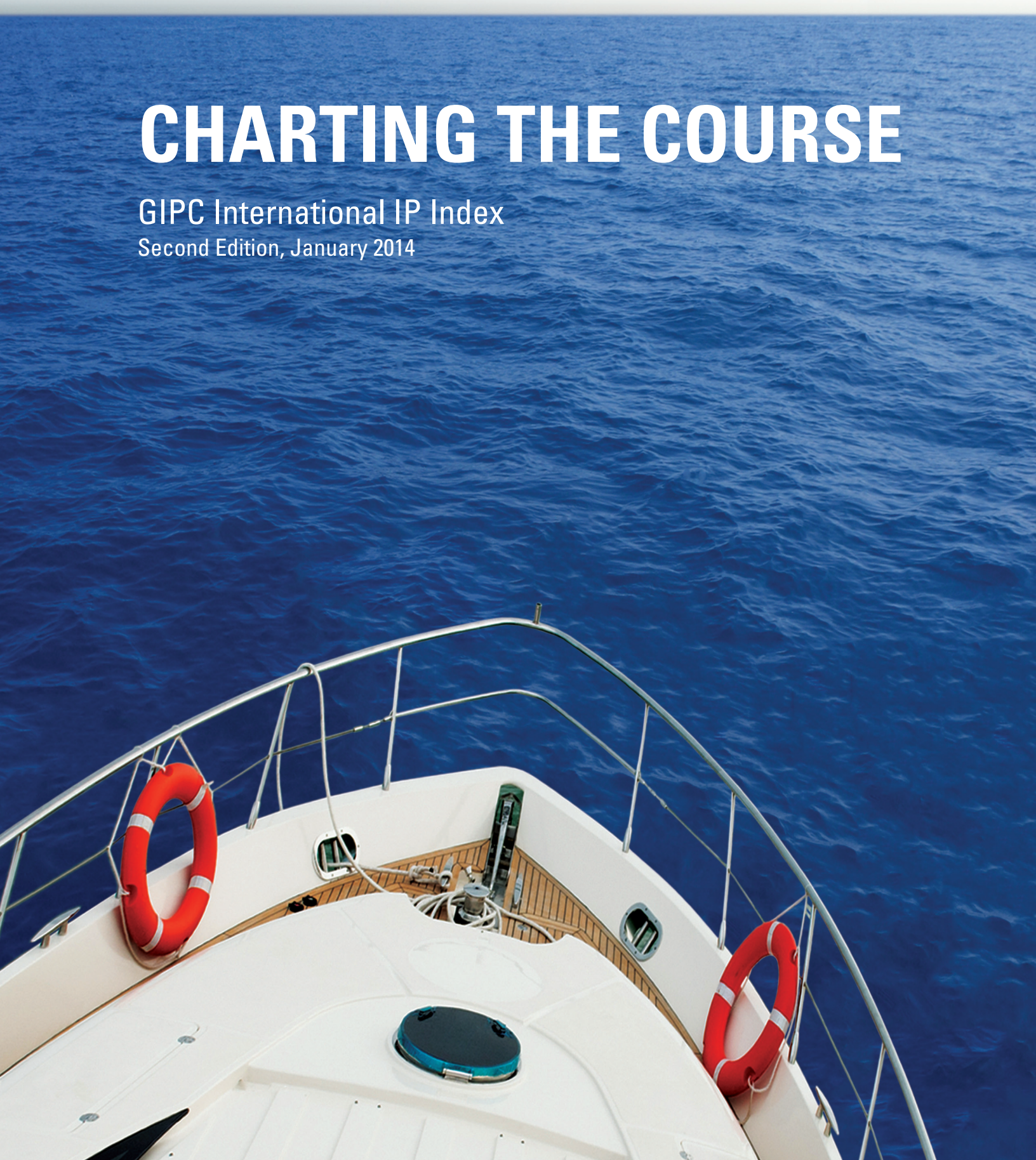
Global Intellectual Property Center
U.S. CHAMBER OF COMMERCE

CHARTING THE COURSE

GIPC International IP Index

Second Edition, January 2014



The U.S. Chamber of Commerce's Global Intellectual Property Center (www.theglobalipcenter.com) is working around the world to champion intellectual property rights as vital to creating jobs, saving lives, advancing global economic growth, and generating breakthrough solutions to global challenges.

The U.S. Chamber of Commerce is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations.

This report was conducted by Pugatch Consilium (www.pugatch-consilium.com) a boutique consultancy that provides evidence-based research, analysis, and intelligence on the fastest growing sectors of the knowledge economy. Authors of this report are Meir Pugatch, Rachel Chu, and David Torstensson.

Professor Meir Pugatch, Managing Director and Founder

Prof. Pugatch founded Pugatch Consilium in 2008. He specializes in intellectual property policy, management and exploitation of knowledge assets, technology transfer, market access, pharmacoeconomics and political economy of public health systems.

He has extensive experience in economic and statistical modeling and indexing, valuation of assets and design of licensing agreements, and providing strategic advice to international institutions, multinational corporations, and SMEs from all sectors of the knowledge economy.

In addition to his work at Pugatch Consilium, he is also a Professor at the University of Haifa, Israel, where he is the Chair of the Health Systems Administration Division of Management at the School of Public Health. He is also a visiting Professor at the Postgraduate Programme on Intellectual Property Law and Knowledge Management at the University of Maastricht.

Rachel Chu, Senior Consultant

Ms. Chu specializes in biomedical and energy-related innovation as well as international innovation policy. She has particular experience in sector-specific trend mapping, survey building and benchmarking of intellectual property environments.

David Torstensson, Senior Consultant

Dr. Torstensson specializes in innovation, tax and intellectual property policy, with a particular focus on the health care, information and communication technology and content industries. He has wide experience in policy and economic analysis, as well as data sampling and creation of strategic operational and advocacy plans.

Contents

Tables and Figures

1. Foreword

All governments want to create an environment that embraces growth and maps the path to further progress. Critical to the creation of this course is a strong intellectual property (IP) environment.

The global IP system is designed to incentivize individuals and businesses small and large to invest in innovation and creativity. These investments, in turn, fuel economic growth, job creation, continued innovation, and access to breakthrough discoveries. This time-proven system also helps provide assurances to consumers that the products they use are authentic, safe, and effective. Countries that protect and effectively enforce IP rights are charting the right course to a successful and dynamic economy.

The second edition of the GIPC International IP Index, entitled *Charting the Course*, is a snapshot of where 25 countries' IP environments are today, and can help provide a road map for those countries wanting to improve their IP environment. This year's Index builds upon the inaugural edition, *Measuring Momentum*, and benchmarks the IP environments of a group of 25 geographically diverse economies that vary in market size, income level, and development. This edition also makes minor adjustments to the previously used indicators to further strengthen the utility of the Index and accurately measure the evolving IP landscape.

Charting the Course is intended to be a constructive tool for policy makers around the world to assess their IP environment and what changes they could make to improve them.

And opportunities to improve abound. Currently 12 countries—ten of which are included in the GIPC Index—are negotiating the Trans-Pacific Partnership (TPP) Agreement. Trade agreements are crafted to open new markets, level the playing field, create jobs, and promote global economic growth, and this agreement has the ability to set the gold standard in the Pacific region, and for the world, on protecting and enforcing IP.

Additionally, the United States is currently negotiating with the European Union on a trade and investment partnership agreement that would promote competitiveness, growth, and jobs. The agreement is a golden opportunity for the two economies to assess and address areas for increased IP protection and establish mechanisms for transatlantic cooperation.

Countries around the world are engaged on a number of similar bilateral agreements that could help enhance IP protections, and help raise the bar for IP protection around the world. Furthermore, nations big and small are wrestling with domestic legislation, judicial proceedings, criminal proceedings, and other processes regarding IP—these are all opportunities to chart a course toward a strong IP environment.

Countries must embrace these opportunities and not ignore them.

Unfortunately, along with these opportunities we also see countries take steps backward on IP. India, which again finished last in the second edition of the Index, continues to allow for the deterioration in its IP climate. And countries like Canada, Brazil, and South Africa for example, continue to avoid opportunities to promote and protect IP—to their detriment.

The GIPC Index provides an updated roadmap for economies seeking to create jobs, promote innovation, ensure safety, and provide access to the creations and inventions of the 21st century. This snapshot is an important tool to assess where countries currently are on IP, and helps inform the debate on how the counties can move towards an innovative and knowledge-based economy.

David Hirschmann
President and CEO
Global Intellectual Property Center
U.S. Chamber of Commerce

2. Executive Summary

All countries seek to develop strong, innovative economies. Innovative economies which harness the ingenuity of their citizenry also propel the creation of jobs, protection of public safety, access to future innovations, and stimulate competition in the global economy. In January 2011, U.S. President Barack Obama stated "The first step in winning the future is encouraging American innovation" and the assurance of intellectual property (IP) rights is essential to incubate homegrown and global innovation. Safeguarding IP supports domestic innovators and creators, attracts world-leading research and development, and creates and sustains high-quality future jobs.

2014 will be rife with opportunities for countries to increase foreign direct investment and foster economic growth. The second edition of the GIPC International IP Index *Charting the Course* clearly and concisely lays out a roadmap for how nations can better protect IP as a means to attract investment, create jobs, and promote 22nd century ingenuity.

The Index maps the IP environment of 25 countries from around the world utilizing 30 factors, which are indicative of an environment that fosters growth and development. The result is a rigorous statistical tool that business and policy makers can use to measure a country's direction as they seek to chart a course to promoting an innovative and creative economy.

The second edition of the GIPC Index provides an empirically based measurement and point of comparison of those national IP environments that were included in the first edition, including:

Australia	China	Russia
Brazil	India	United Kingdom
Canada	Malaysia	United States
Chile	Mexico	

The second edition also looks at 14 new countries including

Argentina	New Zealand	Turkey
Colombia	Nigeria	Ukraine
France	Singapore	United Arab Emirates
Indonesia	South Africa	Vietnam
Japan	Thailand	

Key Findings

The GIPC Index highlights both improvements and impediments to creating robust IP environments.

Charting the Course – Heading in the Right Direction
In order to promote an environment that fosters growth, creates jobs, rewards innovators and creators, and attracts investment, all countries must continue to move toward protecting and enforcing IP. This means continuing to modernize their IP rules and dedicate the resources needed to prevent IP theft. Over the past year, a number of countries have taken steps toward improving their IP systems by securing effective and transparent IP rules:

- Canada recently concluded negotiations with the European Union (EU) on the Comprehensive Economic and Trade Agreement (CETA). Should the provisions of CETA successfully be implemented, Canada's IP environment would improve significantly.

- China continues to show strength in the patents arena, earning the highest score of all middle-income countries and even out-perform high-income countries such as Chile and UAE. While progress is being made, China's overall IP environment continues to see challenges, particularly in regard to trademark and trade secrets as shown by its overall score.

- Russia's new notice-and-takedown provision with regard to the responsibilities of "information intermediaries" indicates progress in protecting copyrights.

- Malaysia introduced significant changes to its copyright laws.

- The negotiations of the Trans-Pacific Partnership (TPP) Agreement continue to provide an opportunity for the negotiating countries— (10 of the 12 TPP parties are mapped in this Index) —to significantly improve their IP environment to advance innovation and development.

Charting the Course – Moving Backwards

While a number of countries have taken positive steps toward improving their IP environments, some countries have taken steps backward that will stifle innovation and arrest the ability of creators and inventors to have their IP protected.

- India continues to have the weakest IP environment of all countries included in the Index. Despite the 2010 declaration by the then-President of India that the next 10 years will be India's "Decade of Innovation" the continued use of compulsory licenses, patent revocations, and weak legislative and enforcement mechanisms raise serious concerns about India's commitment to promote innovation and protect creators.

- South Africa scores poorly in Category 1: Patents and Related Rights due to the lack of patent term extension for pharmaceutical products and regulatory data protection for clinical data.

- Canada continues to lag behind other developed nations on protecting and enforcing IP. The lack of a takedown mechanism or equivalent obligation on the copyright side, and the onerous "patent utility" requirements related to pharmaceutical patents continue to be a concern.

- Ukraine's score is significantly boosted by its high score in Category 6: Membership and Ratification of International Treaties. However, Ukraine's IP environment continues to be weak across all intellectual property categories, as reflected in the United States Trade Representative's (USTR) *2013 Special 301 Report* in which Ukraine is the only country labeled a "Priority Foreign Country."

- Australia's plain packaging requirements severely limit the ability of trademark owners to exploit their rights, and sends a chilling message to brand owners interested in selling in the Australian market. In 2013, five countries brought action against Australia in the WTO on the basis the new law violates Australia's WTO commitments.

Overall, the second edition of the GIPC Index suggests that while there have been positive developments made by developed and developing countries alike in advancing IP protection and enforcement, much work remains. Through multilateral, bilateral, legislative, and legal measures, 2014 provides all countries with opportunities to improve IP climates and foster an environment that creates jobs, rewards innovators and creators, and attracts investment.

Conclusion

In the 21st century, nations continue to look for the best policies to promote innovation, create jobs, and attract investment. The second edition of the GIPC Index provides an academically-rigorous guide for all countries to improve their IP environment and help chart a course to prosperity.

The goal of the second edition of the GIPC Index is to continue to map IP environments around the world in a transparent and objective way, using evidence-based resources to provide a snapshot of a nation's IP climate. As countries continue along their path of development, the intent is to continue to increase the number of sampled countries while updating those scores of previously mapped IP environments, with the ultimate goal being to provide policymakers with a robust roadmap on IP protections and enforcement, and business leaders a guide on how countries protect and enforce IP.

3. Abbreviations

API	Active pharmaceutical ingredient
BSA	Business Software Alliance
BRICS	Brazil, Russia, India, China, and South Africa
CETA	Comprehensive Economic and Trade Agreement
CIIs	Computer-implemented inventions
DRM	Digital rights management
EPO	European Patent Office
EU	European Union
FDI	Foreign direct investment
FTA	Free trade agreement
GDP	Gross domestic product
GIPC	U.S. Chamber of Commerce's Global Intellectual Property Center
GTRIC-e	General Trade-Related Index of Counterfeiting of Economies
ICT	Information and communication technology
IP	Intellectual property
ISP	Internet service provider
MNE	Multinational enterprise
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
R&D	Research and development
RDP	Regulatory data protection
TPM	Technological protection measure
TPP	Trans-Pacific Partnership
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
VeRO	eBay's Verified Rights Owner Program
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

4. Overview and Key Changes from the 2012 Edition

In 2012, the U.S. Chamber of Commerce's Global Intellectual Property Center (GIPC) published *Measuring Momentum,* the first edition of the GIPC's International Intellectual Property Index (GIPC Index). The GIPC Index was, and remains, a unique, first-of-its-kind, academically rigorous, empirical assessment of what countries are doing well and what they can be doing better with respect to their national IP environments. The Index is a constructive tool for policy makers to assess if and how they are building positive momentum for a knowledge-based economy in their countries and for businesses seeking to assess risk to one of their most valuable trading assets—intellectual property—when operating overseas.

This year's edition sees a significant expansion of the GIPC Index with regard to both the number of countries benchmarked and the number of indicators measured. The total number of indicators mapped and measured has increased from 25 to 30, and the number of countries from 11 to 25. Expanding the GIPC Index to 30 indicators (each new indicator is detailed below in Section 6) and more than doubling the countries sampled provides users of the Index with an even richer source of data and information about a country's (or set of countries') national IP environment than the 2012 edition. Indeed, by increasing the number of countries and indicators as well as fine-tuning the scoring methodology to increase granularity, one of the highlights of this year's edition is the significant increase in the number of variables measured and benchmarked. As a result, there is a greater amount of available information and analysis to all end-users of the Index.

As in the 2012 edition, the countries sampled range from high-income economies such as the United States, France, United Kingdom, Japan, and Canada; to emerging markets and middle-income countries such as Brazil, Russia, India, China, and South Africa (the BRICS), Malaysia, Colombia, and Mexico; as well as lower-middle-income countries such as Vietnam, Nigeria, and Indonesia.

Table 1 below lists the 25 countries sampled in the 2014 GIPC Index.

Table 1: 2014 GIPC Index Countries by World Bank Country Group[1]

Lower-Middle-Income Countries	Upper-Middle-Income Countries	High-Income Countries
Indonesia	Argentina	Australia
India	Brazil	Canada
Nigeria	China	Chile
Ukraine	Colombia	France
Vietnam	Malaysia	Japan
	Mexico	New Zealand
	South Africa	Russia
	Thailand	Singapore
	Turkey	United Arab Emirates
		United Kingdom
		United States

Source: World Bank (2013)

As in the 2012 edition, the GIPC Index both operates and can be used on a multitude of levels.

First, users are able to gain an in-depth and detailed overview of a country's total IP environment including all major IP rights (patents, copyrights, trademarks, etc.) as well as industry- or sector-specific IP rights such as regulatory data protection, the patentability of computer-implemented inventions, and legal measures deterring online copyright infringement.

Second, the GIPC Index does not measure only the existence or availability of a relevant IP law or regulation but also the actual enforcement or application of that law or regulation.

Third, as will be detailed in Section 6, because of the methodological construction of the GIPC Index, it is possible to compare and benchmark countries either for the total national IP environment or for specific forms of IP rights or sectors. Because all mapped countries are measured according to the same definitions and criteria, the GIPC Index allows country comparisons to be made on a "like for like" basis. Equally, some users of the Index may be more interested in understanding how specific forms of IP rights—such as online copyright or IP rights relating to the life sciences sector—are protected, both *de jure* and *de facto*, in a given country. Due to its detailed coverage and inclusion of industry-specific IP rights, the Index allows end-users to extract specific indicators and develop unique, tailored measures of particular industries or sectors.

Finally, the GIPC Index gives governments and policy makers real insight into how their individual national IP environments are perceived by the world's leading knowledge- and technology-intensive companies. As discussed in the following section on the relationship between IP rights and economic development, this is particularly important as these countries consider further developing their own innovative and creative industries, seek greater investment, and promote their economic development.

5. IP Rights in the Context of a Global Economy

During the creation and signing of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) almost 20 years ago, a significant debate took place about whether countries that decide to improve their IP environments actually experience benefits such as economic growth and greater inflows of technology. At the time, this was a mostly theoretical question because hard empirical data on the question was lacking. Today, however, in light of data that has been collected over the past two decades, this question has been largely resolved. A substantial and robust body of empirical literature has been built clearly showing that by strengthening their IP environments, countries also see improvements in rates of foreign direct investment (FDI), technology transfer, and general economic activity.

This does not mean that discussion about the manner in which IP rights affect the overall macroeconomic conditions in different countries is over. Rather, discussions are becoming less polemic and more evidence-based. Research is now directed at better understanding and modulating specific aspects of the relationship between IP rights and economic effects with regard to different industries and economic activities. Using econometric and statistical methods, such as sophisticated modeling and regression analysis, it is possible to estimate the extent to which each IP right affects and interacts with other variables.[2] IP rights can be isolated, and their effect on specific types of economic activity can be estimated and better understood. It is also possible to measure the relative importance of other factors of economic activity, such as a country's stage of development, quality of institutions and governance, income level, technical capabilities, and absorptive capacity.

The purpose of this section is twofold. First, it provides readers with an overview of this literature, extracting the key findings on just how important IP rights can be to increase economic activity and rates of domestic and international investment. Second, to give a further sense of the real-life links between IP rights and certain types of economic activity, this section also includes some straightforward correlation analysis. Although less statistically robust than regression analysis and statistical modeling, such correlations, comparisons of countries, and cross-comparisons of levels of IP rights and economic activity provide real insight into the role of IP rights—and, most important, can point to a trend that levels of IP protection and enforcement in a given sample of countries correlate with specific types of economic activity.

5.1 Strength of a National IP Environment and Economic Activity

FDI

FDI is an important broad measure of a country's attractiveness for investing and doing business. In essence, FDI reflects "the objective of obtaining a lasting interest by a resident entity in one economy in an entity resident in an economy other than that of the investor."[3] Flows of FDI represent the attractiveness of a market for building long-term relationships between the direct investor and the recipient. In its most narrow sense (especially for the purpose of statistical analysis and accounting), the term *FDI* is applied when foreign investors own at least 10% of the voting power in the enterprise in which they have invested.[4] Significantly, FDI is often viewed and used as a proxy for international technology transfer. For instance, flows of FDI can directly transfer knowledge from the investing entity to the recipient, such as through a parent firm to a subsidiary, the dissemination of technological products produced by the local entity through foreign investment, or the movement of staff from parent/foreign entity to subsidiary/domestic entity.[5]

Global flows of FDI have increased substantially since the 1980s as globalization, technological improvements, and financial advances have allowed investment capital to move much more freely around the world. Specifically, the growth and development of emerging and developing markets have greatly expanded the potential destinations for these

investment flows. According to figures from the United Nations Conference on Trade and Development (UNCTAD), in 1970 the global total of FDI flows was more than $13.3 billion.[6] Thirty years later, in 2011, this number had increased exponentially and stood at more than $1.5 trillion.

The link between the strength of a national IP environment and flows of FDI is one of the most studied and best understood of all economic activities. Indeed, a number of international and academic studies have been published in the past 5 to 10 years that elaborate on this relationship and show through comprehensive data analysis, surveys, and statistical modeling that there is a strong and relatively consistent relationship between FDI and the availability and enforcement of IP protection. As mentioned, the exact impact of the availability and enforcement of IP rights on FDI depends on a number of factors, including a country's stage of development, its income level, the quality of its institutions and governance, and its technical capabilities.

The Organisation for Economic Co-operation and Development (OECD) has produced some of the most widely cited studies on this topic.[7] In 2008 and 2010, the OECD built three separate models measuring the relationship between IP rights and other economic variables and measures of innovation such as FDI, domestic research and development (R&D), and services imports. These studies found that across three types of IP rights (patents, copyrights, and trademarks), an increase in the level of protection and strength for each IP right saw an increase in each of the economic indicators measured. For example, a 1% change in the strength of a country's IP rights environment as measured by patent rights was associated with a 2.8% increase in FDI inflows.[8]

Other studies have found similar results. For example, Adams investigated the impact of IP rights protection at the level of FDI in developing countries after the implementation of the TRIPS Agreement.[9] The paper reviewed the existing literature and analyzed panel data for a cross-section of 75 developing countries between 1985 and 2003. The study shows that FDI has become one of the most stable sources of development financing for developing countries. By the end of 2004, total foreign aid grants and net official aid and debt flows to developing countries accounted for $47.4 billion and $22.6 billion, respectively, while net FDI flows were $165 billion. Crucially, the author finds that patent protection, after the introduction of the TRIPS Agreement, significantly increased FDI in comparison with the period before the agreement. The study concludes that, in general, the enhancement of IP rights has a positive impact on FDI, in addition to other key determinants of FDI, including the degree of openness, the economic growth rate, and the investment level. However, the study also states that IP rights are only one of the factors required for the potential increase of FDI in developing countries.

One of the key topics in the literature is how FDI into specific industries and economic sectors is more or less affected by the strength of a national IP environment. For instance, Branstetter et al. found that IP reforms in 16 cases led to increased commercial activity by multinational companies, particularly in technology-intensive sectors.[10] The authors looked at the relationship between IP rights reforms and industrial development, specifically at the level and nature of industrial development in the reforming countries. The paper calculates this effect by analyzing the activity of U.S.-based multinationals as measured by the size and scope of assets in a reforming country, including property, plant, and equipment; figures for employment compensation; foreign technology transfer; and R&D expenditures. IP rights reforms are measured across five dimensions within patent rights, ranging from the expansion of innovations eligible for patent protection, term of protection to the administration, and enforcement of patent rights. Overall, the study finds that multinational company activity increases following the introduction of patent reforms, and that these increases are especially concentrated in subsidiaries and affiliates in reforming countries, particularly in technology-intensive sectors.

Economic Development, Job Creation, and Growth

As with studies on the relationship between FDI and IP rights, there is also a significant amount of interest in understanding more broadly the importance of IP–based industries to economic activity. In particular, a growing number of

governmental institutions have recently published studies showing just how important IP rights–dependent industries are to economic activity and job creation.

For example, in 2013 the European Patent Office (EPO) and the European Union (EU) Office for Harmonization in the Internal Market published a joint study on the impact of IP rights and IP-based industries on the EU economy.[11] The study found that on a wide range of indicators, IP-intensive industries made significant contributions to the EU economy. For example, the study found that IP-intensive industries generated almost 26% of all jobs in the studied period, and 35% of all jobs if counting indirect employment generated. As significantly, the report found that IP-intensive industries produced almost 39% of EU-wide gross domestic product (GDP), worth almost €5 trillion.

This EPO study was in large measure based on work conducted by the U.S. government through the Economic and Statistics Administration and U.S. Patent and Trademark Office in 2012.[12] Like the EPO report, these agencies found that IP-intensive industries are instrumental to economic growth and job creation in the United States. Specifically, they found that these industries created more than $5 trillion in value added in 2010, accounting for almost 35% of the U.S. GDP. IP-intensive industries also created 40 million jobs, accounting for 27.7% of all U.S. jobs, with 27.1 million jobs in direct employment in IP-intensive industries and 12.9 million jobs in associated industries.

Other non-governmental work has also found significant links between broader economic activity and IP rights. For example, Kim et al. looked at the relationship between levels of IP protection and economic growth in 70 countries, with a special emphasis on Korea as a case study example.[13] Using a panel dataset to investigate the impact of different degrees of IP protection and forms of IP rights on innovation and economic activity, the authors found that patent protection had a significant impact on rates of innovation and that patentable innovations contribute to economic growth. This correlation is particularly strong for developed countries and countries that have reached a certain technological capacity and level. Utility models are shown to be of greater importance for developing countries, also contributing to innovation and economic growth. The paper argues that this is in line with a wider understanding that the impact of patent protection on innovation and economic activity becomes significant once a country reaches a certain innovative capacity and acquires the necessary R&D infrastructure. As a case study the paper examines the example of patent and utility model applications in Korea. The study uses Korean firm-level data from 1978 to 1995 and finds that the proportion of patent applications by Korean firms increased markedly in that period as these firms acquired more advanced technological capabilities and requisite R&D infrastructure, and Korea's national IP environment was strengthened through patent reform. From the mid-1980s to mid-1990s the ratio of utility model applications to patent applications dropped from 6:1 to 1:1, with the total patent applications in 1995 exceeding utility models. During this time period, total patent applications and utility model applications grew exponentially, with the combined total number of applications increasing from approximately 5,000 in 1985 to more than 80,000 in 1995.

5.2 Correlating the GIPC Index with IP-Related Income

It is also possible to use the GIPC Index as a measure of IP rights and correlate it to other areas of economic activity. While correlations fall into the field of descriptive statistics (i.e., they do not presume to suggest causality), they are nonetheless important and can provide a broad picture of the link between different areas of the legal and economic environment in countries.

For example, it is interesting to consider the extent to which countries that score higher on the GIPC Index also benefit from a higher level of income due to their ability to leverage the knowledge, innovation, and creativity of their citizens. Specifically, one would expect that the stronger a national IP environment, the greater the number of IP assets generated and stored in an economy and, in turn, the higher its levels of IP-based receipts.

One acceptable way to measure the income generated from IP-based activities is to map the charges and receipts from IP-related transactions between residents and nonresidents in a given country. Charges and receipts for the use of intellectual property are defined by the World Bank as "payments and receipts between residents and nonresidents for the authorized use of proprietary rights … and for the use, through licensing agreements, of produced originals or prototypes … and related rights."[14] These rights and related rights include patents, trademarks, copyrights, industrial designs, use of prototypes, satellite broadcasts, and so forth.

Figures I and II correlate the charges and receipts for the use of intellectual property in 2011 (the latest year for which data are available) with the top three and bottom three countries in this year's edition of the GIPC Index. (Vietnam has been replaced by Indonesia as one of the bottom-three countries because the World Bank does not provide data on IP receipts for Vietnam.) Figure I displays the GIPC Index scores for all six countries, and Figure II shows their respective levels of IP-based receipts for 2011.

Figure I: 2014 GIPC Index Scores, Top Three versus Bottom Three Countries

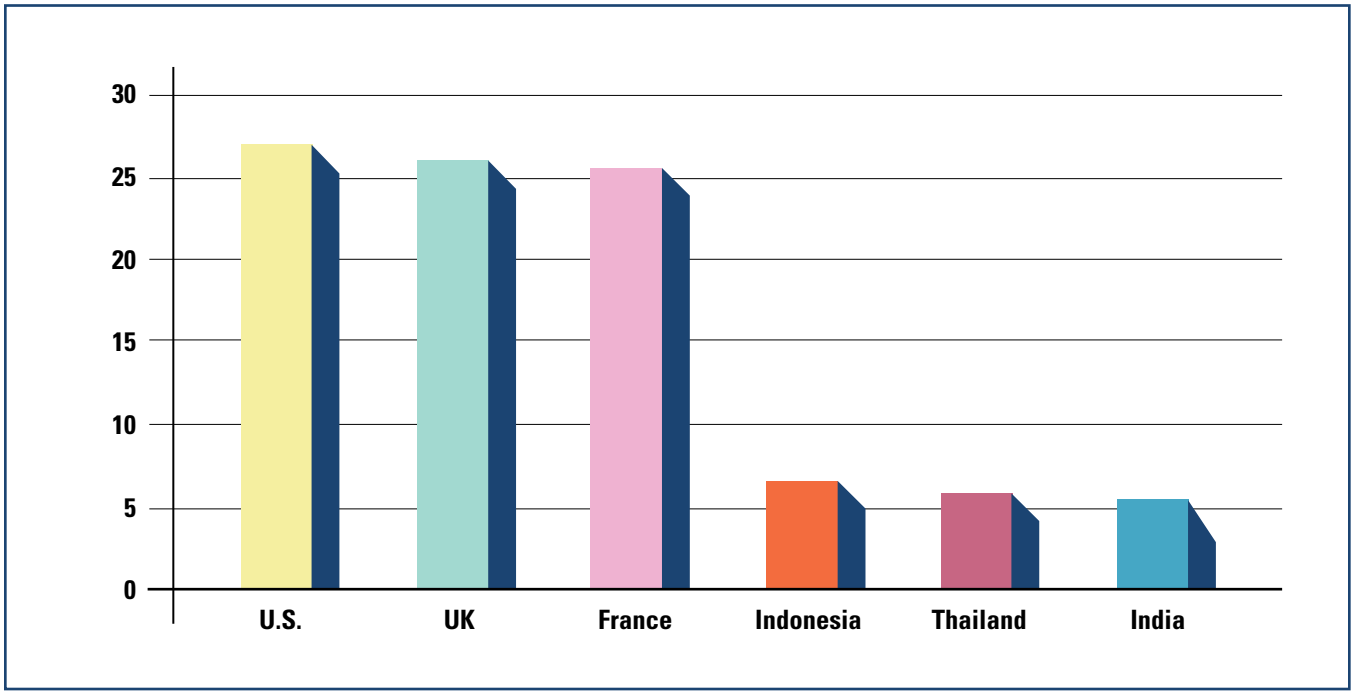
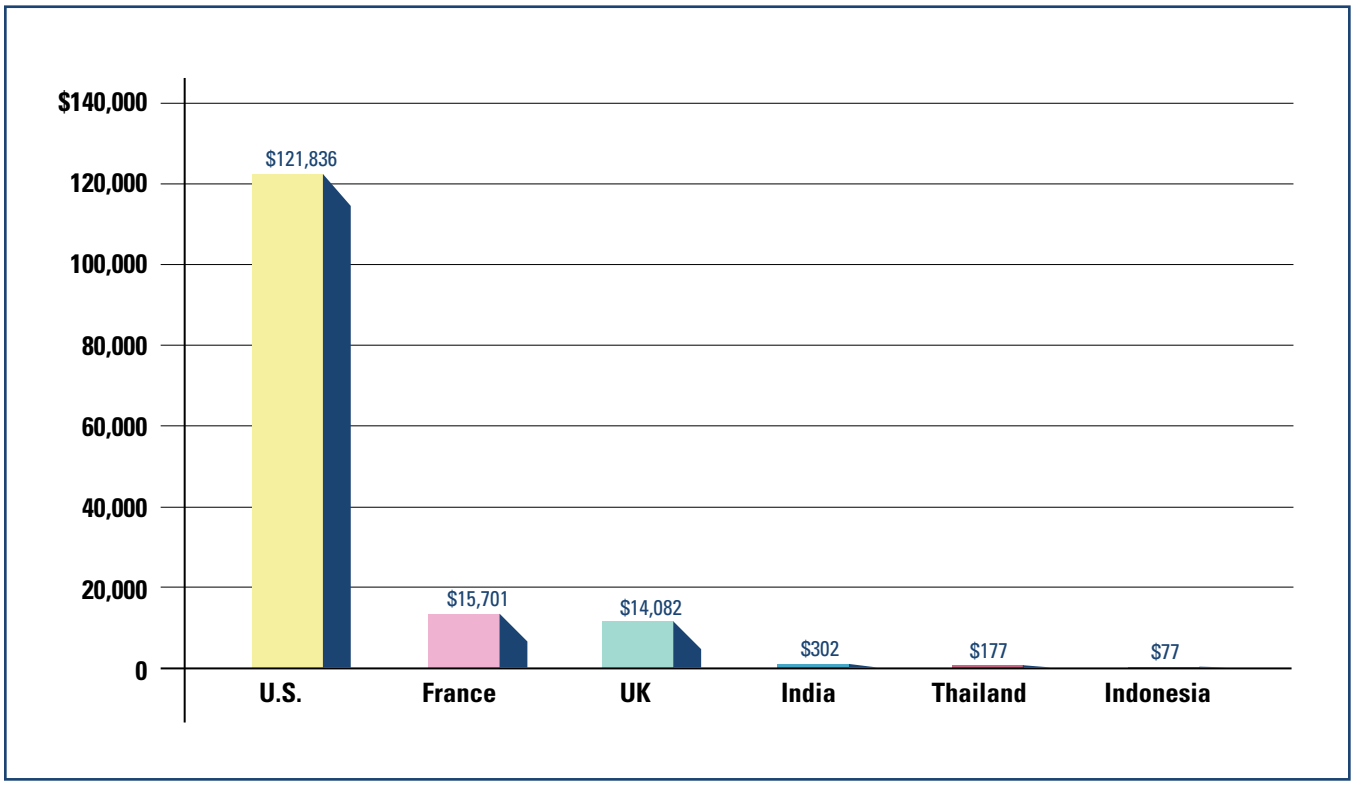


Figure II: Charges for the Use of IP Receipts, Current U.S. Dollars (Millions), GIPC Index Scores, Top Three versus Bottom Three Countries, 2011[15]



Source: World Bank

Figure II shows quite conclusively that the top three countries in this year's edition of the GIPC Index generate significantly more receipts from their IP assets than do the bottom three. This simple correlation would seem to suggest that a stronger national IP environment also results in higher levels of IP-based income.

Having set the context and outlined how the availability and enforcement of IP rights has a direct economic impact—not least on FDI, economic growth, and IP-based income—this report now shifts back its focus to this year's edition of the GIPC Index. The next section details how this year's Index was built, describes the sources it has used, and explains what each Index indicator measures and the basis on which each is calculated.

6. Methodology, Sources, and Indicators Explained

The second edition of the GIPC Index sees a significant expansion of the Index with regard to both the number of countries benchmarked and the number of indicators measured. As mentioned before, the total number of indicators mapped and measured has been increased from 25 in the 2012 edition to 30 in 2014, and the number of countries increased from 11 to 25. Moreover, as detailed below, the scoring methodology used has also been fine-tuned in order to increase the granularity and depth of the indicators.

The first edition of the GIPC Index consisted of 25 indicators across 5 separate categories:

1. **Patents, Related Rights, and Limitations;**
2. **Copyrights, Related Rights, and Limitations;**
3. **Trademarks, Related Rights, and Limitations;**
4. **Enforcement; and**
5. **Membership and Ratification of International Treaties.**

The second edition of the GIPC Index has been expanded by 5 indicators and now consists of 30 indicators across 6 separate categories:

1. **Patents, Related Rights, and Limitations;**
2. **Copyrights, Related Rights, and Limitations;**
3. **Trademarks, Related Rights, and Limitations;**
4. **Trade Secrets and Market Access;**
5. **Enforcement; and**
6. **Membership and Ratification of International Treaties.**

As in the first edition, these categories are for ease of organizing the Index and ***have no statistical impact on weightings or a country's overall score in the Index.*** Each indicator (including the five new indicators) is explained in more detail below.

In addition to the inclusion of five new indicators, the second edition also sees the expansion, from one to two, of numerical indicators relating to the measure of piracy and counterfeiting in indicators 21 and 22, and the number of indicators in Category 6: Membership and Ratification of International Treaties has been reduced from five to four. Finally, an additional category has been created for the second edition—Category 4: Trade Secrets and Market Access.

Table 2 lists all 30 indicators that together make up the 2014 GIPC Index.

Table 2: 2014 GIPC Index: Categories and Indicators

Category 1: Patents, Related Rights, and Limitations
1. Patent term of protection
2. Patentability requirements
3. Patentability of computer-implemented inventions
4. Pharmaceutical-related patent enforcement and resolution mechanism
5. Legislative criteria and use of compulsory licensing of patented products and technologies
6. Patent term restoration for pharmaceutical products
7. Regulatory data protection term
Category 2: Copyrights, Related Rights, and Limitations
8. Copyrights (and related rights) term of protection
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)
10. Availability of frameworks that promote cooperative action against online piracy
11. Scope of limitations and exceptions to copyrights and related rights
12. Digital rights management legislation
13. Clear implementation of policies and guidelines requiring proprietary software used on government information and communication technology (ICT) systems to be licensed software
Category 3: Trademarks, Related Rights, and Limitations
14. Trademarks term of protection (renewal periods)
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products
16. Ability of trademark owners to protect their trademarks: requisites for protection
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks
18. Availability of frameworks that promote action against online sale of counterfeit goods
Category 4: Trade Secrets and Market Access
19. Protection of trade secrets
20. Barriers to market access
Category 5: Enforcement
21. Physical counterfeiting rates
22. Software piracy rates
23. Civil and procedural remedies
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement
25. Criminal standards including minimum imprisonment and minimum fines
26. Effective border measures
Category 6: Membership and Ratification of International Treaties
27. World Intellectual Property Organization (WIPO) Internet Treaties
28. Singapore Treaty on the Law of Trademarks
29. Patent Law Treaty
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after World Trade Organization/TRIPS membership

6.1 Scoring Methodology

As in the first edition of the GIPC Index, each indicator can score values between 0 and 1, and the cumulative score of the GIPC Index ranges from a minimum of 0 to a maximum of 30. Indicators can be scored using three distinct methods: binary, numerical, and mixed. For the second edition, changes have been made to improve the scoring methodology used and, specifically, to increase the level of granularity when scoring each indicator. Overall, the number of mixed and numerical indicators has been increased while the number of binary indicators has been decreased.

When an indicator is of a binary nature, each indicator is assigned either the value 0—if the particular IP component does not exist in a given country—or the value 1—if the particular IP component does exist in a given country.

Numerical indicators are those that, for example, measure terms of exclusivity or are based on a quantitative source. Terms of exclusivity are calculated by dividing the actual term of exclusivity of each relevant indicator by a standard baseline. For example, the standard baseline used for the copyright term is that of 95 years provided in the United States.[16] Thus, the numerical formula for this subcategory is: *n years of basic copyright term/95.* If a country has a copyright term of 95 years, the value it scores in this indicator is 1. If it has a copyright term of fewer than 95 years, then the value is less than 1. Details of the individual baselines used for different types of IP rights are provided in Table 3.

Where there are no adequate baselines and the legislative or regulatory existence of an indicator is not sufficient to determine its actual use or application, the score for that indicator will be mixed. The final score for that indicator will be based on an even split between:

1. Primary and/or secondary legislation (regulation) in place; and

2. The actual application and enforcement of that primary and/or secondary legislation.

For the second edition of the GIPC Index, the number of mixed indicators has been increased, with 21 of the 30 indicators mixed. Of the remaining nine indicators, seven are numerical and only two are binary. The increased use of mixed indicators provides greater flexibility when scoring and allows the Index to more effectively accommodate "gray areas" in country performance for a given indicator. Specifically, it is possible to assign a partial score, rather than only 0 or 1.

In a further innovation in the 2014 Index, the number of scores available within a mixed indicator has increased from three (0, 0.5, and 1) to five (0, 0.25, 0.5, 0.75, and 1) possible scores. As with the more widespread use of mixed indicators, this increase in the range of scores available for mixed indicators means that greater nuance can be used when individual indicators are scored. The practical end result is that countries can now receive partial scores for an indicator, which in some cases are a better approximation of their given reality. For example, with regard to indicator 4 (pharmaceutical-related patent enforcement and resolution mechanism), this change in scoring methodology allows the Index to recognize and give a partial score in this indicator to countries such as Canada and Mexico that in the 2012 edition received a 0.

Finally, there are a few instances where rather than the *de jure* and *de facto* existence of a single element, a mixed indicator is split between two separate elements. For example, in Category 6: Membership and Ratification of International Treaties, the indicators are measured by the signature and ratification or accession to a given international treaty. Thus, 0.5 is given for being a signatory of a treaty and 0.5 for ratifying or acceding to that treaty. In this category, the use of the three-score system (0, 0.5, and 1) is maintained.

6.2 Baselines Used

When possible, the GIPC Index uses baseline values, measures, and models. These values are based on terms of protection, enforcement mechanisms (*de jure* and *de facto*), and/or model pieces of primary or secondary legislation that can be found at the national, supranational,

and international level. Where no adequate baselines are found in international law or treaties, the baselines and values used are based on what rights holders view as an appropriate environment and level of protection.

Table 3: IP Rights Baselines

	Baseline in Years	Legislation Model
Basic patent protection	20	TRIPS
Copyrights	95	U.S.
Trademarks	10	WIPO
Regulatory data protection	10	EU
Patent term restoration	5	EU/U.S.

6.3 Measuring Counterfeiting and Piracy

Indicators 21 and 22 of the GIPC Index measure rates of physical counterfeiting and software piracy, respectively. There are a number of challenges when attempting to measure piracy and counterfeiting.

First, illegal activities are inherently difficult to measure and quantify with a high level of accuracy. Out of necessity, estimates will be based on variables such as physical seizures and surveys. This is particularly the case for online piracy.

Second, studies of rates of piracy and counterfeiting are often either only country-specific (focusing on one country or a relatively small sample of countries) or global but not country-specific. The result is a relative paucity in the number of studies that measure and compare levels of piracy and counterfeiting with a sample of countries sufficient enough to make large-scale comparisons empirically robust.

Finally, because measures of piracy and counterfeiting are inexact, estimates of their economic impact can vary widely depending on the methodology and data samples used.[17]

To surmount these challenges and achieve the broadest and most empirically comparable measure of piracy levels, the GIPC Index uses two main sources for piracy and counterfeiting:

- The OECD's General Trade-Related Index of Counterfeiting of Economies (GTRIC-e), which measures the relative rates of physical counterfeiting for 134 economies (the latest year for which data are available is 2009);[18] and
- Software piracy rates compiled by the Business Software Alliance (BSA) (2011 being the most recent survey).[19]

These sources are both robust and internationally recognized measures. Furthermore, they cover a large sample of countries, providing a sound basis for both cross-country comparisons and long-term use within the GIPC Index. Both the BSA software piracy rates and the GTRIC-e are numerical measures and can be transposed into two scores for indicators 21 and 22, respectively.

Still, there are caveats with the use of these measures, in particular the GTRIC-e. The GTRIC-e measures the relative rates of physical counterfeiting and is based on international trade statistics and customs interception data. Crucially, the GTRIC-e does not take into account or measure "domestically produced and consumed products or non-tangible pirated digital products."[20] The practical result is that a number of countries that have relatively low levels of customs interception of counterfeit goods yet high levels of domestically produced counterfeit goods or high levels of

online piracy rank quite well within the GTRIC-e. *Yet this may not be a reflection of their overall piracy and counterfeiting environment.* For example, the rank of Argentina, Brazil, Chile, and Mexico in the GTRIC-e is slightly misleading as all four countries in other measures—not least the BSA software piracy estimates—have high rates of piracy.

The calculation for indicator 21 (physical counterfeiting rates) based on the GTRIC-e is a simple numerical calculation of a country's rank (based on its relative rate of counterfeiting) divided by the total number of countries (134) included in the GTRIC-e. For example, country X ranks 45 on the GTRIC-e index; calculating that country's GIPC Index score for indicator 21 is thus the numerical result of dividing 45 by 134. Below Table 4 provides an overview of the respective GTRIC-e ranking and GIPC Index scores for indicator 21 for all 25 countries included in the 2014 GIPC Index.

Table 4: GTRIC-e Ranking of Relative Rates of Physical Counterfeiting for 134 Economies[21]

Country	GTRIC-e Ranking: From Highest to Lowest Levels of Physical Counterfeiting	Indicator 21 Score
China	1	0.01
Thailand	4	0.03
United Arab Emirates	5	0.04
Vietnam	16	0.12
Malaysia	17	0.13
Turkey	21	0.16
Ukraine	25	0.19
India	48	0.36
Indonesia	57	0.43
Singapore	61	0.46
Russia	77	0.57
Colombia	80	0.60
Nigeria	85	0.63
South Africa	90	0.67
United States	95	0.71
United Kingdom	97	0.72
Brazil	98	0.73
Argentina	102	0.76
Australia	104	0.78
France	105	0.78
Mexico	107	0.80
Canada	113	0.84
Japan	117	0.87
New Zealand	118	0.88
Chile	124	0.93

The BSA survey expresses a country's software piracy rate as a percentage. Within the GIPC Index, the reverse of the BSA software piracy percentage is used as the score for indicator 22; the higher the BSA software piracy rate for a country, the lower its score on the GIPC Index. For example, if country X has a software piracy rate of 90% according to the BSA, it receives a score of 0.1 for indicator 22 within the GIPC Index. Table 5 shows the latest BSA software piracy rates for all countries sampled in the 2014 GIPC Index, together with their respective scores for indicator 22.

Table 5: BSA Ranking of Software Piracy Rates, GIPC Index Countries Sampled, 2013[22]

Country	BSA Software Piracy Rate: From Highest to Lowest Levels of Software Piracy	Indicator 22 Score
Indonesia	86%	0.14
Vietnam	85%	0.15
Ukraine	84%	0.16
Nigeria	82%	0.18
China	77%	0.23
Thailand	72%	0.28
Argentina	69%	0.31
Russia	63%	0.37
India	63%	0.37
Turkey	62%	0.38
Chile	61%	0.39
Mexico	57%	0.43
Malaysia	55%	0.45
Colombia	53%	0.47
Brazil	53%	0.47
France	37%	0.63
United Arab Emirates	35%	0.65
South Africa	35%	0.65
Singapore	33%	0.67
Canada	27%	0.73
United Kingdom	26%	0.74
Australia	23%	0.77
New Zealand	22%	0.78
Japan	21%	0.79
United States	19%	0.81

6.4 Sources

Scoring in the GIPC Index is based on both qualitative and quantitative evidence. In order to provide as complete a picture of a country's IP environment as possible, this evidence is drawn from a wide range of sources. All sources used are publicly available, freely available, and accessible to all. The following is an outline of the different types of sources used.

Government

Sources from government branches and agencies include:

- Primary legislation;
- Secondary legislation (regulation) from executive, legislative, and administrative bodies;
- Reports from parliamentary committees and government agencies, including patent or intellectual property offices as well as enforcement agencies; and
- Internal departmental guidelines, policies, assessments, and audits.

Legal

Sources from judicial authorities and legal practitioners include:

- Court cases and decisions;
- Legal opinions written by judges; and
- Legal analyses and opinions written by legal practitioners.

International Institutions and Third Parties

These sources include:

- Data, studies, and analysis from international organizations such as the OECD, WTO, and WIPO;
- Publicly available reports, studies, and government submissions by industry organizations; and
- Reports from non-governmental organizations and consumer organizations.

Academic

Academic sources include:

- Academic journals; and
- Legal journals.

News

- News sources include:
- Newspapers;
- News websites; and
- Trade press.

6.5 Indicators Explained

The total number of indicators mapped and measured in the second edition of the GIPC Index has increased by 20%, from 25 indicators to 30 indicators. These new indicators are primarily concentrated in Category 3: Trademarks, Related Rights, and Limitations, with three of the five new indicators included in this category; they are indicators 16, 17, and 18. All three of these new indicators measure the availability, application, and enforcement of IP rights relating to trademark protection. Of the remaining two new indicators, indicator 2 measures the extent to which patentability requirements *(de jure* and *de facto*) correspond to international best practices. Indicator 20 seeks to assess the extent and manner in which market access may or may not be contingent on the sharing or divulging of IP-based or related information.

As explained in the previous section, in addition to the inclusion of five new indicators, the second edition also sees the expansion of indicators relating to the measure of piracy, from one indicator in first edition to two in the second. These are indicators 21 and 22. To make space for this additional piracy indicator, the number of indicators in Category 6: Membership and Ratification of International Treaties has been reduced from five to four.

Finally, a new additional category has been created for the second edition—Category 4: Trade Secrets and Market Access. As in 2012, the organization of indicators into separate categories has no bearing on the final score of the Index and is simply for ease of organization and presentation.

This section explains how each indicator in the GIPC Index is measured and scored.

6.6 Category 1: Patents, Related Rights, and Limitations

The indicators included in this category relate to patent protection and related rights and limitations.

1. **Patent term of protection**—Measured by the basic patent term offered in the TRIPS Agreement. This is a numerical indicator.

2. **Patentability requirements**—The extent to which patentability requirements are in line with international standards of novelty, inventive step, and industrial applicability.[23] Measured by (1) existing *de jure* patentability guidelines and regulations and (2) *de facto* standards established through the application of these guidelines and regulations through the examination process and judicial review. This is a mixed indicator.

3. **Patentability of computer-implemented inventions** (CIIs)—Measured by the extent to which primary and/or secondary legislation explicitly allows for the patentability of CIIs. This is a mixed indicator.

4. **Pharmaceutical-related patent enforcement and resolution mechanism**—Measured by the existence of primary and/or secondary legislation (such as a regulatory mechanism) that provides a transparent pathway for adjudication of patent validity and infringing issues before the marketing of a generic or biosimilar product. This score is evenly divided between the existence of relevant primary and/or secondary legislation and its application/enforcement. If no legislation is in place, the maximum score that can be achieved is 0.5 based on the extent to which *de facto* practices are in place that achieve a similar result. This is a mixed indicator.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies**—Measured by the extent to which primary and/or secondary legislation on the use of compulsory licensing and its application/enforcement is transparent and consistent with the following criteria: (1) the issuing should exclude any requirement for domestic manufacturing; (2) the issuing should not apply to patented innovations that have not yet reached the market; (3) in the case of biopharmaceutical products, the use of compulsory licensing under the framework of TRIPS provisions on public health should not be for commercial purposes, such as for price negotiations or in support of domestic industries; and (4) adequate and well-defined recourse mechanisms should be in place for parties affected by the issuing of the license. This is a binary indicator.

6. **Patent term restoration for pharmaceutical products**—Measured by the current baseline rate of five years used in the United States and EU. This protection is aimed at restoring a portion of the patent term granted to innovative pharmaceutical products that is lost, due to the prolonged research, development, and regulatory approval periods of such products. This category does not include other forms of patent term restoration adjustment that are granted on the basis of prolonged examination periods. This is a numerical indicator.

7. **Regulatory data protection (RDP) term**—Measured by the optimal desired term, which is the term of exclusivity used by the European Union for new biopharmaceutical products containing new active ingredients regardless of molecular size and/or complexity.[24] This is a numerical indicator.

6.7 Category 2: Copyrights, Related Rights, and Limitations

The indicators included in this category relate to copyright protection and related rights and limitations.

8. **Copyrights (and related rights) term of protection**—Measured by the baseline term of protection, which

is the minimum term afforded in the United States of 95 years. Terms of protection are measured as the minimum term allowed by copyright law. Where there are different minimum terms of protection for different forms of copyright, all terms are added together and divided by 95. This is a numerical indicator.

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)**—Measured by the extent to which countries (1) have in place laws and procedures that provide necessary exclusive rights and (2) apply these laws to prevent, deter, and remedy online infringement of copyright and related rights. This is a mixed indicator.

10. **Availability of frameworks that promote cooperative action against online piracy**—Measured by the existence of clear standards for the limitation of liability for copyright and related rights infringement by Internet service providers (ISPs) that expeditiously remove infringing material on obtaining knowledge of it, in the context of an overall system that does not unduly burden ISPs, promotes cooperation between ISPs and rights holders to address online piracy, and respects and protects users' rights. This is a mixed indicator.

11. **Scope of limitations and exceptions to copyrights and related rights**—Measured by the extent to which exceptions and limitations are consistent in text and in application with the three-step test originating in the Berne Convention (Berne three-step test).[25] The score for this indicator is evenly divided between legislation and application in the court system. This is a mixed indicator.

12. **Digital rights management legislation**—Measured by the extent to which (1) countries have passed primary and/or secondary legislation relating to digital rights management (DRM) and technological protection measures and (2) this legislation is applied. This is a mixed indicator.

13. **Clear implementation of policies and guidelines requiring proprietary software used on government information and communication technology (ICT) systems to be licensed software**—Measured by the extent to which (1) policies and guidelines are in place stipulating the use of only licensed proprietary software and (2) these policies and guidelines are applied. This is a mixed indicator.

6.8 Category 3: Trademarks, Related Rights, and Limitations

The indicators in this category relate to trademark protection and related rights and limitations.

14. **Trademarks term of protection (renewal periods)**—Measured by the renewal term of protection being offered, with the baseline term being 10 years as provided by the Singapore Treaty on the Law of Trademarks. This is a numerical indicator.

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products**—Measured by the extent to which different national laws and regulations do not unreasonably limit the rights holder from using or putting his brand on the package of his or her products, thereby curtailing his or her rights under trademark protection. This is a binary indicator.

16. **Ability of trademark owners to protect their trademarks: requisites for protection**—Measured by the extent to which existing laws and regulations and/or de facto practices allow for trademark protection through use of the mark, regardless of whether or not the trademark owner registers the mark. This is a mixed indicator.

17. **Legal measures available that provide *necessary exclusive rights to redress unauthorized uses of trademarks***—Measured by the extent to which countries (1) have in place laws and procedures that provide necessary causes of action to address

violations of a trademark owner's rights (such as infringement of registered trademarks, unfair competition, false designation of origin, false advertising, dilution of famous trademarks, and cybersquatting), which create a likelihood of public confusion as to source, sponsorship, or affiliation, and (2) apply these laws to prevent, deter, and remedy infringement of trademarks and related rights. This is a mixed indicator.

18. **Availability of frameworks that promote action against online sale of counterfeit goods**—Measured by the existence of clear rules and standards for the expeditious removal of trademark-infringing material by online service providers on obtaining knowledge of the infringement, in the context of an overall system that does not unduly burden such providers, promotes cooperation between them and rights holders to address the infringement of trademark rights, and respects and protects consumers' rights. This score is evenly divided between the existence of relevant primary and/or secondary legislation and its application/enforcement. In the absence of a legal or regulatory framework, a score of up to 0.5 can be allocated based on the existence and effectiveness of voluntary industry standards and practices in place. This is a mixed indicator.[26]

6.9 Category 4: Trade Secrets and Market Access

The indicators in this category relate to trade secrets, market access, and related rights and limitations.

19. **Protection of trade secrets**—Measured by (1) the existence of legislation that offers protection for trade secrets or confidential business information and (2) the application of this legislation in the court or law enforcement system. Countries that do not have legislation in place but in which trade secrets and confidential information are effectively protected through other mechanisms can receive a maximum score of 0.5. Model legislation is TRIPS Article 39(1) and (2). This is a mixed indicator.

20. **Barriers to market access**—The extent to which laws and regulations or de facto practices make access to a country's market contingent on the sharing and/or disclosure of intellectual property and know-how with a local/domestic entity. This is measured by (1) the extent to which existing laws and procedures do not make market access contingent on the sharing/disclosure of intellectual property and know-how and (2) the application of such laws, or in the absence of such laws the existence of *de facto* practices and standards that achieve a similar effect. This is a mixed indicator.

6.10 Category 5: Enforcement

The indicators in this category measure the prevalence of IP rights infringement, the criminal and civil legal procedures available to rights holders, punishment rates, and the authority of customs officials to carry out border controls and inspections.

21. **Physical counterfeiting rates**—Measured by estimated rates of general trade-related physical counterfeiting.[27] This is a numerical indicator.

22. **Software piracy rates**—Measured by rates of software piracy. This is a numerical indicator.[28]

23. **Civil and procedural remedies**—Measured by (1) the existence of civil and procedural remedies, including injunctions, damages for injuries, and destruction of infringing and counterfeit goods, as well as (2) their effective application. This indicator also reflects administrative enforcement measures where applicable. This is a mixed indicator.

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement**—This is a mixed indicator.

25. **Criminal standards including minimum imprisonment and minimum fines**—Measured by the extent to which (1) actual legislation is in place

and (2) it is applied (i.e., where reliable source material is available, the actual level of prosecution and penalties applied). Model legislation includes TRIPS Article 61. This is a mixed indicator.

26. **Effective border measures**—Measured by the extent to which goods in transit suspected of infringement may be detained or suspended. This indicator also measures the extent to which border guards have the *ex officio* authority to seize suspected counterfeit and pirated goods without complaint from the rights holder. This is a mixed indicator.

6.11 Category 6: Membership and Ratification of International Treaties

The indicators in this category measure whether a country (1) is a signatory of and (2) has ratified or acceded to international treaties on the protection of IP. Indicators 27 through 29 are measured using WIPO as a source. The following treaties each make up one indicator.

27. **WIPO Internet Treaties**—These consist of the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.[29] Respectively, they cover and clarify the use of copyright in a digital environment and the moral and economic rights of performers and producers of phonograms. This is a mixed indicator.

28. **Singapore Treaty on the Law of Trademarks**—This is a mixed indicator.

29. **Patent Law Treaty**—This is a mixed indicator.

30. **At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership**—This is a mixed indicator.

7. Overall Findings

7.1 One Year of the GIPC Index: Impressions on What Remains a Challenging Global IP Environment

The expansion of the second edition of the GIPC Index from 11 to 25 countries has more than doubled the sample size of countries benchmarked. The increase in the number of countries benchmarked has significantly increased the amount of data and information on the state of IP protection and enforcement across the world. Overall, the results show how significant challenges remain across the globe and how many of the trends—positive and negative—from last year's edition and smaller country sample are present in this bigger, more diverse sample of countries.

Most high-income economies—with notable exceptions, such as Canada, New Zealand, Chile, and the United Arab Emirates (UAE)—have robust national IP environments in place. And while many middle-income and lower-middle-income economies have introduced important reforms in key areas of IP rights, as a whole there is still a significant way to go. This is illustrated by no middle-income country achieving a score of 50% or more of the Index. Only Malaysia and Mexico come closest, with total scores of just more than 14; all remaining countries score under 47% of the Index. Overall, the weakest total national IP environments are in the lower-middle-income countries, such as Vietnam, Indonesia, Thailand, and India.

There are examples of positive and negative developments in all countries sampled. For example, 10 of the 12 negotiating parties to the Trans-Pacific Partnership (TPP) free trade agreement are included in the Index. The conclusion and successful implementation of the TPP could lead to improvements of the GIPC Index score of many of the TPP signatories included in this Index. Similarly, the announcement of a political agreement between the European Commission and Government of Canada on a free trade treaty (the Comprehensive Economic and Trade Agreement, or CETA) was a major positive development. Indeed, the successful conclusion and implementation of CETA could also lead to improvements in Canada's national IP environment, including by possibly addressing some of the challenges identified in this report for the life sciences sector.

Other countries included in the Index also exhibit strengths and positive lessons in the development of their IP environments. For example, Singapore is a story of success and testament to how improvements in a country's national IP environment can have significant and lasting economic effects. Scoring one of the highest scores for indicators relevant to the life sciences sector in Category 1: Patents, Related Rights, and Limitations, Singapore has built a world-class biomedical, innovation-based hub over the course of the past two decades. These IP reforms have had important knock-on effects and significantly increased clinical trial activity, biomedical research and development, and foreign direct investment.[30]

However, in many countries significant challenges remain. With regard to patents and related rights, for instance, a growing number of countries continue to make use of forms of compulsory licensing or the revocation of patents that are outside the framework of the TRIPS Agreement. As detailed in its country overview, India is by far the most prolific user of these policies. But other countries, such as Indonesia and Thailand, have also issued such licenses in recent years. Many countries also have in place *de jure* or *de facto* patentability requirements that restrict the basis for patenting and innovators' rights; examples include Canada, India, Brazil, and Argentina.

In the copyright and content space, many countries face significant challenges, lacking both a robust legal framework and consistent enforcement of existing legislation. Indeed, many of the countries sampled have limited primary and secondary legislation in place to address the issue of online piracy through the use of a graduated response scheme, ISP notice and takedown mechanisms, or strong DRM and technological protection mechanism (TPM) legislation.

Examples of countries lacking in these areas include Argentina, which does not have a legal framework in place to protect rights holders in the online space, and Nigeria, Thailand, Indonesia, Vietnam, Turkey, and Ukraine, all of which have no or very limited laws in place. These countries also suffer persistently high piracy rates and struggle to enforce existing rudimentary laws and legislation. In particular, copyright and trademark enforcement in Ukraine is woefully lacking with, for instance, illegal government use of pirated software and widespread trading and transiting of physical and online counterfeit goods.

The protection and effective enforcement of trademarks also remains a challenge, particularly in the online space. Many countries, such as Malaysia, Ukraine, Vietnam, China, Thailand, Indonesia, Nigeria, South Africa, and others, fail to protect and effectively enforce trademarks. Few countries—even those with high incomes—have in place effective mechanisms to combat the increased sale of counterfeit goods through online auction houses. There are private initiatives such as eBay's Verified Rights Owner (VeRO) Program, which is in place in most countries included in the Index where eBay operates. There are also some examples where relevant notice and takedown legislation does include an obligation on the part of online merchants to take down infringing material on notification by a rights holder. In the European Union, principles and obligations were established with regard to the E-Commerce Directive and online auction houses in the 2011 European Court of Justice case *L'Oréal SA and Others v. eBay International AG and Others* (Case C-324/09).

An area of growing concern is the erection of IP-based market-access barriers. In a bid to improve domestic innovative and technological capabilities, an increasing number of countries are making market access conditional on the forced sharing of IP and sensitive technologies. For example, since the mid-2000s, China has introduced and implemented a range of policies making access to the Chinese market conditional on the sharing of technology and IP with domestic entities. These policies include the transfer of proprietary technologies in procurement, joint ventures, and standardization processes; local manufacturing requirements; and limitations on investment by foreign entities, without guarantee they will be protected from unauthorized disclosure, duplication, distribution, and use. Since 2011, the Chinese government has changed direction somewhat and revoked certain policies at the central level, such as procurement catalogues with special treatment of products that involve local ownership or development of relevant intellectual property. However, this process still requires significant implementation across local and regional governments, both in terms of halting existing policies as well as ensuring new policies linking indigenous innovation with government procurement are not introduced. For instance, in 2012 and 2013 such policies were introduced in at least three municipalities and provinces, and a 2012 survey of multinational companies operating in China indicates that the vast majority have not experienced any improvement in the procurement environment.

Similarly, other countries have erected specific IP-related barriers to access for certain market segments. For instance, Indonesia has introduced IP-based barriers to accessing its pharmaceutical market. Specifically, these barriers condition foreign rights holders to gain market access on either (1) establishing a local manufacturing capability or (2) licensing their intellectual property to an existing firm with a local manufacturing capacity.

As these examples illustrate, there is a broad range of performance within and between the different categories of the Index, types of IP rights, and industry sectors. For example, some countries that do poorly overall in the Index perform highly in certain sectors or categories. Conversely, a number of countries that do well by comparison with their peers in some categories display significant weaknesses in others.

Before switching to a drill-down analysis of the overall and category-specific country scores, it is worth looking at the bigger picture through the prism of those 11 countries included in both the 2012 and 2014 editions of the GIPC Index.

2012 Scores versus 2014 Scores

Overall, the national IP environments in the 11 countries included in the first edition of the GIPC Index have not

changed significantly from 2012 to 2014. Looking, for example, at the average percentage score for these 11 countries, the difference between 2012 and 2014 is very slight. In 2012, the average percentage score was 55.72%.[31] In 2014, the average was 55.3%. This is not to say that there have not been significant changes for some countries within certain categories or even specific indicators.

For example, China, while overall continuing to have a challenging national IP environment, has improved its total score and, in some categories, such as Category 1: Patents, Related Rights, and Limitations, continues to be a strong performer, achieving the highest score of all middle-income countries and even outperforming high-income countries such as Chile and the UAE. In terms of concrete policy achievements during 2013, these include judicial guidance, which introduces principles concerning secondary liability of online copyright infringement, especially of ISPs; a new trademark law that enhances the damages and penalties retrievable for trademark infringement; and continued work on amendments to copyright law that when introduced would help fill current gaps in key areas of online copyright protection, such as the scope of exceptions to copyright and the protection of digital rights management.

Like China, Russia has made some progress in 2013, although its IP rights environment remains a work in progress, with particular challenges in the space of enforcement and implementation of commitments under the WTO accession. Most notably, new amendments to the Civil Code Part IV were introduced, passed by the Duma, and signed into law in July 2013. These amendments include a notice and takedown provision with regard to the responsibilities of "information intermediaries," which include an obligation to act on a notice of infringement from a rights holder. These amendments also include the introduction of interim judicial measures, designating the Moscow City Court as the first instance of such application and with the power of issuing temporary injunctions. A new IP specialist court also began operations in 2013.

Other countries have seen a regression in their IP environments and in certain of the GIPC Index's categories. For example, Australia's overall GIPC Index score has decreased from 86% to 81% of the total available score, primarily in Category 1: Patents, Related Rights, and Limitations. Among other elements, recent actions by the Australian government have limited the ability of innovative pharmaceutical companies to seek adjudication of patent infringement by placing extra costs on companies with claims that are found to be invalid or non-infringing.

In India, the national IP environment continued to deteriorate in 2013 across a number of critical areas. In the biopharmaceutical space, Indian policy continued to breach international standards of the protection of innovation and patent rights, revoking patents generally accepted around the world and announcing that other patented medicines are being considered for compulsory licenses. Most notable was the April decision by the Supreme Court of India on the patentability of the anti-cancer drug Glivec; the court held that the drug did not meet patentability standards as imposed by the Indian Patent Act's Section 3(d) regarding "incremental innovation" and limiting patent protection to what is specifically disclosed, again in contradiction to global norms. This is despite Glivec being recognized as a breakthrough drug and given protection in 40 jurisdictions around the world. Given the prominence and size of India's generic pharmaceutical industry, other countries have taken notice and begun to introduce similar provisions into their own laws and regulations.

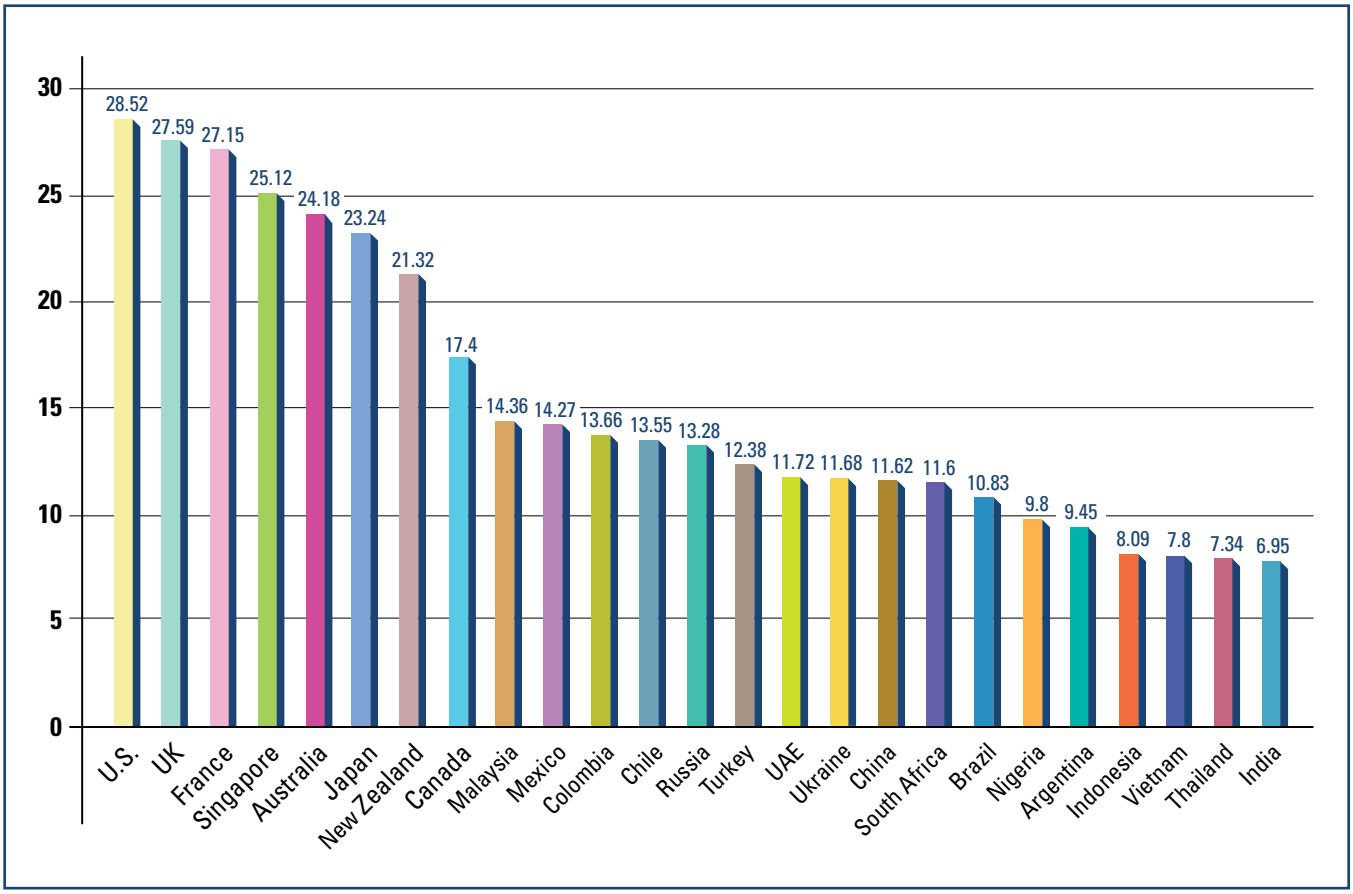
Other countries have introduced reforms that, if implemented, would weaken their IP environments. For instance, in Brazil the government introduced a patent reform initiative in Bill No. H.R. 5402/2013 in 2013; among other things, the bill purports to narrow patentability criteria, even further disallowing patents on new uses or new forms of known substances unless a significant improvement to the known efficacy is present, in many ways matching India's infamous Section 3(d).

The following overview of each category and detailed discussion of each country's score further highlight areas of concern and deficiencies as well as areas of positive development in 2013.

7.2 Overall Country Scores

The GIPC Index consists of 30 indicators divided into six major categories. Each indicator is scored between 0 and 1. The maximum available score for the entire index is 30. Figure III summarizes the total scores for all 25 countries benchmarked and ranks them in order of their total scores.

Figure III: Overall Country Scores



As in 2012, developed, high-income economies perform the best, with the top three performers bunched quite closely together. The United States, the United Kingdom, and France are separated by just more than one point. The next set of high-income countries clustered together is Singapore, Australia, and Japan, which are separated by a few points. While overall retaining very robust national IP environments, all three countries face challenges: Singapore in the copyright space; Australia with regard to plain packaging for tobacco products (where it more or less remains an international outlier); and Japan, which has significant weaknesses in its participation in international IP treaties.

The remaining high-income countries are characterized by how far behind they are from the others. New Zealand is more than 7 points behind the United States (the top score); and between Canada and the top performers, there is an 11-point drop. As in 2012, Canada continues to exhibit significant weaknesses in comparison with the

top performers in Category 1: Patents, Related Rights, and Limitations; Category 2: Copyrights, Related Rights, and Limitations; and Category 5: Enforcement. However, the CETA between the European Union and Canada might lead to some improvements to the Canadian national IP environment, particularly if it successfully addresses some of the challenges faced in the life sciences sector. Like Canada, New Zealand has significant weaknesses in the patent and enforcement categories, particularly with regard to biopharmaceutical IP rights.

The final non-BRICS high-income economies in the sample, Chile and the UAE, are even further behind the top. Chile scores 15 points behind the best-performing countries and the UAE scores nearly 17 points behind the United States, with neither of these countries achieving a score of 50% of the Index. Fundamental, basic IP challenges persist across the board, particularly in the enforcement space, as illustrated by high piracy and counterfeiting rates.

With regard to non-BRICS upper-middle-income economies, Malaysia and Mexico have taken important steps toward strengthening their respective IP environments in the past few years. Malaysia, for example, introduced significant changes to its copyright laws in 2012. Both countries do the best out of the upper-middle-income group and even outperform the worst-performing high-income countries: Chile, Russia, and the UAE. Score-wise, Colombia and Turkey are just below these countries, with significant challenges remaining particularly in Category 2: Copyrights, Related Rights, and Limitations. At the bottom of this group—nearly 5 points behind Malaysia—are Argentina and Thailand, nearly 21 points behind the United States. Overall, significant gaps remain in the national IP environments of all upper-middle-income countries and are reflected in these countries achieving scores of close to 50% or less of the total available Index score.

Out of the four non-BRICS lower-middle-income countries sampled, Ukraine has the highest score. However, Ukraine's total score is somewhat misleading as it is significantly boosted by the country's high score in Category 6: Membership and Ratification of International Treaties, in which it achieves a score of 3. In all other categories, Ukraine is at or near the bottom of the rankings, reflected in the U.S. Trade Representative's (USTR) *2013 Special 301 Report* in which Ukraine is the only country labeled a "Priority Foreign Country." Nigeria, Indonesia, and Vietnam are all at the bottom of the sample with some of the lowest scores and weakest total IP environments of all countries sampled.

The five BRICS economies—Brazil, Russia, India, China, and South Africa—continue to face serious challenges.

As mentioned above, Brazil has made limited progress since the publication of the 2012 GIPC Index. Indeed, many of the challenges that were in place in 2012 have been supplemented by potential new ones, most notably in the form of a patent reform initiative that appears to emulate the negative experiences from India.

As in 2012, Russia's overall score and ranking receives a significant boost from a high score in Category 6: Membership and Ratification of International Treaties. This is the primary reason it ranks higher than the other BRICS economies. For most other categories, Russia ranks at or near the bottom of the BRICS. Overall, Russia's environment is characterized by a distinct contrast between its level of participation in international treaties and its *de facto* implementation of rules and regulations. Nevertheless, as mentioned, 2013 did see a number of important milestones reached, most significantly the strengthening of the legal and enforcement framework as it relates to copyright and the introduction of a specialist IP court.

India continues to have the weakest IP environment of the BRICS and all countries sampled in the GIPC Index, scoring especially poorly for Category 1: Patents, Related Rights, and Limitations; Category 2: Copyrights, Related Rights, and Limitations; Category 5: Enforcement; and Category 6: Membership and Ratification of International Treaties, in which it scores 0. The continued use of compulsory licenses, revocation of patents, and weak legislative and enforcement mechanisms across all IP rights raise serious concerns about India's commitment to promoting innovation

and continuing its path toward creating a 21st-century knowledge-based economy. In fact, India's environment has deteriorated in the 2014 edition of the Index and, as will be spotlighted below, India actually achieves a percentage score lower this year (23%, or 6.95 out of 30 possible points) than last year (25%, or 6.24 out of 25 possible points).

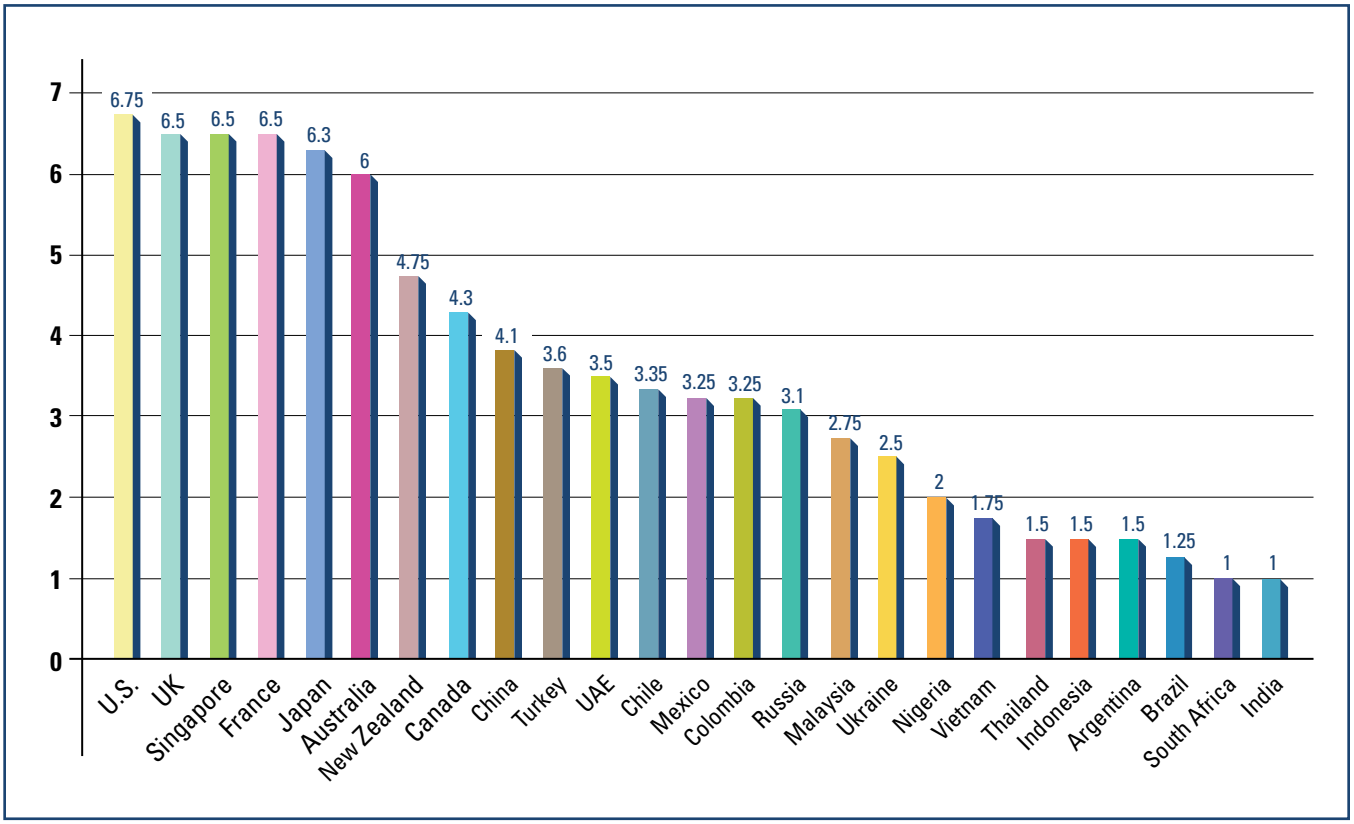
China's 2014 score remains mixed. In certain categories, China does relatively well; for example, in Category 1: Patents, Related Rights, and Limitations, China ranks ninth, ahead of the other BRICS economies. Other categories and indicators reveal more of a challenge. For instance, China scores the lowest of all countries in Category 4: Trade Secrets and Market Access and Category 5: Enforcement. This illustrates very significant challenges that still remain given the huge scale of manufacturing, vast differences in levels of development in the country, and rapid movement of counterfeiting activities to the Internet.

South Africa obtained the highest score out of all BRICS economies in Category 2: Copyrights, Related Rights, and Limitations; Category 3: Trademarks, Related Rights, and Limitations; Category 4: Trade Secrets and Market Access; and Category 5: Enforcement. Overall, the country is behind Russia but ahead of all the other BRICS. South Africa's overall score is brought down by its poor performance in Category 1: Patents, Related Rights, and Limitations and Category 6: Membership and Ratification of International Treaties.

7.3 Category 1: Patents, Related Rights, and Limitations

Figure IV summarizes the total scores for Category 1. This category measures the strength of a country's environment for patents, related rights, and limitations. The category consists of seven indicators with a maximum possible score of 7.

Figure IV: Scores, Category 1: Patents, Related Rights, and Limitations



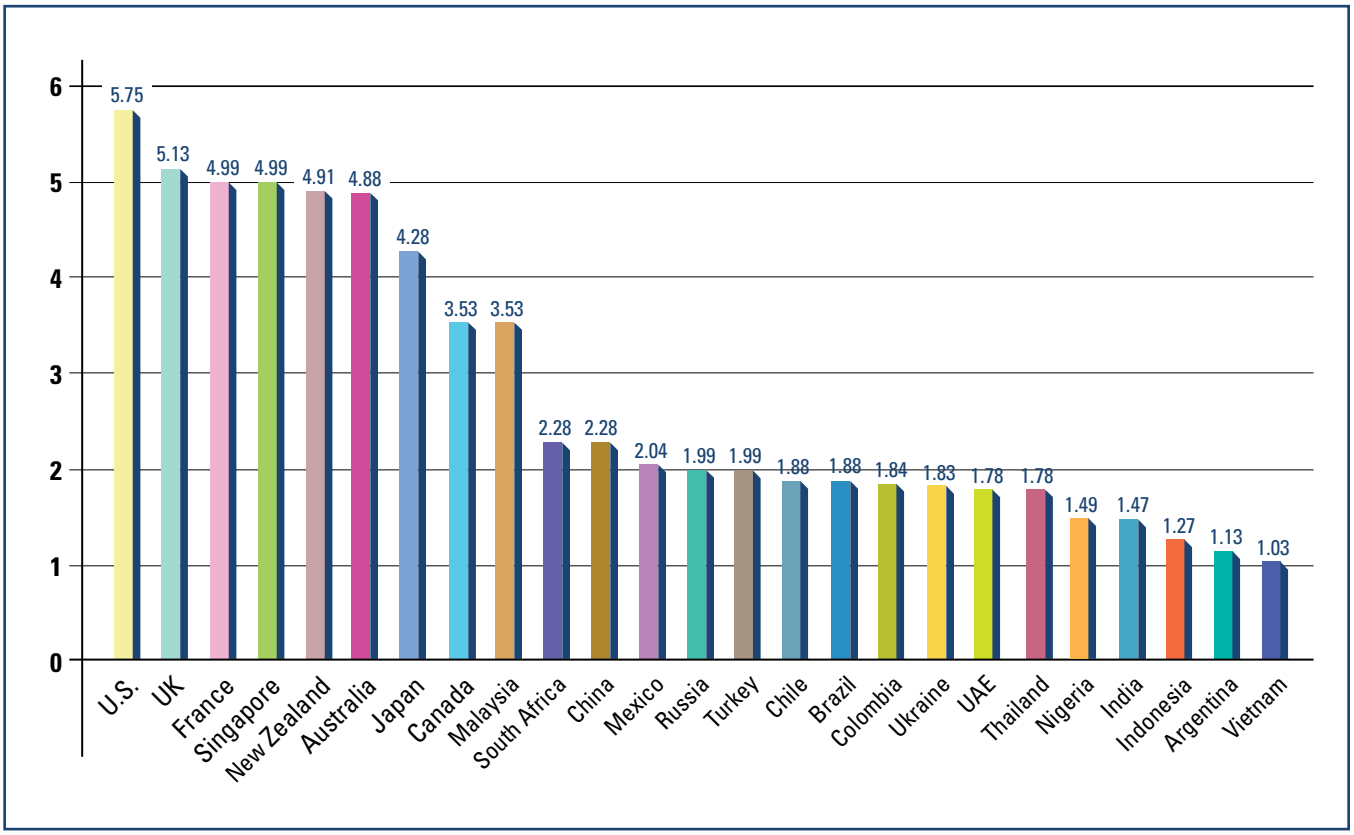
As expected from the overall scores, developed high-income economies do very well, with the United States, United Kingdom, Singapore, France, Japan, and Australia achieving the highest scores. Of note, New Zealand and Canada are significantly behind these countries, with weaknesses in their patenting environment, especially relating to the life sciences.

As in 2012, China does markedly better in this category than in other categories and in its overall score. A number of countries—Turkey, UAE, Russia, Chile, Mexico, and Colombia—receive a score of between 3.25 and 3.6. From this group there is a sharp drop to countries with a score below 2, which makes up more than 25% of the total sample size. Overall a high number of countries have weak patenting environments, with Brazil, South Africa, India, and Argentina standing out.

7.4 Category 2: Copyrights, Related Rights, and Limitations

Figure V summarizes the total scores for Category 2. This category measures the strength of the environment for copyrights, related rights, and limitations. The category consists of six indicators with a maximum possible score of 6.

Figure V: Scores, Category 2: Copyrights, Related Rights, and Limitations



As in Category 1, the United States, Australia, United Kingdom, France, Singapore, New Zealand, Australia, and Japan achieve the highest scores. As with both the overall scores and in Category 1, Canada lags behind other developed high-income countries significantly. As detailed in Canada's country overview, with the exception of

introducing DRM legislation, 2012 changes to the Canadian Copyright Act were mixed and, combined with some challenging 2012 court decisions, have not substantively improved the overall copyright environment.

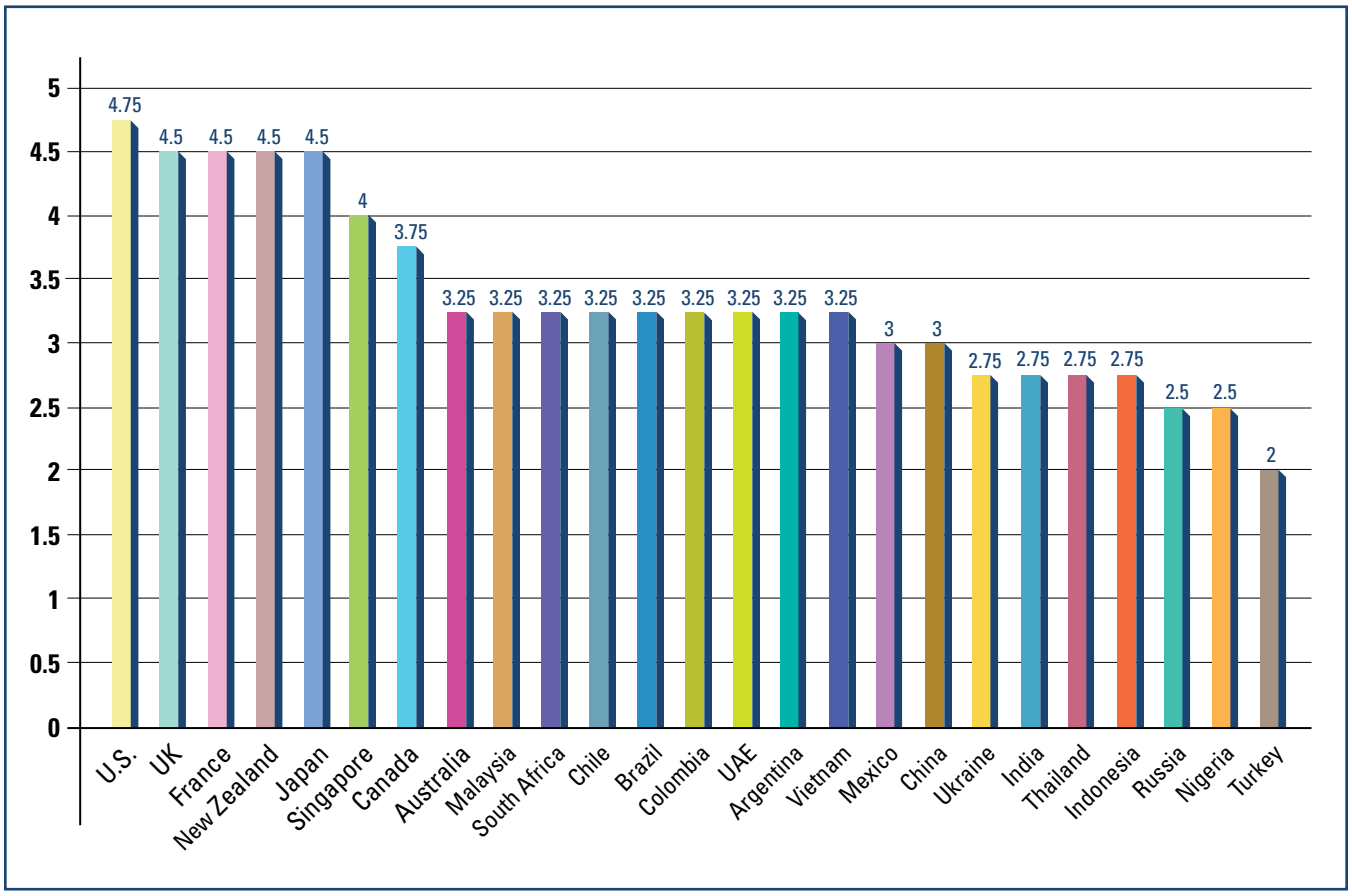
Of equal significance, Malaysia achieves a 2014 score of 3.53, which is significantly higher than other middle-income countries and the BRICS. Although challenges remain on the application side, this high score is primarily due to changes to its copyright laws introduced in 2012 that improved the legal framework relating to cooperative action against online piracy, DRM, and statutory civil damages.

As with Category 1, the relative weakness of the environments in the majority of the sampled countries stands out. No middle-income country, barring Malaysia, achieves a score at or more than 50% in this category. Particularly weak environments are found in Nigeria, India, Indonesia, Argentina, and Vietnam, which all fail to achieve a score of 25% in this category.

7.5 Category 3: Trademarks, Related Rights, and Limitations

Figure VI summarizes the total score for Category 3, which consists of five trademark indicators with a maximum possible score of 5.

Figure VI: Scores, Category 3: Trademarks, Related Rights, and Limitations



For trademark strength, the United States, United Kingdom, France, New Zealand, and Japan come out on top. In this category, Australia is somewhat of an outlier as a result of the passage of its 2012 plain-packaging requirements for tobacco products. This policy severely restricts the use of trademarks on retail packaging of tobacco products and limits the ability of trademark owners to exploit their brands. New Zealand remains in the top echelon in this category; however, the government's firm intention to introduce plain-packaging legislation (voiced in February 2013) would result in the score being lowered to one similar to Australia. The United Kingdom government has also considered introducing plain packaging and is still looking into the issue.[32]

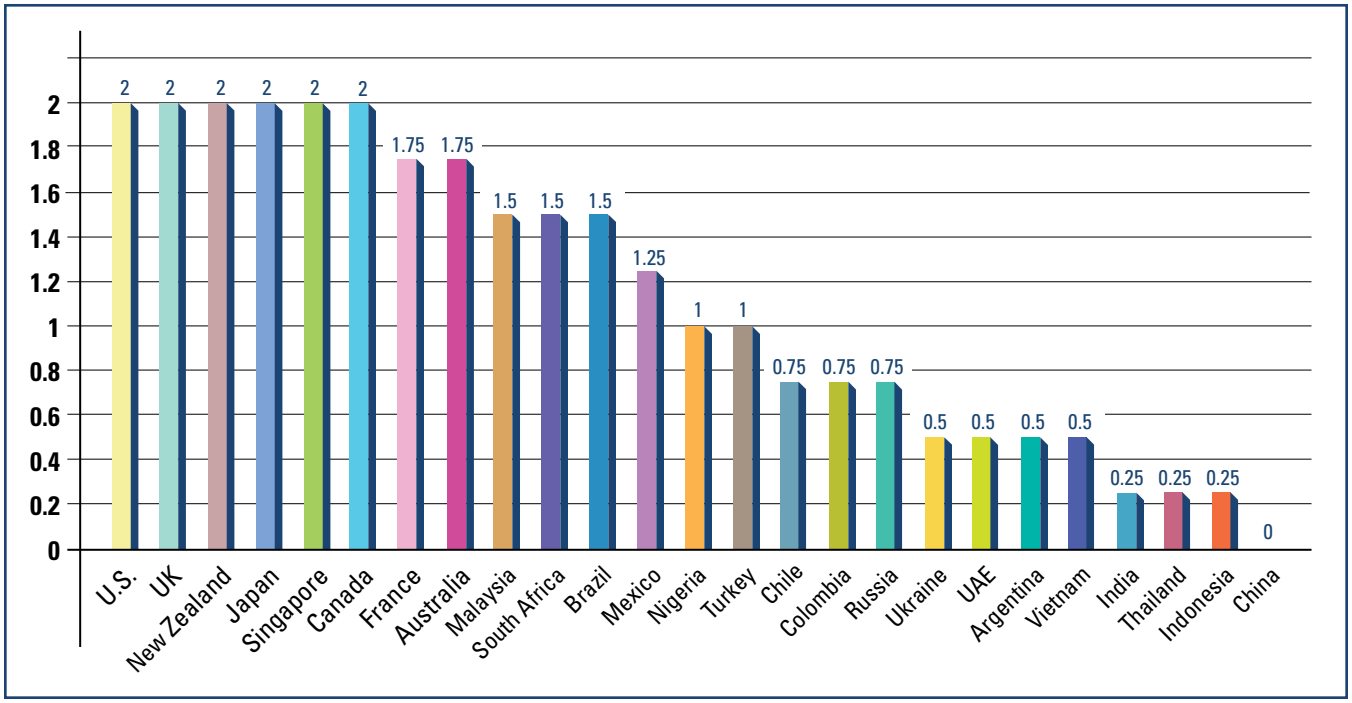
China's score, although still relatively low, has seen some improvements resulting from the introduction of its new trademark law in 2013, with a specific focus on enforcement of trademarks.

Overall, it is striking how few countries—even those with high incomes—have in place effective mechanisms to combat the increased sale of counterfeit goods through online auction houses, as measured by indicator 18. There are private initiatives—such as eBay's VeRO Program—that are operational in most countries included in the Index where eBay operates. But the effectiveness and application of these initiatives vary from jurisdiction to jurisdiction. There are some examples where relevant notice and takedown legislation does include an obligation on the part of online merchants to take down infringing material on notification by a rights holder. In the European Union, principles and obligations were established with regard to the E-Commerce Directive and online auction houses in the 2011 European Court of Justice case *L'Oréal SA and Others v. eBay International AG and Others* (Case C-324/09).

7.6 Category 4: Trade Secrets and Market Access

Figure VII summarizes the total scores for Category 4. This category measures the strength of the environment for trade secrets and market access. The category consists of two indicators with a maximum possible score of 2.

Figure VII: Scores, Category 4: Trade Secrets and Market Access



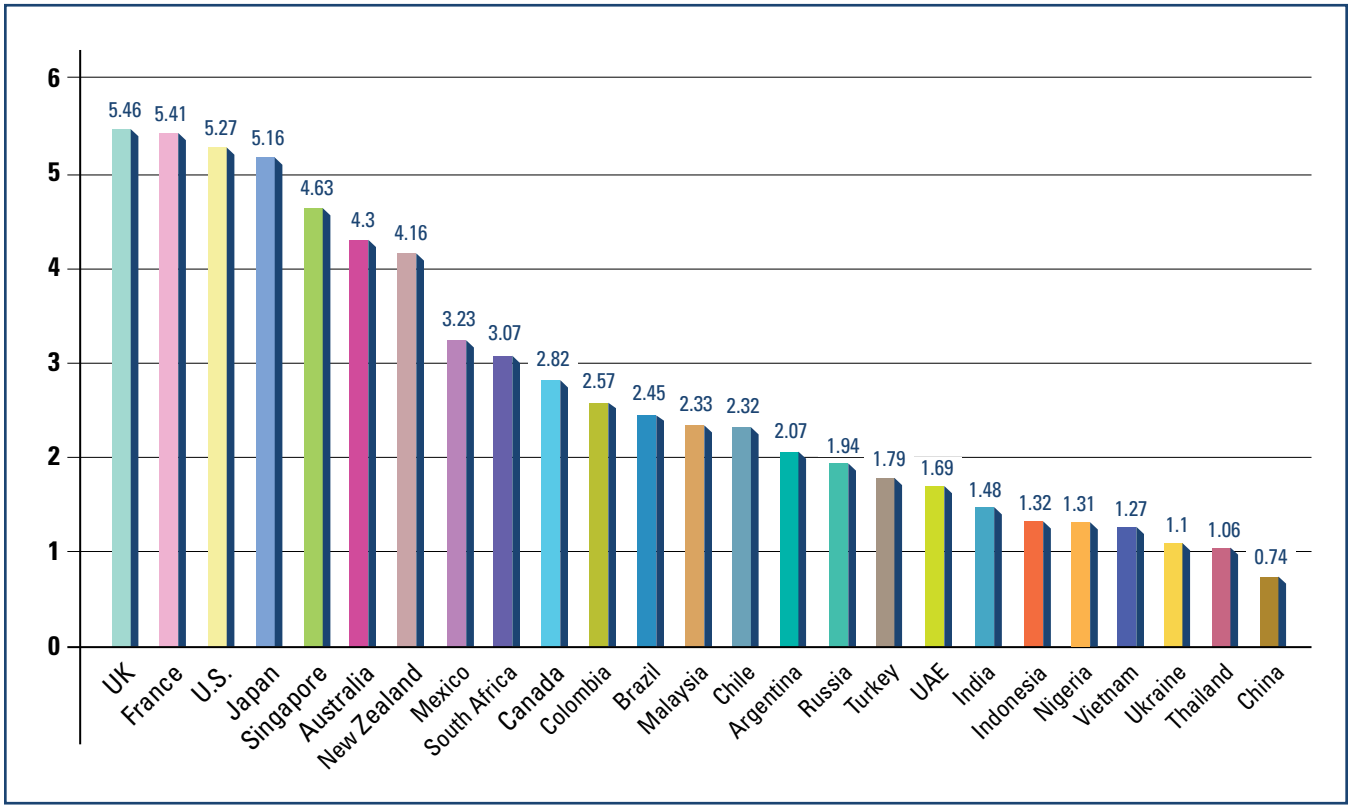
In this category, the United States, United Kingdom, New Zealand, Japan, Singapore, and Canada score the full 2 points. Overall, the protection of trade secrets remains problematic in the majority of countries. Many countries do not protect trade secrets through specific laws. In other countries in which legislation does exist, the enforcement and practical protection of trade secrets is lacking. For example, in Colombia the Andean Community Decision 486 provides protection for business secrets as long as they are not generally known or accessible, have commercial value, and are made the subject of reasonable measure. However, weaknesses in enforcement and in the overall functioning of the system exist, including in enforcement of contracts and confidentiality of trade secrets in litigation; there is also an overall lack of jurisprudence. Likewise, although several different laws provide for some degree of trade secret protection (including the anti-unfair competition, labor, and criminal laws) in China, the current legal system has failed to provide effective protection for trade secrets. For example, on average only 30% of trade secret cases brought in the Shanghai Higher People's Court reach conclusions, and less than half result in findings of infringement.

With regard to IP-based barriers to market access, this is an area of growing concern with a number of countries launching official policies aimed at forcing rights holders to share IP and sensitive information with local partners or state-owned entities. Examples include China, Indonesia, India, and the UAE.

7.7 Category 5: Enforcement

Figure VIII summarizes the total scores for Category 5. This category measures the prevalence of IP rights infringement, the criminal and civil legal procedures available to rights holders, and the authority of customs officials to carry out border controls and inspections. The category consists of six indicators with a maximum possible score of 6.

Figure VIII: Scores, Category 5: Enforcement



The United States, United Kingdom, France, and Japan are the top performers for this category, with scores above 5. Canada again places outside the top-tier countries, landing behind Mexico and South Africa. Canada displays significant weaknesses, in particular the lack of *ex officio* powers for customs officials.

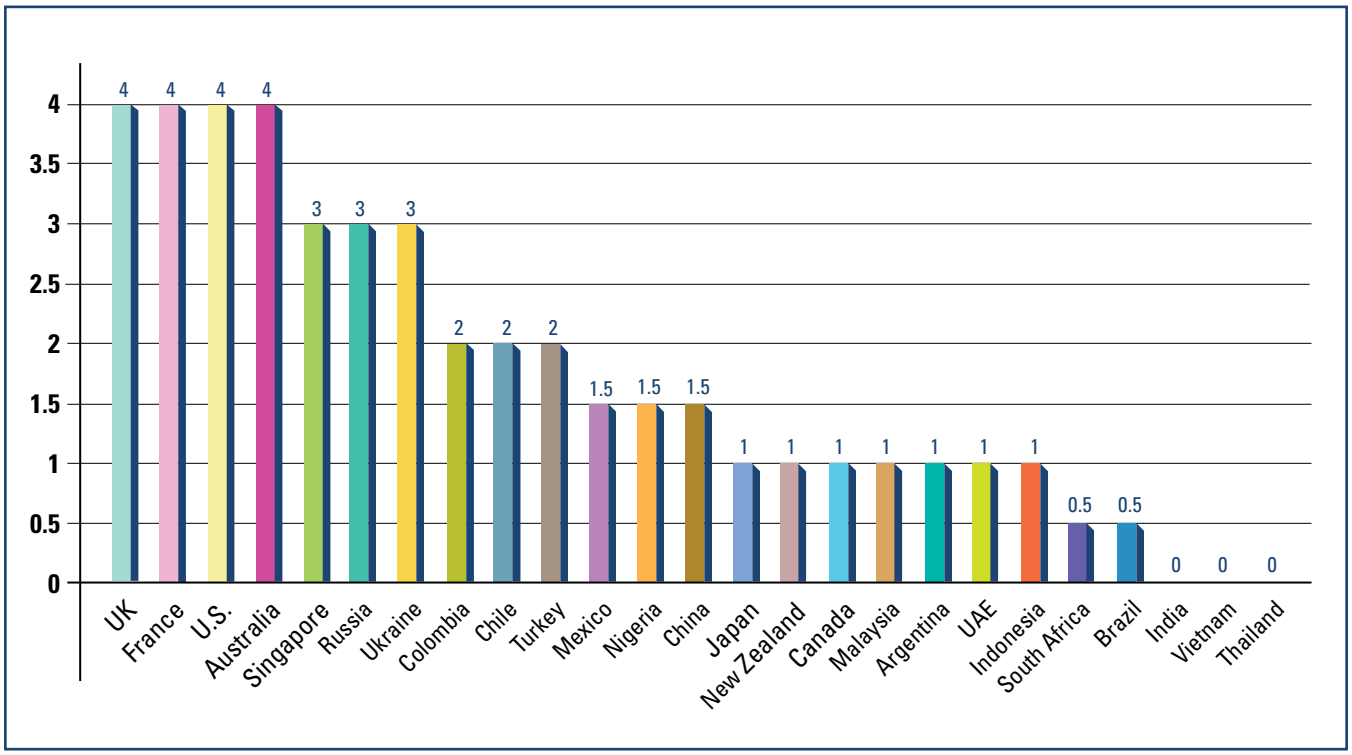
Overall, this category is one of the weakest for all countries included in the sample, with less than a third receiving a score of more than 3 or 50%. Significant weaknesses abound with many countries failing to have more than basic civil and criminal sanctions in place, and even more failing to enforce and apply such measures consistently and effectively.

Even some developed high-income countries show weaknesses in key indicators. For instance, both France and Canada have relatively high rates of software piracy rates as measured by the BSA—at 37% and 27%, respectively.

7.8 Category 6: Membership and Ratification of International Treaties

Figure IX summarizes the total scores for Category 6. This category measures whether a country (1) is a signatory of and (2) has ratified or acceded to international treaties on the protection of IP. The category consists of four indicators with a maximum possible score of 4.

Figure IX: Scores, Category 6: Membership and Ratification of International Treaties



The top four countries for Category 6 are again made up of the United States, United Kingdom, France, and Australia. Noteworthy is that other developed high-income economies, such as Japan, New Zealand, and Canada, score very low and are a full 3 points behind the top performers.

Somewhat surprisingly, Russia and Ukraine achieve very high scores. As mentioned above, Russia and Ukraine's high scores in this category significantly affect their overall scores in the GIPC Index, giving both a significant boost.

Other countries do noticeably worse in this category than their overall scores would suggest. Brazil, South Africa, and Malaysia in particular have weak scores, which bring down their total overall Index scores markedly.

Below Table 6 provides an overview of which sampled countries have confirmed membership to major post-TRIPS free trade agreements that involve substantial provisions on IP rights.

Table 6: Membership in Major Post-TRIPS Free Trade Agreements (FTAs) That Involve Substantial Provisions on IP rights

Countries	Total Score	Status
Australia	1	AUSFTA (U.S.-Australia FTA) + TPP negotiating party
United Kingdom	1	EU-Korea FTA
France	1	EU-Korea FTA
United States	1	KORUS FTA (U.S.-Korea FTA) + TPP negotiating party
Chile	1	U.S.-Chile FTA + TPP negotiating party
Singapore	1	U.S.-Singapore FTA + TPP negotiating party
Colombia	1	U.S.-Colombia Trade Agreement
Mexico	0	TPP negotiating party
Thailand	0	TPP negotiating party
Canada	0	TPP negotiating party
Malaysia	0	TPP negotiating party
New Zealand	0	TPP negotiating party
Japan	0	TPP negotiating party
Vietnam	0	TPP negotiating party
Russia	0	No qualifying FTA
China	0	No qualifying FTA
Brazil	0	No qualifying FTA
India	0	No qualifying FTA
South Africa	0	No qualifying FTA
Turkey	0	No qualifying FTA
Ukraine	0	No qualifying FTA
United Arab Emirates	0	No qualifying FTA
Nigeria	0	No qualifying FTA
Indonesia	0	No qualifying FTA
Argentina	0	No qualifying FTA

8. Applying the GIPC Index: Country Overviews

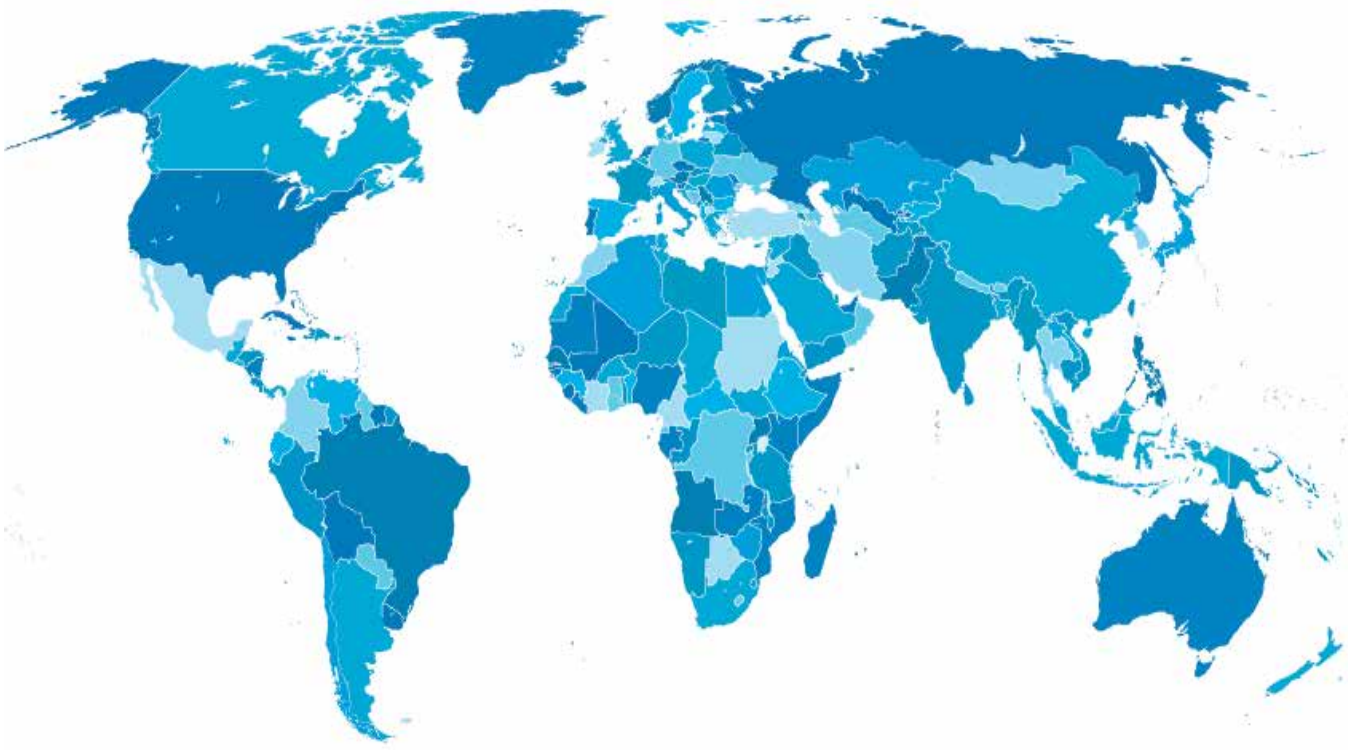
Introduction

This section provides an overview and analysis of each individual country's score in all 30 indicators.

In addition to the scores, each country overview includes a summary of key areas of strengths and weaknesses in the national IP environment. Specific challenges, debates, and issues relating to each category are discussed in more detail in a separate subsection titled "Spotlight on the National IP Environment."

Where relevant for each country, there is a separate discussion included in the "Spotlight on the National IP Environment." Titled "Other Areas of Note," these discussions zero in on areas of IP law and/or enforcement that are not directly covered in the 30 indicators but nevertheless have a significant impact on a country's total IP environment and are relevant to wider issues of innovation, economic development, and job creation.

For the 11 countries included in both the first and second editions of the GIPC Index, an additional discussion titled "One year of the GIPC Index" is included in which the country's scores in the two editions are discussed and contrasted.



Argentina

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.25	
3. Patentability of computer-implemented inventions	0.25	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**1.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.63[33]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0	
Total score—Copyrights	**1.13**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.25	
20. Barriers to market access	0.25	
Total score—Trade Secrets and Market Access	**0.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.76[34]	
22. Software piracy rates	0.31[35]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.5	
Total score—Enforcement	**2.07**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1**	**4**
Total Overall Score	**9.45**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic patentability framework • Fairly strong trademark legal framework present, including protection for unregistered marks • Elemental legal framework for enforcement of IP rights • Positive cases of trademark enforcement in the online sphere	• Key pharmaceutical IP rights missing • Compulsory license framework overly broad • Major holes in legal framework for enforcing copyrights • Rampant digital piracy through direct downloads • Judicial procedure slow and court decisions non-transparent/non-deterrent • Insufficient action by customs officials

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** An invention will satisfy patentability requirements if the invention is new, involves an inventive step, and has industrial application. The patent law approaches process patents strictly and, generally speaking, process patent claims rarely meet the industrial application requirement and are difficult to defend in Argentine

courts (for instance, in *Eli Lilly and Company v. Laboratorio Richmond*). The New Guidelines for the Examination of Patent Applications on Pharmaceutical Inventions, effective as of May 2012, further tighten requirements for the patentability of pharmaceutical inventions, including making second-medical-use claims unavailable.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** Although Argentina provides a rudimentary framework for the issuing of compulsory licenses, it has not ratified Article 31bis of the TRIPS Agreement relating to exporting products to third countries. In addition, an appeals process exists but in effect will not suspend the issuance of a compulsory license, and recourse through the court system is typically slow. Argentine law also creates the possibility of using compulsory licensing to leverage price reductions from patent holders.

7. **Regulatory data protection term:** Argentina does not provide for protection of test and other data in a manner that is consistent with its obligations under Article 39.3 of the TRIPS Agreement. Law 24,766 does not provide a term of protection, and it allows medicines regulators to make use of data submitted for originator drugs for the approval of generic or similar products. The approach also allows competitors to obtain marketing approval via reliance on approvals and data submitted in other countries.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** Argentina provides for general exclusive rights for authors and creators; however, there is no clear reference in the law to copyrights in the online environment. Digital piracy remains the most damaging threat to copyright industries, most frequently in the form of downloads of pirated content from hyperlinks and cyberlockers (for example, Cuevana.tc and Argentinawarez.com). Argentina also suffers from a lack of appropriate resources and support (for example, special police crime units dedicated to online piracy) for the enforcement of copyrights pertaining to the online sphere.

10. **Availability of frameworks that promote cooperative action against online piracy:** No specific legislation is in place for ISP liability relating to online piracy, nor are any notice and takedown requirements in place. Courts tend to take the position that an ISP can be found liable for online infringement only if it has acted with "malice or negligence." At present, rights holders must approach the court for a formal injunction in order to prevent online copyright infringement; however, recourse though the courts is poor and notices by industry have received very little response from ISPs. For example, despite complaints from industry and rights holders, Cuevana.tv is still fully active and expanding. A draft bill addressing ISP liability, submitted to the Argentine National Congress in March 2013, provides only a partial solution. Under the proposed measure, ISPs will be held liable for infringing content if they have knowledge and do not remove access to it; however, such knowledge must be based on a court order and not merely on notice from rights holders.

11. **Scope of limitations and exceptions to copyrights and related rights:** Argentina provides for exceptions to copyright but does not have an appropriate fair use judicial doctrine. Moreover, draft Bill No. 2995-D-2012 proposes to introduce an overly broad private-use exception for online material, including for instruction, education, information, and entertainment as long as such copies are not used for commercial purposes or profit. If this amendment is approved, Argentina's score will in the future drop to 0.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their**

trademarks: requisites for protection: Argentine trademark law makes no direct reference to unregistered trademark protection; however, courts have recognized rights in unregistered trademarks through use based on general legal principles found in the Civil Code related to good practice. Given that the recognition of rights in unregistered trademarks has originated in court decisions, the scope and intensity of use required for protection are evaluated on a case-by-case basis. However, the courts seem to agree that an unregistered mark deserves protection when there has been public and continued use thereof, which has consequently allowed the rights owner to generate significant goodwill. At present, the Argentine legal system does not require any particular intensity of use nor the creation of a clientele; proof of registration granted abroad is frequently considered by the courts as sufficient.

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** There are no explicit legal frameworks providing for cooperation between online merchants and rights holders; however, industry-based platforms exist. The major auction sites (including MercadoLibre and alaMaula, owned by eBay) have a notice and takedown policy and encourage trademark and copyright owners to join their respective IP-rights protection programs. Evidence suggests mixed application. There is indication of the sale of counterfeit goods on MercadoLibre (for example, DVDs, guitars, and shoes), but also evidence that there is redress through the courts based on the applicable notice/complaint system. For example, following notification by the manufacturer, a federal criminal court fined a user $10,000 for advertising fake Adidas merchandise.

Enforcement

23. **Civil and procedural remedies; 24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement; and 25. Criminal standards including minimum imprisonment and minimum fines:** Argentina has in place a basic framework for civil remedies and criminal standards. The Civil Code provides for damages in general but with no specific reference to IP rights, and injunctive relief is available in certain areas (for example, trade secrets, patents, and utility models). Preliminary measures are executed quickly in specific areas such as software; however, in many cases, especially in pharmaceuticals, the process is still drawn out. Criminal courts are directing some focus to physical and online counterfeiting and piracy, as in the recent case of Taringa, in which the webmasters were deemed to be willing participants and aware of illegal conduct. Argentina's criminal enforcement regime, however, still suffers from non-deterrent or laggard judgments, with courts often assigning the minimum penalties provided for in the law, not including penalties at all in the judgment, or postponing the judgment.

Membership and Ratification of International Treaties

Argentina has a low score for its participation and ratification of international treaties. Argentina has signed and ratified the WIPO Internet Treaties but has not joined the Singapore Treaty on the Law on Trademarks or the Patent Law Treaty, and has not concluded any major free trade agreement (FTA) post-TRIPS membership that involves substantial provisions on IP rights.

Australia

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.75	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.75	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	0.5	
Total score—Patents	**6**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.63[36]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.75	
10. Availability of frameworks that promote cooperative action against online piracy	0.75	
11. Scope of limitations and exceptions to copyrights and related rights	1	
12. Digital rights management legislation	1	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.75	
Total score—Copyrights	**4.88**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	0	
16. Ability of trademark owners to protect their trademarks: requisites for protection	1	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.75	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.5	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.75	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**1.75**	**2**

Enforcement		
21. Physical counterfeiting rates	0.78[37]	
22. Software piracy rates	0.77[38]	
23. Civil and procedural remedies	0.75	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.75	
25. Criminal standards including minimum imprisonment and minimum fines	0.75	
26. Effective border measures	0.5	
Total score—Enforcement	**4.3**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	1	
Total score—Treaties	**4**	**4**
Total Overall Score	**24.18**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Broad scope of patentability for pharmaceutical inventions • Patent term restoration for pharmaceutical products • Scope of limitations and exceptions to copyrights and related rights • DRM legislation • Relatively low counterfeiting and piracy rates	• Restrictions on the use of brands in packaging • Inadequate legal measures preventing online copyright infringement • Insufficient criminal penalties • Lack of *ex officio* authority for customs officials

Spotlight on the National IP Environment

2012 Scores versus 2014

Australia's overall score has dropped from 87% of the total possible score (with a score of 21.63) in 2012 to 81% in 2014. This is mainly due to changes to the scoring methodology in 2014 that allow scores to better reflect existing weaknesses in Australia in pharmaceutical patent protection; the online copyright sphere, including an adequate notice and takedown mechanism; and enforcement of intellectual property rights, particularly in terms of civil remedies.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** For a patent to be valid in Australia, it must be new, involve an inventive step, and have industrial applicability. Based on the IP Laws Amendment (Raising the Bar) Act of 2012, inventive step is assessed against the common general knowledge, considered either alone or together with additional prior art. The new law has also introduced greater flexibility concerning the requirements for opposing patents, for instance allowing for pre-grant opposition, but at the same time provides for the patentability of medical treatment methods.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** The Therapeutic Goods Act sets out a relatively transparent mechanism for adjudicating infringement issues as part of the market authorization process for generic or biosimilar medicines. Under the mechanism, the onus is on the applicants to notify patent holders of the application for registration or listing of the product, although the health regulator, the Therapeutic Goods Administration (TGA), also makes information about registrations publicly available. However, the mechanism may be deficient in cases where the applicant is not aware of relevant patents and, hence, does not notify the patent holder, particularly because there are known delays in the publishing of registration information by the TGA. As a result, patent holders may not discover infringement issues until aftermarket authorization has taken place in these cases. Recently, it has become possible for patent holders to be put at an additional disadvantage in the adjudication process: in the last few years, the Australian government has required (or threatened to require) patent holders to compensate generic companies and government agencies for delays in generic entry caused by court imposed injuctionsm, but has not taken a similar position in relation to losses experienced by innovator companies as a result of premature generic entry.

6. **Patent term restoration for pharmaceutical products:** A patent term restoration of five years is allowed under Australian patent law; hence, Australia receives a full score of 1. During 2012, an expert panel reviewed this provision. Its draft report, released in April 2013, contained various recommendations aimed at limiting patent term restoration, including reducing it, making it contingent on certain factors, and replacing it altogether with direct government subsidies for research and development. A closed final report has been submitted to the government. However, due to the recent change in government as a result of federal elections in September 2013, it is unclear at this stage if the new government will take action. If the term of extension were to be reduced, this would lower Australia's score for this indicator in future editions of the Index.

Copyrights, Related Rights, and Limitations

11. **Scope of limitations and exceptions to copyrights and related rights:** The Copyright Act establishes a relatively categorical system of fair dealing and exceptions to copyright, which is applied consistently by the courts. Most recently, in *National Rugby League Investments v. Singtel Optus* (2012), the court upheld the requirement of non-commercial use for the time-shifting exception in Section 111 when it ruled against the recording of television broadcasts by commercial parties for watching at a later time in a domestic context. The Australian Law Reform Commission is currently conducting a review of exceptions to copyright in the digital environment, which is expected to be publicly released in February 2014.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** The Tobacco Plain Packaging Act, which took effect in December 2012, restricts the use of trademarks on retail packaging of tobacco products, requiring them to be sold in non-descript packages. The new measure severely limits the ability of trademark

owners to exploit their rights sufficiently, and has ignited a global debate on the use of plain packaging that threatens to affect trademark owners across different sectors and countries. In 2013, five countries, including Ukraine and Indonesia, brought action against Australia in the WTO on the basis that the law violates its WTO commitments, specifically under the Technical Barriers to Trade, TRIPS, and GATT agreements. WTO dispute panels and consultations are currently under way.

18. **Availability of frameworks that promote action against the online sale of counterfeit goods:** Action against an ISP whose services are used to violate trademark rights is not commonly available in Australia. This is because an infringement action under the Trademark Act requires explicit "use as a trademark," and courts have been reluctant to apply this provision to cases of indirect or contributory infringement. There is the possibility of using the Australian Consumer Law to hold an ISP liable for infringing activity on their websites, but such action has only been brought in an indirect manner with a settlement occurring outside of the court (for instance, in *Google v. Australian Competition and Consumer Commission [ACCC],* 2013).

Enforcement

25. **Criminal standards including minimum imprisonment and minimum fines:** The Raising the Bar Act has increased the Copyright and Trade Marks Acts' penalties to a maximum of five years imprisonment and 550 penalty units ($55,000 for individuals or $275,000 for companies). Application of the raised penalties is unknown at this time given the recent entry into force of the act. However, prior evidence suggests that Magistrates and Federal Courts often do not apply sufficient deterrent penalties, particularly in cases of digital piracy and illegal camcording.

Membership and Ratification of International Treaties

Australia receives a full score in this category, having signed and ratified all major international IP treaties as well as having concluded post-TRIPS FTAs with substantial IP provisions. Australia is also a negotiating party to the Trans-Pacific Partnership.

Brazil

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0	
3. Patentability of computer-implemented inventions	0.25	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**1.25**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.63[39]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.5	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total score—Copyrights	**1.88**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.5	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**1.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.73[40]	
22. Software piracy rates	0.47[41]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.5	
Total score—Enforcement	**2.45**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0.5	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**0.5**	**4**
Total Overall Score	**10.83**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic IP framework introduced in mid-1990s includes 20-year patent protection • *Ex officio* powers granted to customs officials under Patent and Trademark Act • Successful criminal enforcement against physical piracy in cities such as São Paulo	• Patentability requirements relating to pharmaceuticals are not compliant with TRIPS • Pharmaceutical-related patent enforcement and resolution mechanism not available • Regulatory data protection not available for human-use products • Patent term restoration not available • Lack of sufficient mechanism to promote cooperative action against online piracy • Current patent-reform initiative would weaken Brazil's IP system • Inadequate DRM legislation • Challenging enforcement environment with regard to civil remedies and criminal penalties • Low rate of membership and/or ratification of international IP treaties

Spotlight on the National IP Environment

2012 Scores versus 2014

Brazil's overall score has dropped slightly from 38% of the total possible score (with a score of 9.57) in 2012 to 36% in 2014. This is mainly due to no discernable progress having been made on the challenges examined in the first edition of the GIPC Index as well as the introduction of five new indicators in this edition. With regard to these new indicators, rights holders in Brazil face real challenges as to the availability of protection and enforcement of IP rights in relation to these indicators. For example, on indicator 2 (measuring patentability requirements) Brazil has a requirement in place for pharmaceutical patents to be examined by its drug regulatory agency (as detailed below). This is a requirement that is out of step with international best practices.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** The Brazilian National Health Surveillance Agency (ANVISA) has the right to provide prior consent to pharmaceutical patents that are being examined by the Brazilian Patent Office (INPI). Consequently, decisions on whether to grant a pharmaceutical patent are based on examination not solely by patent specialists and officials at INPI but also by ANVISA. This introduces a requirement of dual examination and is in violation of the TRIPS Agreement. In addition, Brazil does not allow patents for secondary claims for novel uses. Moreover, the INPI continues to have a large backlog of patents (estimated at eight to 10 years) and processing times are quite long, averaging 5.4 years. A patent-reform initiative (Bill No. H.R 5402/2013) was launched in 2013. Among other things, the bill purports to narrow patentability criteria even further, disallowing patents on new uses or new forms of known substances unless a significant improvement to the known efficacy is present, in many ways matching India's Section 3(d) requirements. The bill also seeks to raise the inventive step standard so that an invention must show a significant technical advance with regard to the current state of art.

3. **Patentability of computer-implemented inventions:** Section 10 of the Patent and Trademark Act does not allow for the patenting of "computer models per se," as they are not considered inventions. INPI refers to the 1998 Software Law (which provides copyright protection) as the primary basis for the protection of CIIs. However, patents have been granted in the past for CIIs. Nevertheless this is an area of IP protection that remains unclear.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** The Patent and Trademark Act sections on compulsory licensing seem to extend beyond the use of this mechanism for public health emergencies that do not involve commercial consideration. Moreover, this mechanism also includes a domestic manufacturing criterion that can form the basis for the issuing of a compulsory license. Finally, these sections have been used in the past during price negotiations with foreign pharmaceutical innovators to reduce their prices in light of the threat of approving the manufacturing of local generic versions of patented medicines. For example, the 2007 issuing of a compulsory license for the production of efavirenz by the Lula administration came one day after failed price negotiations with the manufacturer.

7. **Regulatory data protection term:** Regulatory data protection is currently available only for fertilizers, agrochemical products, and pharmaceuticals for veterinary use. Pharmaceuticals for human use are not covered by existing regulations.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** Brazil does not have in place a notice and takedown system. Currently, there is some cooperation between ISPs and rights holders, but this is piecemeal, ad hoc, and not systematic.

11. **Scope of limitations and exceptions to copyrights and related rights:** The Copyright Act provides a framework for exceptions and limitations; however, there are important holes in application. For example, there is

widespread unauthorized photocopying and piracy of academic materials and books. New draft copyright laws have been introduced and actively discussed since the beginning of this decade. In 2011, a draft copyright bill was presented in the National Congress of Brazil. This draft bill included provisions broadening exceptions to copyright that appear incompatible with the Berne three-step test. In addition to introducing new copyright legislation, there also has been an active legislative debate about introducing an "Internet Bill of Rights." It is not clear how such a bill would interact with the Copyright Act in its current form or in an amended version. A number of drafts of the Internet Bill of Rights have been published, and congressional voting on the bill has been postponed multiple times. At the time of research and publication of the second edition of the GIPC Index, these reforms efforts were still being debated.

12. **Digital rights management legislation:** The Copyright Act provides a limited form of DRM legislation. Most noticeably the legislation applies only to the use and application of circumvention devices and not to the trafficking or distribution of such devices. This is a major deficiency that has led to the proliferation of circumvention devices and widespread use and distribution of, for example, pirated video games.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** In addition to protecting well-known marks, Brazilian law also defines and offers protection for marks with a "high repute." However, the Brazilian Patent and Trademark Office (BPTO) provides for the protection of these marks, and it is cumbersome to achieve the requisite highly reputed status for such protection. As a result, it is difficult to obtain redress from the courts. Recently, in a court case involving the Absolut brand, the Brazilian Superior Court of Justice ruled that it is beyond the judiciary's reach to decide on the high repute of trademarks when the BPTO has not yet come to an administrative decision on the matter. The matter still rests with the BPTO.

Enforcement

23. **Civil and procedural remedies:** The justice system suffers from long processing times and high costs of litigation. According to industry sources, it can take up to four years for a case to reach trial and more than a decade to reach a final conclusion due to the long appeal process. Furthermore, there are high costs associated with litigation, particularly due to the requirement for forensic experts in copyright cases, as has been highlighted in a number of software piracy cases.

25. **Criminal standards including minimum imprisonment and minimum fines:** Criminal enforcement suffers from serious deficiencies. As mentioned with regard to civil remedies, there are long backlogs in the Brazilian justice system. Furthermore, industry reports suggest that the vast majority of those arrested on suspicion of criminal infringement never face criminal charges or prosecution, with charges either dropped or suspended. As mentioned in the 2012 edition of the GIPC Index, there have been isolated areas of success—for example, in São Paulo—but overall criminal enforcement remains a challenge. Currently, violators are rarely punished with imprisonment and the penalties are not severe enough.

Membership and Ratification of International Treaties

Brazil scores low in its participation in and ratification of international treaties. In large measure, this is due to Brazil not being a contracting party to the WIPO Internet Treaties or the Singapore Treaty on the Law of Trademarks, and not having concluded an FTA with substantial IP provisions since it acceded to TRIPS. Also, while Brazil is a signatory, it has not ratified the Patent Law Treaty.

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.25	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.25	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.8	
Total score—Patents	**4.3**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[42]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.5	
10. Availability of frameworks that promote cooperative action against online piracy	0.25	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	1	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	1	
Total score—Copyrights	**3.53**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.75	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.75	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.75**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	1	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**2**	**2**

Enforcement		
21. Physical counterfeiting rates	0.84[43]	
22. Software piracy rates	0.73[44]	
23. Civil and procedural remedies	0.5	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.5	
26. Effective border measures	0	
Total score—Enforcement	**2.82**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0.5	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0.5	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1**	**4**
Total Overall Score	**17.4**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Patentability of CIIs • Copyright amendments in 2012 introduced DRM legislation • Central government ICT procurement guidelines include documentation on licensing as well as evidence of auditing taking place • Final agreement and implementation of the CETA between Canada and the EU could strengthen Canada's IP environment	• Onerous patentability requirements narrow the scope of inventions • Pharmaceutical-related patent enforcement and resolution mechanism under Notice of Compliance procedure deficient • Patent term restoration not available • No takedown mechanism in ISP notification system • Poor application and enforcement of civil remedies and criminal penalties • Current law provides no *ex officio* powers granted to Canada border Services Agency officers; reforms linked to CETA could change this

Spotlight on the National IP Environment

2012 Scores versus 2014

Canada's overall score has stayed roughly the same with a very slight increase from 57% of the total possible score (with a score of 14.21) in 2012 to 58% in 2014. This is mainly due to the introduction of new indicators to the GIPC Index, the relative strength of the Canadian IP environment with regard to IP rights (if not their enforcement) available for trademark holders, and a lack of IP-based barriers to accessing the Canadian market. However, these strengths are counterbalanced by weaknesses in other areas, such as patentability requirements.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Since the early to mid-2000s, Canadian Federal Courts have issued a growing number of decisions on the basis of patent utility in relation to pharmaceutical patents. In a high percentage of these cases, courts have ruled that pharmaceutical patents were invalid. The Canadian standard of utility established through this expanding case law differs from international standards embodied in TRIPS and the Patent Cooperation Treaty, and practices of patent offices in the United States and EU. To establish utility, an applicant must demonstrate judicially discerned "promise" of the patent is met. This "promise" doctrine places an additional burden on the applicant and as applied discriminates against pharmaceutical patents.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Canada's existing Patented Medicines Notice of Compliance regulations do not provide patent holders (a "first person") with a right of appeal, and the judicial proceedings determining the merits of the disputed patent or patents is a summary, not full, process. This limits the rights of the patent holder and availability of the full term of protection.

6. **Patent term restoration for pharmaceutical products:** Canada is one of only a few high-income countries that do not offer patent term restoration or alternative mechanisms for patent term restoration for pharmaceuticals. Under the CETA treaty (outlined below), Canada would introduce a term of restoration. If implemented, this would represent significant progress in strengthening Canada's national IP environment and would be reflected in this indicator's score.

Other Areas of Note: On October 18, 2013, the European Commission and Canadian government announced a political agreement on a free trade treaty between the European Union and Canada. This treaty, the CETA, has been negotiated since 2009 and, significantly, contains a sizeable chapter on IP rights and the protection of IP. Although the final text has not yet been agreed on, announced preliminary provisions in the area of IP rights suggest that if agreed on and implemented, this treaty could lead to improvements in Canada's national IP environment, including by addressing some of the challenges identified in this report for the life sciences sector and with regard to general enforcement activities.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** In addition to standard measures on exclusive rights, the 2012 amendments to the Copyright Act Section 27(2.3) contain clear language on how services based on the Internet or other digital networks through which infringement takes place may constitute copyright infringement. However, industry has raised concerns that this section will not be a powerful enough deterrent as it relates only to services that are used "primarily for the purpose of enabling acts of copyright infringement."

10. **Availability of frameworks that promote cooperative action against online piracy:** The 2012 amendments to the Copyright Act contain a clear system of notification between rights holders and ISPs. However, these new amendments do not provide a

takedown mechanism or equivalent obligation on the part of ISPs and providers of "information location tools."

11. **Scope of limitations and exceptions to copyrights and related rights:** The 2012 copyright amendments considerably broadened Canada's framework for exceptions, including the expansion of education and personal-use exceptions. Similarly, a number of 2012 Canadian Supreme Court decisions have widened the scope of the judicial interpretation of existing exceptions to the extent that continued compatibility with the Berne three-step test is highly questionable.

12. **Digital rights management legislation:** In a positive step, Section 41 of the 2012 copyright amendments introduced new legislation that prohibits the use, distribution, manufacture, and importation of circumvention devices.

Enforcement

23. **Civil and procedural remedies:** The Trade-marks Act, the Patent Act, and the Copyright Act make available combinations of civil remedies including injunctions, seizures, and damages. However, industry sources suggest that enforcement and prosecution against physical and online copyright infringement is lacking. Similarly, with regard to patent-infringement cases, Canada has a low rate of court decisions. Between 1997 and 2009, a decision was reached in less than 4% of patent-infringement cases.

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** The 2012 amendments to the Copyright Act inserted a distinction between commercial and non-commercial infringement, with significantly smaller statutory damages available for non-commercial infringement. The 2012 amendments also limit to one the number of infringement cases for which a defendant can be subject to statutory damages; this same limit of one is also placed on the number of rights holders that can seek statutory damages from a defendant. While still technically providing a system of statutory damages, these changes undermine the overall effectiveness and availability of statutory damages.

26. **Effective border measures:** Canadian border officials do not have *ex officio* powers to search and seize goods suspected of infringing IP rights. Under both the Copyright Act and the Trade-marks Act, a court order is required for the seizure and detaining of suspected goods by custom officials. Bill C-56 (amending the Copyright Act and the Trade-marks Act) seeks to introduce more robust border measures including new civil and criminal options as well as expanded powers for customs officials. At the time of research, a final version of the bill had not been passed or signed into law.

Membership and Ratification of International Treaties

Canada scores low in its participation in and ratification of international treaties. In large measure, this is due to Canada not being a contracting party to the Singapore Treaty on the Law of Trademarks. Canada is a signatory but has not yet fully ratified the WIPO Internet Treaties and the Patent Law Treaty. Canada has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights. However, Canada is a negotiating party to the Trans-Pacific Partnership and recently announced a political agreement between Canada and the European Union on the CETA.

Chile

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.25	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0.6	
7. Regulatory data protection term	0.5	
Total score—Patents	**3.35**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.63[45]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.75	
Total score—Copyrights	**1.88**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.25	
20. Barriers to market access	0.5	
Total score—Trade Secrets and Market Access	**0.75**	**2**

Enforcement		
21. Physical counterfeiting rates	0.93[46]	
22. Software piracy rates	0.39[47]	
23. Civil and procedural remedies	0.5	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0	
Total score—Enforcement	**2.32**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	1	
Total score—Treaties	**2**	**4**
Total Overall Score	**13.55**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Legislation providing for fair and transparent use of compulsory licensing • Legal measures providing necessary exclusive rights to copyright holders and voluntary notification system • Executive order requiring the use of licensed software in government agencies • Non-discrimination/non-restrictions on the use of brands in packaging • Civil and procedural remedies in legislation	• Patentability of pharmaceutical inventions • Lack of pharmaceutical-related patent enforcement and resolution mechanism • Lack of sufficient framework to promote cooperative action against online piracy • Inadequate DRM legislation • Software and music piracy rates of more than 50% • Lack of pre-established damages • Application of civil remedies and criminal penalties insufficient • Border measures ineffective

Spotlight on the National IP Environment

2012 Scores versus 2014

Chile's overall score has dropped slightly from 47% of the total possible score (with a score of 11.67) in 2012 to 46% in 2014. This is mainly due to changes to the scoring methodology in 2014 that allow partial scores to be applied. As a result, Chile's score increased incrementally in regard to certain elements in the copyright sphere, such as DRM legislation and licensed government software, where a partial score is merited, and it decreased in other areas, such as trade secrets and general IP enforcement, where a partial rather than full score for either legislation or application more accurately captures the situation.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Chilean law provides protection for inventions, whether product or process, provided that they are novel, involve an inventive step, and have industrial application. However, the inventive step criteria are interpreted somewhat narrowly, especially for inventions dealing with chemical compounds. The existence of major structural differences between a new claimed compound and previously existing compound is required, despite the fact that the technical solution provided by the new compound does not form part of the prior art. Additionally, there are significant patent delays in the Chilean patent office for pharmaceuticals, with waiting periods reaching eight years.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Despite committing to do so in its FTA with the United States, Chile has not yet instituted a patent linkage mechanism. In this context, infringing products are known to be approved and resolution of patent disputes is often severely delayed. The Chilean Congress is currently considering an amendment to the Industrial Property Law No. 19,039, which would introduce a fairly promising patent linkage system, including a public registry of known patents relevant to new market approvals and proof in new applications that such patents are not infringed. The bill has been delayed based on uncertainty concerning its constitutionality; however, in March 2013, the Constitutional Court unanimously ruled that the bill is constitutional. Nevertheless, due to Chile's presidential election in late 2013 the bill had not yet reached a final vote at the time of research and writing of this report. On approval and implementation of the bill, Chile's score for this indicator in future editions of the GIPC Index would increase.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** Chile's notice and takedown procedure does not meet the requirements of its FTA with the United States. In particular, ISPs are required to remove infringing content only on having "effective knowledge" (meaning that notice must be by a court, not simply from a rights holder). In light of the fact that the rate of prosecution is low, the ability of rights holders to benefit from the takedown system is quite limited. In addition, although Law No. 20,435 introduced a voluntary system under which ISPs are to forward notices from rights holders to suspected infringers, ISPs have thus far shown little responsiveness to rights holders or courts. This could be due to there being no consequences or liability that can be imposed on an ISP that fails to act after gaining requisite knowledge outside of a court order.

11. **Scope of limitations and exceptions to copyrights and related rights:** Although Chilean law provides for many standard exceptions and limitations to copyright protection, certain exceptions go beyond what is permitted in the U.S.-Chile FTA. First, the exception for reverse engineering is not restricted to achieving interoperability but also includes activities that potentially go beyond the Berne three-step test, such as operating a program,

improving other products, and engaging in research and development. Furthermore, the reproduction of library-owned digital works in their entirety is permitted, without ensuring against further use or distribution of copied works.

12. **Digital rights management legislation:** Despite ratification of the WIPO Internet Treaties and the U.S.-Chile FTA, Chile has failed to provide anti-circumvention rules as required under these agreements. Chilean copyright law still only protects against a small portion of circumvention actions—circumvention of, or interference with, DRM by ISPs. Circumvention by other parties is not illegal, nor is the manufacture, distribution, and sale of circumvention devices.

13. **Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software:** Instructions for the Development of the Electronic Government (Decree No. 905), an executive order issued in 2001, included guidelines requiring that software products used by government departments are properly licensed. Implementation is mixed, however: certain government units regularly license the software they use, but across public agencies there is generally a low awareness of the need to pay for software licenses, and evidence of blatant software piracy exists in some cases. Data from the National Budget Office indicates that the Chilean government's annual expenditure on software licenses has grown close to 20% (about $324 million), however a relatively high level of software piracy and lack of government-wide implementation indicates that stronger efforts are necessary.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** Unregistered and well-known trademarks will be recognized in Chile if they are widely used in its territory. The Supreme Court of Chile has, however, deviated from this rule, accepting global evidence submitted by a well-known mark owner opposing a third-party registration. Although this framework has allowed for successful protection of well-known marks in some cases, the overall administrative and judicial procedures for the protection of well-known marks, including available remedies, could be strengthened.

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** Chile's legal framework provides fairly standard protection of trademark rights, with the exception of dilution of trademarks. Although the trademark office has rejected applications that had the potential of diluting famous marks (for example, Microsoft and CNN), there is no explicit protection in legislation against dilution of famous marks. Generally speaking, administrative and judicial procedures made available to rights holders—which include deterrent remedies for infringement—lack effectiveness.

Membership and Ratification of International Treaties

Chile scores in the medium range in its participation and implementation of international treaties, mainly due to its FTA with the United States (signed and ratified in 2003). Chile has also signed and ratified the WIPO Internet Treaties (in 1996 and 2001, respectively). However, its implementation of aspects of both the FTA and WIPO Internet Treaties remains extremely deficient at this stage, reflected in its low scores for indicators on pharmaceutical patent enforcement and adjudication, cooperative mechanisms aimed at online piracy, and DRM. Chile is also a negotiating party to the Trans-Pacific Partnership.

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.5	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.6	
Total score—Patents	**4.1**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[48]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0.5	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total score—Copyrights	**2.28**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0	
Total score—Trademarks	**3**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0	
20. Barriers to market access	0	
Total score—Trade Secrets and Market Access	**0**	**2**

Enforcement		
21. Physical counterfeiting rates	0.01[49]	
22. Software piracy rates	0.23[50]	
23. Civil and procedural remedies	0	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0	
Total score—Enforcement	**0.74**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0.5	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1.5**	**4**
Total Overall Score	**11.62**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Ongoing implementation of policies requiring proprietary software used on government ICT systems to be licensed software • Introduction of new Trademark Law somewhat improves recognition of well-known marks • Demonstrated ability to launch nationwide enforcement campaigns against counterfeiting and piracy activities in specific sectors • Amendments to the Trademark Law and proposed amendments to the Copyright Law increases penalties and enforcement of IP • Government interest in effectiveness and efficiency in handling IP disputes	• Broad interpretation of patentability requirements have resulted in grants lacking innovation • Major producer and exporter of counterfeit goods worldwide, including through online sales • Very little protection of trade secrets • Insufficient pharmaceutical-related patent enforcement and resolution mechanism • Persistently high rates of physical and digital piracy • Inability to effectively stop persistent, ongoing infringement at retail and wholesale markets • Ineffective framework directed to online sale of counterfeit goods • Inconsistent criminal prosecution against counterfeiters in many industry sectors • Not a contracting party to key international treaties

Spotlight on the National IP Environment

2012 Scores versus 2014

China's overall score has risen from 37% of the total possible score (with a score of 9.13) in 2012 to 38% in 2014. This is partly due to policy achievements in 2012–2013, including new principles concerning secondary liability in online copyright infringement and enhanced damages and penalties for trademark infringement. In addition, to some extent China's 2014 score reflects changes to the scoring methodology in 2014 that allow partial scores to be applied. For example, China's score increased slightly in regard to certain elements in the copyright sphere, such as the scope of exceptions to copyright and DRM legislation, where a partial score is merited, and it decreased in other areas, such as general legal measures protecting online copyright, where a partial rather than full score for either legislation or application more accurately captures the situation.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** China's patent law requires an invention to be new, have an inventive step, and have industrial application; however, novelty and inventive step have been subject to broad interpretation, especially for utility model patents. This approach has resulted in the grant of a large number of patents that lack in innovation and yet are difficult to challenge. In regard to pharmaceutical compounds, the patent-examination practices have in the past required a significant amount of biological data and often ended in the denial of patents for medicines that have been granted in other jurisdictions. China has recently taken positive steps by announcing a change in the interpretation of its patent-examination guidelines to allow for supplementation of data during patent prosecution.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** The Drug Registration Rules (DRR), which is a low-level administrative measure in the Chinese legislative hierarchy, provides for a basic process of patent linkage. Overall, though, the current system does not represent an effective, timely, or transparent adjudication mechanism. Under the rules, applicants for market authorization must include patent-status information for relevant patents, and the China Food and Drug Administration (CFDA) must publish this information as well as act as liaison between applicants and patent holders in cases of patent disputes. However, there is no timeframe within which the CFDA must act. Furthermore, in practice, patent information on the CFDA website is often incomplete or inaccurate, and when faced with infringement issues the CFDA tends to take a highly passive approach (based in part on the Bolar exemption introduced in 2009). At the end of 2013, CFDA published draft changes to the DRR that put at risk the existing patent linkage system. Once passed, this change is expected to be seriously detrimental to research-based pharmaceutical companies. In addition, under Chinese patent law, no infringement proceeding may take place until the product under dispute has been sold in the marketplace; this clause makes patent enforcement in a sufficiently timely manner improbable. In practice, preliminary injunction remedies are almost impossible for companies to obtain.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** Although the Network Regulations Law and the Joint Tort Liability Law outline a basic safe harbor and notice and takedown system, they both involve a great deal of ambiguity. Key issues, such as what constitutes notification, knowledge of infringement, and timely response, have not been dealt with consistently in practice. Some of these ambiguities have been resolved through the "2012 Network Rules" (which entered into force in January 2013) issued by the Supreme People's Court; the most relevant concern is the level of knowledge required for ISPs to be held liable for infringement (via contributory infringement). Among

other elements, the new rules codify joint liability for facilitators of infringement, including those who know or should have known infringement is taking place. However, the appropriate application of the Network Rules will largely depend on the discretion of judges, who have great powers to decide many important elements not included in the rules such as a concrete and reasonable timeframe for takedown of infringing sites on notice by rights holders. Whether courts across the country can consistently apply this broad framework and the tests it provides are of key concern.

11. **Scope of limitations and exceptions to copyrights and related rights:** Exceptions to copyright (found in the Copyright Law and Network Regulations) are not well set out and are often misunderstood or abused. In particular, the language on several exceptions could be applied in such a way that is beyond the Berne three-step test, including exceptions for personal use, state authorities, newspapers and periodicals, and library digital services. In practice, there are many cases of wrongful use and little or no response from authorities. For instance, document-delivery services provided by state-run libraries have been affiliated with websites providing pirated journal articles. There are also numerous cases of television programs or websites running long portions of films or other works on notorious piracy sites without permission. Furthermore, "innocent" infringers of software copyrights are only required to pay a "fee," rather than purchase the license from the rights holder, if they intend to continue using the software. Proposed copyright amendments would include the introduction of greater limitations on use by state authorities, libraries, and news agencies; require that use of other people's works not involve the use of the main or substantive part of the work; establish key elements of the Berne three-step test; and require users of software copyrights to obtain licenses from rights holders once they are made aware of the copyright.

12. **Digital rights management legislation:** The protection of DRM is currently only partial and ambiguous. Although both the act of using and dealing with circumvention devices is prohibited in the Network Regulations, they are superseded by the Copyright Law, which bans only the act of circumvention (as long as it is intentional) and not the manufacture, importation, distribution, or sale of circumvention devices. Proposed amendments to the Copyright Law include a special chapter dealing with this area and may generate substantial progress if they are passed.

13. **Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software:** Under the 2011 terms of the U.S.-China Joint Commission on Commerce and Trade (JCCT), China agreed to ensure that all types of software used by government agencies are licensed, to conduct audits and inspections of agencies, and to publish the results. It agreed that this would occur in provincial governments by mid-2012 and in municipal and county governments by the end of 2013. There remain a large number of cities and counties left to audit and correct, and a pressing need for a commitment to include these measures in an ongoing process, and not just a one-time effort, as well as address improper use of software by state-owned enterprises. Additionally, there have been reports of China's Intellectual Property Office (SIPO) hosting material that appears to have been prepared with software acquired from a website notorious for making available pirated copies.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** China has a strict well-known-mark regime and, as such, requires broad geographical coverage in China and an exceptionally high reputation to exist before protection can be obtained. The new Trademark Law of 2013 does not alter this position. In addition, while the new Trademark Law tried to improve the situation

of protecting against malicious trademark squatting/bad-faith filing (a trademark cannot be registered if there has been awareness of a competing mark through prior use, a contract, business dealings, or other relationships), the end results may be counterproductive. The immediate effectiveness of opposition decisions may allow bad-faith applicants to threaten suits against legitimate brand owners. The new law also introduces a more formal and standard procedure for determining well-known marks and penalizes unfair use of well-known marks. This does not alleviate the strict nature of the Chinese approach but it is, however, a positive step toward recognition of global well-known marks.

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** Online trading platforms in China require proof of infringement for a takedown to be considered. This burden of notice is much higher than those posed by other programs (for example, eBay's VeRO Program). Although business-to-consumer (B2C) trading sites like Taobao.com have implemented a system in which rights holders can request the B2C site to take down listings on suspected products, the sheer number of listings at any given time makes the system inefficient. For repeat offenders that sell counterfeits over B2C sites, it is difficult to remove or ban them from online operation. Criminal investigation remains very rare. Case law is also indicative of the courts' reluctance to hold B2C sites liable for trademark infringement, as well as the B2C sites' general non-responsiveness to rights-holder notices (for example, in *Puma AG Rudolf Dassler Sport v. Taobao.com*).

Trade Secrets and Market Access

19. **Protection of trade secrets:** Although several different laws provide for some degree of trade-secret protection (including the anti-unfair competition, labor, and criminal laws), the current legal system in China has failed to provide effective protection for trade secrets. In particular, a high burden of proof that a given piece of information is a trade secret is required in order for prosecution to commence, prosecutions are often severely delayed or thrown out without concluding, sentencing occurs infrequently, and penalties tend to be insignificant. For example, on average only 30% of trade secret cases brought in the Shanghai Higher People's Court reach conclusions, and fewer than half result in findings of infringement. Also, lag times of more than a year in recent key lawsuits, such as those involving American Superconductor and Chinese turbine-maker Sinovel as well as Corning and Hebei Dongxu Investment Group, reflect some challenges within the judicial system. The challenges are further complicated by the fact that the current situation of rule of law in China makes those that strongly advocate for better protection of trade secrets highly concerned about potential abuse of the system. The result is that innocent enterprises may be prosecuted illegally on the grounds of trade secret infringement.

20. **Barriers to market access:** Since the mid-2000s, China has introduced and implemented a range of policies making access to the Chinese market conditional on the sharing of technology and IP with domestic entities. These policies include the transfer of proprietary technologies in procurement, joint ventures, and standardization processes; local manufacturing requirements; and limitations on investment by foreign entities, without guarantee they will be protected from unauthorized disclosure, duplication, distribution, and use. Since 2011, the Chinese government has changed direction somewhat and revoked certain policies at the central level, such as procurement catalogues with special treatment of products that involve local ownership or development of relevant intellectual property. However, this process still requires significant implementation across local and regional governments both in terms of halting existing policies as well as ensuring that new policies linking indigenous innovation with government procurement are not introduced. For instance, in 2012 and 2013,

such policies were introduced in at least three municipalities and provinces, and a 2012 survey of multinational companies operating in China indicates that the vast majority have not experienced any improvement in the procurement environment.

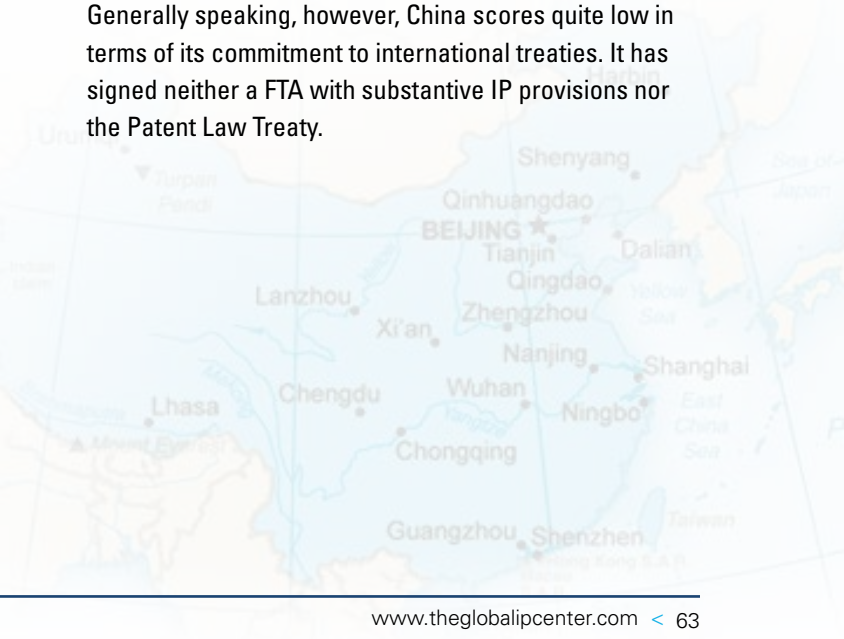
Enforcement

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** The proposed copyright amendments would introduce heightened statutory damages and provide punitive damages to intentional infringers, although concerns remain that these penalties are still not enough of a deterrent. The new trademark law increases statutory damages sixfold and heavier penalties are attached to multiple infringements. Additionally, the new trademark law introduces a new method of calculation of damages based on an infringer's actual turnover. This score could be raised in the future following the approval and implementation of the new copyright amendments and the application of the new trademark regime. In practice, some courts are starting to impose much higher levels of damages for both domestic and international IP rights owners. The Supreme Court has been encouraging lower courts to properly apply evidentiary rules in ways that damages will be awarded to sufficiently compensate the plaintiff.

25. **Criminal standards including minimum imprisonment and minimum fines:** Standards for criminal penalties are insufficient, particularly in the copyright law. The numerical threshold for determining liability (as set out in Promulgated Opinions of the Supreme People's Court in 2011), which has been lowered compared with previous levels, is still excessive, easy to avoid, and causing difficulties in the ability to prosecute counterfeiters in many situations. In the area of piracy, the threshold and the "for profit" requirement make it very difficult to prosecute online infringement and, importantly, the Chinese police and prosecutors refuse to prosecute enterprises that use pirated software. Government officials have indicated there will be an effort to lower and possibly eliminate the criminal threshold in the amendments to the Criminal Code. If this is carried out, it would raise China's score for this indicator in future editions of the GIPC Index. Furthermore, criminal enforcement is lacking in its ability to prosecute counterfeiters and related entities in the supply chain. With regard to pharmaceuticals, Chinese police have begun to prioritize cracking down on counterfeit drug makers; China launched an initiative/campaign against the sale of fake pharmaceuticals in 2013 and achieved success. China announced these efforts would continue in 2014. Nevertheless, up until now unregistered chemical factories that produce illegal active pharmaceutical ingredients for manufacturing of finished counterfeited goods have not been given sufficient attention. Exports of illegal APIs have caused serious threats to public health. However, in a recent positive development, China has committed to taking steps toward introducing a framework for registering manufacturers of bulk chemicals that can be used as APIs, which would be critical in combating dangerous counterfeit pharmaceuticals around the world.

Membership and Ratification of International Treaties

China has signed the Singapore Treaty on the Law of Trademarks, although it has not yet ratified the treaty. Generally speaking, however, China scores quite low in terms of its commitment to international treaties. It has signed neither a FTA with substantive IP provisions nor the Patent Law Treaty.



Colombia

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.5	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.25	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.5	
Total score—Patents	**3.25**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.84[51]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total score—Copyrights	**1.84**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.5	
20. Barriers to market access	0.25	
Total score—Trade Secrets and Market Access	**0.75**	**2**

Enforcement		
21. Physical counterfeiting rates	0.6[52]	
22. Software piracy rates	0.47[53]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.5	
26. Effective border measures	0.5	
Total score—Enforcement	**2.57**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	1	
Total score—Treaties	**2**	**4**
Total Overall Score	**13.66**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic patentability framework • Policy that promotes legal software use in government • Civil remedies and criminal standards framework in place • Basic legal framework for trademark protection • Border measures relating to *ex officio* authority and in-transit detainment by customs officials	• Key pharmaceutical IP rights missing or with significant holes in application • Failure to implement FTA provisions relating to notice and takedown, DRM, or statutory damages for copyright infringement • Overly broad copyright exceptions in legislation and application • Weak prosecution in online copyright environment • No legal protection for unregistered marks • Delay in redress of trademark infringement • Mixed application of border measures

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Inventions will be granted patent protection in Colombia provided they are new, involve an inventive step, and have industrial application. The Andean Court of Justice has issued several legal opinions denying patents on new pharmaceutical indications and biologics that are capable of being isolated. Also, patents are typically not granted for therapeutic methods. In 2013, one multinational pharmaceutical company was denied a patent on a new mode of administration, despite that mode not being part of the state of the art for the given molecule, on the basis that the composition already existed.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** The U.S.-Colombia FTA calls for a patent linkage system to be in place in both countries. Although government authorities have recently introduced provisions intended to implement this obligation, they are missing key elements, and problems with the underlying legal framework for enforcement undermine their effectiveness. In 2013, the National Institute of Food and Drug Monitoring (INVIMA) introduced a mechanism for the notification of patent holders concerning potentially infringing market authorization applications; yet it is the responsibility of the patent holder to pursue prosecution, and Colombia does not provide a legal ground for litigation on the basis of drug registration or suspension of marketing authorization of disputed products. The adjudication process, however, may in the future be positively affected because the new measure gives the Colombian Trademark and Patent Office jurisdiction over infringement cases.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** The U.S.-Colombia FTA provides for a notice and takedown regime that is similar to the framework under the U.S. Digital Millennium Copyright Act, and an attempt to fulfill these obligations occurred in 2011 with the draft "Ley Lleras 1.0" bill. However, lawmakers were not successful in approving the bill.

12. **Digital rights management legislation:** At present, DRM measures do not exist, and widespread music and book piracy suggests that enforcement is lacking. As of June 2013, Colombia is debating the proposed Law 306 that contains an article aimed at implementing its FTA obligations in this area. The bill would introduce protection against the circumvention of TPMs as well as the manufacture, import, distribution, and sale of circumvention devices. On approval and implementation of this bill, Colombia's score for this indicator would increase in future editions of the GIPC Index.

13. **Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software:** Circular 008, issued in 2008 by the Ministry of Industry and Commerce, mandates the use of authorized, legitimate software in government ministries. Although there is some indication of implementation—for example, surveys from the procurement agency, *Agencia Nacional de Contratación Pública,* indicate that all software installed on its equipment is licensed—evidence does not suggest that application of the measure is widespread.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** In the Andean community, which includes Colombia, the use of unregistered trademarks does not give rise to any rights. However, Andean Community Decision 486/2000 creates an exception for well-known marks provided it can be proven that the sign is well known in the Andean community. In 2012, the Ministry of

Industry and Commerce confirmed protection of a well-known mark for the paint brand Pintuco under which the product, and only this product, could derive profit. However, generally speaking, the evidence does not suggest that protection of well-known marks is the norm.

Trade Secrets and Market Access

19. **Protection of trade secrets:** Decision 486/2000 provides protection for business secrets as long as they are not generally known or accessible, have commercial value, and are made the subject of reasonable measure. There are some examples from case law, such as *Chicle Adams SA v. Confites Ecuatorianos CA/Confitecol SA,* that confirm companies must take adequate measures to keep a trade secret confidential in order to derive protection from the law. However, weaknesses in enforcement and in the overall functioning of the system exist, including in enforcement of contracts and confidentiality of trade secrets in litigation. There is also an overall lack of jurisprudence concerning trade secrets.

20. **Barriers to market access:** INVIMA requires pharmaceutical companies to share specific, commercially sensitive information in order to obtain regulatory data protection. The release of this information to third parties affects the ability of companies to register/enter the market and to obtain regulatory data protection in other markets.

Enforcement

23. **Civil and procedural remedies and 25: Criminal standards including minimum imprisonment and minimum fines:** Andean law and the Colombian Criminal Code generally provide for civil remedies for infringement—including banning the sale of infringing goods, the cessation of infringing acts, damages, and the destruction of goods—as well as criminal penalties. However, prosecution overall is weak, and sentencing, when it occurs, is non-deterrent. For example, piracy is still considered a minor offense by criminal and appellate judges, and convicted defendants rarely serve prison time.

Membership and Ratification of International Treaties

Colombia has signed and ratified the WIPO Internet Treaties but still fails to participate in and ratify the Patent Law Treaty and the Singapore Treaty on the Law of Trademarks. Colombia has concluded the U.S.-Colombia FTA, which entered into force in May 2012 and includes substantial provisions on IP rights (Chapter 16 of the agreement).

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	1	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.5	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	1	
Total score—Patents	**6.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.74[54]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.75	
10. Availability of frameworks that promote cooperative action against online piracy	0.75	
11. Scope of limitations and exceptions to copyrights and related rights	1	
12. Digital rights management legislation	1	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.75	
Total score—Copyrights	**4.99**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	1	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	1	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.5	
Total score—Trademarks	**4.5**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.75	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**1.75**	**2**

Enforcement		
21. Physical counterfeiting rates	0.78[55]	
22. Software piracy rates	0.63[56]	
23. Civil and procedural remedies	1	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	1	
25. Criminal standards including minimum imprisonment and minimum fines	1	
26. Effective border measures	1	
Total score—Enforcement	**5.41**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	1	
Total score—Treaties	**4**	**4**
Total Overall Score	**27.15**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Advanced national IP environment • Regulatory data protection • DRM legislation • Non-discrimination/non-restrictions on the use of brands in packaging • Sufficient civil remedies and criminal penalties • Commitment to and implementation of international treaties	• Anti-piracy HADOPI framework for end-users diluted • Relatively high level of software piracy in comparison with other developed high-income countries • Trade secret protection: U.S. government described France as one of a number of countries engaged in "hacking for economic intelligence"

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** The European Medicines Agency does not consider the patent status of an applicant for marketing approval for a generic drug, and there is no explicit regulatory framework in place. Although it is generally possible to enforce a patent through Member State courts (including in France), such disputes rarely restore an innovative manufacturer to the position that they would have

been in but for the launch of the patent-infringing product. It is essential, therefore, that the EU Member States adopt effective patent enforcement systems (or a unified system) that allow for early resolution of patent disputes before an infringing product is launched in the market.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** In 2009, the French government introduced a new set of anti-piracy laws and an enforcement agency, the *Haute Autorité pour la Diffusion des Oeuvres et la Protection des Droits sur Internet* (HADOPI). The HADOPI laws consisted of a graduated three-strikes response scheme that could lead to the disconnection of Internet access for alleged copyright infringers. Academic research suggests that subsequent to the introduction of these laws, music sales in France increased from 20% to 25% relative to sales in other control-group countries. In July 2013, the French government announced significant alterations to the HADOPI laws. The threat of suspension of Internet access for suspected repeat infringers was replaced by a graduated fining system, and the enforcement agency disbanded, with its activities re-routed to another government agency.

10. **Availability of frameworks that promote cooperative action against online piracy:** The 2004 French Digital Economy Law (*Loi n° 2004-575 du 21 juin 2004 pour la confiance dans l'économie numérique*) implements the E-Commerce Regulations 2002 (European Commission Directive) and requires the expeditious removal of any infringing material once an ISP has been notified or has received knowledge of any illegal activity. However, recent rulings by the Court of Cassation and corresponding legal analysis suggest that principles of a general obligation on the part of ISPs to monitor content on notification do not apply.

Trade Secrets and Market Access

19. **Protection of trade secrets:** Protection of trade secrets and confidential information is not codified in a specific trade secrets act or law. The European Commission in 2013 put forward a draft directive to harmonize existing member state mechanisms for the protection of trade secrets. This proposed directive would offer a definition of trade secrets and misappropriation of trade secrets, harmonized civil remedies, and measures to avoid the leakage of trade secrets during the course of litigation. However, in France causes of action are provided through the existing IP Law (trade secrets are considered an IP right), French Civil Code, Labor Law, Contract Law, Criminal Law, and Tort Law. French Criminal Law provides for maximum fines of €350,000 and three-year imprisonment for the theft of trade secrets. France, however, was described in a new 2013 National Intelligence Estimate by the U.S. government as one of a number of countries engaged in "hacking for economic intelligence."

    Particularly troubling to the innovative pharmaceutical industry are the current practices of the European Medicines Agency (EMA) and proposals being advanced through the EMA and the European parliament to provide unrestricted access to and publication of clinical trial data that will substantially harm patient privacy, the integrity of the regulatory system, and incentives for pharmaceutical research and development. Failing to protect confidential commercial information contained in regulatory submissions is inconsistent with the EU's treaty obligations contained in the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

Enforcement

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** France does not have statutory damages in place. There are, however, a number of well-established mechanisms in place to calculate

and determine the amount of damages generated by infringement. These mechanisms include a calculation based on lost profits as well as potential royalties due. A rights holder can also request a lump-sum payment.

26. **Effective border measures:** In 2011, the European Court of Justice ruled that goods in transit can be viewed as being counterfeit or pirated only if they are intended as such. Subsequent to this, the European Union issued a set of guidelines that suggest goods in transit can be suspended from release if there is a suspicion that these goods may be diverted onto the common market. In 2013 the European Commission and European Parliament introduced the new Customs Regulation 608/2013, which is set to come into effect January 1, 2014. Preliminary legal analysis of this regulation suggests that it could be applied to goods in transit under specific circumstances. Furthermore, in 2013 the European Commission also published proposals for a revision of the Regulation on the Community Trademark and for a recast of the directive approximating the laws of the member states relating to trademarks. Under this proposed directive, the commission has made it clear that there is a need for a "European legal framework enabling a more effective fight against the counterfeiting of goods," including goods in transit.

Membership and Ratification of International Treaties

France has signed and acceded to all of the international treaties included in the GIPC Index. Furthermore, the European Union has concluded and ratified several FTAs with substantive IP provisions, such as the EU-Korea Trade Agreement of 2010.

India

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**1**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.47[57]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0.25	
11. Scope of limitations and exceptions to copyrights and related rights	0	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total score—Copyrights	**1.47**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**2.75**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.25	
20. Barriers to market access	0	
Total score—Trade Secrets and Market Access	**0.25**	**2**

Enforcement		
21. Physical counterfeiting rates	0.36[58]	
22. Software piracy rates	0.37[59]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.25	
Total score—Enforcement	**1.48**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**0**	**4**
Total Overall Score	**6.95**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic IP framework introduced in mid-2000s, including 20-year patent protection[60] • *Ex officio* powers introduced in 2007 for the deputy and assistant commissioners of customs	• Patentability requirements in violation of TRIPS • Regulatory data protection not available • Patent term restoration not available • Use of compulsory licensing for commercial and non-emergency situations • Limited takedown mechanism in ISP notification system • Limited DRM legislation • High levels of software piracy, music piracy, and counterfeit goods • Poor application and enforcement of civil remedies and criminal penalties • Not a contracting party to any of the major international IP treaties referenced in the GIPC Index

Spotlight on the National IP Environment

2012 Scores versus 2014

India's overall score has decreased from 25% of the total possible score (with a score of 6.24) in 2012 to 23% in 2014. This is mainly due to the introduction of new indicators to the GIPC Index and the relative weakness of the Indian IP environment with regard to IP rights available for trademark holders, patentability requirements that are outside international practices, and IP-based barriers to accessing the Indian market. Moreover, India's overall IP environment has deteriorated particularly with regard to pharmaceutical patents, for which basic protection seems increasingly to be unavailable.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Indian patent law has in place an additional requirement to patentability that goes beyond the required novelty, inventive step, and industrial applicability requirements. Under Section 3(d) of the Indian Patent Act, there is an additional "fourth hurdle" with regard to inventive step and enhanced efficacy that limits patentability for certain types of pharmaceutical inventions and chemical compounds. Specifically, as per the Supreme Court of India's ruling on April 1, 2013, in the Novartis Glivec case, Section 3(d) can only be fulfilled if the patent applicant can show that the subject matter of the patent application has a better therapeutic efficacy compared with the structurally closest compound as published before the patent application had been filed (regardless of whether or not a patent application on the earlier compound was filed in India). The Supreme Court also found in that same case that it was not in the interest of India to provide patentees with protection that goes substantially beyond what was specifically disclosed in the patent application; compounds that fall within a chemical formula of a claimed group of compounds in a patent application but that are not specifically disclosed in the patent could be regarded as not protected. This point was relevant in another case involving Roche's Tarceva, where the generic company, Cipla, was found not to have infringed on Roche's patented product even though the active ingredient is the same. This approach to patentability requirements is inconsistent with the TRIPS Agreement, which specifies three basic patentability requirements .

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** India does not provide mechanisms that enable patent issues to be adjudicated before marketing approval of a generic or biosimilar product.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** Indian law is not clear as to the availability and requirements of a notice and takedown system. Specifically, the 2000 Information Technology Act, 2008 amendments, and the 2011 Information Technology (Intermediaries Guidelines) Rules appear to be in conflict with the 2012 Copyright Act amendments. The former puts forward relatively clear guidelines and requirements of expeditious removal of infringing material; the latter, conversely, only requires removal for a period of 21 days, with a court order required for any further action.

11. **Scope of limitations and exceptions to copyrights and related rights:** The 2012 Copyright Act amendments have broadened India's exceptions in a manner that seems to be incompatible with the Berne three-step test, specifically the expansion of the private-use exception to "private and personal" use.

12. **Digital rights management legislation:** The 2012 Copyright Act amendments included measures relating to DRM; however, these measures allow broad exceptions and do not cover the import and distribution of circumvention equipment.

Trade Secrets and Market Access

20. **Barriers to market access:** India has in place a number of policies making market access contingent on the sharing or divulging of intellectual property. For example, through its 2012 decision in the Nexavar compulsory licensing case, the Controller General of Patents, Designs, and Trademarks set a precedent of requiring foreign innovators to manufacture in India as a condition of "working the patent" in order to avoid forced licensing of their inventions to third parties. Separately, in a draft policy being considered by the Indian government, there is a requirement of government purchase of ICT equipment that indigenous IP be used; this policy is currently being reconsidered but has not been completely withdrawn.

Enforcement

23. **Civil and procedural remedies and 25. Criminal standards including minimum imprisonment and minimum fines:** India does provide rudimentary civil and procedural remedies and criminal standards under its Copyright, Trade Marks, and Patent acts. However, the availability and enforcement of these remedies and criminal sanctions remains weak.

26. **Effective border measures:** Under the 2007 Notification 47 from the India Department of Revenue, deputy and assistant customs commissioners may suspend the clearance of goods when there are reasonable grounds to believe that the goods in question infringe IP rights. With regard to goods in transit, the regulations do not distinguish between goods in transit and other goods. However, the 2012 Copyright Act amendments explicitly exclude goods in transit from being treated as prohibited goods.

Membership and Ratification of International Treaties

India is not a contracting party to any of the international treaties included in the GIPC Index, nor has India concluded an FTA with substantial IP provisions since acceding to the TRIPS Agreement. Current negotiations with the European Union on an FTA are not likely to be concluded before the beginning of 2014.

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.5	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**1.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.52[61]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total score—Copyrights	**1.27**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**2.75**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.25	
20. Barriers to market access	0	
Total score—Trade Secrets and Market Access	**0.25**	**2**

Enforcement		
21. Physical counterfeiting rates	0.43[62]	
22. Software piracy rates	0.14[63]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.25	
Total score—Enforcement	**1.32**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1**	**4**
Total Overall Score	**8.09**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic IP framework in place including 20-year patent term of protection • Basic patentability framework • FTA obligation for legal government software • Basic enforcement framework for copyright infringement • Basic trademark exclusive rights available • Major auction sites provide notice and takedown for online counterfeiting	• History of pharmaceutical compulsory licensing • No patent term restoration or regulatory data protection available • Lacks patentability for CIIs • Insufficient protection of online copyright • Scope of copyright exceptions overly broad in application • Limited protection for unregistered marks • No specific coverage of trademark dilution or cybersquatting • Market access conditional on local manufacturing requirement or licensing IP • High counterfeiting rates and no in-transit detainment • Very high software piracy rates • Rudimentary judiciary, non-deterrent/ non-transparent penalties

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

3. **Patentability of computer-implemented inventions:** Article 7 of the Indonesian Patent Act stipulates that "any theory and method in the field of science and mathematics" is not patentable and not to be considered an invention. Although there is no specific reference to software or CIIs, legal practice in Indonesia and existing case law suggest that the environment for patent protection for CIIs is challenging, with no clear guidance in place.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** The Indonesian government has issued nine "government use" licenses overriding existing pharmaceutical patents primarily for hepatitis and HIV drugs. These licenses allow the government to exploit existing patent-protected products in the event of threats to national security or an urgent public need. The manner in which these licenses were issued appears to be in contradiction of Article 31 of the TRIPS Agreement. First, the issuing of these licenses took place without engaging the relevant rights holders on an alternative solution or obtaining their authorization. Second, the issuing of the licenses was conducted on a group basis as opposed to an individual basis as required by TRIPS. Finally, there does not appear to be any specific recourse mechanism available that would allow a rights holder to appeal the issuing of these licenses.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** The Indonesian Copyright Act provides only a rudimentary legal framework affording rights holders with exclusive rights, with limited mention of specific recourse mechanisms in place for online infringement. Other acts, including the "Cyber Law" (Law of the Republic of Indonesia on Information and Electronic Transaction), do not prohibit communicating or making copyright material available online. Moreover, the practical reality is that Indonesia has persistent high rates of physical and online piracy, corresponding low levels of enforcement and criminal convictions, and unreliable judicial enforcement. For example, rights holders report that the physical market Harco Glodok in Jakarta continues to operate despite its reputation as a center for trade in illicit copyright-infringing material.

10. **Availability of frameworks that promote cooperative action against online piracy:** There is currently no notice and takedown system in place. A draft copyright amendment bill from 2012 included a mechanism whereby the Indonesian government would be notified of possible infringement, and access to the relevant infringing material would be either disabled or taken off the Internet. At the time of research, this bill had not been passed or enacted into law.

12. **Digital rights management legislation:** The Copyright Act provides a limited form of DRM legislation. Most notably, the legislation does not provide any details as to which specific types of acts, such as the circumvention, manufacture, and trafficking in circumvention devices, are prohibited.

13. **Clear implementation of policies and guidelines requiring any proprietary software used on government ICT systems to be licensed software:** As a signatory to the ASEAN-Australia-New Zealand Free Trade Area (AANZFTA) agreement, Indonesia is committed to implementing "laws, regulations or policies" that require central government agencies to use only legitimate, licensed computer software. However, reports from rights holders suggest that implementation is lacking.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** Indonesian trademark law and case law provides limited protection for unregistered trademarks. Although well-known marks are protected through Indonesia's treaty obligations under both the Paris Convention and TRIPS and legal action can be initiated, rights holders must register their trademarks prior to initiating actions. Moreover, local legal analysis suggests that Indonesia's first-to-file system has been widely abused by local pirates who have registered internationally well-known marks. Although there are examples of well-known marks being protected and rights holders afforded redress (see, for example, the 2012 decision in *Inter Ikea Systems BV v. PT Angsa Daya*), overall the case law suggests that it is difficult for rights holders to seek redress through the court system. Most recently, Christian Dior's appeal against the inclusion of "Dior" in a local trademark was rejected by the Supreme Court in 2013 despite this being a well-known mark widely used outside Indonesia. Moreover, when successful, such as in the 2009 "Subway" case, rights holders are faced with lengthy and costly legal proceedings.

Trade Secrets and Market Access

20. **Barriers to market access:** The Indonesian Ministry of Health Decree 1010/MENKES/PER/XI/2008 introduced significant IP-based barriers to accessing the Indonesian pharmaceutical market. Specifically, this decree conditions foreign rights holders market access on either (1) establishing a local manufacturing capability or (2) licensing their intellectual property to an existing firm with a local manufacturing capacity. While recent actions by the Indonesian authorities have sought to clarify these regulations, the situation remains unresolved.

Enforcement

22. **Software piracy rates; 23. Civil and procedural remedies; 24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement; and 25. Criminal standards including minimum imprisonment and minimum fines:** Indonesia has rudimentary civil and criminal remedies in place for IP infringement. Injunctions, seizures, and damages are available but on the whole are not applied or enforced consistently by the judiciary to the point where they act as a deterrent. As a result, Indonesia has displayed persistently high levels of online and physical piracy. For example, with regard to the infringement of software, Indonesia has an estimated piracy rate of 86%, according to the BSA—the highest of all sampled countries in the 2014 Index. Similarly, Indonesia suffers from high rates of pharmaceutical counterfeiting, which is a serious issue not only for rights holders of infringed IP rights but also for Indonesian patients.

Membership and Ratification of International Treaties

Indonesia scores low in its participation in and ratification of international treaties. In large measure, this is due to Indonesia not being a contracting party to the Patent Law Treaty or the Singapore Treaty on the Law of Trademarks, and not having concluded an FTA with substantial IP provisions since it acceded to TRIPS. Indonesia is a signatory and has ratified the WIPO Internet Treaties.

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	1	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.5	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	0.8	
Total score—Patents	**6.3**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[64]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	1	
10. Availability of frameworks that promote cooperative action against online piracy	0.5	
11. Scope of limitations and exceptions to copyrights and related rights	0.75	
12. Digital rights management legislation	0.75	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.75	
Total score—Copyrights	**4.28**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	1	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	1	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.5	
Total score—Trademarks	**4.5**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	1	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**2**	**2**

Enforcement		
21. Physical counterfeiting rates	0.87[65]	
22. Software piracy rates	0.79[66]	
23. Civil and procedural remedies	0.75	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.75	
25. Criminal standards including minimum imprisonment and minimum fines	1	
26. Effective border measures	1	
Total score—Enforcement	**5.16**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1**	**4**
Total Overall Score	**23.24**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Robust and sophisticated national IP framework in place • Patentability of CIIs • Effective patent enforcement and resolution process through courts • Broad patent term restoration • Policy requiring legal software in government • Trademark exclusive rights in place and generally enforced • Industry-based standards and policy on notice and takedown present relating to online counterfeit sales • *Ex officio* customs authority and in-transit detainment present	• Limited notice and takedown mechanism in place • Weaknesses in copyright exceptions, private copying, and manufacturing of circumvention devices • Copyright damages awarded relatively low

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

3. **Patentability of computer-implemented inventions:** Japanese patent law does not exclude computer programs from patentability. Instead, both "software related inventions" and business methods are patentable subject to fulfilling the basic requirement of being "a creation of technical idea utilizing laws of nature." In practice, patentability of CIIs in Japan is by international standards quite broad and permissive.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Like the European Union, Japan does not have a formal system of patent linkage in place.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** Under the Law Concerning the Limits of Liability for Damages of Specified Telecommunications Service Providers and the Right to Request Disclosure of Identification Information of the Senders (Law No. 137), Japan has in place a limited notice and takedown mechanism. This mechanism stipulates that Japanese ISPs have an obligation to act on being notified of a possible infringement by a rights holder. However, unlike many other countries' notice and takedown systems, under Law No. 137 ISPs must inform the alleged infringer of the allegation of infringement prior to any takedown of the infringing material. On notification the alleged infringer then has a period of seven days to respond to the allegation, and only upon the expiration of the seven days, if no response from the alleged infringer has materialized, can the ISP take down the alleged material.

11. **Scope of limitations and exceptions to copyrights and related rights:** Japan has recently amended its Copyright Act, and in particular the act's exceptions to copyrights. The 2010 amendments made clear that the existing personal-use exception did not apply in cases where audio or film content was downloaded from what was knowingly an infringing source. However, these amendments were not expanded to cover other copyrighted content and works, resulting in a degree of uncertainty about the exception.

13. **Clear implementation of policies and guidelines requiring any proprietary software used on government ICT systems to be licensed software:** The Japanese government has in place a policy on the use of licensed software by government agencies. The 2010 Technical Reference Model for the Government Procurement of Information Systems (TRM), in describing required technology standards, states that a key element of technologies referenced and procured is that IP rights are managed and clearly defined. This is to allow any party to "implement the specifications freely without the possibility of being charged unduly." However, there is limited evidence on the application and implementation of this and other related guidelines.

Trademarks, Related Rights, and Limitations

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** Although there is no statutory or government-administered framework in place to promote action against the online sale of counterfeit goods, since 2008 a fairly comprehensive and effective voluntary industry mechanism has been in operation. The Guideline for Prevention of Distribution of Counterfeits Goods via the Internet initiative is a partnership between online auctioneers and representatives of the content industry. The mechanism in place operates through a notice and takedown procedure whereby rights holders notify online auctioneers of alleged infringement; the alleged counterfeit goods are then removed from the auction sites. Online auction sites have also begun to monitor the display and advertising of counterfeit goods. Available data from the first few years of operation suggests that

the initiative has had a significant impact, with the number of notices sent by rights holders decreasing from close to 100,000 notices in 2005 to fewer than 50,000 in 2009.

Enforcement

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** Japanese law does not have statutory damages in place in relation to the infringement of IP rights; instead, there are fairly well-established mechanisms for determining the amount of damages generated by infringement. Depending on the IP rights, infringed damages can, for example, be calculated using (1) the profits an infringer gained during the course of the infringement, (2) a reasonable royalty rate, (3) the loss of profits, and (4) damages based on a marginal profit basis and multiplied by the number of infringing goods/products sold by the infringer. With regard to actual application and damages awarded, the copyright industry has reported that damages handed down in infringement cases are often relatively small and do not act as an effective deterrent. Recent case law suggests that in patent proceedings, the scope for awarding damages may have been expanded. The 2013 ruling by the IP High Court in *Sangenic Intl. Ltd. v. Aprica Children's Products Inc.* held that the patentee was not required to work their patent for damages to be calculated on the basis of profits earned by the defendant during the course of the infringement.

Membership and Ratification of International Treaties

Japan scores low in its participation in and ratification of international treaties. In large measure, this is due to Japan not being a contracting party to the Patent Law Treaty or the Singapore Treaty on the Law of Trademarks. Japan has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights. Japan is a negotiating party to the Trans-Pacific Partnership Agreement. Japan is a signatory and has ratified the WIPO Internet Treaties.

Malaysia

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	1	
3. Patentability of computer-implemented inventions	0.25	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.5	
Total score—Patents	**2.75**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[67]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.5	
10. Availability of frameworks that promote cooperative action against online piracy	0.75	
11. Scope of limitations and exceptions to copyrights and related rights	0.5	
12. Digital rights management legislation	0.75	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total score—Copyrights	**3.53**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.5	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**1.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.13[68]	
22. Software piracy rates	0.45[69]	
23. Civil and procedural remedies	0.5	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.5	
25. Criminal standards including minimum imprisonment and minimum fines	0.5	
26. Effective border measures	0.25	
Total score—Enforcement	**2.33**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1**	**4**
Total Overall Score	**14.36**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Five years of regulatory data protection for pharmaceuticals • Notice and takedown legislation passed in 2012 • DRM legislation passed in 2012 • Statutory civil damages introduced in the 2012 amendments to the Copyright Act • Has acceded to the WIPO Internet Treaties	• CIIs not viewed as patentable • No pharmaceutical-related patent enforcement and resolution mechanism • Compulsory licensing used as basis for price negotiations in 2004 • Patent term restoration not allowed • High rates of counterfeiting, software, and music piracy • Enforcement against piracy remains challenging • *Ex officio* powers not used by customs officials

Spotlight on the National IP Environment

2012 Scores versus 2014

Malaysia's overall score has increased from 45% of the total possible score (with a score of 11.25) in 2012 to 48% in 2014. This is mainly due to the introduction of new indicators to the GIPC Index, the relative strength of the Malaysian IP environment with regard to IP rights (if not their enforcement) available for trademark holders, and a lack of IP-based barriers to accessing the Malaysian market. However, these strengths are counterbalanced by continued weaknesses in other areas, such as enforcement.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Malaysia's Patent Act does exclude diagnostic therapeutic and surgical methods for the treatment of humans or animals. However, Section 14(4) of the act provides an exception to this exclusion, making Swiss-type claims possible. Similarly, the Guidelines for Patent Examination published by the Malaysia Intellectual Property Office (MYIPO) are relatively clear on what claims are allowed.

6. **Patent term restoration for pharmaceutical products:** Malaysia does not currently allow patent term restoration for pharmaceutical products.

7. **Regulatory data protection term:** Malaysia introduced a five-year term of RDP protection in 2011. While this is a positive achievement, challenges remain. Specifically, the full term of protection is not offered to new products introduced in Malaysia; instead, the term of protection begins whenever a product was introduced globally. This significantly weakens the actual exclusivity and incentive being offered to pharmaceutical innovators through RDP.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** The 2012 Copyright Act amendments introduced a robust and balanced system of notice and takedown. However, rights holders report that challenges remain with reaching full operational status.

11. **Scope of limitations and exceptions to copyrights and related rights:** The 2012 Copyright Act amendments strengthened and clarified Malaysia's exceptions by introducing four new criteria for determining whether a dealing should be considered fair. However, enforcement remains challenging with widespread unauthorized photocopying and piracy of academic materials and books.

12. **Digital rights management legislation:** The 2012 Copyright Act amendments also included new measures relating to DRM that prohibit the use, sale, distribution, and trafficking of circumvention devices. This brings Malaysia broadly in line with international best practices. Still, enforcement remains challenging with high levels of physical and online piracy.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** Malaysia provides protection for well-known marks under the common law action of passing off, provided that there is misappropriation of the unregistered trademark. However, recent case law suggests dilution is not recognized. Recent landmark cases include the 2008 *Consitex SA v. TCL Marketing Sdn Bhd* and 2009 *McCurry Restaurant (KL) Sdn Bhd v. McDonald's.*

Enforcement

23. **Civil and procedural remedies and 25. Criminal standards including minimum imprisonment and minimum fines:** The 2012 amendments to the Copyright Act introduced statutory civil damages,

thus improving the remedies available to plaintiffs in cases of copyright infringement. Existing law also provides minimum criminal standards of fines and prison sentences for copyright infringement. However, overall enforcement against online and physical piracy remains a challenge, with a significant slowdown in activity reported by rights holders.

26. **Effective border measures:** Malaysian customs officials are granted *ex officio* powers through the Trademark Act. However, practice and evidence from the legal community suggests that these powers are not being used to their full effect. Under the Trademark Act, customs officials cannot seize counterfeit goods in transit.

Membership and Ratification of International Treaties

Malaysia recently acceded to the WIPO Internet Treaties. However, apart from these two, Malaysia has neither signed nor ratified or acceded to any of the other international treaties included in the GIPC Index. It is currently in negotiations for two FTAs that are set to include substantial IP provisions: the Trans-Pacific Partnership and a Malaysia-EU FTA.

Mexico

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.5	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.25	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.5	
Total score—Patents	**3.25**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.79[70]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.5	
12. Digital rights management legislation	0	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total score—Copyrights	**2.04**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.5	
20. Barriers to market access	0.75	
Total score—Trade Secrets and Market Access	**1.25**	**2**

Enforcement		
21. Physical counterfeiting rates	0.8[71]	
22. Software piracy rates	0.43[72]	
23. Civil and procedural remedies	0.5	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	1	
25. Criminal standards including minimum imprisonment and minimum fines	0.5	
26. Effective border measures	0	
Total score—Enforcement	**3.23**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0.5	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1.5**	**4**
Total Overall Score	**14.27**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Fair and transparent use of compulsory licensing • Use of licensed software in government agencies • Standard civil and criminal remedies • New rules streamlining the civil remedies process • Pre-established damages for copyright infringement • Signatory to WIPO Internet Treaties	• Lack of patent term restoration for pharmaceutical patents • Insufficient prosecution of trade secret violations • Lack of sufficient framework to promote cooperative action against online piracy • No trademark opposition prior to registration • Exclusive rights lacking for well-known unregistered marks • Poor application of civil remedies and criminal penalties • Ineffective border measures

Spotlight on the National IP Environment

2012 Scores versus 2014

Mexico's overall score has fallen slightly from 49% of the total possible score (with a score of 12.23) in 2012 to 48% in 2014. This is partly due to changes to the scoring methodology in 2014 that allow partial scores to be applied. For example, Mexico's score increased slightly in regard to indicator 4 (pharmaceutical-related patent enforcement and resolution mechanism), where a partial score is merited, and it decreased in other areas, such as general legal measures protecting online copyright, where a partial rather than full score for either legislation or application more accurately captures the situation.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Mexico's Industrial Property Law provides patent protection for inventions that are new, are the result of an inventive step, and have industrial application. Biological processes, materials found in nature (not isolated), therapeutic treatments and methods, and formulations are not patentable except in cases where their use is not obvious to a person skilled in the art and/or they produce an industrial result (and for combination patents, the components cannot function individually). However, claims on methods for new uses may be patentable provided they are in a Swiss-style format.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** While a 2003 Presidential Decree introduced a basic system for early adjudication of disputes, it does not represent a transparent pathway because the patent holder receives no notification of infringing issues and is not formally involved in the adjudication process. In addition, the regulatory pathway is currently limited to substance and formulation patents only; use patents are still not included. In practice, resolution of patent disputes is delayed and often ineffective, whether through administrative or judicial routes.

7. **Regulatory data protection term:** Health regulator COFEPRIS published guidelines in June 2012 that provide protection against the use of undisclosed test data by any person for the purpose of marketing approval for a maximum of five years. This protection is only afforded for new chemical entities. RDP apparently will not be extended to biologics.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** Mexican intellectual property law lacks a legal basis for ISP liability for online copyright infringement; notice and takedown provisions as such are missing from the legislation, and other related legislation, such as the Telecommunications Law, is ambiguous regarding the ability of ISPs to take action against users. As a result, there is a limited response from ISPs to rights holder notices of infringement. There is currently a proposal directed toward amending the copyright law that would introduce a "notice and notice" system; however, this would create ISP liability upon failure to release information on infringing users, rather than failure to take down infringing material.

13. **Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software:** Although certain department-specific policies requiring use of licensed software exist, no formal policy is in place across the federal government. Nevertheless, data from the Tax Administration Service (SAT) shows that annual updating of licenses for key software occurs. In 2012, the Ministry of Economy and several departmental agencies were accredited with BSA's Certification in Standards-Based Software Asset Management for Organizations. Part of this process includes proving and maintaining compliance with software license requirements. However, the need for further and greater compliance by other departments and at the state and local levels remains.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** The Industrial Property Law establishes the exclusive right to use a mark on registration. However, unregistered trademarks are offered a certain degree of protection, regardless of whether use occurs within the jurisdiction of Mexico or abroad. An unregistered trademark proprietor will be able to file a cancelation action against a registration based on prior use; however, the proprietor of the unregistered trademark must make an application for registration and be awarded registration prior to such action. Furthermore, legislation does not provide the owner of the unregistered trademark with exclusive rights. Thus, unregistered trademark owners remain exposed to potential damage by use of an identical or confusingly similar mark, without the possibility of initiating legal action.

Enforcement

23. **Civil and procedural remedies:** The Industrial Property Law and Copyright Law provide standard civil remedies for civil infringement, including injunctions, damages, and destruction of goods; however, the application of these provisions is lacking. Industry sources suggest that severe delays occur in obtaining relief, such that damages are often ineffective. However, in a positive step, 2013 amendments to the Copyright Law could help streamline the enforcement and civil remedy process somewhat by formally authorizing the Copyright Office to conduct inspections of sites suspected of being involved in infringement (although it does not have the authority to issue orders for inspection) and providing for rights holders to take action in courts without first going through administrative routes. The extent to which these measures will be applied and speed up the process of obtaining relief remains a concern.

25. **Criminal standards including minimum imprisonment and minimum fines:** The Industrial Property Law, Copyright Law, and the Criminal Code outline standard fines and terms of imprisonment for criminal infringement, the upper ends of which can be considered sufficiently deterrent. In spite of this, in practice actual prosecution and handing down of sentences is rare, and in cases where it takes place, the penalties incurred are too low to be a deterrent. There have been efforts to raise penalties for infringement, particularly in relation to copyright infringement and the distribution of protected digital works, but currently these efforts have stalled. However, there has been indication of increased criminal prosecution of counterfeit medicines operations, including in regard to distribution and retail.

26. **Effective border measures:** Mexican law does not provide for *ex officio* authority for customs officials. In the past, customs authorities have had to obtain an order from the patent and trademark office, IMPI. Based on the recent copyright amendments, Federal District judges may now issue orders for suspending imported goods suspected of infringement.

Membership and Ratification of International Treaties

Mexico has signed and ratified the WIPO Internet Treaties. However, overall Mexico scores fairly low in its participation in and implementation of international treaties. This is partly because it is not a contracting party to the Patent Law Treaty and has only signed but not ratified the Singapore Treaty on the Law of Trademarks. Furthermore, Mexico's free trade agreements with various trade partners, including the United States and Canada (NAFTA), the European Union, and Japan, came into force prior to its membership in the TRIPS Agreement or only contain very general and brief IP provisions. Additionally, there is concern over the lack of implementation of commitments made under the WIPO Internet Treaties, including inadequate DRM legislation and the absence of a mechanism promoting cooperative action against online piracy. Mexico is a negotiating party to the Trans-Pacific Partnership.

New Zealand

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.75	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.5	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.5	
Total score—Patents	**4.75**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.66[73]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.75	
10. Availability of frameworks that promote cooperative action against online piracy	0.75	
11. Scope of limitations and exceptions to copyrights and related rights	1	
12. Digital rights management legislation	1	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.75	
Total score—Copyrights	**4.91**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	1	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	1	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.5	
Total score—Trademarks	**4.5**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	1	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**2**	**2**

Enforcement		
21. Physical counterfeiting rates	0.88[74]	
22. Software piracy rates	0.78[75]	
23. Civil and procedural remedies	1	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.75	
25. Criminal standards including minimum imprisonment and minimum fines	0.75	
26. Effective border measures	0	
Total score—Enforcement	**4.16**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1**	**4**
Total Overall Score	**21.32**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Copyright framework and application fairly strong (three-strikes law) with important caveats • Legislation and common law provides protection for unregistered marks • Exclusive rights for trademarks in place and generally enforced • Biggest auction site provides notice and takedown for online counterfeiting	• Limited patentability of surgical and therapeutic treatments for human use • No patent term restoration offered • Limited term of RDP in comparison with other high-income countries • Firm government intention to introduce plain-packaging legislation • Low damages awarded in infringement cases • No *ex officio* powers for customs officials • Limited participant in international IP treaties

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** In 2013 New Zealand passed a new Patent Act that includes changes to patentability requirements. Most notably the act codifies in statute the exclusion of surgical and therapeutic treatments for human use. The act states that "invention of a method of treatment of human beings by surgery or therapy is not a patentable invention." Previously this exclusion had been in place through relevant case law; it is now statutorily excluded. Although the Intellectual Property Office (IPONZ) does allow for Swiss-style claims, the relevant New Zealand case law is not always clear. For example, the decisions reached in *Merck & Co v. Arrow Pharmaceuticals (P3/2006)* and *Genentech P1/2007* stand in contrast to those reached in the *Abbott Laboratories (P16/2003)* case. The result is that while Swiss-style patents may be granted, their long-term status and validity is uncertain.

3. **Patentability of computer-implemented inventions:** The new Patent Act also includes changes of patentability requirements for CIIs. Most notably the act narrows the basis for which patents for CIIs can be granted, bringing New Zealand's standards more in line with that of the European Patent Office and EU member states. Computer programs "as such" are not patentable; however, CIIs that meet similar tests developed by courts in the United Kingdom (see, for example, the "Aerotel" case) will be patentable.

6. **Patent term restoration for pharmaceutical products:** New Zealand does not offer patent term restoration for pharmaceuticals. Although discussed throughout the reform period, the final 2013 Patent Act did not address this issue and New Zealand continues to lag behind other high-income countries and many emerging markets.

7. **Regulatory data protection term:** Section 23B of the Medicines Act provides protection for clinical test data for a period of five years. This is significantly shorter than the baseline term used in this Index (that of the European Union) as well as the term in place in most other high-income economies.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking) and 10. Availability of frameworks that promote cooperative action against online piracy:** The Copyright Act provides rights holders with exclusive rights in the online space, including rights of notification to ISPs. In 2011, New Zealand introduced a graduated response scheme through the Copyright (Infringing File Sharing) Amendment Act, further outlined in the Copyright (Infringing File Sharing) Regulations. Specifically, this scheme amended the Copyright Act and introduced a mechanism whereby rights holders can notify Internet protocol address providers (IPAPs) about a suspected infringement; IPAPs are then obliged to pass on a "Detection Notice" directly to the account holder/suspected infringer. Under the terms of the regulations, continued suspected infringement can result in two further notices being issued and the rights holder ultimately being able to apply to the Copyright Tribunal for compensation of up to NZ$15,000. The rights holder can also apply for a court order for the alleged infringer's Internet access to be suspended for a period of up to six months. The ultimate effectiveness of the legislation has been questioned by a number of rights holders as a NZ$25 charge is in place for each notice submitted to an IPAP.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** The Government of New Zealand announced in February 2013 that it would move ahead with introducing

so-called plain-packaging legislation for tobacco products. The stated purpose of this legislation is to standardize all tobacco packaging and remove brand-specific information. Like similar legislation introduced in Australia in 2012, the introduction of plain packaging in New Zealand would significantly restrict the use of trademarks on retail packaging of tobacco products and severely limit the ability of trademark owners to exploit their rights. The passage of such legislation would decrease New Zealand's score in this indicator from 1 to 0.

Enforcement

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** New Zealand does not have statutory damages in place in relation to the infringement of IP rights. Instead, there are fairly well established mechanisms for determining the amount of damages generated by infringement. Depending on the IP right, infringed damages can, for example, be calculated using losses suffered by the infringed party, benefits accrued by the infringer, and the flagrancy of the infringement, which can lead to the award of punitive or "exemplary" damages. However, local legal analysis suggests that damages awarded are often not significant enough to act as a deterrent, and New Zealand courts are reluctant to award exemplary damages, with examples of such being far and few between.

26. **Effective border measures:** The New Zealand Customs Service has traditionally had in place a notification system whereby rights holders can record their registered trademarks and copyrighted goods. This recording system formed the basis for action to be taken by the customs authorities against suspected infringing goods. Amendments in 2011 to the Trade Marks Act introduced a concept of "enforcement officers," which includes customs authorities. Under these amendments, enforcement officers were granted powers of search, examination, and seizures. It is, however, unclear whether or not these powers amount to an *ex officio* authority for customs officials to seize goods suspected of infringing IP rights.

Membership and Ratification of International Treaties

New Zealand scores low in its participation in and ratification of international treaties. In large measure, this is due to New Zealand not being a contracting party to the Patent Law Treaty or the WIPO Internet Treaties. New Zealand has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights. New Zealand is a negotiating party to the Trans-Pacific Partnership. New Zealand is a signatory and has ratified the Singapore Treaty on the Law of Trademarks.

Nigeria

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**2**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.74[76]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0.25	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0	
Total score—Copyrights	**1.49**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0	
Total score—Trademarks	**2.5**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**1**	**2**

Enforcement		
21. Physical counterfeiting rates	0.63[77]	
22. Software piracy rates	0.18[78]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0	
Total score—Enforcement	**1.31**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0.5	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1.5**	**4**
Total Overall Score	**9.8**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic 20-year patent term of protection in place • Basic exclusive rights for copyright in place • Digital copyright reform ongoing • Unregistered marks protected through common law passing off action	• No patent examination process in place • CIIs patentability very limited • No patent term restoration or regulatory data protection • Rudimentary digital copyright regime • No DRM • High rates of software piracy • Limited and sporadic enforcement of trademarks; high rates of infringement • Weak enforcement environment

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Nigeria does not have in place a full examination process of patent applications. Patent applications with the Registrar of Patent and Industrial Designs are not granted on the basis of an examination of novelty, inventive step, or industrial applicability. Although Nigeria's Patents and Designs Act states that an invention is patentable only if it fulfills the criteria of being "new, results from inventive activity and is capable of industrial application," Article 4(2) of the act makes clear that patents should not be examined as to their fulfillment of these criteria.

3. **Patentability of computer-implemented inventions:** Nigeria's Patents and Designs Act does not specifically define CIIs or computer programs as non-patentable. Statistics from WIPO suggest that only a small percentage of patents granted in Nigeria relate to CII. Between 1997 and 2011 only 4.9% of all patent applications were in the category of IT methods for management. Moreover, given that there is no full examination of any patent application, the strength and long-term validity of any patent granted by the registrar is questionable.

6. **Patent term restoration for pharmaceutical products:** Nigeria does not offer patent term restoration for pharmaceuticals products.

7. **Regulatory data protection term:** Nigeria does not offer regulatory data protection for clinical data submitted during market registration applications.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** Nigeria's Copyright Act provides rights holders with general exclusive rights. There are no specific references to the online space. The Nigerian Copyright Commission (NCC) announced in 2013 that it was seeking to introduce new legislation that specifically addresses online piracy. Nigeria has some of the world's highest rates of copyright infringement, both physical and online. For example, a 2008 survey carried out by the Ford Foundation for the NCC found that 36% of respondents estimated that the piracy rate was 80% to 100%. A clear majority (57%) of respondents estimated that piracy was more than 60%. The problem was described as being particularly acute with regard to music CDs, for which 59% of those surveyed estimated the piracy rate at 80% to 100%.

10. **Availability of frameworks that promote cooperative action against online piracy:** There is no provision in the Copyright Act or other relevant legislation instituting a notice and takedown mechanism. However, Part 3, Section 11 of the 2008 Guidelines for the Provision of Internet Service, published by the NCC, includes a notice and takedown mechanism, safe harbor provisions for ISPs as content intermediaries, and a general obligation of ISPs to disconnect subscribers on being made aware that subscribers are using the "services contrary to the requirements of these Guidelines or other applicable laws or regulation." However, it is unclear what practical force these guidelines have or their effective application. The report *Freedom on the Net 2013* published by Freedom House suggests that there are instances in which ISPs have blocked access of users when they are illegally downloading copyrighted material, but this action is said to have been taken to manage traffic on the network rather than enforce IP rights.

12. **Digital rights management legislation:** There is no provision in the Copyright Act or other relevant legislation relating to DRM or TPMs. NCC and others have discussed the introduction of relevant DRM and TPM legislation, but at the time of research no relevant legislation was in place.

Trademarks, Related Rights, and Limitations

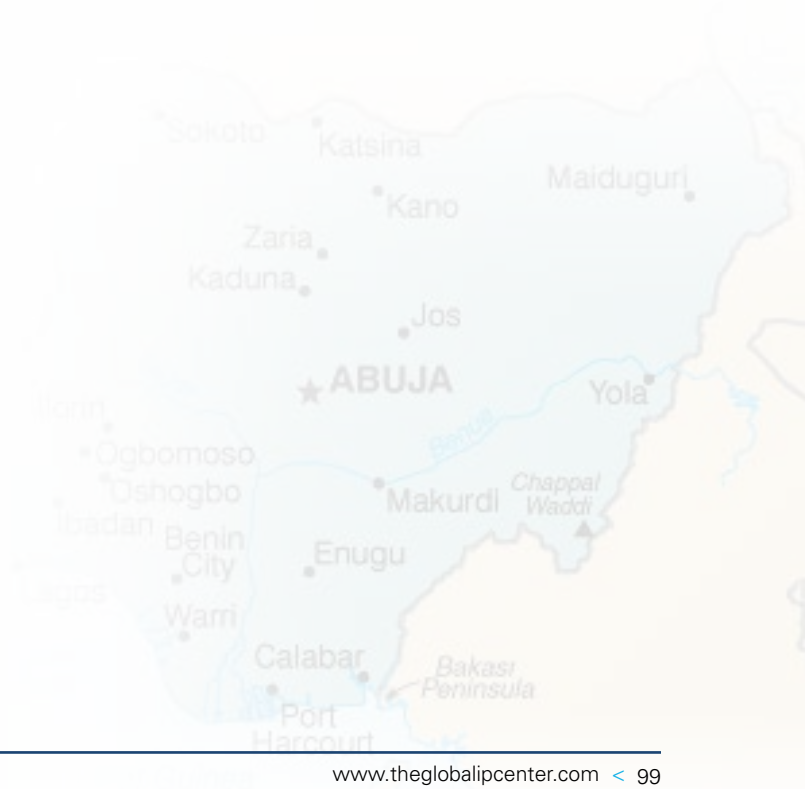
16. **Ability of trademark owners to protect their trademarks: requisites for protection and 17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** Nigeria has in place a basic framework for the protection of registered and unregistered trademarks. The Trademarks Act provides exclusive rights to registered trademarks under Articles 4 through 6. Similarly, the 2011 Cybersecurity Bill provides rights with regard to cybersquatting under Article 11. Unregistered trademarks can only be enforced and protected through passing-off actions. In practice Nigeria suffers from exceedingly high levels of counterfeiting of all goods, including clothing, CDs, films, books, hard goods, and pharmaceuticals. A 2011 report by BBC News estimated that more than two-thirds of anti-malaria drugs were either counterfeit or substandard. Similarly, local surveys suggest that counterfeiting and the availability of counterfeit goods is pervasive. A 2012 academic survey found that across 23 items of goods, either the majority of respondents or a sizeable minority estimated that counterfeit products were "very much" or "much" available for each good. Finally, trademark litigation in Nigerian courts is a long and arduous process, with a number of landmark trademark cases taking more than a decade to reach a final verdict.

Enforcement

23. **Civil and procedural remedies; 24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement; and 25. Criminal standards including minimum imprisonment and minimum fines:** Nigeria has in place a basic framework for civil remedies, criminal standards, and mechanisms for determining damages. Civil remedies available include injunctions, damages, and seizure and delivery up of infringing goods. Criminal standards are provided for in both the Copyright Act and Merchandise Marks Act with minimum fines and imprisonment terms. Pre-established or statutory damages are not available. Overall the enforcement environment is challenging, with law enforcement and judicial proceedings slow, inefficient, and often corrupt. The NCC has published details of criminal prosecution of copyright infringers but for the two- year period of 2011 to 2013, only 40 cases were successfully prosecuted. Given the scale and pervasiveness of infringement, this number is unlikely to act as a deterrent for future infringement.

Membership and Ratification of International Treaties

Nigeria scores low in its participation in and ratification of international treaties. In large measure, this is due to Nigeria not being a contracting party to the Singapore Treaty on the Law of Trademarks. Nigeria has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights. Nigeria is a signatory to but has not ratified the WIPO Internet Treaties and is a signatory and has ratified the Patent Law Treaty.



Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.25	
3. Patentability of computer-implemented inventions	0.25	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	0.6	
Total score—Patents	**3.1**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.74[79]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.5	
10. Availability of frameworks that promote cooperative action against online piracy	0.5	
11. Scope of limitations and exceptions to copyrights and related rights	0	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0	
Total score—Copyrights	**1.99**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0	
Total score—Trademarks	**2.5**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0	
20. Barriers to market access	0.75	
Total score—Trade Secrets and Market Access	**0.75**	**2**

Enforcement		
21. Physical counterfeiting rates	0.57[80]	
22. Software piracy rates	0.37[81]	
23. Civil and procedural remedies	0.5	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0	
26. Effective border measures	0.5	
Total score—Enforcement	**1.94**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**3**	**4**
Total Overall Score	**13.28**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Contracting party to all international treaties included in the GIPC Index • Six year regulatory data protection introduced • Notice and takedown framework introduced in 2013 • *Ex officio* powers for customs officials	• Regulatory data protection not fully implemented • Limited DRM legislation • High levels of online and physical piracy • Poor application and enforcement of civil remedies and criminal penalties

Spotlight on the National IP Environment

2012 Scores versus 2014

Russia's overall score has decreased slightly from 45% of the total possible score (with a score of 14.21) in 2012 to 44% in 2014. This is mainly due to the introduction of new indicators to the GIPC Index and the relative weakness of the Russian IP environment in these indicators.

Patents, Related Rights, and Limitations

3. **Patentability of computer-implemented inventions:** The Civil Code Part IV does not consider computer programs an invention, and they are thus not patentable under the act. The Administrative

Regulations formulated by the Russia Patent Office (FISP) mirror the Civil Code and do not provide a broader interpretation. There are, however, a number of examples of patents being issued for computer-implemented inventions, such as software-based technologies that, for example, perform image scanning. Overall, the existing legal framework and *de facto* practice are not clear and consistent.

7. **Regulatory data protection term:** Under its WTO commitments and the 2010 Law of Medicines, Russia has committed to implementing a regulatory data protection term of six years. This was a positive step and has significantly strengthened the existing framework and protection mechanisms for pharmaceutical innovation. However, as noted in the 2012 GIPC Index, there remains a lack of progress in implementing this commitment and developing a fully functioning form of RDP.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** New amendments to the Civil Code Part IV were introduced, passed by the Duma, and signed into law in July 2013. These amendments include a notice and takedown provision with regard to the responsibilities of "information intermediaries" that includes an obligation to act on a notice of infringement from a rights holder. These amendments also include the introduction of interim judicial measures, designating the Moscow City Court as the first instance of such application and with the power of issuing temporary injunctions. Furthermore, a rights holder can apply to the Federal Service for Supervision in the Sphere of Telecom, Information Technologies and Mass Communication (the ROSKOMNADZOR) for the enforcement of these provisions. Specifically, ROSKOMNADZOR can issue notices to the hosting service provider requiring notification to the alleged infringer and, if no action is taken, the restriction of access to the alleged infringing material. While the amendments introducing a notice and takedown procedure do not refer to specific forms of content, the other amendments refer to "exclusive film rights, including movies and TV films." It is, therefore, not clear at the time of publication whether or not these amendments will apply exclusively to film or include other copyrighted material as well.

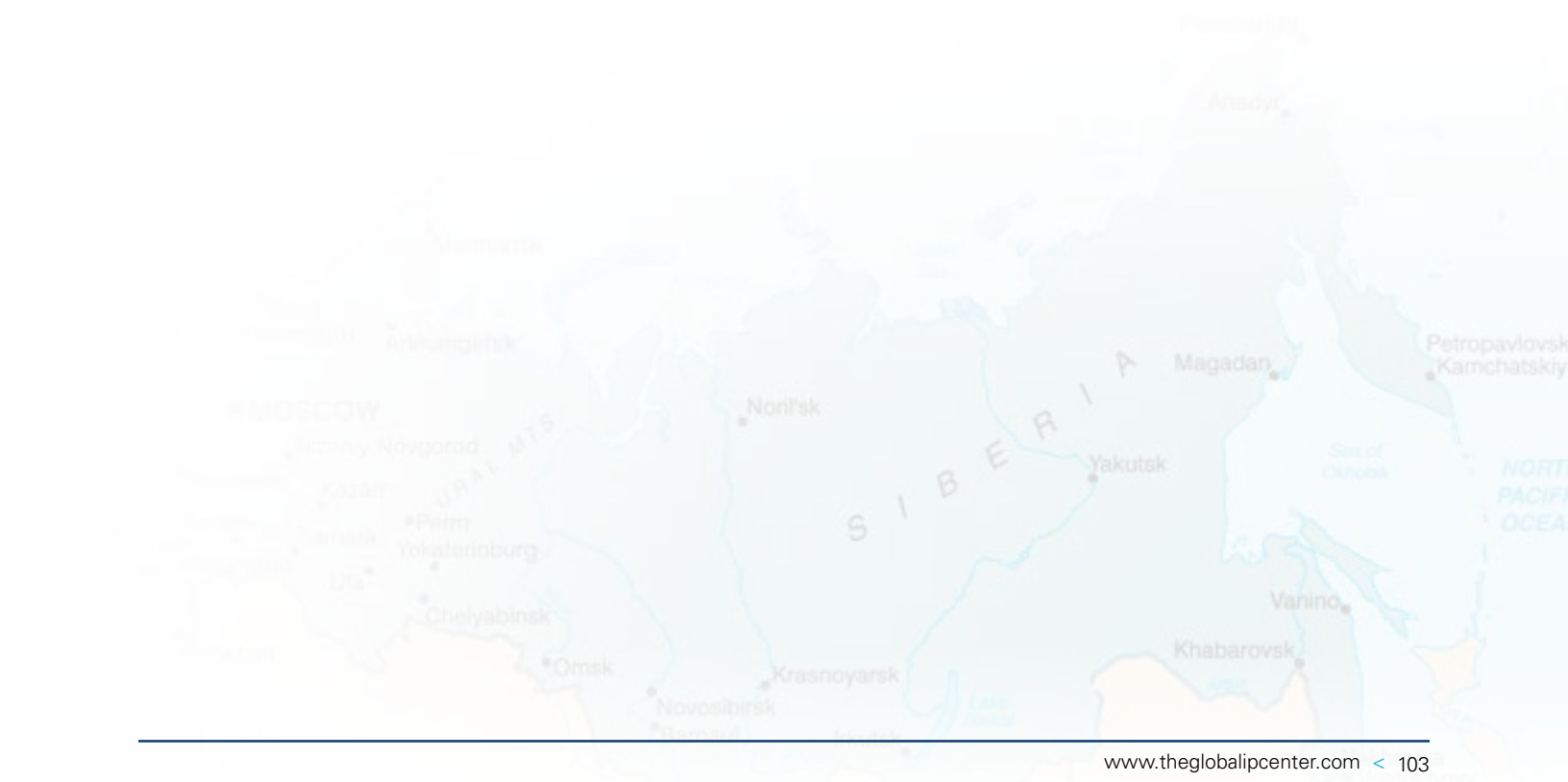
Enforcement

23. **Civil and procedural remedies:** Russia does provide rudimentary civil and procedural remedies under the Civil Code Part IV or the Code of Administrative Offences. A number of positive developments have occurred during 2013 in the space of increasing the availability and specialization of civil and administrative remedies. These include the operational launch of a new court specializing in intellectual property disputes, the Court for Intellectual Property Rights (IP Court). The IP Court will act as a court of first instance with regard to challenges to regulatory acts, establishing the validity of IP rights and as an appellate or cassation court with regard to IP infringement cases. It will not hear civil cases on copyright nor criminal cases. Similarly, the introduction of interim judicial measures designating the Moscow City Court as the first instance of such application and with the power of issuing temporary injunctions in copyright infringement cases is a positive development, although it is still unclear what types of content will be covered. Still, despite these positive developments, the overall enforcement environment is very challenging, with persistently high rates of physical and online piracy.

Membership and Ratification of International Treaties

Russia is a contracting party and has signed and acceded to all of the international treaties included

in the GIPC Index. However, full implementation and enforcement of the obligations enshrined in these treaties is lacking, in particular those found in the WIPO Internet Treaties. Since Russia became a member of the WTO (and thus a TRIPS signatory) in 2012, it has not concluded any FTA with substantial IP provisions subsequent to WTO/TRIPS accession.



Singapore

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	1	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	1	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	0.5	
Total score—Patents	**6.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.74[82]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.75	
10. Availability of frameworks that promote cooperative action against online piracy	0.75	
11. Scope of limitations and exceptions to copyrights and related rights	1	
12. Digital rights management legislation	0.75	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	1	
Total score—Copyrights	**4.99**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	1	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.75	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**4**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	1	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**2**	**2**

Enforcement		
21. Physical counterfeiting rates	0.46[83]	
22. Software piracy rates	0.67[84]	
23. Civil and procedural remedies	1	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	1	
25. Criminal standards including minimum imprisonment and minimum fines	0.75	
26. Effective border measures	0.75	
Total score—Enforcement	**4.63**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	1	
Total score—Treaties	**3**	**4**
Total Overall Score	**25.12**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Advanced national IP framework in place • Patent linkage in place • Patent enforcement legal framework adequate and generally applied • Adequate regime for legal software in the government • Legal framework provides for protection of unregistered marks • Exclusive trademark rights in place and generally enforced • Biggest auction site allows notice and takedown • *Ex officio* authority in place for customs officials	• High rates of per capita P2P sharing • ISPs unresponsive to rights holder notices for online copyright infringement • Lenient sentencing for trade in copyright circumvention devices • Relatively high rates of trademark counterfeiting • Limits on *ex officio* powers with regard to in-transit seizure

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** The Singapore Patents Act Sections 13 through 16 outline the criteria by which inventions can be patented. An invention can be patented only if it is new, involves an inventive step, and is capable of industrial application. The Intellectual Property Office of Singapore (IPOS) accepts second or subsequent medical use claims in the Swiss form. The Patents Act was significantly amended in 2012 whereby examination moved from a "self-assessment" to a "positive grant" system, eliminating any options of examination.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Singapore introduced a system of patent linkage in conjunction with the U.S.-Singapore FTA. Under Section 12A of the Medicines Act, all applicants for drug approval must submit a patent declaration form to the Singaporean market registration authority, the Health Sciences Authority, together with their submission pack.

6. **Patent term restoration for pharmaceutical products:** Section 36A of the Patents Act provides a five-year term of patent term restoration for pharmaceuticals products.

7. **Regulatory data protection term:** Singapore provides a term of protection of five years for clinical data submitted during the market approval process.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** Singapore's Copyright Act provides rights holders with exclusive rights, including in the online space. Despite this, rights holders face a challenging environment with regard to the spread of online piracy, particularly in light of the extraordinary penetration of wireless devices and high-speed broadband. A 2011 report citing research conducted by the Motion Picture Association of America found that Singapore had the highest per capita incidents of peer-to-peer infringement in Asia. In 2013 the government announced that it would consider blocking pirate sites in an effort to stem online infringement.

10. **Availability of frameworks that promote cooperative action against online piracy:** Section 193D of the Copyright Act provides a notice and takedown mechanism and corresponding safe harbor provision for ISPs. However, full compliance and use of the measure appears to be challenging as a number of rights holders have reported difficulties in having infringing material taken down.

13. **Clear implementation of policies and guidelines requiring any proprietary software used on government ICT systems to be licensed software:** There are a number of procurement and streamlining policies in place that help ensure the use of licensed software by government agencies, including the centralized procurement of software and hardware and services through the PC bulk tender scheme administered by the Infocomm Development Authority. Furthermore, in 2008 the SOEasy initiative was launched, streamlining the purchase of all government ICT services and purchases through one vendor for all agencies bar the Ministry of Defence. With regard to evidence of a monitoring mechanism to ensure the use of software licenses, in 2012–2013 the Auditor General audited the Ministry of Manpower's use of software. The audit found that the ministry did not have proper procedures in place and "there was no evidence of monitoring and reconciliation of the type and quantity of software installed against a complete listing of licences purchased."

Enforcement

23. **Civil and procedural remedies; 24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement; and 25. Criminal standards including minimum imprisonment and minimum fines:** Singapore has in place a highly robust and efficient framework for civil remedies, criminal standards, and pre-established damages. Civil remedies available include injunctions, damages, and seizure and delivery up of infringing goods. Criminal standards are provided for in relation to all major forms of IP rights, with minimum fines and imprisonment terms specified in the relevant legislation. Pre-established or statutory damages are available under both the Copyright Act and Trade Marks Act. Established mechanisms for determining damages are used in cases of patent infringement. Overall the law enforcement, judicial environment, and legal framework are efficient, with notable shortcomings only in relation to the relatively low level of penalties for the trafficking of circumvention devices.

26. **Effective border measures:** Border measures are available under the Trade Marks Act, Trade Marks (Border Enforcement Measures) Rules, and Copyright Act. Under these laws custom officials are granted *ex officio* power to seize and detain goods suspected of infringing IP rights. With regard to goods in transit, border officials, however, only have the power to seize suspected goods in transit if these goods are consigned to a person with a physical or commercial presence in Singapore.

Membership and Ratification of International Treaties

Singapore is a contracting party to the Singapore Treaty on the Law of Trademarks and the WIPO Internet Treaties. The U.S.-Singapore FTA included substantial provisions on IP rights. Singapore is a negotiating party to the Trans-Pacific Partnership. Singapore is not a contracting party to the Patent Law Treaty.

South Africa

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**1**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[85]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0.5	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0.5	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total score—Copyrights	**2.28**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.5	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**1.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.67[86]	
22. Software piracy rates	0.65[87]	
23. Civil and procedural remedies	0.5	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.5	
26. Effective border measures	0.5	
Total score—Enforcement	**3.07**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0.5	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**0.5**	**4**
Total Overall Score	**11.6**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic IP framework in place • Basic notice and takedown framework in place • Legal protection for unregistered marks in common law • Exclusive rights for trademarks in place • Adequate (basic) legal framework for trademark enforcement	• Weak patents and related rights environment • Non-examining patent office • New IP policy confirms no patent term restoration or regulatory data protection • Copyright enforcement lacking; deterrent sentences often unavailable • High levels of copyright piracy • Legal uncertainty on scope of copyright exceptions • Enforcement of IP rights lacking; deterrent sentences unavailable • IP reform initiative introduced in 2013 does not address existing weaknesses

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** South Africa does not have in place a full examination process of patent applications. Patent applications with the Companies and Intellectual Property Commission (CIPC) are not granted on the basis of a full examination of novelty, inventive step, or industrial applicability. Currently a wide-ranging patent-reform package is being discussed and consulted on by the South African government. Early iterations of this reform package are not encouraging for rights holders as they include a more expansive use of compulsory licensing and the introduction of pharmaceutical patentability requirements in the style of Section 3(d) of the Indian Patent Act.

3. **Patentability of computer-implemented inventions:** The Patent Act excludes computer programs "as such" as patentable inventions; however, unlike other jurisdictions, such as the United Kingdom, there is no regulatory guidance on the issue nor is there a large volume of relevant case law with regard to CIIs. Statistics from WIPO suggest that only a small percentage of patents granted in South Africa relate to CII. None of the top 10 fields of technology patented between 1997 and 2011 relate to CIIs or ICT. Moreover, given that there is no full examination of any patent application, the strength and long-term validity of any patent granted in South Africa is questionable.

6. **Patent term restoration for pharmaceutical products:** South Africa does not offer patent term restoration for pharmaceuticals products.

7. **Regulatory data protection term:** South Africa does not offer regulatory data protection for clinical data submitted during market registration applications.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** South Africa's Copyright Act provides rights holders with general exclusive rights. There are no specific references to the online space. Although South Africa has relatively low levels of piracy compared with other African countries, the copyright enforcement environment is still highly challenging. For example, a 2011 online survey of more than 5,000 South African broadband users found that 58% of respondents had pirated content within the last 12 months. Similarly, the latest BSA survey of software piracy from 2011 found that South Africa had an estimated software piracy rate of 35%, the lowest in Africa. However, the study also found that the commercial value of pirated software in South Africa was the highest of any country in the Middle East and Africa at $564 million.

10. **Availability of frameworks that promote cooperative action against online piracy:** Chapter 11 of the 2002 Electronic Communications and Transactions Act (ECTA) includes a notice and takedown mechanism and safe harbor provisions for ISPs. On receiving a takedown notification from a rights holder, under the ECTA an ISP has an obligation to act "expeditiously" and remove or disable access to the infringing material. The South African Internet Service Providers' Association (ISPA) also has in place specific provisions in its Code of Conduct requiring member companies to establish notice and takedown "for unlawful content and activity in accordance with ISPA's takedown notification procedure, and respond expeditiously to such notifications."

12. **Digital rights management legislation:** There is no provision in the Copyright Act with regard to DRM or TPMs. However, Chapter 12 of the ECTA does contain a number of provisions that could be interpreted as pertaining to TPMs. Specifically, Section 86 prohibits the "production, sale, design, distribution

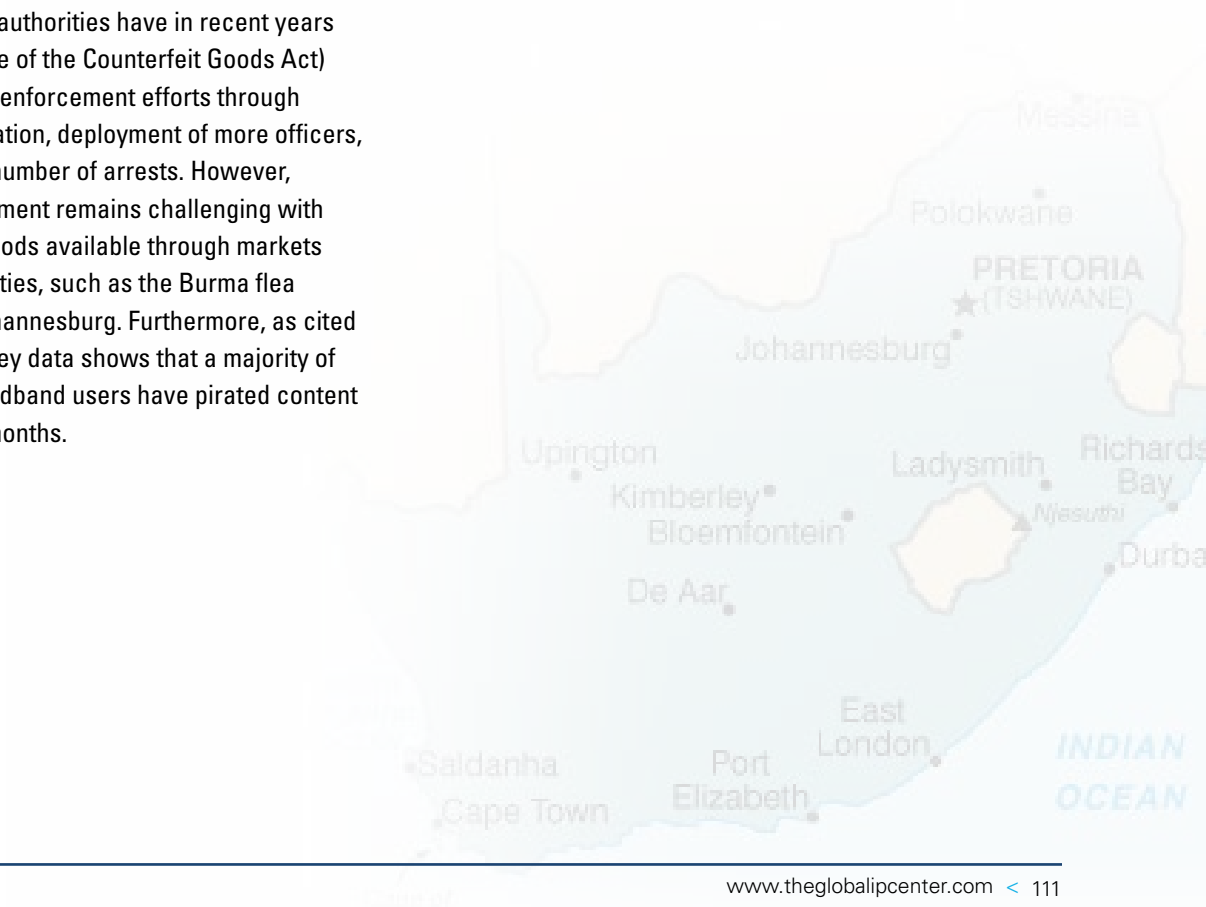
or possession of any device, including a computer program or a component, which is designed primarily to overcome security measures for the protection of data." Nevertheless, despite the presence of this legislation and other measures, physical piracy remains a challenge.

Enforcement

23. **Civil and procedural remedies; 24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement; and 25. Criminal standards including minimum imprisonment and minimum fines:** South Africa has in place a basic framework for civil remedies, criminal standards, and pre-established damages. Civil remedies available include injunctions, damages, and seizure and delivery up of infringing goods. Criminal standards are provided for in relation to all major forms of IP rights, with minimum fines and imprisonment terms specified in the relevant legislation. Pre-established or statutory damages are not available, but mechanisms for determining damages such as a reasonable royalty are available. The South African authorities have in recent years (chiefly through use of the Counterfeit Goods Act) sought to intensify enforcement efforts through increased coordination, deployment of more officers, and an increased number of arrests. However, overall the environment remains challenging with physical pirated goods available through markets around the large cities, such as the Burma flea market outside Johannesburg. Furthermore, as cited above, recent survey data shows that a majority of South African broadband users have pirated content within the last 12 months.

Membership and Ratification of International Treaties

South Africa scores low in its participation in and ratification of international treaties. In large measure, this is due to South Africa not being a contracting party to the Singapore Treaty on the Law of Trademarks or the Patent Law Treaty. South Africa has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights. South Africa is a signatory to but has not ratified the WIPO Internet Treaties.



Thailand

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.25	
3. Patentability of computer-implemented inventions	0.25	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**1.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[88]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.5	
12. Digital rights management legislation	0	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total score—Copyrights	**1.78**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**2.75**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.25	
20. Barriers to market access	0	
Total score—Trade Secrets and Market Access	**0.25**	**2**

Enforcement		
21. Physical counterfeiting rates	0.03[89]	
22. Software piracy rates	0.28[90]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.25	
Total score—Enforcement	**1.06**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**0**	**4**
Total Overall Score	**7.34**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic patentability framework • Basic exclusive rights in place for copyright • Recent narrow approach to copyright exceptions in case law • Administrative notice and takedown mechanism for sale of counterfeit goods recently introduced • Elemental legal framework for enforcement of IP rights • *Ex officio* and in-transit detainment provided for in legislation	• Holes in patentability; local inventions favored • History of compulsory licenses violating TRIPS • Digital copyright regime rudimentary • Failure to implement FTA obligations on legal software in government • Plain-packaging legislation under consideration • Limited framework for legal rights of trademarks • Very high physical counterfeiting rates • IP rights enforcement lacking in terms of delays, judicial and administrative inexperience, and transparency

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** An invention will be granted patent protection if it is new, involves an inventive step, and has industrial application. The patent law provides specifically that novelty will only be destroyed by an invention widely known or used in the domestic area prior to filling out the patent application. The law further provides for a standard of worldwide novelty; however, Thailand lacks the level of high technology needed to apply this standard and, as such, it is unclear how effective the consideration of international prior art is in Thailand. Thailand is not bound to the national treatment principle, which allows it to waive the inventive step requirement for Thai citizens (small or local competitors) but enforce it against foreign competitors.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Thailand does not provide an early patent adjudication mechanism. The only route of recourse is through litigation after infringement occurs; however, the judiciary is not familiar with pharmaceutical intellectual property issues, making the system generally ineffective.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** Thailand's framework for the awarding of compulsory licenses allows licenses to be applied for and issued on grounds of domestic manufacturing or because a patented product is being sold at unreasonably high prices. In 2011, Thailand's Ministry of Public Health reissued compulsory licenses on two HIV therapies, Stocrin and Kaletra. This action, however, was executed without prior consultation with the affected companies.

Copyrights, Related Rights, and Limitations

11. **Scope of limitations and exceptions to copyrights and related rights:** The Copyright Act provides for exceptions in line with the Berne three-step test. However, it is necessary to clarify the scope of the legislation, which can be understood as allowing for the wholesale copying of academic material, in order to ensure compliance with international norms. The Thai Supreme Court Case No. 5843/2543 did clarify the position somewhat—it concluded that photocopying books and producing unauthorized compilations of excerpts for commercial purpose did not qualify as an exception to copyright—however, more case law and/or legislative reform is needed.

12. **Digital rights management legislation:** Thailand has released draft copyright amendments that include measures to outlaw the circumvention of TPMs; however, the draft does not fully meet the requirements as set out by the WIPO Internet Treaties. The draft creates ambiguity as to whether the amendments would outlaw the manufacturing, importing, exporting, distributing, offering, or tracking of circumvention devices or products used to avoid technological protection measures.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** Thailand's Ministry of Public Health is currently considering a plain-packaging law, the Tobacco Consumption Control Act, which includes language prohibiting the display of tobacco product names, trademarks, and importer or manufacturer names on cigarette products. The measure has not been approved as of yet, but on approval Thailand's score would be lowered to 0 for this indicator.

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** The Trademark Act prohibits an individual from bringing legal proceedings to prevent or recover damages for

the infringement of an unregistered trademark; however, this does not apply to a person passing off the goods of another. An opposition or cancelation action is available and may prevent third parties from registering an identical or confusingly similar mark. The Civil and Commercial Code is broad enough to enable a proprietor of an unregistered trademark to construct a civil case. Case law, such as *Wellcome Foundation v. Dairy Management,* suggests that to bring a successful case the proprietor must prove prior use of the mark in Thailand and elsewhere, and prove that this use has been long and consistent.

Trade Secrets and Market Access

19. **Protection of trade secrets:** The Trade Secrets Act of 2002 provides protection for business information, including remedies in the form of temporary and permanent injunctions and damages. In addition to this, criminal penalties are also available if the infringer made the secret public in bad faith or in order to maliciously damage business operations. The legislation, however, is not clear concerning whom exactly can bring an action. Practically, multiple people can qualify (the person who discovers, invents, compiles, or creates the trade information or the person who has a legitimate interest in the information). There are no successful litigation scenarios as of yet; a number of cases have been dismissed for lack of sufficient evidence as to whether a given piece of information qualifies as a trade secret.

Enforcement

23. **Civil and procedural remedies:** The Civil and Commercial Code provides for civil remedies. To obtain an injunction in Thailand, the applicant needs a strong *prima facie* case against the defendant and must show his case to be an emergency, judged on an *ex parte* basis. As a result of the high standard and the complexity involved in obtaining such an order, these actions are rarely granted and, if they are, require more time than the issue of search warrants. The Central Intellectual Property and International Trade Court (CIPITC), established in 1998, has failed to meaningfully deter infringements for most copyright industries. Civil judicial remedies are ineffective due to very low damage awards (lower than the costs and attorney fees associated with bringing civil cases). Civil procedures are extremely lengthy, with an average pendency of three years from filing to judgment.

25. **Criminal standards including minimum imprisonment and minimum fines:** Criminal procedures are available under Thai law, with the strongest penalties directed toward counterfeiting. However, implementation is weak, mainly due to a lack of resources and the mild approach of judges. The CIPITC and the Thai Supreme Court are generally reluctant to impose harsh penalties and regularly suspend imprisonment sentences. The frequent rotation of judges in the CIPITC also undermines its effectiveness.

Membership and Ratification of International Treaties

Thailand scores a 0 for its participation and ratification of international treaties. Thailand is not a contracting party to the WIPO Internet Treaties, the Singapore Treaty on the Law of Trademarks, or the Patent Law Treaty. Although a member of the AANZFTA, Thailand has not signed any post-TRIPS FTA that includes substantial provisions on IP rights.

Turkey

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.5	
3. Patentability of computer-implemented inventions	0.5	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.6	
Total score—Patents	**3.6**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.74[91]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total score—Copyrights	**1.99**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	0	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.5	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**2**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.25	
20. Barriers to market access	0.75	
Total score—Trade Secrets and Market Access	**1**	**2**

Enforcement		
21. Physical counterfeiting rates	0.16[92]	
22. Software piracy rates	0.38[93]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.5	
Total score—Enforcement	**1.79**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0.5	
28. Singapore Treaty on the Law of Trademarks	0.5	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**2**	**4**
Total Overall Score	**12.38**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic patentability framework • Compulsory license framework in line with TRIPS • Policy requiring legal software in government • Protection for unregistered marks and exclusive rights for trademarks exist in legal framework • Basic legal framework for IP rights enforcement	• Weak regulatory data protection • No patent term restoration or patent linkage; preliminary injunctions difficult to obtain • Opaque online copyright environment; awaiting reform • Copyright exceptions overly broad, especially in academic sphere • Plain-packaging legislation present • High physical counterfeiting rates • Major gaps in judicial recourse and border control • Lack of clarity on treatment of goods confiscated by customs officials

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

3. **Patentability of computer-implemented inventions:** The Turkish Patent Act excludes computer programs as patentable subject matter; however, the act does include an "as such" mechanism that provides protection to computer programs capable of solving technical problems provided they are related to a machine or process and meet the patentability requirements of novelty, inventive step, and industrial application. Although software for technical effects may claim patent protection according to law, the actual scope of such protection is still disputable in Turkey.

7. **Regulatory data protection term:** The term of protection provided by the Regulation on Licensing Human Medical Products is six years; however, in practice the period can be as short as one or two years. This is a result of two factors: the term is counted from the date of marketing authorization in any country of the European Union Customs Union, and there can be a considerable gap between this date and the date of authorization in Turkey due to delays in managing inspections of local manufacturing sites. Moreover, Turkey does not provide RDP for combination products, which is incompatible with EU standards.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** The legal framework does provide for general exclusive rights, which includes specific legislation applicable to rights for hosting and online content. The framework is directed to liability of content providers and hosting services but lacks an adequate framework addressing non-hosted or indirect infringements. Additional shortcomings in Turkish copyright law include a lack of attention to repeat offenders and to web advertising and payment processes derived from infringing websites. Online piracy is still prevalent and problematic in Turkey. Proposed amendments to the Copyright Act pertaining to the online environment are currently under discussion. The Ministry of Culture and Tourism has released proposed language that includes the introduction of a user penalty system (in the form of fines of 500–2000 Turkish lira) through the use of technology that would allow the government to track any given protected digital work with a unique code to identify use of an unauthorized copy.

11. **Scope of limitations and exceptions to copyrights and related rights:** The Turkish Copyright Act includes the doctrine of fair use related to copyright and will restrict the copyright holder's rights for public interest reasons. However, in regard to works for educational and instructional purposes, the legislation is not sufficiently narrow with respect to the scope of use and does not ensure that the legitimate interests of rights holders are not negatively impacted. In practice, evidence suggests that universities allow free copying of copyrighted texts.

12. **Digital rights management legislation:** Existing legislation provides a vague framework applying to computer programs. The Turkish government is preparing draft amendments that seek to broaden the scope to cover the circumvention of all types of TPMs and the trafficking in circumvention devices; however, a finalized draft version has not been made available as of yet. The draft also includes civil and criminal remedies for violations involving circumvention of TPMs as well as exceptions to digital rights, which appear to be narrowly tailored to preserve the adequacy and effectiveness of protection. If these amendments are approved, Turkey's score for this indicator would increase.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** In 2011,

the Turkish government initiated plain-packaging regulations. Law 4207 on the Prevention and Control of Hazards of Tobacco Products bans the use of cigarette logos, text, pictures, and colors distinct to the brand on cigarette packs as well as on non-tobacco products, such as alcoholic beverages and clothing.

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** Standard exclusive rights are in force, but there are gaps in application and effectiveness because of unclear and/or partially annulled penalties. A Constitutional Court decision in July 2008 annulled certain provisions of the trademark law relating to penalties for trademark violations. With no legal basis to prosecute offenders or to destroy confiscated goods, a great deal of uncertainty exists on the treatment of seized goods, and companies must take additional efforts to prevent them from being released back into the market.

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** The Internet Law of Turkey (Law No. 5651) fails to provide ISPs with a clear obligation to expeditiously cooperate with rights holders for takedown on their notice; rather takedown is only required following a court order (as for copyright). Nevertheless, in reference to the law, major auction sites (for example, Gittigidiyor.com) offer protection programs for rights holders that provide for the prevention of the sale of infringing goods.

Trade Secrets and Market Access

19. **Protection of trade secrets:** Legislation does not clearly define trade secrets; reference is therefore made to the unfair competition section of the Turkish Commercial Code (Law No. 6762) for guidance, and the Court of Appeal has made efforts to provide a definition. Nevertheless, the uncertainty as to defining and establishing trade secrets as well as delays caused by the judicial system and difficulty in obtaining preliminary injunctions generally render trade secret enforcement in Turkey ineffective.

Enforcement

23. **Civil and procedural remedies:** Intellectual property legislation in Turkey provides for basic civil remedies, which include injunctions, damage awards, and, for patents and trademarks, the confiscation of goods and equipment used to produce infringing material. There remains a general dearth of IP expertise and experience on the part of the judiciary and public prosecutors and, in addition to the difficulty in obtaining preliminary injunctions, many sentences are reversed on appeal. The music industry has reported good cooperation from public prosecutors in a number of online music piracy cases, and there have been positive developments, most prominent being the introduction of 23 specialized IP courts in select cities and the establishment of a special prosecutor's agency responsible for IP rights investigations.

25. **Criminal standards including minimum imprisonment and minimum fines:** Criminal penalties for IP infringement exist in various pieces of IP legislation. However, in certain circumstances, for example in copyright legislation, the lack of clear definition leads to difficulty applying penalties. A basis for punishing the manufacturing and sale of counterfeit goods, including supportive activities, is also absent in the legislation. Furthermore, delays in judicial processes negatively impact the overall IP rights enforcement regime. The copyright amendments under consideration would address some of these issues—as mentioned above, any user who shares an unauthorized copy of a protected work would be fined 500–2000 Turkish lira, and distributors of unauthorized hard copies would be penalized with two to four years of imprisonment.

Membership and Ratification of International Treaties

Turkey has acceded to the Patent Law Treaty. It has signed but has not yet ratified the WIPO Internet Treaties and the Singapore Treaty on the Law of Trademarks. In addition, Turkey is not party to a post-TRIPS FTA that includes substantial provisions on IP rights.

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	0.5	
Total score—Patents	**2.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.58[94]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.25	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total score—Copyrights	**1.83**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.25	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**2.75**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0	
20. Barriers to market access	0.5	
Total score—Trade Secrets and Market Access	**0.5**	**2**

5 Enforcement		
21. Physical counterfeiting rates	0.19[95]	
22. Software piracy rates	0.16[96]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.25	
Total score—Enforcement	**1.10**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**3**	**4**
Total Overall Score	**11.68**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Contracting party to all international treaties included in the GIPC Index • Patent term restoration for pharmaceuticals available • Budget allocated toward legalization of government software (not yet spent) • Legal framework for well-known marks and basic exclusive rights for trademarks in place • Framework provides for customs *ex officio* authority	• Compulsory licensing framework missing recourse mechanism • Regulatory data protection often ineffective • Broad copyright exceptions applied; royalty collection huge problem • No effective notice and takedown mechanism for online copyright infringement • Failure to curb government use of illegal software • Little administrative/judicial action against online piracy, lacking legal grounds • High rates of piracy • Extremely poor enforcement environment

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** It is uncertain whether the current system involves notifying the patent holder of a generic application for market authorization. Additionally, evidence suggests that the Ministry of Health does not routinely check the validity of relevant patents when granting marketing approval for a given product. Furthermore, the Cabinet of Ministers issued a proposal in September 2012 that would weaken the system further by not requiring generic applicants to submit patent information on the original product as part of their dossier for marketing authorization.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** The law is unclear about the application of compulsory licenses. There does not seem to be a strong recourse mechanism and there is concern with a proposed resolution that would make the process more complex and less transparent.

7. **Regulatory data protection term:** The Law on Medicines prohibits the use of registration information for a period of five years running from the day of state registration. The applicable law makes reference to "medicinal products," making no concrete distinction between chemical and biological medicines. However, there is little certainty that RDP will be effectively provided given the law does not identify when and by whom registration of a generic product would be denied on the basis of RDP.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy:** At present, Ukraine lacks effective action against online piracy, including a notice and takedown mechanism and third-party or intermediary liability. It is partly for this reason that the USTR designated Ukraine a "Priority Foreign Country" in its *2013 Special 301 Report*. A draft law introduced in June 2013 provides for a notice and takedown mechanism but does not include important components necessary for the effective functioning of the mechanism, such as third-party liability. This omission effectively renders obsolete the legal incentive for ISPs to comply with notices. Additionally, the mechanism would introduce considerable costs and burden for rights holders.

11. **Scope of limitations and exceptions to copyrights and related rights:** Although the installation, duplication, and sale of unauthorized software is a violation of copyright law, the use or storage of such copies is not. Ukraine boasts a very high personal and commercial piracy rate, estimated at 90% of broadcasts, retransmissions, and public performances. Book piracy is also very high.

13. **Clear implementation of policies and guidelines requiring any proprietary software used on government ICT systems to be licensed software:** A Cabinet regulation from 2003 banned the use of unlicensed software by government agencies and established procedures for legal access to software. An April 2013 official document further calls for the legalization of software in state institutions, and the 2013 government budget included 100 million Ukrainian hryvnia (UAH) targeting this objective. However, subsequent plans have proposed to cut the budget for software, and it is not clear whether it has been spent at all. There is at present acknowledged, widespread use of illegal software in government agencies, another basis for Ukraine's designation as a Priority Foreign Country by the USTR.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** Ukraine does not have legislation limiting brands' marks

on cigarette packaging. In fact, the government of Ukraine is one of several member states that brought WTO action against Australia, arguing that Australia's plain-packaging measures represent an infringement of IP rights and a severe restriction on trade.

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** Generally, Ukraine requires registration for a mark to be protected in its territory, although well-known marks have been recognized by Ukrainian courts. Additionally, an unregistered mark can be enforced under the Unfair Competition Act. However, Ukraine performs poorly in the application and on-the-ground enforcement of this framework, with counterfeit products, such as apparel of famous brands, widely available both in Ukraine and in neighboring countries and regions, including Europe.

Trade Secrets and Market Access

19. **Protection of trade secrets:** The Civil Code of Ukraine provides a broad definition of trade secrets, but it does meet modern criteria as set out in TRIPS. It requires a high burden of proof in order to prove the presence of a trade secret, and even though it is possible to pursue a trade secret violation under the Criminal Code, the route is rarely made use of.

Enforcement

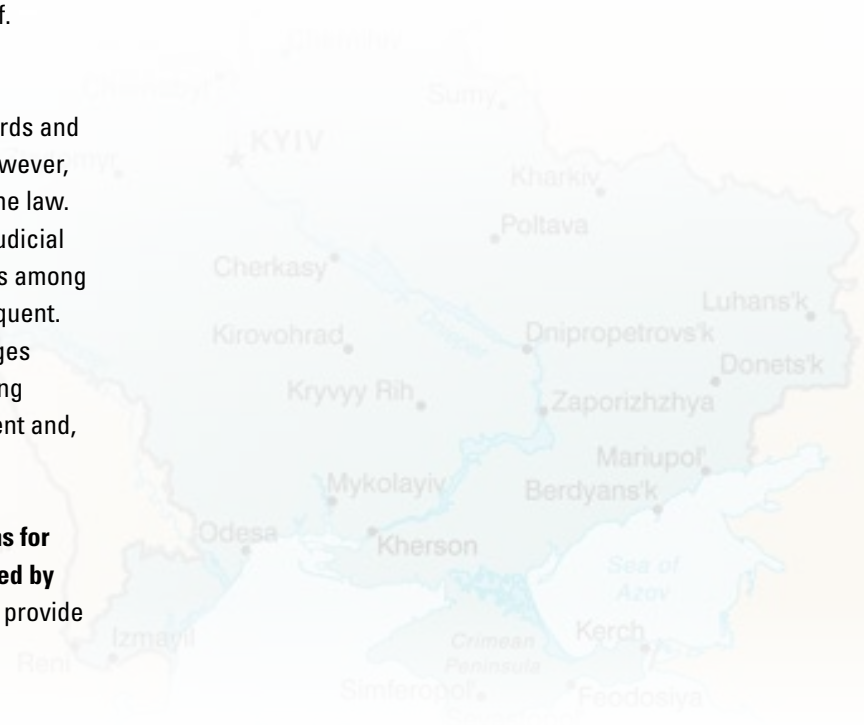
23. **Civil and procedural remedies:** Damage awards and the confiscation of goods can be claimed; however, injunctions are not explicitly provided for in the law. There is a general lack of confidence in the judicial system and a dearth of knowledge of IP rights among the judiciary, and civil prosecutions are infrequent. Although there are instances in which damages have been successfully claimed from infringing companies, decisions are often not transparent and, overall, sentences are non-deterrent.

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** Applicable legislation does not provide for statutory damages. The calculation of damages under existing law is ambiguous, is difficult to apply, and prevents the initiation of criminal investigations and prosecutions.

26. **Effective border measures:** The Customs Code provides clear *ex officio* authority to customs officials, but it is hardly utilized. The legal reference to in-transit detainment is too ambiguous for successful application. Overall, there is a lack of cooperation with rights holders, and customs authorities have only made minor seizures over the past several years.

Membership and Ratification of International Treaties

Ukraine is a member of all of the treaties covered in the GIPC Index and, as such, its score is high in this category. Most recently, in 2010 Ukraine signed and ratified the Patent Law Treaty. However, Ukraine has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights.



United Arab Emirates

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.5	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	1	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0	
Total score—Patents	**3.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[97]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0.5	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total score—Copyrights	**1.78**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.75	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.25	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.5	
20. Barriers to market access	0	
Total score—Trade Secrets and Market Access	**0.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.04[98]	
22. Software piracy rates	0.65[99]	
23. Civil and procedural remedies	0.5	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0	
25. Criminal standards including minimum imprisonment and minimum fines	0.5	
26. Effective border measures	0	
Total score—Enforcement	**1.69**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**1**	**4**
Total Overall Score	**11.72**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Relatively effective pharmaceutical patent linkage system • Exclusive rights for trademarks in place • Trade secret regime improving • Legal framework for enforcement of IP rights present with fairly strong application, the key exception being digital copyright	• Patentability framework lacking regarding methods, biologics, and CIIs • No patent term restoration and regulatory data protection for pharmaceuticals • Rudimentary copyright regime fails to address growing piracy • Administrative mandate for copyright action absent • Judicial recourse ineffective for online piracy • Uncertainty on treatment of prior use for trademarks • *Ex officio* action for IP rights weak and lacks transparency • Not a party to key international treaties on IP protection

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Ministry of Health Decree 404 provides for an early patent adjudication mechanism for pharmaceuticals. The Ministry of Health will deny marketing approval for a product that infringes on a patent existing either in the UAE or in the country from which the product has been imported. Officials will either reject an application or hold the application in abeyance until patent protection has expired.

7. **Regulatory data protection term:** Regulatory data protection in the UAE is tied to the term of patent protection in the country of origin, as opposed to being an additional and separate protection period; the period of protection for applications submitted for marketing approval after January 1, 2000 is for the remaining term of the patent or patents protecting the drug. As such, there is no statutory period of RDP. In addition, the scope of applicability in relation to chemical and/or biological entities is unclear.

Copyrights, Related Rights, and Limitations

11. **Scope of limitations and exceptions to copyrights and related rights:** The law generally provides for standard exceptions; however, its application results in significant curtailment of copyrights. For example, unlicensed software use by enterprises results in considerable losses to the software industry. The UAE Ministry of Economy has made recent efforts to improve awareness of the need to license software.

12. **Digital rights management legislation:** The current law contains only rudimentary protection against circumvention of TPMs. There is visible growth in violations involving the circumvention of TPMs, especially in the Dubai trading zone.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** Prior use of a trademark will grant priority for the purposes of registration. Apart from this provision, the law is silent on the legal effect of the prior use of trademarks in the context of trademark ownership and enforcement. In practice, the registration of trademarks is on a "first to file" basis, and oppositions relying on prior use are unlikely to be considered except in certain cases, such as bad-faith registration. The lack of clarity surrounding prior use has resulted in considerable uncertainty and an imbalance in the protection of proprietors' rights.

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** The UAE provides for standard exclusive rights relating to trademarks. The key exception to this is cybersquatting: the law does not address protection of unauthorized mark usage in domain names. Instead, the owner of a registered trademark will have to file a complaint under the Uniform Domain Name Dispute Resolution Policy.

Trade Secrets and Market Access

19. **Protection of trade secrets:** Confidential information is protected under criminal, civil, and, with respect to employees, labor laws. In addition, the Patent and Design Law makes reference to the protection of know-how. The Dubai International Financial Centre (DIFC) has recently issued a draft law on trade secrets, although for the time being it would not be applicable across the whole of the UAE. Courts typically rule in favor of protecting third-party use of another party's confidential information, particularly in regard to contractual obligations.

20. **Barriers to market access:** The UAE requires more than 50% local ownership in registered companies in order to engage in importation or be eligible for government procurement. Requiring local

ownership, or ownership by a UAE national, involves a compulsory sharing of know-how by companies.

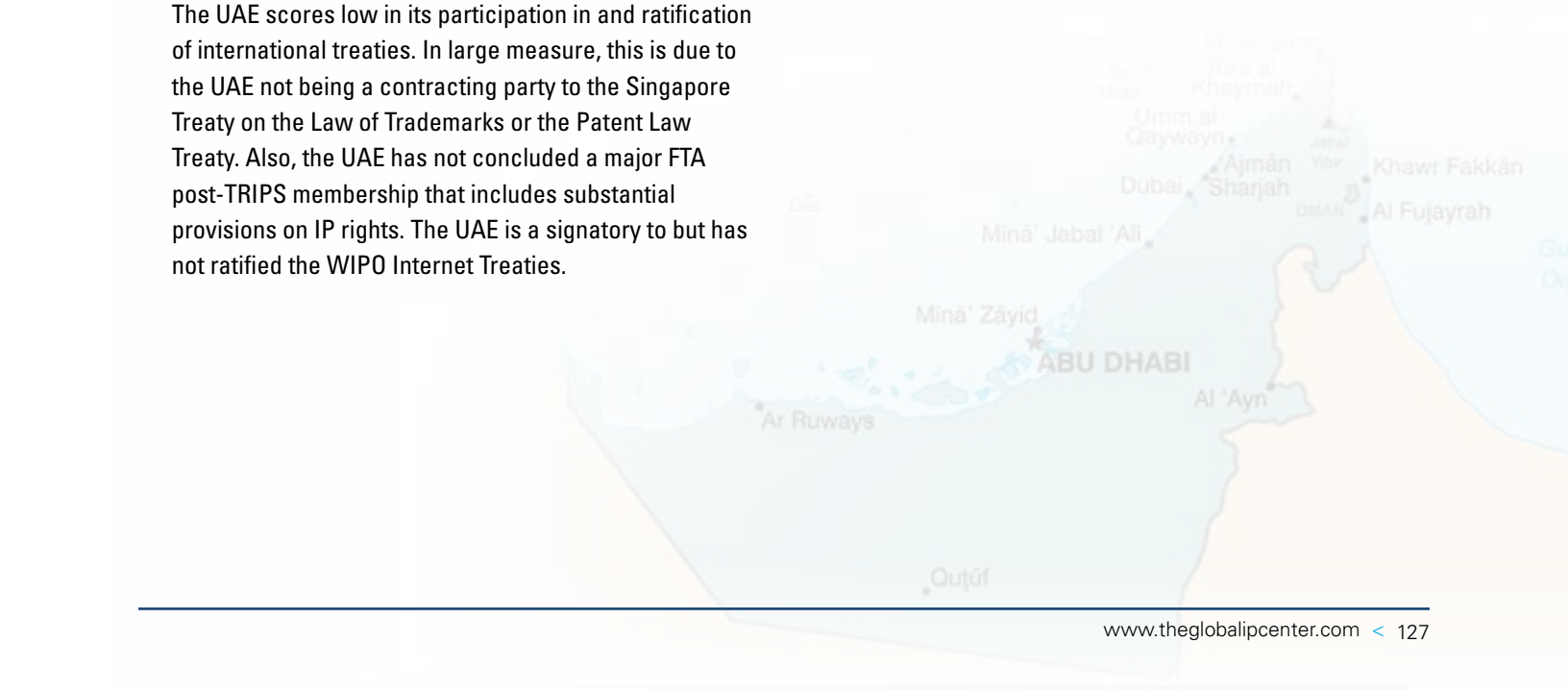
Enforcement

23. **Civil and procedural remedies:** UAE law provides a standard range of civil remedies for IP infringement, and court judgments typically involve effective application of these remedies, the major exception being in the area of Internet piracy. Damages for online piracy are inadequate to promote deterrence, and there is no legal basis for the civil prosecution of the use or sale of circumvention devices (this is covered in criminal provisions only).

26. **Effective border measures:** Law No. 17 of 2011 providing for border measures entered into force in January 2012. The law, however, does not provide for the confiscation of in-transit goods or a provision for *ex officio* action by customs authorities. At present the customs system is fragmented, leading to gaps in transparency and information exchange. Customs authorities in some emirates will respond to a trademark holder's claim of infringing goods without being directed to by a court; however, other authorities may require a court order for seizure of goods.

Membership and Ratification of International Treaties

The UAE scores low in its participation in and ratification of international treaties. In large measure, this is due to the UAE not being a contracting party to the Singapore Treaty on the Law of Trademarks or the Patent Law Treaty. Also, the UAE has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights. The UAE is a signatory to but has not ratified the WIPO Internet Treaties.



United Kingdom

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	1	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0.5	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	1	
Total score—Patents	**6.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.63[100]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.75	
10. Availability of frameworks that promote cooperative action against online piracy	1	
11. Scope of limitations and exceptions to copyrights and related rights	1	
12. Digital rights management legislation	1	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0.75	
Total score—Copyrights	**5.13**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	1	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	1	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.5	
Total score—Trademarks	**4.5**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	1	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**2**	**2**

Category 5 Enforcement		
21. Physical counterfeiting rates	0.72[101]	
22. Software piracy rates	0.74[102]	
23. Civil and procedural remedies	1	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	1	
25. Criminal standards including minimum imprisonment and minimum fines	1	
26. Effective border measures	1	
Total score—Enforcement	**5.46**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	1	
Total score—Treaties	**4**	**4**
Total Overall Score	**27.59**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Highly advanced and sophisticated national IP environment • Protection of trade secrets • Framework in place to promote cooperative action against online piracy • DRM legislation • Commitment to and implementation of international treaties	• Relatively high level of software piracy in comparison with other high-income countries • Warning letters to deter online infringement delayed until 2015

Spotlight on the National IP Environment

2012 Scores versus 2014

The United Kingdom's overall score has increased from 90% of the total possible score (with a score of 22.4) in 2012 to 92% in 2014. This is mainly due to the introduction of new indicators to the GIPC Index and the strength of the United Kingdom's IP environment with regard to IP rights available for trademark holders, patentability requirements, and a lack of IP-based barriers to accessing the UK market.

Patents, Related Rights, and Limitations

3. **Patentability of computer-implemented inventions:** The Patent Act does not view computer programs as inventions, and under the act they are not patentable. However, judicial precedent—specifically, the 2006 Court of Appeal's ruling in *Aerotel Ltd v. Telco Holdings Ltd (and others)*—has established under what circumstances computer-implemented inventions may be patented and is followed by the UK Intellectual Property Office.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** The European Medicines Agency does not consider the patent status of an applicant for marketing approval for a generic drug, and there is no explicit regulatory framework in place. Although it is generally possible to enforce a patent through Member State courts (including in the UK), such disputes rarely restore an innovative manufacturer to the position that they would have been in but for the launch of the patent-infringing product. It is essential, therefore, that the EU Member States adopt effective patent enforcement systems (or a unified system) that allow for early resolution of patent disputes before an infringing product is launched on the market.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** Relevant sections of the Copyright Act provide protection of exclusive rights in relation to the reproduction and broadcasting of a work in any material form, including electronic. The 2010 Digital Economy Act (DEA) provides further such protections in the online sphere, specifically with regard to prevention and deterrence of online infringement. However, as was noted in the 2012 edition of the GIPC Index, implementation of the DEA has been subject to delays. In 2013, the UK government announced that an integral part of the legislation—the sending of warning letters to suspected infringers—will be delayed until 2015.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** The Department of Health considered the benefits to public health of introducing plain packaging for tobacco, with an inquiry into the matter accompanied by a public consultation that ended in the summer of 2012. Based on these deliberations, the department announced in May 2013 that there were no plans for the introduction of plain packaging and that it would wait for further evidence from Australia before deciding whether to introduce plain packaging in the United Kingdom. On November 28, 2013, the UK government announced that it will continue to review the evidence for standardized or plain packaging of tobacco products. It commissioned an independent inquiry to review both existing and fresh evidence, which will be led by pediatrician Sir Cyril Chandler. The report is due in March 2014. Scotland (a separate legal jurisdiction but also part of the United Kingdom) announced in July 2013 that it would legislate for plain packaging and would consult during the beginning of 2014 on how it should be implemented.

Enforcement

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** The United Kingdom does not have statutory damages in place in the Copyright Act. Damages are set by courts, with the Copyright Act outlining factors that should influence this decision. There is, however, a substantive body of case law on the matter going back to the 1800s.

26. **Effective border measures:** In 2011, the European Court of Justice ruled that goods in transit can only be viewed as being counterfeit or pirated if they are intended for sale within the EU. Subsequent to this the European Union issued a set of guidelines that suggest goods in transit can be suspended from release if there is a suspicion that these goods may be diverted onto the common market. In 2013 the European Commission and European Parliament introduced new Customs Regulation 608/2013, which is set to come into effect January 1, 2014. Preliminary legal analysis of this regulation suggests that it could be applied to goods in transit under specific circumstances. Furthermore, the European Commission in 2013 also published proposals for a revision of the Regulation on the Community Trademark and for a recast of the directive approximating the laws of the member states relating to trade marks. Under this proposed directive, the commission has made clear that there is a need for a "European legal framework enabling a more effective fight against the counterfeiting of goods," including goods in transit.

Membership and Ratification of International Treaties

The United Kingdom has signed and acceded to all of the international treaties included in the GIPC Index. Furthermore, the European Union has concluded and ratified several FTAs with substantive IP provisions, such as the EU-Korea Trade Agreement of 2010.

United States

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	1	
3. Patentability of computer-implemented inventions	1	
4. Pharmaceutical-related patent enforcement and resolution mechanism	1	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	1	
6. Patent term restoration for pharmaceutical products	1	
7. Regulatory data protection term	0.75	
Total score—Patents	**6.75**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	1[103]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	1	
10. Availability of frameworks that promote cooperative action against online piracy	1	
11. Scope of limitations and exceptions to copyrights and related rights	0.75	
12. Digital rights management legislation	1	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	1	
Total score—Copyrights	**5.75**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	1	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	1	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.75	
Total score—Trademarks	**4.75**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	1	
20. Barriers to market access	1	
Total score—Trade Secrets and Market Access	**2**	**2**

Enforcement		
21. Physical counterfeiting rates	0.71[104]	
22. Software piracy rates	0.81[105]	
23. Civil and procedural remedies	1	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	1	
25. Criminal standards including minimum imprisonment and minimum fines	1	
26. Effective border measures	0.75	
Total score—Enforcement	**5.27**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	1	
28. Singapore Treaty on the Law of Trademarks	1	
29. Patent Law Treaty	1	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	1	
Total score—Treaties	**4**	**4**
Total Overall Score	**28.52**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Application of patent requirements • Pharmaceutical-related patent enforcement and resolution mechanism • Protection of trade secrets • Framework to promote cooperative action against online piracy • DRM legislation • Non-discrimination/non-restrictions on the use of brands in packaging • Sufficient civil remedies and criminal penalties • Commitment to and implementation of international treaties	• Application of limitations and exceptions to copyrights and related rights somewhat inconsistent with copyright law • Concerns over the ability of border officials to share information with rights holders • Ambiguity concerning ISP obligation to respond to trademark holder notice of infringement

Spotlight on the National IP Environment

2012 Scores versus 2014

The United States' overall score has remained at 95% of the total possible score in 2014 (with a score of 23.73 out of 25, or 95%, in 2012). While its overall performance has not changed year to year, there have been minor adjustments to the scoring methodology in 2014 that allow partial scores to be applied. As a result, the United States' score increased slightly in regard to indicator 26 (effective border measures), where a partial score is merited for on-the-ground protection of goods in transit.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** The Leahy-Smith America Invents Act (AIA), signed into law in 2011 with its central provisions taking effect in March 2013, altered the American patent system from a "first to invent" to a "first inventor to file" system. This requirement is in line with the approach followed by the rest of the world; however, a grace period on public disclosure remains in the act, effectively making it a "first to disclose" system instead. In general, the United States takes a broad approach to patentability standards. However, the Supreme Court's April 2013 decision in *Association for Molecular Pathology v. Myriad Genetics* limited the patentability of human genes.

7. **Regulatory data protection term:** The United States is the first country to provide a distinct term of data protection for biologics. The Federal Food, Drug, and Cosmetics Act affords new chemical entities with a 5-year term, while the Public Health Service Act (amended in 2010) affords a 12-year term to biologics.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyright and related rights (including Web hosting, streaming, and linking):** U.S. copyright law provides for standard exclusive rights, but the application and scope of these rights in relation to the online sphere are not entirely in place. There have been efforts, mainly industry initiatives, to introduce measures to prevent online infringement through education of the most active infringers. In February 2013 content creators and ISPs launched the Copyright Alert System, which broadly introduces a six-strike process involving email warnings and a variety of more stringent measures, such as a reduction in Internet speed, blocking of frequently visited websites, and mandatory completion of online tutorials relating to copyright infringement, depending on the ISP. U.S. courts have also taken steps to enforce online copyrights in 2012–2013. For example, a U.S. district court shut down a popular BitTorrent website, isoHunt, and ordered the payment of $110,000 in damages.

11. **Scope of limitations and exceptions to copyrights and related rights:** U.S. law generally provides for standard fair use exceptions and limitations to copyright. There is currently some ambiguity regarding private use in retransmissions of broadcasts and public performances. On the one hand, in *WNET, Thirteen v. Aereo, Inc.,* a preliminary injunction was denied on the basis that the retransmission technology employed by Aereo relies on individual antennas and, therefore, constitutes a private use; on the other hand, in *Fox Television Stations, Inc. v. FilmOn X LLC*, a district court ruled that use of a similar retransmission technology was not private and granted a nationwide injunction on the Internet television service. Furthermore, there is still a lack of clarity in regard to reprinting of books, journals, and news articles for educational purposes and personal use. For example, in *Authors Guild v. Google, Inc.*, the fair use principle in the distribution of e-books is still being considered by a district court. The House Judiciary Committee is currently conducting a review of U.S. copyright law in the context of digital and online content, including

in relation to exceptions to copyright. Changes that could adversely affect rights holders, such as a "digital first sale" doctrine, have been sought, although no legislation has been considered yet.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** Unregistered marks are afforded effective protection if use of the mark is within interstate commerce or in foreign commerce with the United States, provided that use is in the ordinary course of trade. The Lanham Act provides protection to unregistered marks or designs if a likelihood of confusion is present, based on there being confusing similarity (for example, in *Louis Vuitton Malletier v. Dooney & Bourke*). The Lanham Act also provides the owner of a famous mark an action to prevent others from using the mark in a way that detracts from, or dilutes, the uniqueness of the famous mark, provided the owner can show that the mark is famous (for example, in *Visa International Service Association v. JSL Corporation*).

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** No fixed law is present in relation to safe harbor or secondary liability of ISPs for online trademark infringement. Courts typically rely on trademark and unfair competition law to determine the liability of ISPs. Major auction sites, such as eBay and Amazon, have implemented notice and takedown programs and generally respond to notices. In *Tiffany Inc. v. eBay, Inc.* (2010), the U.S. Court of Appeals for the Second Circuit confirmed the responsibility of eBay to take down infringing content in response to rights holder notice, as well as that on doing so its liability ends. However, more recent case law has introduced ambiguity regarding the responsibility of ISPs in relation to rights holder notices. In 2012, in *Tre Milano v. Amazon.com,* a Californian appellate court concluded that Amazon can ignore rights holder notices if they are not verified by the rights holder, due to Amazon being a "transactional intermediary."

Trade Secrets and Market Access

19. **Protection of trade secrets:** The Uniform Trade Secrets Act and the Economic Espionage Act (EEA) protect against improper use of trade secrets, in particular targeting both foreign and economic espionage. Congress has been working to enhance the criminal penalties available for trade secret violations carried out to benefit foreign governments. The Foreign and Economic Espionage Penalty Enhancement Act of 2012 was signed into law in January 2013 and increases the maximum amount of penalties relating to intentional trade secret theft. Individuals can expect penalties ranging from $500,000 to $5,000,000 and organizations from $10,000,000 to three times the value of the stolen trade secrets, although these new standards are only applicable to actions benefiting a non-U.S. entity. In addition, the 2012 ruling in *United States v. Aleynikov* highlighted that penalization via the EEA is limited to trade secrets incorporated into products directly involved in commerce but not those that only facilitate commerce. However, the Theft of Trade Clarification Act of 2012 (introduced in December 2012) refined the situation by expanding the EEA's application to relevant products or services. U.S. court rulings are generally consistent with existing standards for protection established in legislation. For example, in 2013 the U.S. Circuit Court upheld a 2012 conviction for espionage in *United States v. Janjuan Jin* and the Federal Circuit granted a preliminary injunction to prohibit employees who left a company with trade secrets from starting a competing firm *(Core Labs v. Spectrum).* Key cases that are currently awaiting judgments include *United States v. Pangang Group Co.* and *United States v. Kolon Industries Inc.,* both of which deal with trade secrets appropriated from DuPont Co.

Enforcement

23. **Civil and procedural remedies:** U.S. patent, copyright, trademark, and trade secret law all contain remedies for infringement including injunctive relief, damages, and the destruction of

goods. Several administrative and legislative efforts to improve and modernize IP rights enforcement were initiated in 2012–2013. A 2013 green paper by the Department of Commerce calls for the enactment of legislation that will impose felony penalties for the unauthorized streaming of copyrighted works and for the improvement of enforcement tools used to combat online copyright infringement. A bill relating to patent-litigation reformation has been introduced in the U.S. House of Representatives but is still awaiting discussion. It is mainly directed toward reducing unnecessary and wasteful litigation and increasing transparency in the litigation process.

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by copyright infringement:** For copyright and trademark infringement, the owner can recover actual damages suffered as a result of the infringement, including any profits attributable to the infringement that were not taken into account when computing the actual damages. The 2013 green paper by the Department of Commerce calls for the application of statutory damages to infringements made by individual file-sharers and secondary liability for large-scale online infringements.

26. **Effective border measures:** Under customs law, customs officers have the responsibility and authority to seize goods that they suspect violate U.S. laws or regulations; yet, in practice, customs officials do not necessarily perform adequate inspection of incoming cargo, which limits their ability to identify and seize infringing goods. Furthermore, some concerns remain as to the ability of officials to share information regarding suspected goods with rights holders, and thereby verify that infringement has occurred. Passage of the U.S. Customs and Border Protection Reauthorization Bill, which would enhance the sharing of information on suspected infringing goods and improve IP rights–enforcement capabilities of customs officials, would represent a positive step in this direction. With regard to in-transit goods, the Pro-IP Act of 2008 prohibits the transshipment of counterfeit goods through the United States, although full implementation of this provision is still needed.

Membership and Ratification of International Treaties

The United States is a contracting party and has signed and ratified all of the international treaties covered in the GIPC Index, including the Patent Law Treaty, which it ratified in 2013. Furthermore, the United States has concluded and ratified several FTAs with substantive IP provisions, such as the Korea-U.S. trade agreement (2011). The United States is a negotiating party to the Trans-Pacific Partnership.

Scores

Indicator	Score	Total Possible Score
Patents, Related Rights, and Limitations		
1. Patent term of protection	1	
2. Patentability requirements	0.25	
3. Patentability of computer-implemented inventions	0	
4. Pharmaceutical-related patent enforcement and resolution mechanism	0	
5. Legislative criteria and use of compulsory licensing of patented products and technologies	0	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.5	
Total score—Patents	**1.75**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyrights (and related rights) term of protection	0.53[106]	
9. Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking)	0.25	
10. Availability of frameworks that promote cooperative action against online piracy	0	
11. Scope of limitations and exceptions to copyrights and related rights	0	
12. Digital rights management legislation	0.25	
13. Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software	0	
Total score—Copyrights	**1.03**	**6**
Trademarks, Related Rights, and Limitations		
14. Trademarks term of protection (renewal periods)	1	
15. Non-discrimination/non-restrictions on the use of brands in packaging of different products	1	
16. Ability of trademark owners to protect their trademarks: requisites for protection	0.25	
17. Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0.5	
Total score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.5	
20. Barriers to market access	0	
Total score—Trade Secrets and Market Access	**0.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.12[107]	
22. Software piracy rates	0.15[108]	
23. Civil and procedural remedies	0.25	
24. Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement	0.25	
25. Criminal standards including minimum imprisonment and minimum fines	0.25	
26. Effective border measures	0.25	
Total score—Enforcement	**1.27**	**6**
Membership and Ratification of International Treaties		
27. WIPO Internet Treaties	0	
28. Singapore Treaty on the Law of Trademarks	0	
29. Patent Law Treaty	0	
30. At least one free trade agreement with substantive and/or specific IP provisions such as chapters on IP and separate provisions on IP rights provided it was signed after WTO/TRIPS membership	0	
Total score—Treaties	**0**	**4**
Total Overall Score	**7.8**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic patentability framework • Basic exclusive rights for copyrights and trademarks in place • New legal requirement for notice and takedown platforms in relation to trademark infringement; voluntary mechanisms also exist • Elemental framework for IP rights enforcement • *Ex officio* authority for customs officials	• Narrow interpretation of inventive step • Compulsory license and RDP frameworks vague • No effective copyright notice and takedown mechanism • Major holes in exceptions to copyrights and DRM framework • Legislation does not directly address unregistered marks • Very high physical counterfeiting rates • Enforcement poor; damages insufficient; and lack of effective administrative action

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Vietnam provides a basic legal framework for patentability, but the term *invention* is interpreted narrowly. Specifically, "technical solutions" are only taken to refer to "products and processes," such that patents not related to either (for example, second-use/medical-use patents) have been rejected by the National Office of Intellectual Property (NOIP).

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** The Law on Intellectual Property uses ambiguous terms in identifying the causes for issuing a compulsory license. In addition, the law does not provide for an explicit recourse mechanism.

7. **Regulatory data protection term:** The Law on Intellectual Property and Circular No. 05/2010/TT-BYT provide for a kind of data protection for a term of five years, which appears to apply to both chemical and biological entities. However, it is unclear whether such protection applies in cases where generic applicants seek to rely on clinical data for marketing authorization; if it does not, this would render the term obsolete.

Copyrights, Related Rights, and Limitations

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** The 2012 Joint Circular on Stipulations on the Responsibilities for Intermediary Service Providers in the Protection of Copyright and Related Rights on the Internet and Telecommunications Networks requires various ISPs (including social media networks) to issue warnings to infringing users. However, at present online copyright enforcement is poor, with widespread use of linking services and cyberlockers. Lack of effective administrative action, including delays and red tape, and of prior jurisprudence have contributed to low numbers of civil cases and no known criminal cases involving copyright infringement.

11. **Scope of limitations and exceptions to copyrights and related rights:** The exceptions to copyright in law are broad and incompatible with TRIPS. They allow for the direct recording of performances for public information and educational purposes, the copying of computer programs for library archives, and broad compulsory licenses for all works (excluding cinematography). There is widespread copying of books and journals in both the commercial and academic spheres. Universities commonly distribute unlicensed content, and there is no known university or government effort to address the issue. Additionally, software piracy and cable and satellite signal theft are widespread.

13. **Clear implementation of policies and guidelines requiring proprietary software used on government ICT systems to be licensed software:** Software piracy in the government is a concern, and several ministries in Vietnam have reported the use of unlicensed software. Vietnam is party to the ASEAN-Australia-New Zealand FTA, under which members should introduce laws providing for legitimate computer software in central government agencies. The Ministry of Information and Communication has indicated interest in introducing policies aimed at legalizing software use in the government agencies; however, there is no concrete action as of yet.

Trademarks, Related Rights, and Limitations

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** In July 2013, Vietnam introduced the E-Commerce Government Decree No. 52/2013/ND-CP. It prohibits the trade of counterfeit goods and requires all sellers using online sites to register themselves. This positive development

should aid Vietnam in tracking and prosecuting online infringers. Due to the recent nature of the implementation, enforcement thereof remains to be seen.

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** The E-Commerce Government Decree No. 52/2013/ND-CP requires e-commerce sites (e.g., auction sites) to provide a notice and takedown platform in order to combat the distribution of counterfeit goods online. At least one major site, Chodientu.vn (which has partnered with eBay), provides for notice and takedown. Even though online auctions are still a relatively new platform in Vietnam, online sales of counterfeited goods is a growing concern, and the effectiveness of notice and takedown mechanisms is limited at this stage.

Enforcement

23. **Civil and procedural remedies:** Civil remedies provided for in the Law on Intellectual Property include the provision of damages and destruction of goods. Relatively few civil cases have been brought to the courts, partly due to known delays, red tape, and lack of prior jurisprudence. Administrative enforcement is ineffective as a result of excessive evidence requirements, the absence of a complaint processing procedure, and the issuing of non-deterrent fines.

25. **Criminal standards including minimum imprisonment and minimum fines:** The Criminal Code provides penalties for IP infringement; however, it does not criminalize all acts of infringement identified in IP law. In addition, the language on penalties is often vague, and deterrent penalties are not frequently issued particularly for the manufacturing, supplying, and selling of counterfeit medicines. The criminal prosecution system lacks resources as well as knowledge of, and experience with, IP rights. The Vietnamese government recently issued Decree No. 08/2013/ND-CP, which provides clearer designation of the roles of various government agencies in enforcement (for example, the police should handle production and trade of counterfeit goods while the border and coast guards specialize in exports). However, the application of these measures will be limited to cases that cause harm to public or consumer interest, involve recurring infringement, or deal with counterfeits or infringement of labels or packages.

Membership and Ratification of International Treaties

Vietnam scores 0 in its participation in and ratification of international treaties. Vietnam is not a contracting party to any of the treaties covered in the GIPC Index and has not concluded a major FTA post-TRIPS membership that includes substantial provisions on IP rights. Vietnam is a negotiating party to the Trans-Pacific Partnership Agreement.

Endnotes

1 World Bank, "Country and Lending Groups," 2013. Available at http://data.worldbank.org/about/country-classifications/country-and-lending-groups

2 Regression analysis represents one of the most sophisticated methods in social science for investigating the economic impact of IP rights. Generally speaking, this type of analysis is widely used for estimating the relationship among different variables. One of the most common models is the multiple linear regression, which measures how a single, dependent variable relates to or is affected by several other variables, often with a special focus on one of those variables. For details on this type of analysis, see: A. Sykes, "An Introduction to Regression Analysis," Chicago Working Paper in Law and Economics, 1992, p. 8

3 OECD, *OECD Benchmark Definition of Foreign Direct Investment*, 4th edition, OECD, Paris, 2008, p. 17.

4 Ibid.

5 W. G. Park D. Lippoldt, "Technology Transfer and the Economic Implications of the Strengthening of Intellectual Property Rights in Developing Countries," Trade Policy Working Paper 62, OECD, 2008, p. 9.

6 UNCTAD, UNCTADstat, Inward and outward foreign direct investment flows, annual, 1970–2011

7 Park and Lippoldt, "Technology Transfer;" R. Cavazos, et al "Policy Complements to the Strengthening of IPRS in Developing Countries," Trade Policy Working Paper 104, OECD, 2010.

8 Cavazos, et al., "Policy Complements."

9 S. Adams, "Intellectual Property Rights, Investment Climate and FDI in Developing Countries," *International Business Research,* 3 (3) (2010): 201–209.

10 L. Branstetter, R. Fisman, C. Foley, and K. Saggi, "Does Intellectual Property Rights Reform Spur Industrial Development?" *Journal of International Economics,* 83 (1), (January 2011): 27–36.

11 European Patent Office and the Office for Harmonization in the Internal Market (2013), *Intellectual Property Rights Intensive Industries: Contribution to Economic Performance and Employment in the European Union,* Industry-Level Analysis Report, September 2013, pp. 6–7

12 Economic and Statistic Administration and United States Patent and Trademark Office*, Intellectual Property and the U.S. Economy: Industries in Focus,* U.S. Department of Commerce, 2012.

13 Y. Kim, K. Lee, W. Park, and K. Choo, Appropriate intellectual property protection and economic growth in countries at different levels of development, *Research Policy,* 41 (2012): 358–375.

14 World Bank, Databank, Science and Technology Indicators, Charges for the use of intellectual property, receipts (BoP, current US$), indicator source note.

15 Ibid.

16 Many countries have a copyright term that is measured by the life of an author plus an additional number of years. Given the difficulties in measuring and estimating an average life of an author, and thus an average term of protection, this indicator uses only minimum terms that are applied in lieu of the life of author plus an additional number of years (i.e., in cases where the rights holder is unknown or has already died). Accordingly, 95 years is the minimum term applied in U.S. law.

17 These difficulties of measuring piracy are particularly pronounced for online piracy. No comprehensive studies exist that measure and compare rates of online piracy for a large sample of countries. Because of this, the indicators measuring piracy and counterfeiting in the IP Index are primarily based on physical piracy and counterfeiting, with the data from BSA based on both physical and digital software piracy. Nevertheless, there are a number of academic and industry-supported studies that measure rates of online piracy and its economic impact either on a global basis or for a few large economies. For example, a 2011 study commissioned by NBC Universal and produced by Envisional found that 23% of global Internet traffic was estimated to be infringing in nature. Similarly, a 2011 report by Frontier Economics estimated the total value of counterfeit and pirated products in 2008 and 2015 to be $455 billion to $650 billion and $1,220 billion to $1,770 billion, respectively. Out of this total, digitally pirated products were estimated at $30 billion to $75 billion in 2008 and $80 billion to $240 billion in 2015. Furthermore, this report found that online piracy in the United States made up a large share of this digital piracy figure. For 2008 the report estimated that $7 billion to $20 billion in digitally pirated recorded music was consumed in the United States, with an additional $1.4 billion to $2 billion of

digitally pirated movies also consumed. Finally, the vast majority of academic papers and economic analyses have found that online piracy and file sharing has had a negative impact on media sales, including music. For details see: Envisional, *Technical Report: An Estimate of Infringing Use of the Internet,* Cambridge, 2011, p. 2; Frontier Economics, *Estimating the global economic and social impacts of counterfeiting and piracy,* London, 2011, pp. 56–8; M. D. Smith and R. Telang, *Assessing the Academic Literature Regarding the Impact of Media Piracy on Sales,* Social Science Research Network, 2012.

18 OECD, *Magnitude of Counterfeiting and Piracy of Tangible Products: An Update,* 2009, pp. 5–6

19 Business Software Alliance (BSA), *Shadow Market: 2011 BSA Global Software Piracy Study,* 2012, pp. 8–9

20 Ibid. pp. 1–2

21 OECD, *Magnitude of Counterfeiting.*

22 BSA, *Shadow Market.*

23 International and best practices are defined here as those principles established in TRIPS Article 27: "Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application."

24 Half (0.5) of the available score is based on the term available for biologics or large molecule compounds. If a country's relevant legislation/regulation either de jure or de facto does not cover such compounds, then the maximum score that can be achieved in this indicator is 0.5. The baseline numerical term used is that by the EU of 10 years (8 years plus 2 years) of marketing exclusivity.

25 The Berne three-step test generally requires that limitations and exceptions to copyrights should be: (1) confined to special cases; (2) which do not conflict with a normal exploitation of the work; and (3) do not unreasonably prejudice the legitimate interests of the rights holder (TRIPS Agreement, Article 13).

26 Examples of voluntary and industry-based standards include those standards and policies used in the United States and elsewhere by providers such as eBay. The latter has a system in place—the Verified Rights Owner (VeRO) Program—which allows rights holders to protect their intellectual property through a process of notification and takedown in which eBay is notified of the infringement and promptly removes the material from its website. Full details of the system are available at http://pages.ebay.com/vero/intro/index.html.

27 General physical counterfeiting rates are based on the OECD's General Trade-Related Index of Counterfeiting of Economies (GTRIC-e), which measures the relative rates of physical counterfeiting for 134 economies (the latest year for which data is available is 2009).

28 Software piracy rates compiled by the BSA (2011 being the latest survey).

29 The 2012 Beijing Treaty on Audiovisual Performance, which covers the rights of performers in audiovisual works, is also a relevant treaty. Given that it was signed by WIPO member states in June 2012, however, it is too early to include it as a useful element of this indicator.

30 For full details of Singapore's biomedical development see: M. P. Pugatch, and R. Chu, The strength of pharmaceutical IPRs vis-à-vis foreign direct investment in clinical research: Preliminary findings, *Journal of Commercial Biotechnology,* 14 (4) (2011): 308–318.

31 Given the addition of five new indicators, direct comparisons between the overall IP Index scores from 2012 to 2013 are not possible. Therefore, comparing the percentage score achieved, while not perfect, provides a better sense of the changes in a country's overall score from 2012 to 2013.

32 Other countries not included in the Index have also introduced or are looking to introduce plain-packaging legislation, thus weakening the ability of trademark owners to exploit their rights sufficiently in these countries. For example, the Irish Cabinet in 2013 approved the Heads of Bills—an outline heading of a potential bill—on plain packaging for tobacco products. The government has also approved that the general scheme of the bill be submitted for hearings by the Joint Oireachtas (Parliamentary) Committee on Health and Children for review and report before any legislation goes forward. These hearings will take place in January 2014.

33 Calculated as the average of the minimum terms of protection for anonymous intellectual works belonging to institutions, corporations, or legal persons (50 years) and for authorship (70 years), divided by the baseline term of 95 years.

34 Calculated based on the OECD GTRIC-e index, where Argentina ranked 102 out of 134.

35 Based on software piracy rates (69%) compiled by BSA.

36 Calculated as the average of the term for literary, dramatic, musical, and artistic works (70 years) and the term for broadcasts (50 years), divided by the baseline term of 95 years.

37 Calculated based on the OECD GTRIC-e index, where Australia ranked 104 out of 134.

38 Based on software piracy rates (23%) compiled by BSA.

39 Calculated as the average of the term for software (50 years) and the term for all other works (75 years), divided by the baseline term of 95 years.

40 Calculated based on the OECD GTRIC-e index, where Brazil ranked 98 out of 134.

41 Based on software piracy rates (53%) compiled by BSA.

42 Calculated as the minimum term (50 years), divided by the baseline term of 95 years.

43 Calculated based on the OECD GTRIC-e index, where Canada ranked 113 out of 134.

44 Based on software piracy rates (27%) compiled by BSA.

45 Calculated as the average of the term for broadcasts (50 years) and all other copyrighted works (70 years) divided by the baseline term of 95 years.

46 Calculated based on the OECD GTRIC-e index, where Chile ranked 124 out of 134.

47 Based on software piracy rates (61%) compiled by BSA.

48 Calculated by dividing the term of protection for citizens' works and all other types of copyrighted works (50 years) by the baseline term of 95 years.

49 Calculated based on the OECD GTRIC-e index, where China ranked 1 out of 134.

50 Based on software piracy rates (77%) compiled by BSA 2011.

51 Calculated as the minimum term (80 years), divided by the baseline term of 95 years.

52 Calculated based on the OECD GTRIC-e index, where Colombia ranked 80 out of 134.

53 Based on software piracy rates (53%) compiled by BSA.

54 Calculated as the minimum term (70 years), divided by the baseline term of 95 years.

55 Calculated based on the OECD GTRIC-e index, where France ranked 105 out of 134.

56 Based on software piracy rates (37%) compiled by BSA.

57 Calculated as the average of the term for broadcasting rights (25 years); performers' rights (50 years); and literary, artistic, and musical works (60 years), divided by the baseline term of 95 years.

58 Calculated based on the OECD GTRIC-e index, where India ranked 48 out of 134.

59 Based on software piracy rates (63%) compiled by BSA.

60 Twenty-eight recent actions by the Indian authorities appear to undermine basic product patent protection to India in the mid-2000s. This is by design, given the wording of the Indian Patent Acts of 2005, which, for example, introduced additional patentability requirements (Section 3[d]) and intentionally vague criteria for compulsory licensing. Apart from the issuing of compulsory licenses outside the essential facilities doctrine, a number of patents have been revoked in 2013 using pre- and post-grant opposition guidelines introduced in 2005, resulting in revocations of patents that are currently under protection in a number of other countries including for pharmaceutical products such as Sutent, Glivec, and others.

61 Calculated as the minimum term (50 years), divided by the baseline term of 95 years.

62 Calculated based on the OECD GTRIC-e index, where Indonesia ranked 57 out of 134.

63 Based on software piracy rates (86%) compiled by BSA.

64 Calculated as the minimum term (50 years), divided by the baseline term of 95 years.

65 Calculated based on the OECD GTRIC-e index, where Japan ranked 117 out of 134.

66 Based on software piracy rates (21%) compiled by BSA.

67 Calculated as the minimum term (50 years), divided by the baseline term of 95 years.

68 Calculated based on the OECD GTRIC-e index, where Malaysia ranked 17 out of 134

69 Based on software piracy rates (55%) compiled by BSA.

70 Calculated as the average of the term of an author's economic rights (100 years), the term for sound recordings and performances (75 years), and the term for video recordings and broadcasts (50 years), divided by the baseline term of 95 years.

71 Calculated based on the OECD GTRIC-e index, where Mexico ranked 107 out of 134.

72 Based on software piracy rates (57%) compiled by BSA.

73 Calculated as the average of the minimum terms of protection for literary, dramatic, musical, or artistic works (50 years), sound recordings and films (50 years), communication works (50 years), and copyright works made by a person employed or engaged by the Crown under a contract of service, apprenticeship, or service (100 years), divided by the baseline term of 95 years.

74 Calculated based on the OECD GTRIC-e index, where New Zealand ranked 118 out of 134.

75 Based on software piracy rates (22%) compiled by BSA.

76 Calculated as the minimum term (70), divided by the baseline term of 95 years.

77 Calculated based on the OECD GTRIC-e index, where Nigeria ranked 85 out of 134.

78 Based on software piracy rates (82%) compiled by BSA.

79 Calculated as the minimum term (70 years), divided by the baseline term of 95 years.

80 Calculated based on the OECD GTRIC-e index, where Russia ranked 77 out of 134.

81 Based on software piracy rates (63%) compiled by BSA.

82 Calculated as the minimum term (70), divided by the baseline term of 95 years.

83 Calculated based on the sum of the OECD GTRIC-e index, where Singapore ranked 61 out of 134.

84 Based on software piracy rates (33%) compiled by BSA.

85 Calculated as the minimum term (50), divided by the baseline term of 95 years.

86 Calculated based on the OECD GTRIC-e index, where South Africa ranked 90 out of 134.

87 Based on software piracy rates (35%) compiled by BSA.

88 Calculated as the minimum term (50 years), divided by the baseline term of 95 years.

89 Calculated based on the OECD GTRIC-e index, where Thailand ranked 4 out of 134.

90 Based on software piracy rates (72%) compiled by BSA.

91 Calculated as the average of the minimum terms of protection (50 years), divided by the baseline term of 95 years.

92 Calculated based on the OECD GTRIC-e index, where Turkey ranked 21 out of 134.

93 Based on software piracy rates (62%) compiled by BSA.

94 Calculated as the average of the minimum terms of protection for anonymous works (70 years), performers' rights (50 years), manufactures of phonograms and videograms (50 years), and broadcasts (50 years), divided by the baseline term of 95 years.

95 Calculated based on the OECD GTRIC-e index, where Ukraine ranked 25 out of 134.

96 Based on software piracy rates (84%) compiled by BSA.

97 Calculated as the average of the minimum terms of protection (50 years), divided by the baseline term of 95 years.

98 Calculated based on the OECD GTRIC-e index, where UAE ranked 5 out of 134.

99 Based on software piracy rates (35%) compiled by BSA.

100 Calculated as the average of the minimum terms of protection for broadcasts and computer-generated works (50 years) and literary, dramatic, sound, phonograms, films, and music (70 years), divided by the baseline term of 95 years.

101 Calculated based on the sum of the OECD GTRIC-e index, where the UK ranked 97 out of 134.

102 Based on software piracy rates (26%) compiled by BSA.

103 Calculated as the minimum term (95 years), which is also the baseline term of 95 years.

104 Calculated based on the OECD GTRIC-e index, where the United States ranked 95 out of 134.

105 Based on software piracy rates (19%) compiled by BSA.

106 Calculated as the average of the minimum term of protection (50 years), divided by the baseline term of 95 years.

107 Calculated based on the OECD GTRIC-e index, where Vietnam ranked 16 out of 134.

108 Based on software piracy rates (85%) compiled by BSA.

GIPC
Global Intellectual Property Center
U.S. CHAMBER OF COMMERCE

Global Intellectual Property Center
1615 H Street, NW
Washington, DC 20062
www.theglobalipcenter.com