RETRIEVING THE MISSING LADDER: EXCAVATING FLEXIBILITY OF THE TRIPS MECHANISM

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Abstract

Since the emergence of the TRIPS regime in mid 1990s, the standard for the enforcement of the TRIPS Agreement has been under constant debate. There has been extensive theoretical literature examining the shortfalls of the TRIPS Agreement. However, questions as to why the harmonization of TRIPS is unsymmetrical and how to maximize flexibilities of the agreement as a pragmatic strategy to rehabilitate the pre-TRIPS balance remain largely unanswered. As a consequence, the critique of the incompatibility of the TRIPS Agreement remains rather asserted and less convincing. This Article attempts to review the TRIPS regime from a prismatic lens to justify the correlation between IPR and economic growth and examine the implications of the existing IPR regime. Apart from focusing on the global intellectual property regime, Part I seeks to demystify the economic facets of pre-industrial economies in the “catch-up” phase, accounting for the “ladder of development” reflected by stage theory as a dominant aspect that underpins domestic adaptation of an improved IPR standard in widely differing socioeconomic circumstances. By tracing development trajectories of different economies, Part II presents historical myths of such developed economies as Great Britain, the United States, and Japan, which have produced a similar development strategy for implementing and enforcing IPR. Finally, Part III explores the economic and social foundation needed to enable development of an effective IPR enforcement mechanism. This Article is thus crucial to understanding some overlooked aspects of intellectual property law per se, particularly in the context of the global trading system.

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INTRODUCTION

The emergence of the World Trade Organization (WTO) Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) has revolutionized the conventional attributes of intellectual property rights (IPR) and altered the institutional landscape of the global trading system. Developing countries attempted to achieve a variety of goals in addition to participating in the global trading system. However, they have found the promise of long-term benefits elusive and the administrative costs and policy problems a significant burden. This has led to a view that the need for, and benefits of, stronger IPR protection varies with economic strength and technological sophistication, and thus TRIPS requirements should be adjusted to the specific conditions of particular states. Accordingly, it is no surprise that the relationship between developing and developed countries concerning the protection of IPR is delicate, and that it is at the cutting edge of the debates as to the constituent components of sustainable development.

IPR as a concept has been debated throughout history and, with a global economy, this debate has become increasingly controversial and confrontational. Scholars from different backgrounds have often debated the validity and legitimacy of IPR from different perspectives. Developing nations—that are only "beginning to exploit intellectual property of their own"—are concerned as to the asymmetrical and high-contingent benefits they can expect from the TRIPS regime, which tends to benefit foreign proprietors and discourage domestic inventors, and serves as a potent tool for kicking off the ladder of development. Without achieving compliance between IPR and the level of domestic adaptation, enforcement is likely to be sporadic. Although TRIPS has established a new international IPR arena based on minimum standards that contrast with previous flexibility to afford differentiated protection of IPRs, attempts to accommodate the varied circumstances of the countries have led to difficulty, except for the length of transition periods for phasing

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2. See Sanjaya Lall, Indicators of the Relative Importance of IPRs in Developing Countries 1 (2003).
7. See Keith Maskus, Intellectual Property Rights in the Global Economy 174–75 (2000) (noting that "[o]wners of patents in developing countries are overwhelmingly foreign; there is little likelihood of that changing for a considerable period of time").
in the WTO obligations. Substantial emphasis has been placed on the shortfalls of the TRIPS regime. Very little scholarship, however, has been devoted to the demonstration as to why the regime is problematic and how the pre-TRIPS balance can be rehabilitated. As a result, the critique of the incompatibility of the regime remains rather asserted and less compelling. This Article attempts to shed new light on this overlooked area.

I. LOCATING THE LADDER OF DEVELOPMENT: AN INDISPENSABLE PHASE IN RESTRUCTURING THE VALUE CHAIN

In discussing the economic justification for the TRIPS Agreement, a logical starting point is to compare and contrast the components of such fundamental issues as economic growth. Economic growth, in the sense attributed to this concept in contemporary macroeconomics, is a natural phenomenon of industrialization. As one of the most popular fields in contemporary macroeconomics, economic growth is not only essential to theorists but also valuable to policymakers and practitioners.

Regarding economic growth, there are two different but interrelated arguments, falling foul of the classic chicken-egg debate.

On the one hand, some postulate that a strengthened IPR regime acts as an important catalyst of economic growth. Economic growth depends, in large part, on technological change (e.g., innovation) and reflects the increase and accumulation of technological and other knowledge of commercial value. From its early days, scholars and economists, in particular, have attempted to address issues concerning economic growth and its correlation with technological advancement because these issues concern human welfare in the long run. To maintain economic growth, countries have endeavored to establish varied mechanisms to foster innovation and facilitate the transfer of technology. The creation and protection of IPR exemplify a central part of this strategy.

On the other hand, more and more scholars and political elites tend to believe


10. The contemporary concept of economic growth has distant origins, because it stems back from the early days of the Industrial Revolution and is constantly evolving. In the 1950's, following the publication of papers by Robert Solow and Nicholas Kaldor, growth theory became a dominating topic until the early 1970's. The emerged “new growth theory” (also known as endogenous growth theory) asserts that new ideas are the root source of economic growth, since they promote technological innovation and hence stimulate productivity improvements. See, e.g., Neri Salvadori, Introduction, 54 METROECONOMICA 125, 125 (2003); Michael Borrus & Jay Stowsky, Technology Policy and Economic Growth 3 (Berkeley Roundtable on the International Economy, Working Paper No. 97, 1997); see also CHARLES JONES, INTRODUCTION TO ECONOMIC GROWTH 2, 10-11, 18 (2d ed. 2002) (discussing the link between sustained economic growth and technological progress).


15. See Summary of the Conference, supra note 9, at 2 (outlining examples of a number of mechanisms used around the world to foster economic growth).

that TRIPS provides a standard of protection for domestic innovators that might not ordinarily apply until a country has reached a certain level of economic growth.17 This stage theory provides an interesting challenge to developing states as to when and how they should engage with international IPR norms while ensuring that legislation strikes an appropriate balance between the interests of local innovators and the needs of the societies of which they are a part. When a country remains a consumer of intellectual property, it is unlikely to see gains from the vigorous protection of IPR. Instead, profits will result from the imitation of existing products.

In 1960, Walt Rostow conceptualized the notion of the stages of economic growth. Rostow presented five steps through which all countries at the initial stage of development must pass through to become industrial countries.18 In a similar vein, Jeffrey Sachs coined the phrase, “ladder of development” in his work The End of Poverty: Economic Possibilities for Our Time.19 This concept provided an overarching framework for the discussion of economic development concerning poverty elimination and economic growth.20 More to the point, in his book Kicking Away the Ladder: Development Strategy in Historical Perspective, Cambridge economic scholar, Ha-Joon Chang, questions the legitimacy of neoliberal policies. There, Chang demonstrates how the developed countries are “kicking away the ladder” by which they climbed up to the top beyond the reach of the developing countries.”21 Chang argues that the current orthodoxy discourse in the industrial countries constituted a fundamental obstacle to capacity building in the developing world.22 In light of the global protection of IPR, this “ladder-kicking” argument revealed an unbridgeable difference between developed and developing countries, notwithstanding reasons to believe that enforcement of IPR has an overall positive impact on economic growth.23

A. Innovation and the Cultivation of the Intellectual Property

Since the nineteenth century, the constant industrial expansion and technological advancement have dramatically changed the structure of human society and the mode of human nature refreshing the portrayal of our everyday reality.24 The IPR has thus emerged at a historic moment when the value of ideas

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18. W. W. ROSTOW, THE STAGES OF ECONOMIC GROWTH: A NON-COMMUNIST MANIFESTO 4–10 (1963) (demonstrating that all the countries pass through five stages of development as their economies grow: traditional society, preconditions for take-off, take-off, drive to maturity, and age of high-mass consumption).
20. Id. at 2 (asserting that “it is our task to help them onto the ladder of development, at least to gain a foothold on the bottom rung, from which they can then proceed to climb on their own”).
22. Id. at 126 (arguing that tariff protection and infant industry promotion are all pragmatically important tools for the development of most pre-industrial countries).
23. Id.
and knowledge became a key metric in shaping human landscape.\textsuperscript{25} As a consequence, overwhelming majority of entrepreneurs have found their intangible properties one of their most valuable assets—an important determinant of their future capacity to generate profit, and have assigned more weight to innovation.\textsuperscript{26} A creative culture has been fostered for the innovation to flourish, and exponential technological advances have rewarded the intellectual content of innovation.\textsuperscript{27} In a knowledge economy, and at a time when the globalization of world markets creates global opportunities for the products of innovation, the effective protection of IPR is emerging as a magic weapon of commercial success.\textsuperscript{28} The accelerated growth of international trade over the past decades has witnessed tremendous expansion of trade share involving IPR, leading innovators to devote significantly increased resources to effective protection of the innovations.\textsuperscript{29}

The development of the creative culture has promoted the cultivation of the intellectual property. With the phenomenal economic growth and significant technological advancement, international trade has become more knowledge-incentive than ever before. These intellectual capitals have become primary resource and major value drivers in a modern economy.\textsuperscript{30} A pertinent case in point is the United States.\textsuperscript{31} As noted by Harvard Business School Professor, Juan Enriquez, the rate of patents per capita in the United States stands at the highest levels.\textsuperscript{32} As illustrated in Table 1 below, it takes about 3,000 Americans to generate one U.S. patent, compared to 4,000 Japanese, 6,000 Taiwanese, 1.8 million Brazilians, 10 million Chinese, and 21 million Indonesians.\textsuperscript{33}

IPR as intangible assets has gradually evolved and has been continually refined over the past decades to keep abreast of the changing development model which evidenced a shift from an industrial base to post-industrial service economies.\textsuperscript{34} The ever-increasing levels of international trade has given rise to questions as to whether IPR will be up to the challenge of leveling the per capita levels of innovation between the developed and developing countries, or whether they will merely amplify and reinforce the asymmetry of the innovative capacity that manifests disparity of global incomes.\textsuperscript{35}

\textsuperscript{27} See, e.g., Dosi et al., supra note 25, at 471-72.
\textsuperscript{28} Grossman & Helpman, supra note 13, at 33.
\textsuperscript{29} Grossman & Helpman, supra note 13, at 26-27.
\textsuperscript{30} Grossman & Helpman, supra note 13, at 27.
\textsuperscript{32} Id.
\textsuperscript{33} Id.
\textsuperscript{34} Id.
\textsuperscript{35} Id.
TABLE 1
PATENTS PER CAPITA

<table>
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<tr>
<th>Nations</th>
<th>Population per patent</th>
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<tbody>
<tr>
<td>The United States</td>
<td>3,000</td>
</tr>
<tr>
<td>Japan</td>
<td>4,000</td>
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<tr>
<td>Taiwan</td>
<td>6,000</td>
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<tr>
<td>Brazil</td>
<td>1,800,000</td>
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<tr>
<td>China</td>
<td>10,000,000</td>
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<tr>
<td>Indonesia</td>
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IPR is a catch-all term used to describe the legal protections afforded to the owners of intellectual properties—the intangible products of their creativity and innovation embedded in physical objects—in the form afforded to the owners of physical properties. The basis on which protections are afforded to such rights is to give expression to the moral sentiment that a creator should enjoy the fruits of their creativity, and to encourage new innovations and creativities in a way that is beneficial to society. IPR legislation confers on the holders the exclusive right to control commercial exploitation by setting the level of revenue arising from the use of the IPRs and safeguarding them by excluding others from manufacturing, selling, distributing or using it, in order to ensure that their investments are duly and efficiently rewarded.

B. The Ladder of Development: Geographical Limitation on the Coverage of IPR

It is pragmatically important to investigate whether an IPR regime is the appropriate vehicle for stimulating enabling technologies, rather than applied technologies; or whether industry-funded Research & Development (R&D), government-funded awards, or the public sector are more effective vehicles. IPR plays a big role in human society as “the decision to grant property rights in intangibles impinges on both competitors and the public.” Ensuring that the social benefits derived from knowledge-based innovation outweigh the social cost is the

36. Id.
37. See BENTLY & SHERMAN, supra note 5, at 2–3 (demonstrating that intellectual properties “share a similar image of what means to ‘create’ (or produce), for example a book, a design for a car, or a new type of pharmaceutical”).
39. See CORNISH, supra note 6, at 38.
40. See Randall S. Kroszner et al., Economic Organization and Competition Policy, 19 YALE J. ON REG. 541, 586 (2002) (stating that it is impossible for the IPR regime to provide profound protection without exception although: On the other hand, some innovations may be difficult enough to imitate that, even without intellectual property protection, the innovator can enjoy a substantial cost or quality advantage over its competitors for some period. In either case, other characteristics of some dynamically competitive industries are important in making it likely that a successful innovation will yield a firm the leading position in a market, and profits that are essential to encourage such innovations.)
41.:BENTLY & SHERMAN, supra note 5, at 3–4.
In high-technology sectors, such as pharmaceuticals, however, the risk of failure of expensive research is high, and entrepreneurs must have good reason to expect that the profits of future business endeavors can cover the cost of failure. Otherwise, the incentive to undertake innovative activities will dry up. As Nancy Gallini and Suzanne Scotchmer note, "if the balance between private gain and public good slips too far beyond what is necessary to spur innovation, it will instead become a drag on innovation and impede the creation of further innovations.

Two issues—how the proper balance is established and whether the same balance is capable of universal adoption—have engaged much academic debate. Ishac Diwan and Dani Rodrik, on the one hand, conclude that developing countries may embark on protecting IPR of developed countries to facilitate the invention of technologies that are indigenously appropriate to the developing world. On the other hand, a holistic economic analysis proposes a novel algorithm and sheds new light on the issues, taking into account historical contingency. Judith Chin and Gene Grossman put forward a "static" model of asymmetric duopoly whereby all innovation occurs in the North and all imitation occurs in the South. This North-South product cycle model suggests that developing countries are reluctant to strengthen IPR protection because, understandably, their cost advantages would be undermined when having to pay an increased wage.

In a similar vein, Alan Deardorff introduces another static and behavioral model, which indicates that patent protection could have an "offsetting effect," in the event that "all innovation originates in one part of the world." As Deardorff points outs, "on the one hand, permitting inventors to earn monopoly profits on their inventions and thus stimulating inventive activity and, on the other hand, distorting consumer choice by monopoly pricing." He also argues for a geographical limitation on patent coverage that would affect the spread of IPRs internationally.

Taking a more intrinsic approach, Elhanan Helpman examines the costs and benefits of stronger IPR protection in a general equilibrium model, where innovation
takes place in the Northern world while the Southern world imitates the former’s innovation. Helpman argues for a rather flexible and incremental approach to the improvement of IPR standards, and demonstrates that it is desirable and feasible to slow down the speed of the harmonization process of the IPR protection in the developing world to allow innovation to flourish progressively and sustainably. Helpman concludes that, in general, the developing world has little to gain from stronger IPR protection due to the terms of trade deterioration from an initial position of equilibrium. He advocates this position because the more stringent IPR protection may erode the social foundation on which innovation is built and this is a lose-lose situation for both developed and developing countries.

Stephen Richardson and James Gaisford share a similar view, maintaining that, in a country where indigenous innovation is scarce, an excessively stringent protection of IPR could lead to reduced welfare of that country and ultimately impair global welfare. Other commentators are even more cynical. Michele Boldrin and David Levine argue that “while awarding a monopoly to an innovator increases the payoff to the original innovator by giving her control over subsequent uses of the innovation, it reduces the incentive for future innovation.” They assert that “from the perspective of the functioning of markets, . . . what is ordinarily referred to as ‘intellectual property’ protects not the ownership of copies of ideas, but rather a monopoly over how other people make use of their copies of an idea.”

One of the remarkable contributions of economic analysis to intellectual property law is The Economic Structure of Intellectual Property Law by William Landes and Richard Posner. Having examined the interaction between intellectual property law and economics, Landes and Posner challenge the conventional wisdom that a stronger IPR regime is a catalyst of creativity and innovation, and argue that “expanding IPR can actually reduce the amount of new IPR that is created by raising the creators’ input costs, since a major input into new intellectual property is such property which already exists.” Landes and Posner take a fresh look at the economic underpinnings of IPR, in particular copyright, and demonstrate that overprotection of IPR in developing countries stifles the inherent balance between right proprietors and society, and thus counteract the innovation. It is therefore not surprising that, although almost all countries have ostensibly embraced the TRIPS Agreement, the harmonized norms are still exotic and repel many states.

53. Id. at 1275.
54. Id. at 1253, 1274.
55. Id. at 1250, 1275.
60. Id. at 422.
61. Id.
While intellectual property has developed and evolved over centuries, the international protection of IPR in its modern sense did not come into existence until mid-nineteenth century. The depth and breadth of international business transactions in which IPR plays a role are broad. Hence, strategic management of intellectual property in the dynamic global market has become indispensable in pursuit of a stable IPR system to safeguard the interests of international trade. As developed economies are equipped with accrued competitive technological advantages, the existing regime was designed for the types of knowledge goods typically originated in the developed countries, but largely neglecting the "traditional knowledge, folklore, and natural endowments" that constitute comparative advantages of the developing countries, and has thus marginalized the emerging nations. In this context, IPR protection at the global level is fundamentally associated with the attainment of sustainable development and has become a complex issue involving international law and development policy.

The irresistible tide of globalization and the intensified global marketplace under the WTO have generated increasing pressure on WTO members from the developing world to liberalize their trading regimes and expedite their integrations to the global economy. Although, for the most part, this means dismantling protections afforded to the domestic industry, with regard to IPR, TRIPS actually increases the standards for domestic industry protection.

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62. The first conventions concerning international protection of intellectual property are the Paris Convention for the Protection of Industrial Property (1883) and Berne Convention for the Protection of Literary and Artistic Works (1886). Because of these two conventions, the IPR issues were converted from a national forum to an international arena. See generally Vincenzo Vinciguerra, A Brief Essay on the Importance of Time in International Conventions of Intellectual Property Rights, 39 AKRON L. REV. 635, 642, 647 (2006) (reviewing the international systems and obligations related to IPRs that were established by the Paris and Berne Conventions).


64. Graeme B. Dinwoodie & Rochelle C. Dreyfuss, Designing a Global Intellectual Property System Responsive to Change: The WTO, WIPO, and Beyond, 46 HOUS. L. REV. 1187, 1189 (2009); see also Assafa Endeshaw, The Paradox of Intellectual Property Lawmaking in the New Millennium: Universal Templates as Terms of Surrender for Non-Industrial Nations; Piracy as an Offshoot, 10 CARDozo J. INT’L & COMP. L. 47, 75 (2002) (pointing out that the “universal templates” created in the international lawmaking process are modeled after laws in developed countries and fail to take into consideration the socioeconomic circumstances of developing and less-developed countries).

65. See Endeshaw, supra note 64, at 76.

66. See Jonathan M. Miller, A Typology of Legal Transplants: Using Sociology, Legal History and Argentine Examples to Explain the Transplant Process, 51 AM. J. COMP. L. 839, 840–41 (2003) (discussing how economic globalization has influenced the political will of the participating countries toward domestic legal changes); see also VERNON VALENTINE PALMER, LOUISIANA: MICROCOsm OF A MIXED JURISDICTION 3, 4 (1999) (asserting that "there doesn’t exist in the modern world a pure judicial system formed without exterior influence").

67. See Laurence R. Helfer, Regime Shifting: The TRIPS Agreement and New Dynamics of International Intellectual Property Lawmaking, 29 YALE J. INT’L L. 1, 23–24 (2004) (noting that, upon the emergence of the TRIPS regime, the harmonized IPR global network, which had been owned exclusively by developed countries, extended to the developing world).
At the national level, IPR is significantly characterized by its territorial nature. If the IPR owners wish to seek recognition of their rights in other countries, they will have to apply to the relevant countries concerned separately. Multiple applications can be lengthy and costly, with unforeseeable risks accompanying the procedural differences. This makes it economically viable to ensure that IPR protection obtained in one country could be extended to another.

It is under this backdrop that attempts were initiated to eliminate these obstacles in the last quarter of the nineteenth century, the main three pillars being the Paris Convention for the Protection of Industrial Property, signed in 1883; the 1886 Berne Convention for the Protection of Literary and Artistic Work; and the Madrid Agreement Concerning the International Registration of Marks in 1891. It was not until 1967, however, that the World Intellectual Property Organization (WIPO) was established to administer various conventions and oversee the protection of IPR within the member states. As a U.N. specialized agency, WIPO has promoted worldwide protection of intellectual property and assisted its members in implementing and enforcing their obligations for the protection of IPR.

However, as an intergovernmental forum, WIPO was considered hostile and incentive to the needs of extending domestic levels of IPR protection. A key to achieving a breakthrough for the issue of IPR is to find a place on the global trade agenda where IPR could be included in a negotiated package. It was a belief that “the WTO provided a way to pay off developing countries for accepting stronger obligations.”

More to the point, developed countries were grumbling about the voting system of WIPO, which impeded the efforts of developed countries to promote harmonized standards. As a consequence, IPR was taken into the ambitious agenda of the

68. See Cornish, supra note 6, at 26 (stating that one way of expressing the close association of national policy and legal right lies in the principle of “territoriality,” and this characteristic is often attributed to the major form of intellectual property).

69. Cornish, supra note 6, at 747 (noting that intellectual property “forms a central barrier along the boundary between the fair and unfair competition, and ideas about where that boundary should be drawn undoubtedly vary”).

70. For the full text of these three conventions, see Blackstone’s Statutes on Intellectual Property Law 238, 354, 490 (Andrew Christie & Stephen Gare eds., 6th ed. 2003).

71. See Robert J. Pechman, Seeking Multilateral Protection for Intellectual Property: The United States “TRIPS” over Special 301, 7 Minn. J. Global Trade 179, 181 (1998) (stating that the Paris Convention left the enforcement of IPR up to each member state).


73. See Dinwoodie & Dreyfuss, supra note 64, at 1217–18.

74. Dinwoodie & Dreyfuss, supra note 64, at 1217-18.

75. Dinwoodie & Dreyfuss, supra note 64, at 1218.

Uruguay Round negotiations in 1986. Finally intellectual property was remolded into a new form containing “trade-related” characters, and developed countries started to “pull the debate away from WIPO,” in the hope of integrating the issue of IPR with that of free trade. This led to the emergence of the TRIPS Agreement in Marrakesh in 1994. After intensive negotiations, the United States and other developed countries had at last “achieved their objective of incorporating internationally enforceable [IPR] norms into the world trading system.” Upon its establishment, the TRIPS Agreement was hailed as a “milestone” in the international trade arena, and “the most far-reaching and comprehensive legal regime ever concluded at the multilateral level in the area of [IPR],” which “revolutionized international intellectual property law.”

While TRIPS does not endorse a unitary approach to the framework for IPR protection, it does impose minimum standards for the protection of IPR by which WTO members, including developing and less-developed countries, are to comply with the substantive obligations of WIPO-administered conventions concerning the protection of IPR. As the TRIPS sets minimum standards for IPR without setting a ceiling, members of the WTO are free to negotiate and bound themselves to more stringent terms, whereby developed countries pursue a policy of negotiating bilateral free trade agreements (“FTA”) that require IPR protection far in excess of TRIPS mandated standards, known as TRIPS-Plus. By explicitly embedding the expansive global norms of each member to bring national laws in conformity with the underlined “standards,” TRIPS serves as a point of leverage to harden the asymmetrical bargaining power of the developed countries and facilitate the implementation of the obligations of the developing countries.

The establishment of TRIPS as a distinctive component of the WTO framework is perhaps the most ambitious and adventurous undertaking in the history of international trade to harmonize IPR on a worldwide scale. This is because TRIPS

77. Id.
79. Id.
80. Helfer, supra note 67, at 23.
83. Helfer, supra note 67, at 23.
85. TRIPS Agreement, supra note 1, art. 1.
enables private parties’ recourse to legal remedy at the national level, and when this proves to be ineffective, it enables enforcement by states at an international level, making use of WTO’s dispute settlement mechanism as the last resort. In this sense, it exerts a profound influence on domestic policy-making process with regard to the IPR protection and, as a result, has considerably marginalized the conventional international IPR architecture under the auspices of the WIPO.

D. The Dilemma of the Global IPR System

As the above passage has demonstrated, IPR is based on the notion of balance in that it must optimize benefits for both innovators and society. Meanwhile, countries ought to have IPR standards that line up with their economic strengths and comparative advantages. Although human capital plays a key role in promoting economic growth in the developing world, technological competitiveness has not yet produced desirable inventions. In other words, the pirating of intellectual property fuels economic development until the country reaches the stage where IPR protection becomes economically advantageous to a sufficiently strong set of domestic stakes.

If the establishment of an IPR legal system lacks a social foundation on which society fully realizes adequate economic values of the system, however, the incentives of innovation may recede and the underpinnings that sustain creativities may collapse. In other words, if a country has not developed an endogenously-generated impulse to change their economic behavior, any radical strategy for stronger demands of IPR protection may be counterproductive and only turn into a legal failure.

The emergence of counterfeiting and piracy is a logical consequence of market equilibrium—where demand meets supply. In such a market, authorities lack genuine enthusiasm and native intelligence to enforce IPR because providing substantial IPR protection does not provide immediate economic benefits to the national economy. For many companies lacking independent, homegrown intellectual property, strengthened IPR protection implies that domestic enterprises are obliged to pay a colossal sum of royalties to foreign proprietors, thereby resulting in substantial economic losses.

89. Articles 41–60 of TRIPS provide civil and administrative procedures and remedies, as well as provisional measures to prevent IPR infringement. Article 61 provides criminal procedure. TRIPS Agreement, supra note 1, arts. 41–60.
91. Helfer, supra note 67, at 2.
93. See CORNHISH, supra note 6, at 11–12.
94. See Boldrin & Levine, supra note 57, at 4.
95. See Mikhaelle Schiappacasse, Note, Intellectual Property Rights in China: Technology Transfers and Economic Development, 2 BUFF. INT’L L. J. 164, 166 (2004) (stating that the long-term beneficial effect from strengthened IPR protection in developing countries is dependent on various factors, such as increasing human capital).
99. Id. at 1979.
in escalating production costs and shrinking profit margins.100 Correspondingly, most enterprises are typically content to make imitation products and have invested little capital and made little effort to develop their own creative and innovative technologies.101 Understandably, to harness the weak purchasing power of low-income citizens and to maintain the national revenue generated from imitation, authorities of developing countries often turn a blind eye on counterfeiting and piracy because it is a “legitimate grey market” in the early stages of development—as they know, they need time to phase-in effective policies.102

Nurturing and rewarding innovative talent is the foundation of intellectual property.103 Construction of a system balancing protection and exploitation is therefore indispensable for the establishment of an intellectual creation cycle.104 An economy must reach a certain stage of overall development before it can commit substantial resources to R&D and embark on a genuine effort to protect IPR.105

For example, in global pharmaceutical companies, R&D funds are in excess of one billion dollars.106 On health-related R&D, the U.S. federal government invested more than twenty-five billion dollars in 2005.107 By contrast, the largest amount spent on pharmaceutical R&D in China was only one hundred million Chinese Yuan in 2003, which is about equivalent to twelve million dollars.108 China’s R&D expenditure as a percentage of its gross domestic product (GDP) was 1.34 percent in 2005.109 Foundations need to be set up to support innovation and enhance competitiveness. The practical approach to achieving this is to have sufficient financial resources for investing in IP-related industries and research institutions.

In terms of national economic development in the international balance-of-payments structure, countries are normally technological followers of more industrialized countries at first before usually passing through a cycle in the balance-of-payment structure.110 The primary stage of development is largely characterized by imitation rather than innovation, given the fact that the divergence between the “haves” and “have-nots” in the information age is still significant.111 Overprotection of IPR on an improper development stage may hinder rather than stimulate the trade

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101. Id.
103. BENTLY & SHERMAN, supra note 5, at 3.
104. BENTLY & SHERMAN, supra note 5, at 3.
108. Ning & Jize, supra note, 106.
111. Kirchanski, supra note 8, at 598.
by which technology transfer is achieved and, in the long run, act to the detriment of
global development.112

Faced with the dilemma of the current global IPR system, more and more
commentators and policymakers have discerned a tendency toward overprotection
of IPR, which leads to anti-competitive effects that are pernicious to both developing
and developed countries because they dilute important liberties and freedoms.113 In
the political realm, the harmonization of the universal TRIPS standards has been in
some way depicted as a lever that allows developed countries to maximize their
interests in the global marketplace.114 Taking copyright as an example, implementing a stronger IPR system in the short run should be judged not only by
its ability to protect the interests of copyright owners, but also by its commitment to
avoiding pitfalls caused by overprotection that may lead to cultural appropriation and
hinder the pace of global civilization.115 This is apparently inconsistent with the
long-term goal set out by the TRIPS Agreement.

The development path of a mature IPR system takes the form of the “ladder of
development” toward underlying demand of IPR, which developing countries have
to step on to pass through.116 Apparently, IPR can either trigger or thwart innovation;
it can either promote or hinder economic growth, depending on how it is oriented on
the “ladder of development.” Developed countries, however, have attempted to hide
the secrets of their success and, by introducing the TRIPS regime, have kicked away
the ladder the emerging economies wish to climb to become industrial countries.

II. “RIDING OUT THE LADDER”: THE HIDDEN TRUTH OF THE DEVELOPED COUNTRIES

All countries pass through a stage of development whereby imitation of foreign
products is seen as a strategic business practice.117 All of the industrial countries,
including the European countries, the United States, and Japan, initially had inherent
deficiencies of intellectual property protection.118 As Teresa Watanabe has
demonstrated, the United States passed through a stage of copying European


113. Harris, supra note 90, at 101 (arguing that “TRIPS’ focus on private interests will not only harm developing countries, but also will rebound back against the United States, thereby inflicting significant harm”).

114. A. David Demiray, Intellectual Property and the External Power of the European Community: The New Extension, 16 MICH. J. INT’L L. 187, 200 (1994) (pointing out that a key motivation behind the introduction of TRIPS was a desire of developed states to protect their accrued competitive technological advantage in the face of the threats and opportunities of globalization). See also Engle, supra note 84, at 189 (noting that the functional outcome of TRIPS is, to some extent, to consolidate the global hegemony of a few developed nations).


116. See SACHS, supra note 19, at 16.


118. Endeshaw, supra note 117, at 300.
technology in its early years of economic growth. The development of the United States in the Nineteenth Century was largely based on the adoption of technological, economic, and legal policies from England and France. In the case of Japan, "the total price Japan had to pay for the Western technology it needed to transform itself from a nation of 'rice paper and bamboo' to 'transistors and skyscrapers' was a bargain-basement nine billion dollars." American domestic entrepreneurs were "notorious pirates of British works of intellectual property," as were the Japanese.

A. The Experience of Great Britain

Patent law did not come into being in England until 1624 with the Statute of Monopolies, lagging far behind the first-known written law of patent, which was introduced in Venice in 1474, granting ten years monopoly to the crafts guilds. Most of the early English patent legislation, including the Statute of Monopolies and the subsequent acts passed in the Nineteenth and early Twentieth Centuries, was rather "purpose-made;" that is, it was intended to solve specific problems. In addition, the patent as a term was used less restrictively than it is today. Also, early modern patents are understood to be policy-oriented. For example, the patent system of the time includes Sir Edward Dyer's control over the tanning industry and a patent to John Martin as "informer and prosecutor" for the Crown on penal laws.

The enactments of the patent acts of 1835, 1852, 1883, and 1902 "went beyond a codification of existing case law or well-established administrative practice, [and] utterly lacked the boldness of civilian-style draftsmanship." Patent law at the time "lacked disclosure requirements, incurred very high costs in filing and processing patent applications, and afforded inadequate protection to the patentees." More significantly, patenting by British nationals of foreign inventions was unequivocally...
considered legitimate. Moreover, the process of ruling on petitions or applications for patents was subject to royal discretion and was beyond the reach of the English judiciary until 1932, when the Patent Appeals Tribunal (PAT) was established. Consequently, "[t]he beneficial aspects of the patent system . . . did not prevent its occasional abuse by patentees and their servants." Even the Patents and Designs Act of 1907, the most comprehensive patent legislation by far, marking a significant step toward modernizing patent law in Great Britain, "failed to address major legal issues that were hardly even recognized, much less litigated until 150 years later." Britain did not adopt a trademark law until 1862, when the Merchandise Mark Act was introduced to deal with "commercial thievery," such as the forging of trademarks and the labeling of false quantities. The legislature, however, failed to enact the Act. This led to the subsequent amendment of the Act in 1887 in an effort to ban patently false descriptions and misleading descriptions—notably the then-widespread German practice of selling counterfeit Sheffield cutlery with fake logos.

British copyright law has been seen as the "most significant of the early salvos in the formalization of copyright." Copyright at that time was barely in embryo; however, as "[t]he putative recipients of any benefit to intellectual development from copyright were, rather, the small coterie of 'learned men' who, according to the Statute, needed exclusivity to 'compose and write useful books,' presumably for one another's consumption." Unsurprisingly, in the mid-Eighteenth Century, "copyright theory was torn among inconsistent and conflicting suppositions about its purpose, about the relative importance to it of the natural rights claims of authors, and about the strength of society's claim to greater freedom to share in and utilize new expression and ideas."

B. The Experience of the United States

The term "intellectual property" did not appear in the United States until the second half of the Nineteenth Century. Steve Lohr described it as follows:

In the 19th century, the United States was both a rapidly industrializing nation and—as Charles Dickens, among others, knew all too well—a bold pirate of intellectual property. But these days, when it comes to dealing with developing nations around the world, the United States seems to be ignoring its own

131. Chang, supra note 21, at 84.
132. Meshbesher, supra note 125, at 608.
133. Dent, supra note 126, at 420.
134. Meshbesher, supra note 125, at 601.
137. Chang, supra note 135, at 282.
139. Id. at 972 (quoting Statute of Anne, 1710, 8 Ann., c. 19 (Gr. Brit.)).
140. Id. at 981.
swashbuckling heritage.142

In the area of patent, when patent systems emerged in Europe in the Seventeenth Century, “Americans hardly knew about it.”143 The first patent statute was the Patent Act of 1790, which witnessed the end of the period of mere common law in the regulation of patents, and the “end of patents granted by royal favor.”144 Upon the adoption of the U.S. Constitution, the First Congress drafted the first U.S. patent law, resulting in the Patent Act of 1790, which established basic principles of patent law on a national level.145 Before the 1836 overhaul of the patent law, however, it was not imperative to have proof of originality before a patent was granted.146 Chemical and pharmaceutical substances, moreover, were not considered patentable.147 Through patenting of imported technologies, this lax patent system effectively “encouraged racketeers to engage in ‘rent-seeking’ by patenting devices already in use (‘phony patents’) and by demanding money from their users under threat of suit for infringement.”148

With regard to trademark, it was not until 1870 that the United States enacted the first statute providing for a federal trademark regime. However, a unanimous Supreme Court opinion invalidated the federal trademark laws, holding the federal trademark code unconstitutional.149 This led to the prompt enactment of the Trademark Act of 1881, which was revised in 1905.150 This statute, however, was only applicable to trademarks used in commerce with foreign nations and Indian tribes.151 Moreover, the Trademark Act could only impose infringement liability when “anyone who shall without the consent of the owner reproduce, counterfeit, copy or colorable imitate any such trademark and affix the same to merchandise of substantially the same descriptive properties as those set forth in the registration...”152 The phrase “descriptive properties” gave rise to much uncertainty. Indeed, one commentator observed, “a virtuoso in vagueness must have conceived it.”153 As Edward Rogers remarked, “the whole thing was intended as a practical joke.”154

143. Prager, supra note 127, at 313.
144. Id. at 324–25.
145. Meshbesher, supra note 125, at 609.
146. CHANG, supra note 135, at 279.
147. CHANG, supra note 135, at 279.
148. CHANG, supra note 135, at 279.
150. Id. at 892.
153. Id.
154. Rogers asserts the following: The only people to suffer would be infringers, who now seek to profit by preying on ‘the trade-marks of more successful traders, and lawyers of a certain type properly classed with trade-mark pirates who now make a living by fostering the abuses made possible by our present trade-mark registration statute. The infringer, of course, deserves no sympathy—the lawyers who would be hurt by the repeal of the present act may be expected to complain bitterly. Id. at 669, 675–76.
In 1946, Congress passed the Federal Trademark Act, known as the Lanham Act, which prescribed rules of federal trademark protection and registration.\(^{155}\) Like the Act of 1905, however, the Lanham Act still provided relief against infringement whenever the dependence’s use of the mark was “likely to cause confusion or mistake or to deceive purchasers as to the source of origin of such goods or services.”\(^{156}\) The “practical joke” continued until 1967, when the Lanham Act underwent its first amendment.\(^{157}\) Although Congress attempted to broaden the act’s coverage to include the use of marks—“likely to cause confusion or mistake or to deceive,” thereby making actionable the deceptive and misleading use of marks in such commerce—it made no effort to amend or delete this language clearly protecting the confusion of goods in commerce.\(^{158}\)

It may be more interesting to survey the evolving copyright laws in the United States. Similar to patent and trademark, copyright, in the United States before its independence was virtually non-existent.\(^{159}\) The United States was an ardent follower of Britain in the area of copyright, as “[m]uch of what was ‘understood’ about copyright in the United States in the last decades of the Eighteenth Century was derived from the British experience.”\(^{160}\) The statutes adopted by the U.S. Congress were almost wholly modeled after the Statute of Anne.\(^{161}\) Although, in an exceptional number of states, such as Maryland and North Carolina, copyright laws were enacted following the U.S. Constitution, monopolies on which modern intellectual property rights are based were depicted in their states’ constitutions as “odious, contrary to the spirit of free government, and the principles of commerce,” and as “contrary to the genius of a free state.”\(^{162}\)

Unsurprisingly, after the U.S. Constitution was ratified and the new copyright act passed, debate on the legitimacy of copyrights continued among judiciaries and scholars.\(^{163}\) By the early Twentieth Century, when the 1909 Act was introduced and implemented, the confusion still existed from the copyright and patent clause adoption in the U.S. Constitution, and copyright continued to lack a logical fundamental principle.\(^{164}\) As a result, “copyright reached the Twentieth Century still as mysterious in purpose as it was at its start.”\(^{165}\)

Indeed, as Barbara Ringer, the former Register of Copyrights in the United

\(^{156}\) Id. § 1114(1) (1946).
\(^{157}\) See Rogers, supra note 152, at 669.
\(^{159}\) Zimmerman, supra note 138, at 981–82 (pointing out that, “[p]rior to the American Revolution, copyright protection for colonial authors was essentially non-existent”).
\(^{160}\) Zimmerman, supra note 1389, at 967.
\(^{161}\) Zimmerman, supra note 1389, at 987.
\(^{162}\) The Maryland Constitution of November 3, 1776, § XXXIX specified that “monopolies are odious, contrary to the spirit of free government, and the principles of commerce; and ought not to be suffered.” Edward C. Walterscheid, Defining the Patent and Copyright Term: Term Limits and the Intellectual Property Clause, 7 J. INTELL. PROP. L. 315, 319 n.15 (2000). In a similar vein, the North Carolina Constitution of December 14, 1776, § XXIII, maintained “[t]hat perpetuities and monopolies are contrary to the genius of a free State, and ought not to be allowed.” Id.
\(^{163}\) Zimmerman, supra note 138, at 987.
\(^{164}\) Zimmerman, supra note 138, at 996.
\(^{165}\) Zimmerman, supra note 138, at 996.
States and one of the principal architects of the Copyright Act of 1976, 166 commented four decades ago, "[u]ntil the Second World War the United States had little reason to take pride in its international copyright relations; in fact, it had a great deal to be ashamed of. With few exceptions its role in international copyright was marked by intellectual short-sightedness, political isolationism, and narrow economic self-interest."167 Mirroring the Berne Convention for the Protection of Artistic and Literary Works, 168 the 1976 Copyright Act extended the term of copyright from the fifty-six-year fixed term to a term of life for the author plus an additional fifty years. 169

As has been demonstrated, tolerant IPR national policies are almost inevitable at the early stages of economic development. 170 Indeed, "[t]he U.S. was long a net importer of literary and artistic works, especially from England, which implied that recognition of foreign copyrights would have led to a net deficit in international royalty payments."171 In the period before the U.S. Declaration of Independence, individual American states promoted and reorganized patent rights, but legislators more or less neglected copyright protection. 172 As observed by Peter Yu, shortly after independence, the domestic market was flooded with imported newspapers, periodicals, and books, and "copyright laws were virtually nonexistent."173 In the words of Zorina Khan, "[d]espite the lobbying of numerous authors and celebrities on both sides of the Atlantic, the American copyright statutes did not allow for copyright protection of foreign works for fully one century."174

American copyright law at that time created a discriminatory double standard—copyright protection was only offered to citizens and residents of the United States. 175 As a result, American publishers and producers were able to pirate foreign literature, art, and drama. 176 It was not until 1783 that the first legislation made its


167. Barbara A. Ringer, The Role of the United States in International Copyright—Past, Present, and Future, 56 GEO. L.J. 1050, 1051 (1968); see also PAT CHUA, HOT PROPERTY: THE STEALING OF IDEAS IN AN AGE OF GLOBALIZATION 166 (1st ed. 2005) (noting that the United States, the major promoter of the establishment of the world intellectual property regime, is not blameless in the realm of idea theft in a historical perspective).


170. See Kirchanski, supra note 8, at 598.


174. Khan, supra note 172, at 40.

175. Steve Lohr elaborates as follows:

The works of English authors were copied with abandon and sold cheap to an American public hungry for books. This so irritated Mr. Dickens—whose "Christmas Carol" sold for 6 cents a copy in America, versus $2.50 in England - that he toured the United States in 1842, urging the adoption of international copyright protection as being in the long-term interest of American authors and publishers. Lohr, supra note 142.

176. See Lohr, supra note 142.
debut in Connecticut.\footnote{177 In 1783, Connecticut became the first state to approve an “Act for the Encouragement of Literature and Genius,” followed shortly by Massachusetts and Maryland. See Yu, supra note 173, at 338.} Even at that time, the piracy of foreign authors’ works was still not regarded as immoral.\footnote{178 Yu, supra note 173, at 341.} As a consequence, in the period “between 1800 and 1860, almost half of the bestsellers in the U.S. were pirated, mostly from English novels.”\footnote{179 Yu, supra note 173, at 341.} The “double standard” remained until 1891, when the United States boasted a thriving literary culture and a publishing industry that called for its own intellectual property protection abroad.\footnote{180 Lohr, supra note 142.} Notably, although the foundation of the IPR system had been built by the end of the Nineteenth Century, the United States was not interested in the formation of and participation in an international IPR regime until after the Second World War.\footnote{181 Yu, supra note 173, at 421.} This exemplifies how the American IPR system was established late, lagging largely behind its economic capacity.

Despite the passage of legislation, the enforcement of copyright laws has been lax for much of American history.\footnote{182 Yu, supra note 173, at 421.} For example, by the early 1980s, record piracy had become an enormously profitable business.\footnote{183 Frank L. Fine, Record Piracy and Modern Problems of Innocent Infringement: A Comparative Analysis of United States and British Copyright Law, 21 SANTA CLARA L. REV. 357, 361 (1981) (pointing out that, in early 1970s, a House Report stated that the annual volume of business involving in record pirates in the United States exceeded $100 million).} Today, with its rapid economic growth and technological sophistication, the United States has long since moved away from its notorious past. Furthermore, it has converted “from the most notorious pirate to the most dreadful police” of the IPR regime.\footnote{184 Yu, supra note 173, at 353.}

\section{C. The Experience of Japan}

Although Japan has enjoyed the longest tradition of IPR in Asia, it only serves to illustrate the early development of the Japanese economy.\footnote{185 Christopher Heath, Intellectual Property Rights in Asia—Projects, Programmes and Developments, in GLOBALIZATION OF INTELLECTUAL PROPERTY IN THE 21ST CENTURY: EUROPE, ASIA, AND THE INTERNET 204, 206, 208 (Kraig M. Hill et al. eds., 1998).} In fact, it is not surprising that scholars have characterized Japan’s IPR legal regime as a diffusion of knowledge rather than as facilitating innovation.\footnote{186 See Hamada, supra note 123 (maintaining that Japan’s IPR related legal system emphasized the “diffusion of foreign knowledge rather than creating its own.”).} The first director-general of the Japanese Trademark Registration and the Patent Office, Korekiyo Takahashi, who became prime minister in 1921, wrote in his autobiography when visiting the U.S. Patent Office: “We have looked about us to see what nations are the greatest, so that we can be like them. We said: ‘What is it that makes the United States such a great nation?’[‘] And we investigated and found that it was patents and so we will have patents.”\footnote{187 Wei Shi, Cultural Perplexity in Intellectual Property: Is Stealing a Book an Elegant Offense?, 32 N.C. J. INT’L L. & COM. REG. 1, 34 (2006); see also STRATEGIC COUNCIL ON INTELLECTUAL PROPERTY, JAPAN, INTELLECTUAL PROPERTY POLICY OUTLINE (July 3, 2002), available at}
style IPR legal system in Japan during the Meiji Period was to promote Japan as "an advanced nation," as Emperor Meiji wished, or facilitate its emergence as "a greatest nation," as Premier Takahashi expected.\footnote{188} The nationwide transplantation of an exotic intellectual property system in Japan was virtually a massive copying activity reflected by an ingrained habit of imitation.

Due to the lack of economic underpinnings for strong IPR protection during the early phase of economic development, compulsory licensing was frequently required for a patent holder and, until 1938, a patent was liable to expire in practice if it was not in use by the patent holder.\footnote{189} In the 1960s, the U.S. Patent Office normally approved or rejected an application for a patent within eighteen months.\footnote{190} By contrast, it took the Japanese Patent Office (JPO) an average of five to seven years,\footnote{191} with the Kilby patent case comprising a typical example.\footnote{192} In addition, the JPO required "full disclosure of the technology submitted in the application for the accommodation of imitation."\footnote{193}

Furthermore, although Japan had joined the Paris Union on July 15, 1899, as recently as the 1990s, the duration of patents in Japan was fewer than twenty years, which is the minimum duration set out in the TRIPS Agreement.\footnote{194} It was not until 1994 that the patent law was amended and improved to guarantee at least twenty years after the application for the patent.\footnote{195} Strong IPR protection only came to fruition in Japan due to external pressure from the United States and lobbying pressure from domestic industrial sectors.\footnote{196} In this sense, it was only recently that Japan substantially came into harmony with robust international standards and embarked on a national undertaking to construct a nation built on intellectual property.\footnote{197}

In this context, the Japanese government had a rather tolerant attitude toward intellectual property enforcement and, as a result, counterfeiting and piracy were

\footnote{188} Shi, supra note 187, at 34.
\footnote{189} Hamada, supra note 123.
\footnote{190} Vaughan, supra note 121, at 347.
\footnote{191} Vaughan, supra note 121, at 347.
\footnote{192} In 1961, the electronic giant Texas Instruments obtained the basic patent in Japan covering the integrated circuit, known as the "Kilby patent," under the name of Nobel laureate Jack St. Clair Kilby. The JPO then required that the Texas Instruments application be divided into fourteen segments, of which twelve were ultimately rejected. It took approximately seventeen years for the first patent to be granted after it was filed, "during which time the Japanese semiconductor industry copied and sold many IC chip products, earning billions of dollars in profit." Vaughan, supra note 121, at 347. For a substantive introduction of and comment on the Kilby case, see Dana Rohrabacher & Paul Crilly, The Case for a Strong Patent System, 8 HARV. J.L. & TECH. 263, 265 (1995).
\footnote{193} Vaughan, supra note 121, at 347.
\footnote{194} Hamada, supra note 123.
\footnote{195} Hamada, supra note 123.
\footnote{196} Hamada, supra note 123.
\footnote{197} Since 2002, the Japanese government has initiated various institutional reforms in the area of IPR. The work has been promoted in accordance with the "Intellectual Property Policy Outline" in July 2002 and the "Strategic Program for the Creation, Protection and Exploitation of Intellectual Property" in July 2003, which defined concrete measures the government should take and priorities in establishing a "nation built on intellectual property" where intellectual property is used to create high-value-added products and services with the aim of revitalizing the economy and society. See STRATEGIC COUNCIL ON INTELLECTUAL PRO., JAPAN supra note 187; INTELLECTUAL PROP. POLICY HEADQUARTERS, STRATEGIC PROGRAM FOR THE CREATION, PROTECTION AND EXPLOITATION OF INTELLECTUAL PROPERTY (July 8, 2003).
widespread.\textsuperscript{198} It was not surprising that infringement and trademark counterfeiting were committed with the connivance of The Registered Trademark and Design Law.\textsuperscript{199} It was during this period that Japan seized this historical opportunity.\textsuperscript{200} In 1953, less than a decade after the Second World War, the Japanese strived to recover from the devastation of the war and exceed pre-war levels of productivity and income.\textsuperscript{201} In the early 1960s, the Japanese Prime Minister Hayato Ikeda formulated his ambitious “doubling the income” plan.\textsuperscript{202} Then, at the centennial of the Meiji restoration, when China underwent the Cultural Revolution, Japan’s Gross National Product (GNP) skyrocketed, overtaking Germany to become the second largest economy in the world.\textsuperscript{203} It is no exaggeration that Japan did no more than follow the path of the United States in cloning European technology in its initial stage of economic development.\textsuperscript{204}

Over time, Japan reached a more mature and diversified phase where enhanced IPR protection became an inherent demand of domestic sectors.\textsuperscript{205} One example is Yoshida Kogyo KK, famous maker of YKK zippers, which identified counterfeit YKK zippers imported from Korea and launched a six-year exhaustive marathon lawsuit against the copiers.\textsuperscript{206} Although the judgment was against Yoshida Kogyo KK, the controversy surrounding the case aroused enthusiasm for a much stronger IPR regime.\textsuperscript{207}

Soon after the Yoshida Kogyo KK case, the Japanese Ministry of Finance proposed to establish the “Customs Information Centre,” a “watchdog unit to monitor illicit copying” and to “combat IPR infringement.”\textsuperscript{208} This initiative gradually took effect, and counterfeits from the domestic market in Japan became rare by 1970 due to a drastically overhauled enforcement mechanism to crack down on counterfeits and due to the gradual economic recovery.\textsuperscript{209} There was a period of relapse in the mid-1970s, however, when Japan “faced a resurgence of counterfeit goods that flooded into the Japanese market.”\textsuperscript{210} The rebound phenomenon coincided with the recession, on the heels of the international oil crisis in the 1970s.\textsuperscript{211}

\textsuperscript{198} Id.

\textsuperscript{199} See Michio Morishima, Why Has Japan “Succeeded”? Western Technology and the Japanese Ethos 16 (1982) (stating that “Japanese people changed course completely and devoted all their energies to the acquisition of Western technology.”).

\textsuperscript{200} Id. at 23 (pointing out that “‘Wa-kon Yo-sai’ (Japanese spirit with Western ability) was a Japanese slogan current after the Meiji Revolution when the nation was importing Western technology.”).


\textsuperscript{203} Id. at 82-83.

\textsuperscript{204} Vaughan, supra note 121, at 316–17.

\textsuperscript{205} Vaughan, supra note 121, at 349.

\textsuperscript{206} Vaughan, supra note 121, at 349.

\textsuperscript{207} Vaughan, supra note 121, at 349.

\textsuperscript{208} Vaughan, supra note 121, at 349.


\textsuperscript{210} Id.

\textsuperscript{211} The oil crisis commencing in 1973 and ending in 1974, has had a significant impact on the global economy. For a full account of the oil crisis, see James E. Akins, The Oil Crisis: This Time the Wolf is Here, 51 Foreign Aff. 462 (1973).
III. Analysis: Stop Crying over Spilt Milk—Mop It Up!

Policymakers should try to reconcile between private and public interests; however, how to strike the balance between private gain and public good is a hotly contested question. Over the past half century, developing countries have been determined to call for flexibility of international rules that account for countries’ income inequality and economic disparities. Although the rapid marketplace expansion and technology utilization have made IPR a critical international priority, and thus seen it emerge as a key component on international agendas, the role of IPR in the global marketplace should not be overlooked. For this reason, the international community needs to take a constructive and pragmatic approach to ensure that measures to enforce IPR do not stall or obstruct development. Realistically, given that a substantial amendment to TRIPS does look distant, if not unachievable, granting developing countries the benefits of differential and more favorable treatment might be a workable approach to inspiring and encouraging both the developed and developing world to embrace the common values of the disputed international standards of IPR enforcement.

“Differential and More Favorable Treatment,” also known as the “Special and Differential Treatment” (SDT), of developing countries was a logical consequence of GATT and has been a fundamental principle of the WTO, which is based on the premise that developing countries are inherently disadvantaged and vulnerable in their involvement in the global trading system. In order to achieve objectives set forth in this rationale, the international community has reached a clear consensus that, in general, developing countries may be subject to somewhat different rules and disciplines in areas such as parallel import and compulsory licensing. In addition, developing countries may implement their obligations under the WTO in a manner that would preserve a minimum degree of deference in the domestic policies of the developing countries. As TRIPS provides certain exceptions to the exclusive rights conferred by IPR, it is of pragmatic importance to have a close look at specific areas within the international IPR regime, typically those set out in the TRIPS Agreement. In this sense, this Article has selected parallel imports, compulsory licensing, and the fair use provision of copyright as distinctive and representative samples in their respective areas of trademark, patent, and copyright. This Article has selected public health not merely for the sake of example, but also

212. See Cornish, supra note 6, at 31.
213. Developing countries have been keen to restructure the global IPR system. The gap between the perceptions of the developing and developed world, however, has been significant. As a result, apart from applying for a systemic amendment to the existing regime, WTO members are seeking maximal adjustment toward relevant articles of TRIPS and making temporary arrangements. See Constantine Michalopoulou, Quaker United Nations Office, Special and Differential Treatment of Developing Countries in TRIPS (2003).
214. Id.
215. Id. at 2, 19.
216. Id. at 6.
217. Articles 13, 17, and 30 of TRIPS stipulate limitations and exceptions for the exclusive rights of copyright, trademark and patent respectively. TRIPS Agreement, supra note 1, arts. 13, 17, 30.
because the most powerful lobbying, both for the original TRIPS Agreement,218 and subsequently, represents special interests of the international pharmaceutical industry.

A. Exhaustion of Rights and Article 6 of TRIPS: Fraternizing with Parallel Imports

Exhaustion doctrine has been controversial from the outset as academics and practitioners have yet to achieve consensus on the legitimacy of parallel imports, a subject they have debated for a century. The unresolved tension between IPR protection and the doctrine of the exhaustion of IPR is the key to the issue of parallel imports. However, neither the TRIPS Agreement nor the WIPO conventions provide an explicit and unequivocal interpretation as to what constitutes the criteria for "exhaustion," and whether, let alone to what extent, national and regional IPR should reinforce market segmentation, and thus prohibit parallel importing or allow exhaustion of rights to apply, regardless of whether it is at the first point of sale or not. Accordingly, they are left for individual members to pursue their own policies.219 As developed countries are normally against international exhaustion, a group of developing countries have voiced their deep concern that IPR holders in developed countries may make every effort to outlaw the importation of goods and services legitimately manufactured in developing countries.220 If countries could establish a consensus, confrontations between the two sides would be well avoided.

1. Market Segmentation and the Parallel Trade

The term parallel importing refers to a process by which products that are legitimately manufactured in "Country A" under license from the proprietor at one agreed price and subsequently exported for resale into "Country B" without the authorization of the licensor to the importing country, or their exclusive licensee in "Country B" at a set lower price.221 The disparity in regional market conditions produces the demand for cross-border parallel trade.222 As parallel import is a legal means by which importers can get genuine products for lower prices by exploiting market segmentation,223 from an economic standpoint, this would be of practical interest to consumers. In view of pharmaceutical companies, by setting prices equal to marginal cost (known as Ramsey Pricing), rather than to the cost of production, developed markets are in a position to subsidize lower prices in developing

218. In light of the special needs of developing countries, the TRIPS Agreement provides a special provision in Article 31, under which countries are authorized to impose compulsory licensing under certain circumstances. See TRIPS Agreement, supra note 1, art. 31.
219. TRIPS Agreement, supra note 1, art. 6.
countries. From the viewpoint of owners of IPR, this is not merely an issue of price but also of ensuring consistent quality. Accordingly, where there is market segmentation and price differentials, there will also be parallel importing. Parallel trade is in fact a by-product of otherwise segregated markets.

2. TRIPS Agreement and Exhaustion Doctrine

Similar to the WIPO conventions, the TRIPS Agreement’s treatment of the exhaustion of rights and parallel imports is also ambiguous, and the outcome of the argument over these controversies has been an implicit manipulation, as reflected by Article 6 of the TRIPS Agreement, which stipulates as follows:

For the purposes of dispute settlement under this Agreement, subject to the provisions of Articles 3 and 4 above nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights.

Although the TRIPS Agreement does not directly correspond to the legitimacy of parallel importing, TRIPS Article 6 provides leverage whereby parallel importing is defined by virtue of its nexus to the exhaustion doctrine. According to the article, “once a rights-holder introduces protected goods into the stream of commerce, there is no restriction on how the goods may be further distributed,” due to the fact that their “rights” have been “exhausted.” TRIPS provides for (1) a minimum protection in respect of IPR; (2) a protection to nationals of members to the agreement that such rights will be enforceable; and (3) an equality of protection, on a “National Treatment basis.” By leaving exhaustion to the discretion of the WTO members, TRIPS allows members to determine whether the first sale of the goods “exhausts” a right holder’s exclusive right to continue distributing the goods. This evasive yet rather artful interpretation in Article 6 represents “an agreement to disagree” with regard to parallel importing, leaving the matter to be decided by the WTO members, who are free to adopt their own rules that reflect international exhaustion of rights, and subsequently accept parallel importing.

226. TRIPS Agreement, supra note 1, art 6.
228. See TRIPS Agreement, supra note 1, arts. 15–20.
229. TRIPS Agreement, supra note 1, art. 1.
230. TRIPS Agreement, supra note 1, art. 3.
231. See Ferreira, supra note 227, at 1146.
232. See Peggy B. Sherman & Ellwood F. Oakley, III, Pandemics and Panaceas: The World Trade Organization’s Efforts to Balance Pharmaceutical Patents and Access to AIDS Drugs, 41 AM. BUS. L.J. 353–74 (2004) (Because the issue is not addressed, governments are prohibited from bringing issues relating to parallel importing for dispute resolution via the WTO’s mandatory dispute resolution process).
3. Legitimacy of the Parallel Imports: the European Union, the United States, and China

As has been demonstrated, whether a country prohibits or accepts parallel imports depends, in principle, on whether the country adopts the doctrine of international exhaustion. For instance, the European Union provides Community wide exhaustion — a regional arrangement for the acceptance of a unique form of exhaustion between national and international exhaustion. As demonstrated and examined by the International Association for the Protection of Intellectual Property (AIPPI) Report, under such compromise, the fundamental principle of free movement of goods within the single market may call for the legitimacy of parallel imports within member states. This led to a consensus across the community that such a restriction of IPR is compatible with the overall objectives of the single market.

Thus, the European Union protects the consumer’s interests through the unique principle of “regional exhaustion.” Once sold into the market of the European Union, any licensed rights of the owner are exhausted within the European Union, since the rights have never been exercised. As the economic conditions vary significantly within the European Union, given the new Central and Eastern European E.U. member states, parallel trading is viewed as the “bane of European brand owners.” Gradually and inevitably, the competing interests of brand owners and parallel traders have established various rules of parallel trading that operate within the European Union and incorporate as part of a main agenda item in E.U. negotiations with other non-E.U. countries.

The E.U. trademark regime, established by the First Council Directive 89/104/EEC of December 21, 1988, is based on the principle of “community exhaustion.” Clearly, to establish a unitary E.U. market with identical trademark effect throughout the Community, this directive does not entitle the right holders to prohibit the onward sale of protected goods within the European Union once they have physically and legitimately entered the European Community market. The dilemma of implementing the directive, however, lies in the harmonization of the exhaustion policy at the regional level. Specifically, within those member states whose national legislation articulates international exhaustion, the member states concerned should have to make necessary adjustments to their national laws to keep...
in line with the E.U. provision. Furthermore, the national courts of those member states that adopted the wording of the directive on exhaustion would have to reinterpret or restate their national legislation in order to comply with the decisions of the European Court of Justice (ECJ). Ironically, although two decades have passed since the emergence of the directive, the exhaustion doctrine still "lies at the heart of the debate," and the exclusion of parallel imports remains a "gray" area of law, with the European Commission grappling over the issues.

That said, within the European Union, the issue of parallel imports has produced considerable case law both among national courts within the member states and in the ECJ. On July 17, 2014, the ECJ answered a request for a preliminary ruling from a Greek Court inquiring as to whether, and, if yes, under which circumstance, the use by Honda Giken Kabushiki Kaisha of its trademarks to prevent the importation of Honda spare parts from Thailand into Greece constitutes a violation of European competition law or TRIPS. The ECJ reaffirmed that Trademark exhaustion in the E.U. is community-wide and this position remains unchanged.

In the United States, parallel importing is governed by Sections 32, 42, and 43(a) of the Lanham Act, and Section 1526 of the Tariff Act. The Lanham Act prohibits the importation of goods which "copy or simulate" a registered trademark owned by U.S. citizens or corporations, regardless of whether that manufacturer is a domestic or foreign entity. Similarly, based on the Tariff Act, the importation of merchandise bearing a registered trademark owned by a U.S. domiciliary without the trademark owner's consent is prohibited, despite the fact that the goods are genuine.

Recent case law seems to have recognized the concept of "international exhaustion." On March 19, 2013, the Supreme Court released its unprecedented opinion in Kirtsaeng v. John Wiley & Sons, a case involving the parallel

243. Id.
244. BENTLY & SHERMAN, supra note 5, at 892-96; see also Melvyn J. Simburg et al., INTERNATIONAL INTELLECTUAL PROPERTY RIGHTS, 38 INT'L. LAW. 293, 299 (2004) (discussing the proliferation of cases brought in both national courts and the ECJ as a result of importing trademark products into the European Community).
247. Section 1526(a) states the following:
[I]t shall be unlawful to import into the United States any merchandise of foreign manufacture if such merchandise, or the label, sign, print, package, wrapper, or receptacle, bears a trademark owned by a citizen of, or by a corporation or association created or organized within, the United States, and registered in the Patent and Trademark Office by a person domiciled in the United States, under the provisions of sections 81 to 109 of title 15, and if a copy of the certificate of registration of such trademark is filed with the Secretary of the Treasury, in the manner provided in section 106 of said title 15, unless written consent of the owner of such trademark is produced at the time of making entry. 19 U.S.C. § 1526(a) (2012).
importation of copyrighted works. The defendant was a Thai student who purchased textbooks in Thailand and then resold them at a profit in the United States. The Second Circuit Court of Appeals held that the first sale doctrine did not apply to foreign made goods, but the Supreme Court reversed this judgment, holding that, contrary to the judgments of the two lower courts, the first sale doctrine does apply to foreign-made works. In other words, the resale of the books did not constitute infringement of Wiley's copyright, as Wiley's rights of distribution of the books had been "exhausted" by the initial sale in Thailand. This implies that the law of the United States recognizes the concept of the "international exhaustion doctrine," at least in the context of copyright law.

In China, the picture of parallel trade is somewhat blurry in that Chinese patent law denies parallel imports, whereas Chinese trademark law remains silent with regard to exhaustion. Previously, China lacked economic grounds for engaging in parallel imports because it was conventionally known for its low labor and production costs, and prices in China were typically much lower than those in the international market. Constrained by the high import quotas and tough customs duties, parallel imports had not gained adequate space in which to function. Accordingly, it was only with the increase of market-oriented reforms after China's entry into the WTO that the issue of parallel imports became significant in China. Though controversial, as some commentators have suggested, under current economic and social conditions, it would be a sudden leap for China to adopt any measures aimed at restricting parallel imports. On the one hand, as explained above, parallel importing has been accepted by large number of countries, primarily due to the general acquiescence given by both the TRIPS Agreement and the Paris Convention. Understandably, there are no imminent international treaty obligations

251. Id. at 1356.
252. Id. at 1355–56 (confirming that "[t]he 'first sale' doctrine applies to copies of a copyrighted work lawfully made abroad").
253. Id. at 1387.
254. Id.
255. Chinese patent law requires the following:
    After the grant of the patent right for an invention or utility model, except as provided in Article 14 of this Law, no entity or individual may, without the authorization of the patentee, exploit the patent, that is, make, use or sell the patented product, or use the patented process, for production business purposes.
    After the grant of a patent right for a design, no entity or individual may, without the authorization of the patentee, exploit the patent, that is, make or sell the product, incorporating the patent design, for production or business purposes. See Zhonghua Renmin Gongheguo Zhuanli Fa [Patent Law of the People's Republic of China] (promulgated by the Standing Comm. Nat'l People's Cong., Mar. 12, 1984, effective Dec. 27, 2008) 12 P.R.C. LAWS 173, art. 11 (China), translated in 24 I.L.M. 295 (1985).
257. Xiaodong Yuan, Research on Trade Mark Parallel Imports in China, 25 EUR. INTELL. PROP. REV. 224 (2003); see also Chow, supra note 256.
258. Wong, supra note 223, at 164.
259. Yuan, supra note 257, at 224.
260. See, e.g., Wong, supra note 223, at 181.
to prohibit or restrict parallel imports. On the other hand, the exclusive rights of trademark holders are likely to be abused if excessive rights are demanded and granted, and this appears to be inconsistent with international norms of competition law curbing monopolistic conduct and promoting healthy competition. As China is yet to establish a mature market-oriented economy and still lacks an established framework of antitrust law, China needs to adopt a cautious approach to permitting the doctrine of international exhaustion and subsequently introducing parallel imports to prevent or ameliorate any negative effect of foreseeable monopolization.

The parallel trade has turned into a global issue at the cutting edge of the debates highlighting the interaction between law and development. If parallel imports were prohibited in underdeveloped countries, it would be impossible to provide consumers in these countries affordable access to quality products. On the contrary, it may lead to increased living costs and expanded disparities. Moreover, if parallel importation is not permitted, as scholars have already predicted, huge prices disparities and lucrative profits in selling products of name foreign brands would induce unscrupulous traders to counterfeit such products. Underdeveloped countries may make full use of parallel trade to manufacture licensed products and re-export them at lower prices to rich countries for the “perceived boost to economic development.” In certain circumstances, it is fairly enough for a developing country to produce these licensed goods, particularly pharmaceutical products, and re-distribute them to other developing countries. It is of particular significance for underdeveloped countries to facilitate timely access to generic versions of medicines from developed countries via parallel imports, by which the imports of the former from the latter may be subject to competition from parallel imports, leading to reduced profit margin of the name foreign brands and, as a result, bringing benefit to the consumers.

B. Compulsory Licensing: Daylight Robbery or Timely Help?

The TRIPS Agreement is designed “to reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade.” It is however not intended to achieve this goal at the expense of diminishing the range of options available to governments to promote social affairs and safeguard public health. As the regional economic disparities and the

261. Chow, supra note 256, at 1283 n.2.
262. Wong, supra note 223, at 180.
263. Wong, supra note 223, at 180.
264. Wong, supra note 223, at 180 (although controversial Antitrust Law, literally translated as “Anti-monopoly” Law, was enacted in August 2007 after lengthy debates, it has taken longer for the law to be implemented and enforced and controversy still remains).
265. Wong, supra note 223, at 180.
266. Wong, supra note 223, at 180.; see also Yuan, supra note 257, at 225.
268. Id.
269. TRIPS Agreement, supra note 1, pmbl.
knowledge gap continue to grow, countries should envisage the increasing demand for a short-term strategy to address imminent challenges of access, as well as a longer-term approach to enhancing capacity building.270

As examined earlier, TRIPS contains exceptions and provides reasonable flexibility for developing and less-developed countries to obtain additional acquisition based on varied economic strengths and unbalanced technological capacities.271 For example, Article 31 of TRIPS provides the basis for the legitimate use of the compulsory licensing, which involves the freedom for national governments to issue licenses enabling the product to be produced domestically, subject only to providing the patent holder with reasonable compensation.272 This allows the national governments or authorized third parties to manufacture a generic version of the patented drug and to sell it domestically at affordable prices.273

In Article 31, compulsory licensing is phrased generically as “other use without authorization of the right holder,” whereby members are allowed to authorize “other use” of the subject matter of a pharmaceutical patent without the patent owner’s consent, provided that it fulfills the requirements set out in paragraphs (a) to (l) of this article. An initial hurdle lies with Article 31(f), which expressly requires production under compulsory licensing to be predominantly for the supply of the domestic market.274 Members with insufficient or no manufacturing capacities in the pharmaceutical sector are left with difficulties in taking proper advantage of the flexibilities under Article 31.

At the fourth WTO Ministerial Conference, where the Declaration on TRIPS and Public Health in Doha was adopted, Ministers reached a consensus that “each WTO Member has the right to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted.” 275 This provision allows members to decide the grounds, which warrant issue of a compulsory license. 276

Further to this point, WTO General Council Decision of 30 August 2003 adopted interim waivers with regard to paragraphs (f) and (h) of Article 31 so that members lacking sufficient manufacturing capacity are legally allowed to import generic pharmaceutical products manufactured under compulsory licensing, and an eligible importing member is not liable to pay remuneration if it has already been provided for by the manufacturer in the exporting country.277

On December 6, 2005, in order to render the interim waivers permanent, the WTO General Council adopted a protocol for the amendment of the TRIPS Agreement, known as “TRIPS Waiver,” by inserting a new article 31bis and an annex

271. See Cychosz, supra note 222, at 994.
272. TRIPS Agreement, supra note 1, art. 31.
274. TRIPS Agreement, supra note 1, art. 31(f).
into the TRIPS Agreement. The protocol will enter into force upon acceptance of the amendment by two thirds of the members. The deadline for acceptance of the change, which was originally set for December 1, 2007, has been extended four times, which will come to an end on December 31, 2015, and so far only 57 out of the 161 WTO members have accepted the amendment, which is still far below the threshold for implementing the proposed change. It seems that the provisional nature of the TRIPS waiver will remain intact in the years to come. Nevertheless, as a political compromise, compulsory licensing is used unexceptionally and mainly to counter cases of market failure, and this has proved to be an effective tool for developing countries to take advantages of policy options in reducing pharmaceutical prices and facilitating access to generic medicines.

C. Fair Use of Copyright: Where Is the Bottom Line?

Copyright is inextricably tied up with culture, and "has emerged as one of the most important means of regulating the international flow of ideas and knowledge-based products." In the digital environment, copyright has a distinctive global and transnational nature, which makes it essential to establish an international system for the effective management of the copyright.

However, the actual positions that developed and developing countries' attempts to engage in the global copyright system diverge. Developed countries are primarily producers of copyright-protected products, and the main beneficiaries of those copyrights. By contrast, developing countries are generally consumers of copyrighted works. According to a UNESCO Information Report, "copyright

278. See Amendment of the TRIPS Agreement, (December 8, 2005), https://www.wto.org/english/tratop_e/trips_e/wt1644_e.htm. Article 1 of the Protocol stipulates that: The Agreement on Trade-Related Aspects of Intellectual Property Rights (the "TRIPS Agreement") shall, upon the entry into force of the Protocol pursuant to paragraph 4, be amended as set out in the Annex to this Protocol, by inserting Article 31bis after Article 31 and by inserting the Annex to the TRIPS Agreement after Article 73.

279. See General Council, Amendment of the TRIPS Agreement-Extension of the Period For the Acceptance of Members of the Protocol Amending the TRIPS Agreement, WTO Doc. WT/L/711 (Decision of 18 December 2007); General Council, Amendment of the TRIPS Agreement-Second Extension of the Period For the Acceptance of Members of the Protocol Amending the TRIPS Agreement, WTO Doc. WT/L/785 (Decision of 17 December 2009); General Council, Amendment of the TRIPS Agreement-Third Extension of the Period For the Acceptance of Members of the Protocol Amending the TRIPS Agreement, WTO Doc. WT/L/829 (Decision of 30 November 2011); General Council, Amendment of the TRIPS Agreement-Fourth Extension of the Period For the Acceptance of Members of the Protocol Amending the TRIPS Agreement, WTO Doc. WT/L/899 (Decision of 26 November 2013).


281. See Correa, supra note 221, at 43-44; see also Jiang, supra note 225, at 231 (stating that compulsory licensing has been used to remedy anti-competitive practices, particularly in the pharmaceutical industry).


283. Alan Story, Burn Berne: Why the Leading International Copyright Convention Must be Repealed, 40 HOUSTON L. REV. 763, 766 (2003) (concluding that "the United States is the main producer, seller, and beneficiary of intellectual property exports").

284. Id. at 769.

285. Id.
ownership is largely in the possession of the major copyright corporations.286 By exercising monopoly power, the rights-holders “place low per capita income countries and smaller economies at a significant disadvantage.”287 Policy-makers, commentators and scholars are considering potential solutions to remedy this shortfall, including that the “fair use” of copyright may be a plausible option.

1. “Fair Use” Doctrine in the Realm of International Law

The fair use doctrine developed over two centuries ago, following the creation of the copyright by the Statute of Anne of 1709.288 “Fair use,” as a doctrine of national law, particularly in U.S. copyright law,289 is based on the rationale that “every book in literature, science and art, borrows and must necessarily borrow, and use much which was well-known before.” Expressions of knowledge and intellectual creativities are, in part, derivative.290 Intellectual activity has obvious characters of inheritance and continuity. The creative activity in such areas as literature, philosophy, history, and even the natural sciences is explicitly referential and, in this sense, a wholly original thought or invention does not exist.291 In this regard, as a common exception to the exclusive right conferred by copyright law, fair use attempts to balance the rights of copyright owners and society’s interests as a whole and, as a distinctive copyright doctrine, serves to alleviate the “inherent tension in the need simultaneously to protect copyrighted material and to allow others to build upon it.”292 Although disagreements may be voiced in various applications, “recognition of the function of fair use as integral to copyright’s objectives leads to a coherent and useful set of principles.”293

In the realm of international law, “fair use” still lacks sufficient legitimacy and needs greater justification. As the most influential agreement in the sphere of international intellectual property law, the TRIPS Agreement is playing a unique role in the international law arena. On one hand, the TRIPS Agreement sets out the minimum standard of and a procedure for the protection of copyright and the neighboring rights. On the other hand, the copyright provisions do not give a clear guidance as other IPR provisions, like patents, that were envisioned in light of developing new international standards of protection considered beneficial for developing countries.294 In this regard, developing countries have found themselves in a dilemma of being unable to have a legal basis to challenge the asymmetrical

286. UNESCO, supra note 282, at 320.
287. UNESCO, supra note 282, at 320.
289. Id. at 1105 (“In the United States, the doctrine was received and eventually incorporated into the Copyright Act of 1976, which provides that ‘the fair use of a copyrighted work . . . is not an infringement of copyright.’
290. Id. at 1109.
291. Id.
293. Leval, supra note 288, at 1110.
copyright system. While some commentators have attempted to justify the claim of developing countries in the context of fair use, opponents have defended that the doctrine of fair use is not compatible with international law, despite that fact that it stands as a common law doctrine. 

However, as Ruth Okediji has suggested, “the status of the fair use doctrine under international law is, at best, uncertain,” international law should nevertheless specify such a standard. By reference, the TRIPS Agreement incorporates the treatment of exceptions to copyright owners set out in the Berne Convention, which reflects a codification of international norms of the fair uses. As a compromise, TRIPS allows each WTO member to exercise its discretions and make its own determinations as to the compatibility of TRIPS to local circumstances. One possible option could be to adopt the fair use doctrine in an international context, but this process will not become operational without advocacy from the international community using the TRIPS framework.

2. Bridging the Digital Divide: From the “Copyright Poor” to the “Copyright Rich”

This Article has argued that a flexible copyright policy is more suitable in almost all countries at their nascent stage of development. Interestingly, to some extent at least, copyright law has represented the interests of the stakeholders. As Professor Jessica Litman observes, the most significant characteristic of copyright laws throughout the Twentieth Century is that “it is for all of the lawyers who represent the current stakeholders to get together and hash out all of the details among themselves.” Over the centuries, the international copyright debate has been marked by an ongoing interplay of the “copyright rich” versus the “copyright poor,” and the “haves” versus “have-nots” in the copyright regime. The widespread copyright violations can be depicted as a “battle between the stakeholders and non-stakeholders over the change and retention of the status quo.” The stakeholders would ardently preserve their trade competitiveness in the global marketplace, whereas the non-stakeholders act as zealous performers to expand their market share and strive to ascend into stakeholders. Until these nations advance into stakeholders, however, they may have limited incentives and motivations to do more

295. Correa, supra note 221, at 22.
296. Engle, supra note 84, at 222.
298. Id. at 87–89.
299. Id. at 142–47.
300. Engle, supra note 84, at 222–23.
303. SIVA VAIDHYANATHAN, COPYRIGHTS AND COPYWRONGS: THE RISE OF INTELLECTUAL PROPERTY AND HOW IT THREATENS CREATIVITY 103, 105 (2003); see also Yu, supra note 173, at 402 (stating that copyright law has always involved a discussion of the difference between the “haves” and “have-nots”).
304. Yu, supra note 173, at 335, 403.
305. Yu, supra note 173, at 403.
than copying and imitating.\textsuperscript{306} In this scenario, policymakers on the side of the stakeholders should "help the non-stakeholders develop a stake in the system and understand how they can protect their products and receive royalties,"\textsuperscript{307} For example, they should convince the non-stakeholders of the benefits of developing their own software industry, so that the concept of copyright takes root during the process of local adaptations and become domestically assimilated.

In this context, it is advisable for developing countries to work out possible solutions that maximize use of digital technology and facilitate access to information while reaping financial reward from the protection of copyright.\textsuperscript{308} It is worth reminding that, in many parts of the developing world, there are "more pressing concerns than copyright rules," such as poverty, illiteracy, unemployment, and so on.\textsuperscript{309} Policymakers should pay special attention to the tension between meeting the public need and pursuing commercial interests.\textsuperscript{310}

If policymakers take no positive actions, the accelerating knowledge gap may exacerbate the disparities in the digital realm.\textsuperscript{311} As noted by some scholars, policymakers should implement temporary arrangements, such as introducing affordable licensing and providing technical support, so that, over time, there will be indigenously fostered enthusiasm of and domestic commercial interest in the protection of copyright.\textsuperscript{312} Only in this way can a "copyright poor" or non-stakeholder state be upgraded into a "copyright rich" or stakeholder state in the near future.

3. Open Access: An Inevitable Trend in a Digital Society?

In the process of the transformation of a state from "copyright poor" to "copyright rich," industries can play an equally important role alongside the governments. A good illustrative example at point is Apple's iTunes, which was claimed to be "the driving force behind the digital music revolution."\textsuperscript{313} One decade ago, in April 2003, Apple debuted its online music service, the iTunes Music Store (now the iTunes Store), allowing customers to download legitimately from recording companies and get free access to music.\textsuperscript{314} In January 2006, a major Belgian music retailer, Belgacom Skynet, established a partnership with Apple's iTunes Music Store, further offering their customers twenty free iTunes downloads.\textsuperscript{315} According to the media release, iTunes has offered "the first small glimmer of hope that

\textsuperscript{306} Yu, supra note 173, at 403.
\textsuperscript{307} Yu, supra note 173, at 336.
\textsuperscript{308} Burgiel & Schipper, supra note 270, at 6.
\textsuperscript{309} Burgiel & Schipper, supra note 270, at 6.
\textsuperscript{310} Burgiel & Schipper, supra note 270, at 6.
\textsuperscript{311} Burgiel & Schipper, supra note 270, at 6.
\textsuperscript{312} Burgiel & Schipper, supra note 270, at 6.
\textsuperscript{313} Press Release, Belgacom & Skynet, Belgacom and Skynet Expand Their Online Music Services with iTunes Music Store (Jan. 27, 2006), http://macdailynews.com/2006/01/30/belgiums_belgacom_skynet_music_club_to_be_folded_into_apples_itms/.
\textsuperscript{315} Belgacom & Skynet, supra note 313.
Hollywood and the music industry may actually avert a digital Armageddon in which perfect copies of every artist’s work become instantly obtainable online for free.”316 As commented by Joseph Menn, author of All the Rave: The Rise and Fall of Shawn Fanning’s Napster, iTunes has created “the best thing that’s come along for consumers who would rather not steal.”317

While open access has become an increasingly popular method for data sharing, the implementation of open access remain at the policy level, and there is no specific legal mechanism governing open-access.318 Although envisioned as a nonprofit and voluntary model, open access as a doctrine is derived in the legal and regulatory framework of copyright law.319 Following the establishment of the TRIPS regime, two international conventions on copyright law, namely the Copyright Treaty and Treaty on Performances and Phonograms, were adopted under auspices of WIPO.320 Although the primary purpose of these conventions was to provide intensified protection of copyrighted over unauthorized utilization, relevant agencies and authorities have put forward various initiatives in association with “open access.”321 The primary objective of these initiatives is to make full use of digital technology in a manner that facilitates freedom of sharing.322 Government agencies may implement certain initiatives, such as free software, open content, open access, and open standards, under an open and collaborative model of R&D.323 Meanwhile, one empirical study on new copyright licensing models demonstrates a unique approach to applying dual licensing for one product, especially with reference to the legal and economic requirements of dual licensing.324 More encouragingly, in the World Summit on the Information Society, participating states took specific measures to promote and implement “the international common desire to build a people-centered, inclusive and development-oriented information society.”325

While still controversial, as Correa has points out, open-access initiatives may be pragmatically relevant and particularly appropriate in fields of scientific research and software development.326 As an alternative to the restricted access model, open

317. Id.
319. Id. at 1–2.
325. World Summit on the Information Society, supra note 318, at 1, 4 (stating that “the sharing and strengthening of global knowledge for development can be enhanced by removing barriers to equitable access to information for economic, social, political, health, cultural, educational, and scientific activities and by facilitating access to public domain information, including by universal design and the use of assistive technologies”).
access has gained wide adherents in the community of information technology. It is not surprising that open-source software is playing an increasingly important role for information technology in the enterprise and government architecture.

In Europe, although the European Parliament has approved the IPR Enforcement Directive for the prohibition of widespread copying, there has been a growing demand for diversity of licensing arrangements. In addition, varieties of licenses, which offer more freedom than conventional copyright licenses, have come into being. Among the new types of licenses, the Creative Commons, "a nonprofit organization that offers artists, authors, publishers and musicians the option of creating and defining a flexible copyright for their creative works," is the most interesting and promising achievement. Notably, on February 17, 2012, the European Commission took concrete steps to give substance to open access to publicly funded research.

More encouragingly, there have been a number of landmark copyright litigation efforts endorsing the validity of the new forms of licenses. In the Netherlands, having reviewed the Creative Commons license, courts upheld the validity of this alternative copyright license. This decision was particularly noteworthy because, as a landmark case about the new type of license, it firmly endorsed the principle that "the conditions of a Creative Commons license automatically apply to the content licensed under it, and bind users of such content even without expressly agreeing to, 

332. See id.
335. Adam Curry, a famous internet entrepreneur, sued Weekend, a Dutch gossip magazine, for copyright infringement after the magazine published family photos of Curry’s daughter without his prior consent. These pictures were published under a specific non-commercial Creative Commons license. The photos also carried the notice that “this photo is public.” Curry sued for both copyright and privacy infringements. Weekend defended itself, maintaining that it did not understand the reference to the Creative Commons license. The magazine also claimed there could be no damages because the pictures on the website were publicly accessible. On March 6, 2006, the District Court of Amsterdam ruled in summary proceedings that Weekend could not republish pictures as Weekend did not seek or obtain prior permission. For a more detailed introduction about the case and its judgment, see Mia Garlick, Creative Commons Licenses Enforced in Dutch Court, CREATIVE COMMONS (Mar. 16, 2006) http://creativecommons.org/weblog/entry/5823.
336. Id.
or having knowledge of, the conditions of the license.” As recent as November 2013, the lengthy copyright litigation between Authors Guild and Google reached end. Federal judge Denny Chin justified Google’s book scanning project on the ground of fair use.

Another recent development was the open-access initiative released by the U.S. White House Office of Science and Technology Policy (OSTP) on February 22, 2013. The new open-access directive required “each federal agency with more than $100 million in annual conduct of research and development expenditures to develop a plan to support increased public access to the results of research funded by the Federal Government,” ideally within one year of publication and requiring researchers to better account for and manage the resulting publications and digital data resulting from federally funded scientific research. Although government officials must clarify the concepts and rationales underlined in the memorandum, this initiative represents a remarkable breakthrough in the development of public access.

CONCLUSION

Economic factors constitute one of the important reasons for the IPR enforcement problems in developing countries. The TRIPS Agreement provides a standard of protection for domestic innovators. This provision, however, is virtually ineffective until a later stage in a country’s development. When an economy is premature, a tolerant IPR policy helps an economy bloom. Within the current WTO regime, developing countries should make full use of the flexibilities within TRIPS, such as the permission of parallel trade and the application of compulsory licensing. At the point where economic maturity occurs, and when the new concept of IPR is slowly filtering into people’s minds, higher standards of IPR will be called for automatically.

The evolutionary trajectory of a mature IPR regime takes the form of the “ladder of development” toward underlying demand of IPR. The “ladder of development” is a dominant aspect that underpins domestic adaptation of a strengthened IPR standard in various socioeconomic circumstances. IPR protection in developing countries should not be as strong as that of developed countries in the “catch-up” phase until they are about to ascend the “ladder of development.” However, TRIPS serves as leverage for kicking off the ladder of development, by which the developing countries wish to climb to become industrial countries. The TRIPS Agreement represents a successful culmination of constant attempts by developed countries to consolidate their monopoly status over the global trading system and acts as a barrier to the ability of developing countries to obtain technologies necessary for their

339. Id.
341. Id.
economic development. The overlooked fact is that developed and developing countries are within an interdependent and inseparable economic community in the global trading system. Overprotection of IPR in a developing country may impair the overall welfare of that country and ultimately result in reduced world welfare, thus undermining interest of the developed countries. In other words, the optimal pattern for the IPR enforcement at the global level requires altruistic endeavors with an expectation of economic return in the future. In this context, developed countries should formulate long-term strategies to bridge the economic divide between “copyright rich” and “copyright poor” states. This will aid developing countries reach the “development stage” and change their “economic behavior” rather than “kicking off the ladder of development.”