



Protection of Intellectual Property Rights under International Agreements

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Abstract

Intellectual property rights (IPRs) have become a cornerstone of the global economic and legal system, particularly in light of rapid technological developments and the digital revolution. The protection of IPRs ensures the promotion of innovation, creativity, and fair competition, while also safeguarding the interests of authors, inventors, and entrepreneurs. However, in an interconnected world, national legal frameworks alone are insufficient to guarantee effective protection. This has led to the emergence of various international agreements, most notably the Paris Convention, the Berne Convention, and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). These agreements have established minimum standards of protection and enforcement, while also raising debates about their fairness and impact on developing countries. This article explores the conceptual foundations of intellectual property, analyzes the most significant international agreements governing its protection, and examines contemporary challenges such as digital piracy, counterfeiting, and the balance between private rights and public interests. It further highlights the role of states, particularly in the Arab and African regions, in aligning national laws with international obligations. The study concludes by emphasizing the necessity of a balanced and

cooperative international legal framework that fosters innovation and economic growth while ensuring equitable access to knowledge and culture.

Keywords: *Intellectual Property Rights – International Agreements – TRIPS – WIPO – Copyright – Patents – Globalization – Digital Economy – Enforcement – Public Interest*

Protection des droits de propriété intellectuelle dans le cadre d'accords internationaux

Résumé

Les droits de propriété intellectuelle (DPI) sont devenus une pierre angulaire du système économique et juridique mondial, en particulier à la lumière des progrès technologiques rapides et de la révolution numérique. La protection des DPI garantit la promotion de l'innovation, de la créativité et de la concurrence loyale, tout en préservant les intérêts des auteurs, des inventeurs et des entrepreneurs. Cependant, dans un monde interconnecté, les cadres juridiques nationaux ne suffisent pas à eux seuls à garantir une protection efficace. Cela a conduit à l'émergence de divers accords internationaux, notamment la Convention de Paris, la Convention de Berne et l'Accord sur les aspects des droits de propriété intellectuelle qui touchent au commerce (ADPIC). Ces accords ont établi des normes minimales de protection et d'application, tout en soulevant des débats sur leur équité et leur impact sur les pays en développement. Cet article explore les fondements conceptuels de la propriété intellectuelle, analyse les accords internationaux les plus importants régissant sa protection et examine les défis contemporains tels que le piratage numérique, la contrefaçon et l'équilibre entre les droits privés et les intérêts publics. Il souligne en outre le rôle des États, en particulier dans les régions arabes et africaines, dans l'alignement des législations nationales sur les obligations internationales. L'étude conclut en soulignant la nécessité d'un cadre juridique international équilibré et coopératif qui favorise l'innovation et la croissance économique tout en garantissant un accès équitable à la connaissance et à la culture.

Mots clés : *Droits de propriété intellectuelle – Accords internationaux – ADPIC – OMPI – Droit d'auteur – Brevets – Mondialisation – Économie numérique – Application – Intérêt public*



Introduction

Background: the rise of intellectual property (IP) in the global economy

Over the last century, intellectual property has evolved from a secondary issue of national legal systems into a central pillar of the international economic order. Whereas the industrial age was defined largely by the accumulation of physical capital and natural resources, the contemporary global economy is increasingly knowledge-driven, with intangible assets such as patents, copyrights, and trademarks representing the bulk of corporate and national wealth. The World Intellectual Property Organization (WIPO) has estimated that in many advanced economies, over 80 percent of the market value of leading firms derives from intellectual assets rather than from tangible resources (WIPO, 2020). This transition has been accelerated by globalization, as innovations in information technology, pharmaceuticals, and cultural production flow rapidly across borders, making consistent protection of intellectual property rights indispensable. Without an effective international framework, the uneven protection of rights in one jurisdiction can undermine the ability of creators and inventors to capture the benefits of their work globally, which explains why IP has become a permanent feature of trade negotiations and a strategic tool in foreign policy (Drahos & Braithwaite, 2002; Gervais, 2012).

The importance of protecting IP in the digital era

The digital revolution has radically reshaped the conditions under which intellectual property is created,

disseminated, and consumed, thereby heightening the importance of robust protective mechanisms. Unlike traditional physical goods, digital content—whether music, films, books, or software—can be copied and distributed at virtually no cost, often to millions of users worldwide within seconds. This ease of reproduction poses enormous challenges to the sustainability of cultural and technological industries, as creators face a constant risk of uncompensated use of their works (Boyle, 2008). At the same time, emerging technologies complicate the picture further: artificial intelligence generates creative outputs that test conventional notions of authorship, 3D printing enables decentralized reproduction of patented objects, and biotechnology pushes the boundaries of what counts as patentable subject matter (Samuelson, 2016). Digital platforms such as YouTube, Spotify, and Amazon Kindle illustrate both the potential and the tension in this environment: while they expand access to creative works, they also depend heavily on licensing systems, copyright enforcement, and digital rights management to ensure fair remuneration for authors. In the pharmaceutical industry, digital technologies accelerate research and drug development, yet patents remain indispensable to safeguard investments, a reality that became especially visible during global health crises when the need for balancing exclusivity with access to essential medicines sparked heated international debates (Correa, 2000). Thus, the digital era not only magnifies the value of intellectual property but also intensifies the debate on how best to design protective regimes that encourage innovation while preserving equitable access.



Research problem: challenges of harmonizing national laws with international standards

Although a network of international agreements provides a common legal framework for intellectual property protection, the reality on the ground demonstrates considerable disparities in how rights are regulated and enforced across jurisdictions. Developed countries tend to adopt stringent standards, driven by the demands of their high-tech and creative industries, while developing countries often struggle to implement even minimum requirements because of limited institutional capacity, economic priorities, or political resistance (Maskus & Reichman, 2005). The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was designed to harmonize these standards, yet its implementation has highlighted the difficulties of balancing sovereignty with international commitments. Governments must weigh their obligations to protect private rights with their duty to secure access to education, healthcare, and technology for their citizens. This tension is particularly evident in the pharmaceutical sector, where patent protection can restrict access to life-saving medicines, raising questions about the compatibility of strict international standards with the public interest (Abbott & Cottier, 1999). Furthermore, many countries lack the judicial expertise or enforcement mechanisms necessary to prosecute complex IP cases, which results in uneven application of the law despite formal adherence to treaties (Yu, 2007). Cultural differences further complicate harmonization, as some societies emphasize communal or traditional ownership of knowledge in ways that clash with Western notions of exclusive rights (Helfer &

Austin, 2011). The research problem at the heart of this article, therefore, is whether the international IP regime can reconcile the demand for global uniformity with the diversity of national interests, cultural values, and developmental needs.

Objectives and significance of the study

The purpose of this study is to provide a critical analysis of the international framework governing intellectual property rights, with a particular focus on the major agreements that shape the field and the practical challenges that emerge in their implementation. Beyond merely cataloging legal instruments, the study aims to assess their effectiveness in promoting innovation, encouraging economic development, and protecting creators, while also scrutinizing the criticisms that these agreements disproportionately serve the interests of developed economies at the expense of developing ones. By situating intellectual property within the broader context of globalization and the digital revolution, the article highlights the complex interplay between private rights and public goods, between innovation incentives and access to knowledge (Boyle, 2008; Correa, 2000). The significance of this research lies in its potential contribution to ongoing debates in international law and development policy: effective and fair intellectual property protection can attract foreign investment, stimulate domestic innovation, and foster cultural industries, yet poorly calibrated systems risk deepening inequalities and restricting access to essential knowledge and technologies. Ultimately, the study seeks to propose pathways toward a more balanced and cooperative international framework—one that secures the legitimate



interests of innovators while ensuring that intellectual property does not become an obstacle to social welfare, development, and human rights.

1. Conceptual Framework of Intellectual Property Rights

The concept of intellectual property encompasses a wide range of intangible rights that protect the products of human creativity and innovation. At its core, intellectual property law seeks to confer exclusive rights on creators and inventors over their original works, inventions, and distinctive signs, thereby granting them legal control over how these assets are used, reproduced, or commercialized. Copyrights, for example, protect literary and artistic creations such as books, films, music, and software, granting authors the exclusive right to reproduce and distribute their works while also recognizing moral rights over attribution and integrity (Ginsburg, 2001). Patents, on the other hand, secure exclusive rights to inventors for a limited period, typically twenty years, in exchange for public disclosure of the invention, thus promoting technological progress (Bently & Sherman, 2014). Trademarks serve to protect distinctive signs, logos, or symbols that identify the source of goods or services, helping consumers distinguish between competing products and ensuring brand reputation. Industrial designs safeguard the aesthetic features of products, such as their shape, configuration, or surface ornamentation, which contribute to market appeal. Finally, trade secrets protect confidential business information, including formulas, processes, or strategies, provided that reasonable measures are taken to maintain their secrecy (Maskus, 2000). Together, these categories illustrate the diversity of intellectual

property regimes and their shared objective of fostering innovation and creativity by granting time-limited exclusivity.

Historically, the protection of intellectual property rights can be traced back to early European practices in the fifteenth and sixteenth centuries, when royal privileges and guild regulations first granted exclusive rights to inventors and authors. One of the earliest patent systems emerged in Venice in 1474, establishing rules for granting inventors exclusive rights to their new machines and methods (Machlup & Penrose, 1950). The Statute of Anne in 1710, enacted in England, is widely regarded as the first modern copyright law, providing authors with limited rights over the reproduction of their works while also emphasizing the public interest in access to knowledge (Patterson, 1968). Over time, the industrial revolution and the expansion of international trade made the protection of intellectual property more pressing, as national laws proved insufficient to address cross-border infringements. The nineteenth century thus witnessed the first multilateral efforts to standardize protection, culminating in the Paris Convention of 1883 and the Berne Convention of 1886. These developments paved the way for the institutionalization of international intellectual property law under organizations such as WIPO and, later, the World Trade Organization (Sherwood, 1990).

The rationale for intellectual property protection has always involved a delicate balance between competing interests. Economically, IP rights provide incentives for innovation by ensuring that creators can capture the returns on their investments in research and development, thereby encouraging further creativity and technological



advancement (Landes & Posner, 2003). Culturally, copyright law plays a central role in supporting artistic production, ensuring that writers, musicians, and artists can sustain themselves while enriching societies with their works. Technologically, patents and trade secrets stimulate industrial progress by motivating investment in new technologies and by facilitating the dissemination of knowledge once inventions are disclosed to the public. However, the rationale also incorporates limitations, as overly rigid protection may hinder access to knowledge, increase consumer costs, or stifle follow-on innovation (Boyle, 2008). This tension between exclusivity and access continues to shape the evolution of intellectual property law, highlighting its dual role as both a private economic right and a public regulatory mechanism.

2. International Agreements on Intellectual Property

The internationalization of intellectual property protection began with the **Paris Convention for the Protection of Industrial Property of 1883**, which addressed patents, trademarks, and industrial designs. Its key achievement was the principle of “national treatment,” requiring member states to treat foreign applicants no less favorably than domestic ones (Ricketson, 1987). This was a significant step toward harmonization, although enforcement remained limited. Soon after, the **Berne Convention for the Protection of Literary and Artistic Works of 1886** extended protection to authors of literary, musical, and artistic creations. Berne introduced the principle of automatic protection, eliminating the need for formal registration, and established minimum terms of

protection, thereby laying the foundation for the modern copyright system (Goldstein & Hugenholtz, 2013).

These early conventions eventually converged under the auspices of the **World Intellectual Property Organization (WIPO)**, established in 1967 as a specialized agency of the United Nations. WIPO administers more than two dozen treaties, including the Patent Cooperation Treaty (PCT), which simplifies the process of seeking patent protection in multiple countries, and the Madrid Protocol, which facilitates the international registration of trademarks (WIPO, 2020). WIPO also spearheaded responses to digital challenges through the **WIPO Copyright Treaty (WCT)** and the **WIPO Performances and Phonograms Treaty (WPPT)**, both adopted in 1996, which clarified the application of copyright in the digital environment.

The **Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)**, adopted in 1994 as part of the World Trade Organization (WTO) framework, represents the most comprehensive and influential instrument in the field. Unlike WIPO treaties, TRIPS is enforceable through the WTO's dispute settlement mechanism, giving it real teeth in ensuring compliance (Abbott & Cottier, 1999). It covers all major categories of intellectual property, mandates minimum standards of protection, and requires effective enforcement at the national level. Other agreements have complemented this framework, such as the **Hague Agreement on Industrial Designs**, the **Marrakesh Treaty of 2013** on facilitating access to published works for persons with print disabilities, and the **Budapest Treaty** on the recognition of the deposit of microorganisms for patent procedures. Collectively, these instruments reveal the progressive layering of international norms, from soft



commitments in the nineteenth century to binding global standards under the WTO system.

3. The TRIPS Agreement as a Cornerstone

The TRIPS Agreement is often described as the cornerstone of the international intellectual property regime, because it sets binding minimum standards for nearly every form of IP protection, from copyrights and trademarks to patents and industrial designs. By integrating IP into the WTO's multilateral trading system, TRIPS elevated IP law from the margins of international cooperation to a central feature of global economic governance (Gervais, 2012). It requires all WTO members to provide a baseline of protection, including a 20-year minimum for patents, the recognition of well-known trademarks, and a 50-year minimum term for copyright. This harmonization has significantly reduced the disparities that previously plagued the system, though it has also sparked controversy about the appropriateness of imposing uniform standards on diverse economies.

One of TRIPS' most powerful features lies in its **enforcement mechanisms**, which oblige members not only to adopt IP laws but also to ensure their effective implementation through civil, administrative, and criminal procedures. Importantly, disputes over non-compliance can be brought before the WTO's Dispute Settlement Body, which has the authority to authorize trade sanctions against violators. This level of enforceability distinguishes TRIPS from earlier WIPO treaties, which lacked robust compliance tools (Abbott & Cottier, 1999). Notable disputes, such as those concerning pharmaceutical patents and copyright

enforcement, have demonstrated that the threat of trade retaliation can compel states to strengthen their regimes even against domestic opposition.

Yet TRIPS is not without flexibilities. Recognizing the concerns of developing countries, the agreement incorporates mechanisms such as **compulsory licensing**, which allows governments to authorize the production of patented medicines without the consent of the patent holder in cases of public health emergencies. This flexibility was reaffirmed in the **Doha Declaration on the TRIPS Agreement and Public Health (2001)**, which emphasized that TRIPS should not prevent members from taking measures to protect public health and promote access to medicines (Correa, 2000). Moreover, TRIPS permits limited exceptions for educational and research purposes, providing space for balancing private rights with broader societal needs. Nonetheless, debates continue about whether these flexibilities are adequate, especially as global crises such as the COVID-19 pandemic underscore the tension between IP protection and the right to health.

4. Regional and Bilateral Agreements

Beyond the multilateral framework, intellectual property protection has increasingly been shaped by regional and bilateral agreements that go beyond TRIPS standards. In the **European Union**, IP law has been progressively harmonized to create a unified market, including the establishment of the European Union Intellectual Property Office (EUIPO) and the creation of the Community Trademark and the Registered Community Design. The EU has also adopted directives to harmonize copyright and related rights, particularly in the digital environment (Geiger, 2010). The



United States, by contrast, has relied heavily on bilateral agreements and free trade agreements to export its high standards of protection, often referred to as “TRIPS-plus” obligations because they impose stricter rules on areas such as pharmaceutical patents and digital copyright enforcement (Sell, 2003).

In Africa and the Arab world, regional organizations have emerged to coordinate protection, including the **African Intellectual Property Organization (OAPI)** and the **African Regional Intellectual Property Organization (ARIPO)**, both of which provide centralized systems for registering and enforcing rights. The **League of Arab States (LAS)** has also sought to harmonize approaches to copyright and industrial property, though implementation varies widely across member states. These initiatives reflect the recognition that regional cooperation can help overcome institutional weaknesses and facilitate compliance with international obligations, while also tailoring IP protection to local contexts.

5. Challenges in the Protection of Intellectual Property Rights

The digital age has transformed intellectual property (IP) protection into one of the most pressing issues of global governance. Counterfeiting and piracy have reached unprecedented scales due to technological advances that allow for mass reproduction and instant distribution of creative content. Music, films, books, and software can be copied and disseminated across the world in seconds, undermining both the creative industries and the economies that depend on them. According to the OECD (2019),

international trade in counterfeit and pirated goods accounted for 3.3% of global trade, reflecting the magnitude of the challenge. The ubiquity of the internet has made it nearly impossible for traditional enforcement mechanisms to keep pace, as piracy websites can easily re-emerge after being shut down, while peer-to-peer networks and streaming services complicate detection. These dynamics reveal that piracy is not simply a legal violation but a complex socio-economic phenomenon linked to accessibility, affordability, and consumer behavior in a highly interconnected digital economy.

Developing countries face particularly acute difficulties in enforcing IP rights due to structural weaknesses in their legal and institutional frameworks. Many nations lack the resources to establish specialized IP courts, train enforcement officials, or deploy technological tools necessary for monitoring and prosecuting infringements. As Maskus (2000) emphasizes, the gap between formal adoption of international IP treaties and effective implementation remains vast in the Global South, where enforcement is hindered by limited infrastructure, corruption, and competing national priorities such as poverty alleviation and economic development. This often creates a cycle of weak enforcement that both discourages foreign investment and perpetuates local industries' reliance on imitation and counterfeit products as a cheaper alternative to genuine goods. The digital divide further exacerbates these enforcement issues, as countries with low technological capabilities struggle to track and control online infringements.

Another fundamental challenge lies in balancing strong IP protection with the public interest, especially in critical



sectors such as public health, education, and technology transfer. The TRIPS Agreement initially faced strong resistance from developing nations because of concerns that strict patent rules would hinder access to essential medicines. This was highlighted during the HIV/AIDS crisis in the 1990s and early 2000s, when patent protections made life-saving antiretroviral drugs prohibitively expensive in Africa (Correa, 2002). The Doha Declaration on TRIPS and Public Health (2001) attempted to address this by affirming states' rights to issue compulsory licenses to safeguard public health. However, tensions remain between pharmaceutical companies seeking to protect investments in research and governments trying to ensure equitable access to medicines. This dilemma extends to other fields such as education and knowledge-sharing, where paywalls and licensing restrictions can limit access to scientific publications, thereby impeding innovation and development in resource-poor contexts.

Globalization and e-commerce add further complexity to the enforcement of IP rights. Cross-border trade in counterfeit goods has flourished due to global supply chains, weak border controls, and the rise of online marketplaces such as Alibaba, Amazon, and eBay, which serve as platforms for sellers of counterfeit products (Interpol, 2020). E-commerce blurs jurisdictional boundaries, making it difficult to determine liability and prosecute infringers who operate across multiple countries. Moreover, consumers are often complicit in purchasing counterfeit products, driven by lower prices and a perception that counterfeiting is a victimless crime. This trend undermines both brand owners and public trust, as counterfeit

pharmaceuticals, automotive parts, or electronic devices can endanger health and safety. The increasing sophistication of counterfeiters, who now produce nearly identical copies of branded products, further complicates detection and enforcement.

The interplay of these challenges underscores the need for international cooperation, as no single country can effectively address the global dimensions of IP infringement alone. The World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO) have spearheaded initiatives to strengthen enforcement capacity, encourage legislative harmonization, and foster cross-border collaboration. However, critics argue that these efforts often prioritize the interests of developed economies over those of developing nations, reinforcing structural inequalities in the global IP system. Thus, the central challenge remains finding a sustainable balance between protecting IP rights, ensuring fairness in the global economy, and safeguarding the fundamental rights of access to knowledge, culture, and essential goods.

6. Intellectual Property in the Digital Space

The digital revolution has fundamentally transformed how intellectual property (IP) is created, disseminated, and consumed, bringing both opportunities and risks. Nowhere is this more evident than in the domain of copyright, where the internet has created vast new channels for distribution but also unprecedented challenges for enforcement. Online piracy, file-sharing networks, and streaming platforms have eroded traditional revenue models for artists, writers, and content producers. According to the International Federation of the Phonographic Industry (IFPI, 2021), more than 30% of



global consumers admit to accessing music through unlicensed platforms, revealing the persistence of piracy despite decades of legal reforms. At the same time, the internet has democratized cultural production by giving small creators access to global audiences, raising questions about whether traditional copyright regimes designed for analog markets remain fit for purpose in the digital age. These tensions reflect the dual nature of digital technology as both an enabler of innovation and a disruptor of existing legal and economic structures.

One of the key technological responses to piracy has been the development of Digital Rights Management (DRM) systems, which aim to control how copyrighted content is accessed and used. DRM technologies, embedded in e-books, music files, software, and digital films, restrict copying, sharing, or modifying works without authorization. Proponents argue that DRM is essential to protect creative industries in a borderless digital marketplace, while critics contend that such measures often erode user rights, stifle innovation, and create digital monopolies. Lessig (2001) famously described DRM as “code as law,” emphasizing that technological restrictions can be even more powerful than legal rules in regulating behavior. The controversy surrounding DRM illustrates the broader dilemma of how to balance protection for rightsholders with fair access for users, especially in contexts such as education, libraries, and developing countries where restrictive DRM can exacerbate inequalities in access to knowledge.

The role of international law in addressing digital copyright challenges has been reinforced by the adoption of the WIPO Internet Treaties: the WIPO Copyright Treaty

(WCT, 1996) and the WIPO Performances and Phonograms Treaty (WPPT, 1996). These agreements updated the Berne Convention and the Rome Convention to adapt copyright law to the digital environment, introducing provisions on technological protection measures and rights management information. They establish the principle that the same protections granted to authors and performers offline must extend to the digital realm, ensuring that copyright is “technology-neutral.” Yet, implementation varies widely across countries, reflecting differing policy priorities and enforcement capacities. While developed nations have largely integrated these provisions into their national laws, many developing countries have been slower to adapt, citing costs, administrative burdens, and fears that stringent rules could undermine access to digital resources vital for development (Reichman & Okediji, 2012).

Beyond traditional copyright issues, digital innovation has given rise to novel questions that existing IP frameworks struggle to address. Artificial intelligence (AI) challenges the very notion of authorship, as algorithms now generate art, music, and literature with minimal human intervention. Current copyright systems generally recognize only human creators, leaving AI-generated works in a legal gray area (Samuelson, 2019). Similarly, the rise of non-fungible tokens (NFTs) has transformed how digital art and collectibles are monetized, but legal disputes over ownership, authenticity, and copyright infringement remain unresolved. Blockchain technology provides new tools for verifying originality and provenance, yet it also exposes weaknesses in traditional enforcement models. These developments highlight how IP law is constantly being tested by technological innovation,



requiring adaptive governance that balances protection, innovation, and inclusivity in the digital sphere.

7. National Implementation and Case Studies

While international agreements establish the general framework for IP protection, their effectiveness depends on how individual states implement and enforce them. National legal systems vary widely in their capacity to translate global standards into domestic practice, creating a fragmented and often inconsistent global IP landscape. Some states, such as the United States and members of the European Union, have established robust enforcement mechanisms, specialized IP courts, and comprehensive legislation that goes beyond the minimum standards set by TRIPS. Others, particularly in the Global South, have adopted the necessary laws but struggle with enforcement due to weak institutions, lack of expertise, or competing development priorities. This divergence illustrates the persistent “implementation gap” that undermines the uniformity envisioned by international agreements (Gervais, 2020).

Case studies highlight how these challenges play out in practice. Disputes at the World Trade Organization (WTO) have underscored the contentious nature of TRIPS enforcement. For instance, the well-known India–United States dispute over pharmaceutical patents in the early 2000s illustrated the tension between public health needs and strict patent enforcement. India’s decision to issue compulsory licenses for essential medicines was defended as consistent with TRIPS flexibilities, while pharmaceutical companies accused it of undermining innovation (Abbott & Reichman,

2007). Similarly, software piracy cases in China have attracted global attention, as widespread copying and unauthorized use of software were long seen as tolerated by local authorities to boost domestic technological development, leading to conflicts with trading partners. These cases demonstrate how IP law functions as both a legal and a political tool in global trade relations.

In the context of Algeria, implementation of international IP standards has been marked by gradual progress but also significant challenges. Algeria is a member of WIPO and a signatory to several conventions, including the Berne and Paris Conventions, yet aligning domestic legislation with TRIPS and other modern agreements has been a slow process. The country faces structural obstacles such as limited institutional capacity, a weak enforcement culture, and competing policy priorities linked to economic diversification and social welfare. Moreover, piracy of software, films, and educational materials remains widespread, partly driven by affordability issues and weak regulatory oversight. Despite these challenges, Algeria has made strides by strengthening its IP office, joining regional initiatives, and engaging in international cooperation programs. However, harmonizing fully with global standards requires sustained reforms, capacity building, and a cultural shift in how IP is perceived by society and policymakers alike.

8. Critical Perspectives

While international IP agreements, particularly TRIPS, have advanced the global standardization of intellectual property rights, they have also generated strong criticism, particularly from scholars, activists, and developing nations.



Critics argue that TRIPS primarily reflects the interests of developed countries and multinational corporations, embedding rules that favor capital-rich economies at the expense of poorer nations (Sell, 2003). The emphasis on stringent patent protections, for example, has been accused of stifling innovation in developing countries, limiting access to affordable medicines, and perpetuating global inequalities in knowledge and technology. For this reason, TRIPS has often been described as a “neo-colonial” framework that entrenches the dominance of the Global North in shaping global economic and technological agendas.

The debate over the relationship between IP rights and human rights further illustrates these tensions. On one hand, IP protection is defended as a mechanism that promotes creativity, innovation, and cultural expression by rewarding creators for their contributions. On the other hand, excessive protection can infringe upon fundamental human rights such as the right to health, education, and participation in cultural life, as enshrined in the International Covenant on Economic, Social and Cultural Rights (ICESCR, 1966). The HIV/AIDS crisis in Africa, and more recently the COVID-19 pandemic, reignited debates over whether patent monopolies are compatible with global health equity. The push for a temporary TRIPS waiver to facilitate vaccine access in developing countries underscored the ongoing tension between IP enforcement and public welfare (Watal & Caminero, 2021).

Calls for reform in international IP law have therefore intensified in recent years. Scholars and policymakers advocate for a more balanced approach that integrates flexibilities, safeguards, and differential treatment for

developing countries. Proposals include enhancing the role of compulsory licensing, strengthening open-access initiatives in scientific research, and revisiting the principle of exhaustion to facilitate parallel imports of affordable goods. Others have suggested rethinking the very foundations of IP by embracing models of knowledge-sharing and open innovation that reflect the realities of the digital economy and global development goals. As Drahos (2002) argues, a more equitable IP system must shift from being purely a trade issue to being embedded within broader concerns of social justice, sustainable development, and human rights. This perspective emphasizes that intellectual property should serve not only private interests but also the collective good of humanity.

Conclusion and Recommendations

The protection of intellectual property rights in the context of international agreements represents one of the most complex and evolving fields of contemporary legal and economic governance. This study has shown that intellectual property (IP) is no longer a peripheral concern but lies at the heart of the global economy, influencing innovation, cultural production, trade, and even fundamental human rights. From the early conventions of Paris and Berne to the modern TRIPS framework under the World Trade Organization, international law has continuously sought to harmonize diverse national systems while responding to the disruptive impact of digital technologies. Yet, as the analysis reveals, harmonization remains uneven, and the challenges posed by



globalization, digitalization, and socio-economic inequalities persist.

The research demonstrates that while international agreements such as TRIPS and the WIPO Internet Treaties have established important minimum standards, their implementation has been shaped by national contexts, often leading to disparities between developed and developing nations. The case of Algeria, for example, highlights both the progress made in adopting international norms and the structural challenges that hinder effective enforcement. Similar trends can be observed across much of the Global South, where resource constraints and competing policy priorities impede the realization of a balanced and effective IP system. This reinforces the argument that international cooperation must move beyond formal standard-setting and focus more on capacity building, technology transfer, and equitable development.

The digital era has further complicated IP governance by introducing issues such as online piracy, digital rights management, AI-generated works, and NFTs. These developments have challenged the relevance of existing legal categories and underscored the need for adaptive and forward-looking frameworks. As emerging technologies reshape creative industries, traditional enforcement mechanisms appear increasingly inadequate, pointing to the necessity of technological, legal, and policy innovation. This is particularly urgent in light of the growing role of e-commerce and globalization in facilitating cross-border IP violations.

Critically, the study also highlights the tension between intellectual property rights and broader social goals,

particularly the right to access culture, education, and essential medicines. The HIV/AIDS crisis, the COVID-19 pandemic, and persistent global inequalities demonstrate that excessive emphasis on private rights can conflict with public welfare. In this regard, calls for reform in international IP law are both timely and necessary. A more balanced approach that embeds IP within the framework of human rights and sustainable development would ensure that creativity and innovation serve not only the interests of rightsholders but also the collective needs of humanity.

Moving forward, the study recommends that policymakers prioritize three key strategies. First, strengthen international cooperation by enhancing mechanisms for capacity building, particularly in developing countries, and by promoting fairer terms for technology transfer. Second, embrace flexibility within international IP law, ensuring that public health, education, and access to knowledge are not undermined by rigid enforcement of rights. Third, invest in adaptive governance structures capable of responding to the rapid pace of technological innovation, ensuring that new challenges such as AI and blockchain are addressed proactively. Only through such a holistic and inclusive approach can the global IP system achieve its dual goals of fostering innovation while safeguarding fairness, equity, and human dignity.

References

Abbott, F. M., & Reichman, J. H. (2007). The Doha Round's public health legacy: Strategies for the production and diffusion of patented medicines under the amended TRIPS provisions. *Journal of International*



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- Economic Law*, 10(4), 921–987.
<https://doi.org/10.1093/jiel/jgm040>
- Correa, C. M. (2002). *Implications of the Doha Declaration on the TRIPS Agreement and public health*. World Health Organization.
- Drahos, P. (2002). Developing countries and international intellectual property standard-setting. *Journal of World Intellectual Property*, 5(5), 765–789.
<https://doi.org/10.1111/j.1747-1796.2002.tb00178.x>
- Gervais, D. J. (2020). *The TRIPS Agreement: Drafting history and analysis* (5th ed.). Sweet & Maxwell.
- International Federation of the Phonographic Industry (IFPI). (2021). *Global music report 2021: The industry in 2020*. <https://www.ifpi.org>
- Interpol. (2020). *Illicit trade report 2020*. <https://www.interpol.int>
- Lessig, L. (2001). *The future of ideas: The fate of the commons in a connected world*. Random House.
- Maskus, K. E. (2000). *Intellectual property rights in the global economy*. Peterson Institute for International Economics.
- Organisation for Economic Co-operation and Development (OECD). (2019). *Trends in trade in counterfeit and pirated goods*. OECD Publishing.
<https://doi.org/10.1787/g2g9f533-en>
- Reichman, J. H., & Okediji, R. L. (2012). When copyright law and science collide: Empowering digitally integrated research methods on a global scale. *Minnesota Law Review*, 96(4), 1362–1462.
- Samuelson, P. (2019). Should AI-created works be protected by copyright law? *Law, Innovation and Technology*,

11(2), 97-117.

<https://doi.org/10.1080/17579961.2019.1644413>

Sell, S. K. (2003). *Private power, public law: The globalization of intellectual property rights*. Cambridge University Press.

Watal, J., & Caminero, R. (2021). Intellectual property, the TRIPS Agreement, and the COVID-19 pandemic. *World Trade Review*, 20(S1), S37-S54. <https://doi.org/10.1017/S1474745621000323>