally Tyler Ochoa, *Limits on the Duration of Copyright: Theories and Practice*, in TIME: LIMITS AND CONSTRAINTS (Jo Alyson Parker et al. eds., 2010), <https://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?article=1803&context=facpubs>.

183. See generally Michael W. Carroll, *One for All: The Problem of Uniformity Cost in Intellectual Property Law*, 55 AM. U. L. REV. 845 (2006).

asymmetries between policymakers and innovators, administrative costs of tailoring,” and political economy considerations.¹⁸⁴ Thus, it would be ideal to tailor term to fit different genres of creation, fields of technologies, and perhaps, even individual creations or inventions. It is far from clear that the current duration of IP rights is ideal—longer, shorter, infinite, or no duration might all result in the production of the “correct” amount of innovation or art. However, as far as IP rights go, terms are fairly easy characteristics to harmonize. There does not appear to be a well-founded reason to choose 20 years as a term for all patents. This might, therefore, be an area in which some empirical evaluation would be helpful if there were different patent terms in different countries. However, for much the same reasons that a minimum copyright term has been attractive to many countries with developed creative industries, patent term is also subject to minimum standards for term in the TRIPS Agreement.¹⁸⁵ Between the requirement that countries make patents available regardless of the field of technology and the requirement of a term length of no less than 20 years, the TRIPS Agreement seemingly harmonizes patent term across countries. The arguments in favor of patent term harmonization generally track those of harmonizing patent law. Thus, developed country industries included the 20-year term when seeking protection abroad with the promise of increasing foreign direct investment and exportation of the tacit knowledge necessary to manufacture patented goods.¹⁸⁶

Term is also a useful measure of the value of harmonization in international IP, precisely because it is easy to measure. It is, in a sense, an on-off switch. During the term of a copyright or patent, the rights holder can exclude others from the market; once the term has run, she cannot. This means that if one country offers a longer term than another, goods that infringe in one country will not infringe in another. And the information costs associated with figuring out the term of protection of works in different countries can be quite high when those terms differ.¹⁸⁷ This raises precisely the type of non-tariff barrier that the TRIPS Agreement—and the general push to harmonize—decries. Therefore, it would make sense if the Global North, having wrested agreement regarding term from the rest of the world, maintained that uniform, harmonized term. Otherwise, the disparate terms of protection might form such a non-tariff barrier to trade that would result in inefficiencies. And yet, term increases have become part of many of the treaties negotiated since the TRIPS Agreement.

B. Term Extensions in Copyright

The United States has changed the terms of IP rights to comply with international treaties. Following the TRIPS Agreement, the United States has also sought to conclude a series of bilateral and regional treaties that required copyright

184. *Id.* at 848.

185. TRIPS Agreement, *supra* note 11, art. 33.

186. See Peter Lee, *Transcending the Tacit Dimension: Patents, Relationships, and Organizational Integration in Technology Transfer*, 100 CAL. L. REV. 1503, 1526 (2012).

187. That is, issues related to determining copyright terms when the country of origin or publication is not the same country in which protection is sought. See, e.g., Bundesgerichtshof [BGH] [Federal Court of Justice] Jan. 27, 1978, 10 INT'L REV. OF INDUS. PROP. & COPYRIGHT L. (358), 1979 (Ger.).

term extensions, moving from the Berne Convention and TRIPS Agreement minimum up to the life plus 70 term of the EU countries. As discussed above, the United States amended its copyright term in large part because of the EU Directive extending term coupled with its rule of the shorter term. Together, these provisions disadvantaged American authors and producers in European markets. Although the United States does not have a rule of the shorter term, the term extensions have become a part of many of the regional trade agreements concluded by the United States in the years since its own copyright term extension.

The United States—originally a scofflaw when it came to copyright protection—has gradually become one of the strongest proponents of copyrights and their enforcement worldwide. In the United States, a 1790 statute provided copyright terms of 28 years total (14 years, renewable for 14 more).¹⁸⁸ The terms and allowable extensions were increased various times thereafter.¹⁸⁹ These extensions were in part a reaction to extensions in copyright terms abroad.¹⁹⁰ In 1976, the United States moved to a system that tied copyright term to the life of authors, providing a term of 50 years from the author's death for works created by natural persons and 75 years from publication for other works, such as works made for hire.¹⁹¹ The United States only joined the Berne Convention in 1989.¹⁹² The TRIPS Agreement imposes a minimum copyright term of life plus 50 years¹⁹³ and in the case of works without flesh-and-blood authors, a required minimum term of 50 years.¹⁹⁴ Joining the Berne Convention therefore did not require the United States to enact a term extension.¹⁹⁵

The United States extended its copyright term with passage of the Sonny Bono Copyright Term Extension Act of 1998.¹⁹⁶ One of the major purposes of that extension was to harmonize the law with the level of protection offered in Europe.¹⁹⁷

188. Copyright Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124 (1790).

189. Terms were extended in 1831 and again in 1909, for a potential total of 56 years. Act of Feb. 3, 1831, ch. 16, §§ 1–2, 4 Stat. 436, 439 (1831) (28 years with 14 years upon renewal); Act of Mar. 4, 1909, ch. 320, §§ 23–24, 35 Stat. 1080–1081 (1909) (28 years with 28 more upon renewal).

190. See Ochoa, *supra* note 182, at 163–64.

191. Copyright Act of 1976, 17 U.S.C. §§ 302–04 (2018).

192. See Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853 (1988).

193. See *supra* note 150.

194. TRIPS Agreement, *supra* note 11, art. 12.

195. Jerome H. Reichman, *The Duration of Copyright and the Limits of Cultural Policy*, 14 CARDOZO ARTS & ENT. L.J. 625, 627 (1996) (“The proposal to extend the basic term of copyright protection from fifty to seventy years after an author’s death, as triggered by the European Communities’ [] Directive to this effect, is not mandated by the [TRIPS Agreement].”).

196. Sonny Bono Copyright Term Extension Act, Pub. L. No. 105-298, 112 Stat. 2827 (1998) (amending 17 U.S.C. §§ 302–04 (2018)).

197. Eric Schwartz described the discussion in Congress surrounding European term extension and U.S. term extension as follows:

What the European Union directive said was “If you (another country) do not give a longer term to our works, we won’t give it to your works”—that is known as reciprocity. And a lot of older American musical material

In 1993, the EU lengthened—and harmonized—the copyright term of all of its member states to life plus 70 years for most works, with 70 years from publication for the remainder.¹⁹⁸ With the Berne Convention in force and the WTO Agreement on the horizon, the passage of the extension, which would bring the EU countries out of harmony with the rest of the world, has been described as “uneventful.”¹⁹⁹ The laws and directives being passed in the EU did seek to harmonize the laws of those countries.²⁰⁰ However, the changes disharmonized the EU—in copyright term—from the many countries that granted the Berne Convention minimum requirement of life plus 50 years. The stated reasoning for the EU extension was to remain consistent with the Berne Convention purpose of granting a copyright term that lasted two generations after the life of the author but accounting for increased life spans.²⁰¹ This supposed “purpose” behind the Berne Convention term has been challenged but remains a basis for the legislative increase in term.²⁰²

Some scholars opposed the U.S. term extension, questioning its economic merit.²⁰³ But the extension survived a constitutional challenge with the Supreme Court holding that the extended copyright constituted a “limited time[]” as required by the Constitution.²⁰⁴ Some of those who favored copyright term extension

was being broadcast by European broadcast networks, so, not having protection for those older works meant lost royalties. So, for members of Congress, all you had to explain to them, which you could do on a one sheet was, if you pass term extension, royalties will come into the U.S. economy, which means money into the Treasury in the form of taxes.

Schwartz, *supra* note 168, at 343.

198. Council Directive 93/98/EEC of 29 October 1993 Harmonizing the Term of Protection of Copyright and Certain Related Rights, 1993 O.J. 290, 9–11.

199. MIRELLE VAN EECHOU, P. BERNT HUGENHOLTZ, STEF VAN GOMPEL, LUCIE GUIBAULT & NATALI HELBERGER, *HARMONIZING EUROPEAN COPYRIGHT LAW: THE CHALLENGES OF BETTER LAWMAKING* 57 (2009).

200. *Id.* at 66 (“[T]he ambition of the Term Directive [was] ‘to make terms of protection identical throughout the Community’”). This harmonization was still incomplete because of differences in rules of ownership and subject matter. *See id.* at 62 (explaining that protection may vary across European member states because “many intellectual creations result from the efforts not of one person, but of several or even a multitude of actors. As a consequence, although the harmonized norms at first glance suggest otherwise, for an individual information product the term of protection is not necessarily identical across Member States . . . [The problem] is caused by incomplete or relatively vague definitions in the harmonized realm of subject matter and right owners.”).

201. *Id.* at 58 (“The argument for a seventy-year harmonized term rather than the fifty-year international standard, is that the average life span in the Community has grown longer.”).

202. *See* RICKETSON & GINSBURG, *supra* note 80, §§ 9.08–9.09. There is no indication that life plus two generations was the reasoning behind the term in the Berne Convention. *See id.* §§ 9.14–9.26.

203. *See, e.g.,* Shauna C. Bryce, *Life Plus Seventy: The Extension of Copyright Terms in the European Union and Proposed Legislation in the United States*, 37 HARV. INT’L L.J. 525, 538–39 (1996); Jane C. Ginsburg et al., *The Constitutionality of Copyright Term Extension: How Long Is Too Long?*, 18 CARDOZO ARTS & ENT. L.J. 651, 700 (2000); Marci A. Hamilton, *Copyright Duration Extension and the Dark Heart of Copyright*, 14 CARDOZO ARTS & ENT. L.J. 655, 655 (1996).

204. *Eldred v. Ashcroft*, 537 U.S. 186, 189, 194 (2003).

explained it was necessary for harmonization.²⁰⁵ Other commentators focused on the interests of American producers and purveyors of cultural capital, arguing that these interests would be harmed if the United States had a shorter term than other markets.²⁰⁶ Even this viewpoint, however, suggests that harmonization is the path to economic- and trade-related goals.²⁰⁷ Arguments against copyright extension also considered the question of harmonization. For example, Jerome Reichman argued that harmonization and uniform standards could not justify the term extensions alone.²⁰⁸ Once the United States had increased its term, however, the goal of encouraging other countries to increase their copyright term *became* a harmonization goal—or perhaps a goalpost, and a moving one at that.

Once Europe and the United States increased their copyright terms, they now had interests in persuading others to “harmonize” upwards almost immediately after the entry into force of the TRIPS Agreement. Thus, through a series of TRIPS-plus agreements—trade agreements that increased commitments beyond those of TRIPS—European countries and the United States included provisions with longer copyright terms than those provided in the TRIPS Agreement. Not all of the TRIPS-plus agreements addressed term, and a number of countries still have the copyright term required by the Berne Convention and the TRIPS Agreement.²⁰⁹ For example, some of the agreements the EU entered into just after the TRIPS Agreement required only that its partners observe the requirements of the Berne and Paris Conventions. This includes agreements with Tunisia²¹⁰ and Morocco.²¹¹ Both countries were

205. See, e.g., Howard Coble, *The Spring 1998 Horace S. Manges Lecture—The 105th Congress: Recent Developments in Intellectual Property Law*, 22 COLUM.-VLA J.L. & ARTS 269, 296 (1998); Joseph P. Liu, *Copyright and Time: A Proposal*, 101 MICH. L. REV. 409, 410–11 (2002) (“Those supporting the extension have argued, inter alia, that a longer term encourages creative activity, that it is necessary to provide incentives to preserve copyrighted works in the digital age, and that it is necessary to harmonize our copyright laws with those of other countries.”); Arthur R. Miller, *Copyright Term Extension: Boon for American Creators and the American Economy*, 45 J. COPYRIGHT SOC’Y U.S.A. 319, 325 (1998).

206. See, e.g., Arthur R. Miller, *Extending Copyrights Preserves U.S. Culture*, BILLBOARD, Jan. 14, 1995, at 4, reprinted in 141 Cong. Rec. 6,554 (1995).

207. *Id.* (“By harmonizing our laws with the EU, we can reduce our balance-of-trade deficit, encourage economic investment, strengthen our hand in dealing with intellectual piracy, and see to it that America’s authors, composers, artists, and computer programmers receive the same level of protection afforded the creative people of other nations.”).

208. J.H. Reichman, *The Duration of Copyright and the Limits of Cultural Policy*, 14 CARDOZO ARTS & ENT. L.J. 625, 626 (1996).

209. For example, the following countries have copyright terms of life plus fifty for most works and fifty years from publication for the remainder: China, Zhonghua Renmin Gongheguo Zhuzuoquan Fa (中华人民共和国著作权法) [Copyright Law of the People’s Republic of China] (promulgated by the Standing Comm. Nat’l People’s Cong., Feb. 26, 2010, effective Apr. 1, 2010) art. 21, 2010 FAGUI HUIBIAN; South Africa, Copyright Act 98 of 1978 § 3; Malaysia, Copyright Act 1987, c. 3, §§ 17–23; Kenya, Copyright Act (2001) Cap. 130 § 23.

210. Euro-Mediterranean Agreement, annex 7, 1998 O.J. (L 97) 2.

211. Euro-Mediterranean Agreement, annex 7, 2000 O.J. (L 70) 2. Morocco was already a Berne member country since 1971. Morocco Member Page, WIPO.INT, https://www.wipo.int/members/en/details.jsp?country_id=109 (last visited July 23, 2020).

TRIPS members,²¹² and both granted copyright terms of life plus 50 years, as required by the agreement; thus, the trade agreements with the EU did not impose any independent requirements on the countries with respect to copyright term beyond conditioning further preferential trade treatment on continued adherence. Nonetheless, these treaties paved the way in some cases for future increases in copyright term. While Tunisia maintains its Berne-consistent term, Morocco has increased its copyright term.²¹³

But many treaties concluded around the time of the TRIPS Agreement required a copyright term of life plus 70 years for flesh-and-blood authors and a 70-year term for other works. For example, the 1995 trade treaty between the EU and Turkey required Turkey to adopt domestic legislation “equivalent to the legislation adopted in the Community or its Member States,”²¹⁴ referencing the European Council Directive that increased the copyright term.²¹⁵ This required Turkey to increase its copyright term.²¹⁶ As a result, Turkey implemented a term of life plus 70 years in 1995.²¹⁷

One study looked broadly at the similarity in various trade agreements and found that “rich developed states act as rule-makers in bilateral treaty negotiations” such as those that were made in the 1990s around the time of the TRIPS Agreement.²¹⁸ Many of these bilateral agreements were between the EU and countries in Central and Eastern Europe, looking to establish trade with Western Europe and willing to accept the lawmaking of the stronger partner.²¹⁹

The United States also entered into a number of bilateral trade agreements that required partners to increase copyright term. The United States and Australia

212. Tunisia joined the WTO on March 29, 1995 and Morocco joined on January 1, 1995. *Members and Observers*, WTO.ORG, https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited July 23, 2020).

213. In 2006, Morocco amended its copyright law to provide for a duration of life of the author plus 70. Copyright and Related Rights, 2-00, 9 Kaada 1420, 12 (2000), <https://ictpolicyafrica.org/en/document/6aiooiga6ey?page=1>.

214. Council Decision 1/95, annex 8, art. 4, 1996 O.J. (L 35) 1 (EC).

215. Council Directive 93/98/EEC, pmbl., 1993 O.J. (L 290) 9 (“[I]n order to establish a high level of protection which at the same time meets the requirements of the internal market and the need to establish a legal environment conducive to the harmonious development of literary and artistic creation in the Community, the term of protection for copyright should be harmonized at 70 years after the death of the author or 70 years after the work is lawfully made available to the public, and for related rights at 50 years after the event which sets the term running.”).

216. Turkey joined WTO on March 26, 1995 and had implemented a term of life plus 50 through its accession to the WTO and TRIPS Agreement in 1995. *Members and Observers*, *supra* note 212.

217. FIKIR VE SENAT ESERLERI KANUNU [LAW ON INTELLECTUAL AND ARTISTIC WORKS] [CIVIL CODE] no. 5846, art. 27.

218. Wolfgang Alschner, Julia Seiermann & Dmitriy Skougarevskiy, *Text-as-Data Analysis of Preferential Trade Agreements: Mapping the PTA Landscape*, at 12, U.N. Doc. UNCTAD/SER.RP/2017/5 (July 10, 2017) (noting the difference between BITs and PTAs with respect to whether the more powerful countries dictate terms and structure of agreements).

219. *See id.* at 10–12.

entered into an agreement in 2004 that required a copyright term of life plus 70 years.²²⁰ This move came despite Australia's decision in 2000 not to proceed with copyright extension, following a government review concluding there was insufficient evidence that an extension would benefit domestic stakeholders enough to offset the costs.²²¹ The United States and Korea entered into a free-trade agreement in 2008 ("KORUS"), which was implemented in 2012 and was referred to as "the high water mark of bilateral[] [trade agreements]."²²² Among other things, KORUS required an extension of copyright term to "not less than the life of the author and 70 years after the author's death" or, for terms not based on the life of a natural person, "not less than 70 years from the end of the calendar year of the first authorized publication of the work . . ."²²³ Like other agreements, KORUS has a catch-all provision at the beginning of the IP chapter allowing for "more extensive protection for, and enforcement of, intellectual property rights under its law than [that] Chapter requires,"²²⁴ reinforcing that IP agreements are floors, not tools of harmonization.

In addition to these bilateral agreements, the last decade has seen the formation of large regional trading blocs, each of which contains IP chapters. NAFTA, which took effect in 1994, is one such regional agreement. It only required compliance with other copyright treaties then in force.²²⁵ NAFTA was recently renegotiated and renamed as the Agreement between the United States of America, the United Mexican States, and Canada ("new NAFTA" or "USMCA").²²⁶ The new NAFTA includes a minimum copyright term of life plus 70 years for natural persons and 75 years for terms calculated on other bases.²²⁷ Moreover, it explicitly allows

220. Australia-United States Free Trade Agreement, art 17.4.4, May 18, 2004, T.I.A.S. No. 6422 ("[T]he term of protection of a work (including a photographic work), performance, or phonogram is to be calculated: (a) on the basis of the life of a natural person, the term shall be not less than the life of the author and 70 years after the author's death; and (b) on a basis other than the life of a natural person, the term shall be: (i) not less than 70 years from the end of the calendar year of the first authorised publication of the work, performance, or phonogram; or (ii) failing such authorised publication within 50 years from the creation of the work, performance, or phonogram, not less than 70 years from the end of the calendar year of the creation of the work, performance, or phonogram.").

221. INTELLECTUAL PROPERTY AND COMPETITION REVIEW COMMITTEE, REVIEW OF INTELLECTUAL PROPERTY LEGISLATION UNDER THE COMPETITION PRINCIPLES AGREEMENT 80-84 (2000), https://www.ipaustralia.gov.au/sites/default/files/ergas_report_september_2000.pdf; see also Matthew Rimmer, *Robbery Under Arms: Copyright Law and the Australia-United States Free Trade Agreement*, FIRST MONDAY, pt. 1 (Mar. 6, 2006), <https://firstmonday.org/ojs/index.php/fm/article/view/1316/1236#note29>.

222. Schwartz, *supra* note 168, at 342.

223. KORUS, *supra* note 23, art. 18.4.

224. *Id.* art. 18.1.

225. NAFTA, *supra* note 23, art. 1701. The European Union could be included as an early model of a large, regional trading bloc, too, but because of the strength of its provisions and the structure of European Union level government that can enforce actual harmonization, I exclude it from the example.

226. Agreement between the United States of America, the United Mexican States, and Canada, Nov. 30, 2018, <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/agreement-between> [hereinafter USMCA].

227. *Id.* art. 20.62.

for countries to use the rule of the shorter term if they grant a copyright term greater than that required by the agreement.²²⁸ The reason the agreement contemplates this is likely that Mexico already grants a term of life plus 100 years.²²⁹ Canada, in contrast, will need to amend its copyright law to grant the longer term required by the new agreement.²³⁰ There was pushback in Canada to the term extension, much like in Korea and Australia, from groups concerned about decreased access to goods and diminished public domain. Yet the pressure brought to bear by inclusion in trade agreements ultimately won out, and all of those countries joined the United States in its longer term.

While the renegotiation of NAFTA was no surprise, a new set of regional agreements developed in the last five years have the potential to reshape major areas of trade, including the Trans-Pacific Partnership (“TPP”) and the Regional Comprehensive Economic Partnership (“RCEP”). Before discussing these provisions, however, it is worth noting that the global political environment has very recently seen a swing of the pendulum away from free trade and towards protectionist rhetoric. For the reasons described below, it does not seem to have greatly changed the maximalist view of IP rights stemming from the Global North.

The last five years have been accompanied by a rise in nationalism worldwide, with a return to some mercantilist, zero-sum views of trade. One of the elements of this nationalism has been suspicion about free trade and a goal, voiced by political leaders, to raise barriers to trade in order to protect the interests of citizens, whether through the protection of jobs or by raising pressure on other countries as a negotiation tactic. This nationalism has an IP component.²³¹ Many of the countries that have seemingly embraced such ideas, most notably the United Kingdom and the United States, have in the past pushed for, *inter alia*, lower barriers to trade through harmonization of IP laws. The new nationalism has manifested in threats to leave multilateral treaties, such as the United States’ withdrawal from the TPP at a relatively late stage of negotiations and threats to leave the WTO.²³² Even without leaving the WTO, the United States has hamstrung the agreement’s dispute settlement function by refusing to consider new appointments to the

228. *Id.* art. 20.63, n.61.

229. Ley Federal de Derechos de Autor [LFDA] art. 29, Diario Oficial de la Federación [DOF] 15-6-2018, <https://wipolex.wipo.int/en/text/477187>.

230. Nathaniel Lipkus & Jaymie Maddox, *A Need-to-Know Guide on IP in the U.S.-Mexico-Canada Agreement*, OSLER (Oct. 2, 2018), <https://www.osler.com/en/resources/cross-border/2018/a-need-to-know-guide-on-ip-in-the-u-s-mexico-canada-agreement>.

231. Sapna Kumar, *Innovation Nationalism*, 51 CONN. L. REV. 205, 228–31 (2019).

232. In October 2018, trade ministers from 12 countries met to discuss strengthening the WTO in the wake of threats from the Trump Administration to withdraw the United States from the agreement. Bryce Baschuk & Josh Wingrove, *Trade Chiefs Say WTO No Longer Sustainable and Needs Reform*, BLOOMBERG (Oct. 25, 2018), <https://www.bloomberg.com/news/articles/2018-10-25/trade-chiefs-say-wto-is-no-longer-sustainable-and-needs-reform> (“Trump has threatened to withdraw from the WTO, repeatedly attacked the organization as being biased against U.S. interests and is slowly strangling the appellate body, which mediates trade disputes that affect some of the world’s largest companies.”).

appellate body.²³³ The 2016 referendum vote in the United Kingdom to leave the EU is another example of destabilizing nationalism and protectionism with complicated implications for international trade.²³⁴

The rise of nationalist and protectionist leaders, rhetoric, and foreign policy should logically accompany an abandonment of IP's harmonization goals. At the same time, maximization is consistent with policy that privileges domestic interest—for developed countries. And despite the increasing fragmentation, withdrawals, and potential withdrawals from various trade agreements, maximization continues. For example, the Trump administration announced its withdrawal from the TPP in early 2017. The negotiations for that trade agreement included maximizing IP provisions, such as the requirement of a copyright term of life of the author plus 70 years. The negotiations for that agreement continued without the United States, as discussed below. Importantly, the new NAFTA replicated the same term provisions. This demonstrated that increasingly nationalist rhetoric in a number of developed countries has not driven a corresponding increase in belief in flexibility for countries to implement IP protection at lower levels if that is consistent with their national interests. Thus, for example, it was not so long after the TPP withdrawal that the United States announced its intention to renegotiate NAFTA.²³⁵ As discussed above, the current draft of the new NAFTA includes the life-plus-70-year terms.²³⁶ Moreover, as Wolfgang Alschner and Rama Panford-Walsh have shown, the new NAFTA includes much of the language of the drafts of the TPP, with a 66% similarity in their IP chapters.²³⁷ Thus, despite protectionist rhetoric and even withdrawals from major trade agreements, the maximalist language survives to be included in other agreements.

233. *Id.* (“Over the past year, the U.S. has refused to consider any appellate body appointments because it says the forum’s current members have strayed from their original mandate. The three judges remaining are the bare minimum required to adjudicate appellate cases. If the U.S. allows the terms of two of the three remaining appellate body members to expire in December 2019, it would essentially paralyze the WTO’s ability to arbitrate trade disputes.”).

234. See, e.g., Sean Morrison, *No-Deal Brexit Gamble ‘Will Put Jobs and Livelihoods at Risk,’ MPs Warn*, EVENING STANDARD (July 19, 2019), <https://www.standard.co.uk/news/politics/brexit-news-latest-nodeal-exit-could-cause-severe-disruption-to-the-economy-putting-jobs-and-a4193471.html> (quoting members of Parliament who warn about severe disruption to trade, including negative impact on the farming and automotive industries, as well as concerns about patient safety and care in the event that the UK leaves the European Union without an independent trade deal).

235. Press Release, Office of the U.S. Trade Representative, Trump Admin. Announces Intent to Renegotiate the North American Free Trade Agreement (May 18, 2017), <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/may/ustr-trump-administration-announces>; see also Letters from Robert E. Lighthizer, U.S. Trade Representative, to Congressional Leaders (May 18, 2017), <https://ustr.gov/sites/default/files/files/Press/Releases/NAFTA%20Notification.pdf> (mentioning intellectual property, specifically, as an area of interest for reform).

236. USMCA, *supra* note 226, art. 20.62.

237. Wolfgang Alschner & Rama Panford-Walsh, *How Much of the Transpacific Partnership Is in the United States-Mexico-Canada Agreement?* 15, 19–20 (Ottawa Faculty of Law, Working Paper No. 2019-28, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3410658.

Once the United States left negotiations for the TPP, other countries continued negotiations. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (the “CPTPP”) was signed in March 2018 and entered into force for signatories at the end of 2018.²³⁸ The first six countries to ratify the agreement were Canada, Australia, Japan, Mexico, New Zealand, and Singapore. The CPTPP requires a minimum copyright term of life plus 70 years for works based on the natural life of the author.²³⁹ For other works, the term is required to be 70 years from the year of first publication.²⁴⁰ The maximization of copyright term is being exported through regional agreements.

Another regional treaty, the RCEP, has emerged—but not yet been concluded—in some contrast to the maximizing agreements mentioned above. In November 2018, the 16 signatory countries agreed that they aimed to conclude the agreement in 2019.²⁴¹ The agreement would include China, Japan, South Korea, India, Australia, and New Zealand and encompass approximately 3.5 billion people, or 45% of the world population, and more than a third of the world GDP.²⁴² RCEP would require lower levels of IP protection than other agreements and is seen in many ways as a China-driven agreement that will enhance trade between China, India, and Japan and lessen the effects of the United States’ trade wars.²⁴³ Although it is unclear if the potential members will come to an agreement, a draft of the agreement leaked in 2015. That draft did not include longer copyright terms. Instead, it references the term included in the Berne Convention (and incorporated by reference in TRIPS).²⁴⁴

Through bilateral and regional treaties, following the TRIPS Agreement’s potential to harmonize copyright term globally, countries in the Global North have instead pushed for piecemeal increases to term. As a result, there is a bimodal distribution of global copyright term, not harmonization. Countries may choose to “harmonize up” to the longer term length, and through the use of treaties, they have been encouraged to do just that. But there is no option for harmonizing down to the standard that has true global agreement by now.

238. Charlotte Greenfield, *Countering Global Protectionism, Pacific Trade Pact Nears Takeoff*, REUTERS (Oct. 30, 2018), <https://www.reuters.com/article/us-trade-tpp/trans-pacific-trade-deal-to-come-into-force-on-dec-30-nz-minister-idUSKCN1N42QV>; *see also* CPTPP, *supra* note 23.

239. CPTPP, *supra* note 23, art. 18.63(a).

240. *Id.* art. 18.63(b).

241. Lee Chyen Yee & Aradhana Aravindan, *China-Backed RCEP Trade Pact in ‘Final Stage,’ Deal Eyed in 2019: Singapore*, REUTERS (Nov. 14, 2018), <https://www.reuters.com/article/us-asean-summit-trade/china-backed-rcep-trade-pact-in-final-stage-deal-eyed-in-2019-singapore-idUSKCN1NJ1DW>.

242. *Id.*

243. Bhavan Jaipragas & Tashny Sukumaran, *Deal or No Deal: Is ASEAN’s RCEP Trade Pact Going the Way of the TPP?*, SOUTH CHINA MORNING POST (July 6, 2019), <https://www.scmp.com/week-asia/economics/article/3017497/deal-or-no-deal-aseans-rcep-trade-pact-going-way-tpp>.

244. Single Working Document on the Intellectual Property Chapter Regional Comprehensive Economic Partnership (RCEP) Free Trade Agreement, art. 1.7, ¶ 6 (Oct. 15, 2015) (unpublished draft), <https://www.keionline.org/23060> [hereinafter RCEP].

C. Term Extensions in Patent Law

Patent term, like copyright term, is a blunt on-off switch for the exclusive rights it offers to inventors. Many acknowledge that a single, standardized term for all fields of technology is unlikely to be economically efficient. And many patents are not valuable for their entire term, as demonstrated by the number of patent holders who allow patents to expire through failure to pay maintenance fees.²⁴⁵ For example, there are wildly different time frames for innovation and discovery in different fields. Inventions that move a field forward may be obsolete before 20 years have expired in fields like software development, and there is a potential for broadly worded patents to block follow-on innovation. In other areas, like drug development, a single pharmaceutical product may remain an important and useful discovery for much longer. Moreover, because of the high levels of investment required in drug development, the length of time regulatory examination takes, and the ease of reverse-engineering drug discoveries, a longer term for pharmaceutical products than for other areas might make sense in order to allow companies to recoup costs.²⁴⁶ Nonetheless, there are good reasons not to explicitly discriminate among fields for patent term length. One example is that it is difficult to draw lines between scientific fields prospectively, given the dynamic and unpredictable nature of scientific research. Moreover, such line-drawing would likely affect investment among fields and invite lobbying and litigation over nascent technologies and their appropriate classifications.

In the United States, the patent term has changed from its first incarnation, albeit not as radically as the copyright term. Under the first federal patent act in 1790, patents were to be granted for up to 14 years.²⁴⁷ In 1836, the statute was amended to allow for a seven-year extension of the term.²⁴⁸ Then in 1861, the patent term was amended to a single, fixed term of 17 years from the date of filing which remained the term for over a century until the TRIPS Agreement was negotiated, requiring a 20-year term from the date of filing.²⁴⁹ The United States changed its law in order to conform with the TRIPS Agreement and international norms. The change from a term based on the issuance date to one based on the filing date for a patent application probably was not a drastic change on average, given that patent examination often takes a bit less than three years, and it may well be that the “vast majority of patentees . . . benefit[ted] from the new law”²⁵⁰ by gaining in patent term. However, in some instances, it could be a significant shortening of the term, such as for patents that issued as a continuation of an earlier-filed patent. In fact, the potential for patents to issue as continuations from earlier-filed patents had become

245. See, e.g., Kimberly A. Moore, *Worthless Patents*, 20 BERKELEY TECH. L.J. 1521, 1524–26 (2005) (discussing the frequency of patent expiration through failure to pay maintenance fees).

246. At the same time, it is hard to say whether the “ideal” term ought to be longer than the current term granted or whether other fields ought to be less.

247. Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 109–12 (amended 1836) (allowing “any term not exceeding fourteen years”).

248. Patent Act of 1836, ch. 357, § 18, 5 Stat. 117, 125 (amended 1861).

249. Act of Mar. 2, 1861, ch. 88, § 16, 12 Stat. 246, 249.

250. Mark A. Lemley, *An Empirical Study of the Twenty-Year Patent Term*, 22 AIPLA Q.J. 369, 391 (1994).

somewhat of a problem at the time, and the change in term was meant in part to address the issue of so-called “submarine patents,” with their potential to pop up unannounced and surprise competitors.²⁵¹ In this sense, the move to a term based on a filing date was desirable, but it is also worth noting that it could be a decrease in term.

Despite the now 20-year patent term in the United States—and all WTO member countries—not all patents expire 20 years after their filing date. There is a set of provisions in U.S. law that predates the TRIPS Agreement and allows for significant patent term extensions either to make up for regulatory delay at the patent office or to account for the time spent seeking regulatory approval for pharmaceutical products from the Food and Drug Administration (“FDA”). The Hatch-Waxman Act balances the interests of various groups, such as pharmaceutical innovators, generic drug companies, and patient groups in a complex legal scheme.²⁵² Prior to the Hatch-Waxman Act, every company seeking to market a drug had to engage in lengthy and expensive testing to prove its efficacy.²⁵³ Moreover, if a drug was still under patent, generic drug companies could not engage in that testing until the patent had expired; otherwise the tests would constitute infringement.²⁵⁴ This meant that patented drug-makers received a de facto extension of their patents during the time that generic drug manufacturers were going through the approval process. Moreover, it meant that generic drug companies were engaged in testing drugs that had already been tested by the patent-holding pharmaceutical company which was duplicative. In addition, because generic drug-makers would not receive patent exclusivity, it was harder to recoup the cost of testing, leading to a concern that generic market entry was being discouraged by the high costs of approval.²⁵⁵ The Hatch-Waxman Act sought to encourage earlier generic market entry and save on the redundancy of testing by allowing generic drug-makers to rely on the results of the patent-holding, or pioneer, drug-makers. However, because the pioneer drug-makers generally file for a patent and then go through the lengthy, regulatory approval process, the Hatch-Waxman Act allowed for extension of the patent term as a balancing measure, recognizing that pioneer drug-makers were still required to go through a lengthy process while generic drug-makers no longer are. In this way, the law was a “calibrat[ion] . . . of costs and incentives for both innovating firms and generic competitors.”²⁵⁶ In addition to offering patent term extension to pioneer drug-makers, the law provides for “pseudo-patent” protection in the form of five-year market exclusivity for new chemical entities and semi-exclusivity for generic

251. *Id.* at 376–77.

252. Rajec, *Evaluating Flexibility*, *supra* note 30, at 175.

253. *Id.* at 176.

254. H.R. REP. NO. 98-857, pt. 2, at 4 (1984), *reprinted in* 1984 U.S.C.C.A.N. 2686, 2688; *see also* Brief for Knowledge Ecology Int’l as Amicus Curiae Supporting Petitioner at 2–3, *FTC v. Watson Pharms., Inc.*, 133 S. Ct. 787 (2013) (No. 12-416), *sub nom.* *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013) (discussing the purposes of the Hatch-Waxman Act).

255. Rajec, *Evaluating Flexibility*, *supra* note 30, at 176.

256. Rebecca S. Eisenberg, *The Role of the FDA in Innovation Policy*, 13 MICH. TELECOMM. & TECH. L. REV. 345, 348 (2007).

companies that apply to market a generic drug and challenge the validity of pioneer patents.²⁵⁷

Immediately following the TRIPS Agreement, these regulatory extensions began to make their way into the various bilateral and free-trade agreements as permissive measures. In contrast, in the more recent wave of negotiations of regional trade agreements, the United States has sought to include a version of its own patent term extensions as a minimum requirement in treaties. In other words, where earlier agreements stated members “may” provide for patent term extension, the more recent agreements state members “shall” provide for patent term extensions.

The KORUS agreement requires that parties adjust patent terms for unreasonable agency delays, at least when the delay is four or more years from the application date or three or more years from the examination request date. The KORUS agreement also requires that parties make available patent term extension for “unreasonable curtailment” of the term resulting from marketing approval processes for pharmaceutical products or processes. The requirement states that the adjustment “shall confer all of the exclusive rights, subject to the same limitations and exceptions” as the original patent.²⁵⁸ While requiring the availability of patent term extension, the KORUS does not state the length of the required extension.

While the 1994 NAFTA agreement permitted countries to allow for patent term extension,²⁵⁹ new NAFTA requires patent term extension for unreasonable delay, which is defined as more than five years from filing or three years from the examination request.²⁶⁰ The language requires that members provide a means for requesting the adjustment and that they “shall, adjust the term” at the request of the patent owner.²⁶¹ However, it does not state how long of an extension should be available. Similarly, the agreement requires parties to adjust patent terms to account for market approval for pharmaceutical products.²⁶² There is no cap on how long the extension can be. In a footnote, the agreement allows for sui generis protection rather

257. *Id.* at 348, 359–64 (explaining how provisions for market exclusivity are similar to patent law).

258. KORUS, *supra* note 23, art. 18.8.

259. A Party may extend the term of patent protection, in appropriate cases, to compensate for delays caused by regulatory approval processes. NAFTA, *supra* note 23, art. 1709.12.

260. USMCA, *supra* note 226, art 20.44 (defining unreasonable delay as “a delay in the issuance of a patent of more than five years from the date of filing of the application in the territory of the Party, or three years after a request for examination of the application has been made, whichever is later. A Party may exclude, from the determination of those delays, periods of time that do not occur during the processing of, or the examination of, the patent application by the granting authority; periods of time that are not directly attributable to the granting authority; as well as periods of time that are attributable to the patent applicant.”).

261. *Id.* (emphasis added).

262. *Id.* art. 20.46 (“With respect to a pharmaceutical product that is subject to a patent, each Party shall make available an adjustment of the patent term to compensate the patent owner for unreasonable curtailment of the effective patent term as a result of the marketing approval process.”).

than patent term extension, as long as it confers the same rights as a patent.²⁶³ (Market exclusivity is one example of *sui generis* protection that can be shaped to provide the same rights as a patent.)

The CPTPP also includes required patent term extensions, stating that the extensions “shall” be provided for regulatory delay²⁶⁴ or for marketing approval.²⁶⁵ That said, member countries have flexibility in shaping the conditions and limitations for extensions based on marketing approval of pharmaceutical products.²⁶⁶ By requiring that extensions be available but failing to specify how long those extensions can be or how they should be calculated, the CPTPP, like other agreements, provides opportunities for countries to grant patent terms of differing lengths.

Perhaps surprisingly, given its otherwise minimalist nature, the IP chapter of RCEP leaked in 2015 provided for a patent term extension of up to *at least* five years for marketing approval.²⁶⁷ There was also a (disputed) provision for restoration of patent term for unreasonable delay in patent examination.²⁶⁸ As discussed above, a formal copy of RCEP has not been made public, and it is unclear what stage the negotiations have reached. However, like the other regional agreements, RCEP has the potential to require patent term extensions of its members.

These agreements discussed above are maximizing instruments for patent term. By providing for term extensions, the provisions allow for the possibility of terms that run longer than the TRIPS-required 20-year minimum. But it is more than that. It is also disharmonizing. Unlike the copyright extension provisions discussed in the previous Part, patent term extensions are necessarily variable because they depend on the circumstances of individual administrative processes. Not only will terms vary from patent to patent within a country depending on the length of administrative processes, but because there are not harmonized standards for determining the appropriate lengths of extensions, the terms will vary for a single invention with identical patent applications filed in multiple countries. The provisions are therefore both maximizing and explicitly disharmonizing. Just as in the case of copyright extensions, the Global North has chosen maximization over harmonization for patent-rights duration. The copyright term extensions are of greater duration, but the patent term extensions increase uncertainty by providing for potentially multiple different terms in different countries.

263. *Id.* art. 20.46 n.39 (“For greater certainty, a Party may alternatively make available a period of additional *sui generis* protection to compensate for unreasonable curtailment of the effective patent term as a result of the marketing approval process. The *sui generis* protection must confer the rights conferred by the patent.”).

264. CPTPP, *supra* note 23, art. 18.46 (Each party “shall provide the means to, and at the request of the patent owner shall, adjust the term of the patent to compensate for [unreasonable] delays.”).

265. *Id.* art. 18.48 (For pharmaceutical products, “each Party shall make available an adjustment of the patent term to compensate the patent owner for unreasonable curtailment of the effective patent term as a result of the marketing approval process.”).

266. *Id.*

267. RCEP, *supra* note 244, art. 5.13

268. *Id.*

IV. VALUING FLEXIBILITY IN INTERNATIONAL IP

Dispelling the harmonization myth is descriptively important; it is inaccurate, as demonstrated by the inclusion of term-extension provisions in post-TRIPS treaties that have resulted in less harmonized, but more protective, IP rights. But while an accurate description is important in its own right, it is also important to a normative assessment of IP protections that are exported and required of trading partners without empirical or economic justification. Developed countries and certain industry interest groups justify increases in IP protection under the guise of harmonization, touting the efficiency savings to companies that can rely on similar protections in multiple markets. However, if industry groups that rely on IP rights generally lobby for maximization over harmonization when given the chance, the efficiency gains must not be so valuable after all. Changes in law result in less certainty for investors, and yet these same investors pursue changes that maximize protection rather than static-yet-certain laws.

Nevertheless, certain objections to the myth characterization deserve consideration. For example, to the extent that longer terms for copyright or the tradeoffs embodied in patent term extension are normatively desirable, the story of the previous Part may yet be a happy one. Moreover, term length is but one characteristic of IP protection. Other characteristics might tell a more nuanced story. Recent initiatives demonstrate concerted attempts to moderate the maximization of IP rights. These objections have some merit but still demonstrate how flexibilities are often cast against a default rule of maximization-cast-as-harmonization. After describing the drawbacks to IP law maximization and responding to potential objections, this Part explores potential antidotes to the harmonization myth that has driven IP protection upward for at least the 25 years since the TRIPS Agreement entered into force. These solutions range from eliminating treaty terms that put pressure on member countries to constantly increase protection upward to refocusing the conversation surrounding trade-related aspects of IP to allow for and welcome certain levels of diversity among domestic IP laws—whether those measures depart upward or downward from international norms.

A. The Drawbacks of IP Maximalism and the Harmonization Myth

There are several drawbacks to the “global IP upward ratchet”²⁶⁹ and the increases in the duration of IP protection it has encouraged. The ever-increasing minimum rights included in treaties and the opportunistic regime-shifting by the Global North described in the previous Part make it harder for all countries to implement normatively desirable levels of IP protection. This is true whether the normative desirability of terms is measured country by country or globally. That is, even if there is a single, best term length for copyright and patent protection, the current structure of international agreements makes it less likely that countries will discover—or be able to enact—that term. In addition, the characteristics of the various treaties have cast increases of protection as unassailable exercises of domestic power, while decreases or lessening of protection require justification as “exceptions” or “flexibilities.” As a result, developing and least-developed countries are constrained from exploring levels of IP protection that best fit their domestic

269. See SELL, *supra* note 25, at 12.

interests when those differ from the interests of developed countries. Lastly, the rhetorical power of inaccurately naming the changes that increase protection, “harmonization,” imbues maximizing measures with an unmerited, default legitimacy. As discussed above, minimum standards of protections are not harmonizing—in law²⁷⁰ or in fact.²⁷¹

The normatively desirable term length for copyright or patent protection is a question open to debate. There are serious arguments that copyright term is longer than it needs to be.²⁷² The longer copyright term lasts, the more likely there are to be high information costs to consumers and other artists who must determine what is in the public domain or find copyright owners years down the line to request permission to use works that may have been created well over a century ago.²⁷³ And as discussed above, the 20-year term is not one that was chosen on the basis of an empirical evaluation of the ideal term length.²⁷⁴ As a result, it is unlikely that this particular number of years is the ideal one for a given country’s interest, let alone globally. Moreover, a number of legal and economic scholars have critiqued the way that patent terms apply uniformly across technological fields because fields differ so greatly in terms of the cost and length of research and development.²⁷⁵ Because patents are neutral as to technology, term lengths are not tailored by industry—although the patent term extension provisions for pharmaceuticals, discussed above, are one means of increasing term in a single industry. Generally, however, the same term applies to inventions in fields that move incredibly quickly, such as software, as to inventions in fields in which innovation takes years, such as the pharmaceutical industry.²⁷⁶ Thus, even if 20 years is the “right” term for some industries, it is unlikely to be the right term for all industries. There are good reasons not to treat industries differently, such as the difficulty of line-drawing and the potential for lobbying and public choice problems if industries are treated differently. However, the fact remains that 20 years is unlikely to be the ideal patent term—and even if it is for the United States, it may well not be elsewhere. By fixing terms in treaties, countries in the Global North are tying their own hands when it comes to experimentation with term length—betting that whatever the ideal term is, it is equal to or greater than those being negotiated in treaties. This is problematic because even if domestic interests are in favor of the current terms of protection (and there has been pushback against those), there is no opportunity to make changes in the future, absent widespread agreement globally.

270. See discussion *supra* Part II.

271. See discussion *supra* Part III.

272. See *supra* notes 181–82 and accompanying text.

273. BARD & KURLANTZICK, *supra* note 60, at 57–59 (discussing the costs of copyright protection and arguing against the value of extensions).

274. See Ouellette, *supra* note 26, at 66–67.

275. See *supra* notes 183–84 and accompanying text; Eric E. Johnson, *Calibrating Patent Lifetimes*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 269, 285 (2006) (discussing the economic literature relating to patent duration, finding it inconclusive, but noting that term is likely too long in many cases); Lemley, *supra* note 250, at 373.

276. For a critique that patents may give too little incentive to invent in industries with long research timeframes, see, for example, Michael Abramowicz, *The Uneasy Case for Patent Races over Auctions*, 60 STAN. L. REV. 803, 832–33 (2007).

Moreover, developing countries are tied to terms that may not be ideal for their interests. Countries in the Global South have varied domestic priorities, with some valuing access, whether to drugs or creative expression, more highly than the grant of incentives that will redound, for the most part, to foreign industries. However, these countries are unable to unilaterally shorten the terms of protection even if they so desire. Because the treaty provisions discussed above are all cast as floors—but not ceilings—for term, they leave little flexibility going forward. This means that, regardless of whether the chosen term is longer than the “ideal” level of IP protection, changes would require treaty amendments. Moreover, because many countries sign multiple treaties with similar language, any changes would have to be replicated in many, parallel negotiations.

Last, it is worth noting that there is rhetorical power in casting all protection-increasing measures as harmonizing and all access-increasing measures as exceptions or flexibilities. The intentions behind the exploration of flexibilities are good. For example, the TRIPS Agreement recognizes national development objectives,²⁷⁷ while in 2001, the Ministerial Conference issued a Declaration on the TRIPS Agreement and Public Health (the “Doha Declaration”), which served to somewhat formalize a commitment to access to medicines.²⁷⁸ And the scholars who have explored the use of TRIPS flexibilities have generally done so with an eye toward striking a balance between the interests of rights holders and the needs and interests of consumers and downstream creators and inventors.²⁷⁹ Nevertheless, there is a sense in which the term “flexibility” is ceding the moral high ground to harmonization. This may make sense if harmonization is a purpose that is highly valued by most negotiating members and if it is valuable enough that any deviation from harmonized IP rights requires some sort of cost-benefit analysis. However, where countries pursue measures that move their laws out of harmony without the same level of scrutiny, it becomes more difficult to justify such scrutiny for developing countries looking to implement disharmonizing measures.

B. Counterarguments and Responses

The preceding Parts show how term limits that were ostensibly harmonized by the TRIPS Agreement have been maximized in subsequent treaties. However, some objections to the myth characterization deserve consideration; duration of rights is certainly not the only measure of IP rights protection. Other characteristics of IP rights protection may not show the same maximization story as that of term. For example, the Doha Declaration expanded the use of compulsory licensing.²⁸⁰ The Doha Declaration allowed for countries to grant compulsory licenses to address health crises in other countries, in recognition of the fact that not all countries had pharmaceutical industries at the ready in the case of public health crises.²⁸¹ In a sense, this was a downward modification of TRIPS standards of IP rights protection. While an important modification to the TRIPS Agreement, the Doha Declaration essentially fixed a problem associated with the inflexible wording of the initial

277. TRIPS Agreement, *supra* note 11, pmb1.

278. *See* Doha Declaration, *supra* note 133.

279. *See generally* DINWOODIE & DREYFUSS, *supra* note 123.

280. *See* Doha Declaration, *supra* note 133.

281. *Id.*

agreement that could have terrible consequences for least developed countries in the midst of health crises. The “costs” associated with this decrease in rights were likely minimal, as the problem for least developed countries was that they had neither economic resources to address the AIDS crisis nor industrial resources to provide generic medicines to the population.

Another recent treaty affecting IP rights is the Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled (“Marrakesh Treaty”).²⁸² The Marrakesh Treaty was negotiated through WIPO and signed in 2013.²⁸³ It was, as Marketa Trimble points out, an agreement that brought together developing and developed countries despite “the atmosphere of growing opposition from many experts and the general public to international IP treaties.”²⁸⁴ The treaty seeks to increase access to copyrighted works for the blind and visually impaired, thereby augmenting users’ interests and arguably weakening copyright. It requires countries to provide certain exceptions and limitations designed in the treaty to facilitate cross-border access to works that are fixed in accessible format copies.²⁸⁵ While the Marrakesh Treaty is certainly important for the users whose interests it protects, it may, like the Doha Declaration, be a fairly low-cost concession made by developed countries. This is not to suggest that it has been made in bad faith—merely that it is not a sweeping lowering of IP protection the way that a 20-year term increase is a sweeping increase.

These two treaties are examples of agreements to limit IP protection through the treaty-making process, and thus constitute a counterexample to the maximization examples of term. They demonstrate that maximization is not the *only* motivating factor behind post-TRIPS Agreement treaty negotiation. And the purposes of both the declaration and the treaty are laudable and should not be minimized. At the same time, maximization need not be the sole purpose in order for it to be a driving force in many negotiations. There are also many other characteristics of copyright and patent protection that have been subject to increased minimum standards through post-TRIPS treaty-making, too. The usefulness of term is that without harmonization in term, there are immediate variations between countries. Duration, therefore, should be one of the areas subject to the strongest efforts at harmonization. Given the tolerance of variance, it undermines the harmonization narrative. Nonetheless, it is worth acknowledging that maximization is certainly not the *sole* motivator of the Global North since the TRIPS Agreement. It is, however, a powerful motivator and frequently more powerful than harmonization.

C. Developing Dynamic IP

Once the diminished role of harmonization—and the central role of maximization—is apparent, what are the implications for international IP treaty-making and law-making? A number of solutions to the harmonization myth would

282. Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled, June 27, 2013, 52 I.L.M. 1312, <https://www.wipo.int/treaties/en/ip/marrakesh> [hereinafter Marrakesh Treaty].

283. *Id.*

284. Marketa Trimble, *The Marrakesh Puzzle*, 45 IIC 768, 769 (2014).

285. *Id.* at 772; Marrakesh Treaty, *supra* note 282, art. 2(a)–(b).

make sense. First, treaty provisions that invite maximization ought potentially to be abandoned. The rule of the shorter term is one such provision. Second, discussions of international IP rulemaking should not dismiss the value of diversity among IP regimes so easily. There may be cases in which harmonized laws are indeed the most desirable, but that should not be such an easy assumption, whether or not potential laws are an upward departure or downward departure from the “standard” level of protection. Last, even without major changes to IP treaties or methods of evaluating proposed treaty provisions, there is value in recognizing that a standard description is inaccurate, and that the rhetoric carries a normative weight that is unearned.

The rule of the shorter term is hard to justify in the modern system of IP protection. The EU adoption of the rule—as permitted by treaty—has led to much mischief, driving the United States to increase term despite great pushback domestically.²⁸⁶ Then, once the EU and the United States both had increased copyright term, the countries used their heft in trade negotiations to push increased terms on other countries, despite there being no empirical support for the increases. As a result, there is a roughly bimodal distribution of copyright terms, worldwide, and copyright protection is needlessly long in many countries. The rule of the shorter term also violates the national treatment provision²⁸⁷ that is a cornerstone of trade agreements—and now is standard in international IP agreements as well. This means that the rule allows countries to treat works originating in foreign countries differently than works originating domestically (if those foreign countries have shorter copyright terms). As a result, copyright protection in countries adhering to the rule differs in length, depending on who is receiving the protection, thus increasing information costs to users who are interested in accessing works. Given these drawbacks, the benefits of the rule do not outweigh the negatives. In theory, the rule results in less protection for some works, which corresponds with greater access to those works. And although, theoretically, creators in the United States could have looked at their treatment on the European market and said “our treatment there reflects the way we value access at home, by matching the terms,” the actual outcome—lobbying for longer terms—is the more likely one. As a result, the rule does not serve to recognize the differing policy decisions of foreign countries but rather serves as the “ratchet,” discussed above, that drives IP rights duration ever-upward.

In addition to removing incentives to increase IP rights protection upward, recognizing harmonization as a myth suggests a more critical evaluation of IP rights measures in bilateral and regional treaties, generally. This is particularly necessary when such measures are justified primarily because they serve to harmonize rights and particularly when the arguments are used to encourage increases in IP rights. While harmonization in procedure of rights acquisition, substance, and enforcement may be desirable, the value of diverse rights in IP should not be discounted. Diversity in IP regimes can allow countries to tailor rights to their domestic interests.²⁸⁸ Moreover, as rights are consistently increased through appeals to

286. See discussion *supra* Section III.B.

287. See discussion *supra* Part I.

288. Rajec, *Evaluating Flexibility*, *supra* note 30, at 198.

harmonization, it becomes less and less likely that an “ideal” level of rights will be found.

The weak version of this suggestion is that future increases should be looked on skeptically as simply more “harmonizing up” that will not result in true stability, and instead the virtues of diverse IP regimes should be weighted more strongly. A stronger version of the suggestion would require rethinking the minimum rights already in place in numerous treaties. While this is likely politically unworkable given the number of interwoven and duplicative treaties that enforce minimum standards of IP protection, it may be a worthwhile thought experiment: if countries that sought harmonized copyright protection determined that a 20-year increase was not a hindrance to trade, why not consider a 20-year decrease in copyright term? In other words, for every significant increase to IP rights, one might assume that a proportional decrease in protection must be tolerable from the perspective of international trade.

Ultimately, many increases in IP rights protection are likely irreversible under the current system of interlocking and interdependent treaties and trade relationships because of their complexity. And it is entirely possible that the current levels of IP protection are relatively ideal or that stronger IP protection would be ideal. However, if that is so, then any future increases should be argued for on their merits, rather than pushed through with hollow appeals to harmonization. After all, it seems harmonization was never the primary goal.

CONCLUSION

Harmonization played a central role in international IP law treaty-making in the years leading up to the TRIPS Agreement. However, it is a concept that does not fit much of the treaty-making that has occurred in the years since the agreement came into force. While it has great explanatory power for the sweeping changes that the TRIPS Agreement required, allowing rights holders to expect similar structures and scope to their IP rights, globally, it is neither a desirable nor practical end goal for IP rights to be completely harmonized.

This realization that harmonization is not as valuable as previously thought is borne out by the negotiating behavior of countries most in favor of harmonization, and it requires a rethinking of international IP law and its trajectory. The Global North countries—initial proponents of harmonized IP laws—have repeatedly negotiated for longer terms of protection in copyright and patent law, even though the longer terms bring duration out of harmony. And in the case of patents, the requirement for term extensions may result in different and unpredictable terms from country to country, even more varied than the bimodal distribution that copyright term increases have created. The strategies of the Global North countries in increasing term—to the detriment of harmonization—show that there are limits to the desirability of harmonization as a goal for all countries. It makes sense, then, to view new proposed increases to IP protection critically. These increases can come with serious costs to access and other domestic interests, which are frequently dismissed when the harmonization narrative is strong. Countries should evaluate such measures without the sheen of harmonization. Moreover, treaty measures that increase pressure to maximize IP rights protection—such as the rule of the shorter term—undermine harmonization and put a finger on the scale for maximization. The

rule is hard to support given that it does not comport with the rule of national treatment that is a cornerstone of free-trade agreements, and even harder given its maximizing pressure. It is time to rethink international IP, free of the harmonization myth.