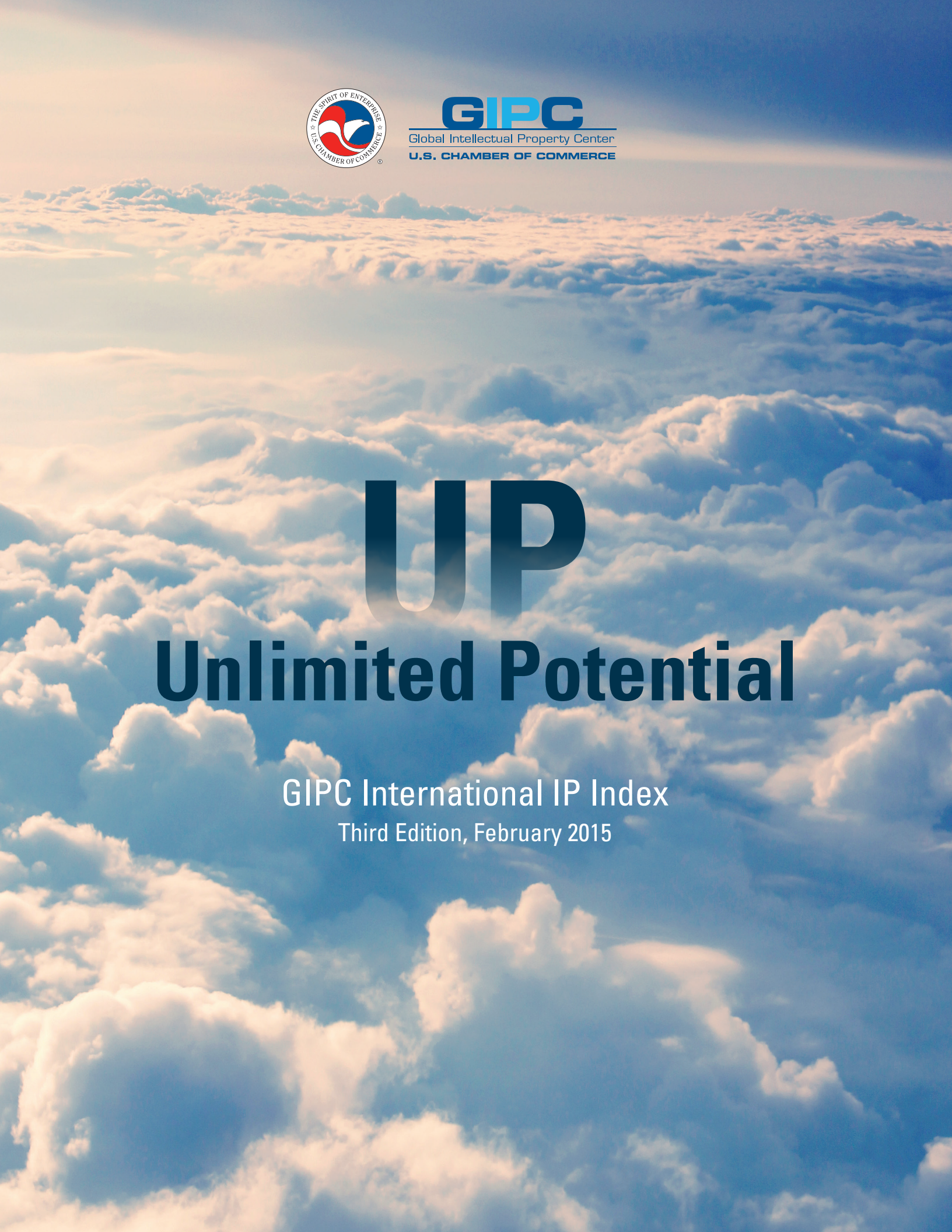
GIPC
Global Intellectual Property Center
U.S. CHAMBER OF COMMERCE
IP
Unlimited Potential
GIPC International IP Index
Third Edition, February 2015

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

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.

Pugatchconsilium

This report was conducted by Pugatch Consilum (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 an IPKM Professor of Valorisation, Entrepreneurship and Management at the University of Maastricht in the Netherlands, as well as the Chair of the Health Systems Administration and Policy Division at the School of Public Health, University of Haifa in Israel. He is author and editor of an extensive number of publications and serves as a referee and editorial board member of numerous peer review journals.

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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.
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Contents

1. Foreword

At the Global Intellectual Property Center (GIPC), we believe that intellectual property (IP) is the key to promoting innovation and bringing new products to market. Progress on issues such as poverty, hunger, disease, and climate change requires the creative and innovative capacity of every global citizen. Now in its third edition, for 2015, the GIPC International IP Index (GIPC Index) provides a rigorous, data-based analysis that can help all economies put that critical human element to work.

First and foremost, the GIPC Index is intended to be a tool for governments that wish to understand the key IP factors that drive business decisions in innovative industries. The 30 criteria measured by the GIPC Index in 6 categories provide a roadmap to the healthy IP environment that effectively underpins investments in innovation. The infographic accompanying this year's GIPC Index further illustrates—in an interesting and accessible fashion—how IP inputs such as "patent protection," "enforcement," and "international treaties" can produce benefits such as job creation, domestic innovation, consumer safety, and access to innovative products.

Second, as a private-sector-developed resource, the GIPC Index inherently reflects the indicators that innovative companies watch most closely as they decide where, when, and how much to invest in the resource-intensive research and development and testing required to bring complex innovative products to market. For those businesses, the GIPC Index provides a one-stop shop for comparative information on key markets, such as China and India, while also providing a sense of the direction of global trends. For government officials, meanwhile, the GIPC Index provides a valuable insight into private-sector policy priorities.

Finally, the GIPC Index provides advocacy groups such as the GIPC with a rigorous, academic research tool that helps identify both global and market-specific trends as they work to shape an upward trajectory for IP promotion worldwide. Toward this end, in 2015, for the first time, the GIPC Index includes a new section (Section 4) and corresponding annex devoted to demonstrating the correlations that exist between high standards of IP protection and the socioeconomic objectives related to innovative activity, foreign investment, research and development expenditures, and job creation that are sought after by government policy makers everywhere.

We believe IP will be ascendant in 2015. Accordingly, we've dubbed the GIPC Index, *UP: Unlimited Potential*, and we look forward to working with decision makers and thought leaders everywhere to fulfill a shared vision of an upward-leading innovative society made possible by a global commitment to IP.

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

2. Executive Summary

Intellectual property (IP) is the legal underpinning for innovation, making possible investment by innovative industries, job creation, consumer safety, and access to innovative products. By providing a roadmap to a strong IP environment, the Global Intellectual Property Center International IP Index (GIPC Index) gives governments a tool with which to prioritize legislative, regulatory, and administrative reforms to achieve the greatest possible expansion of their national innovative potential.

The third edition of the GIPC Index, *UP: Unlimited Potential*, examines both a measurement of the strength of the IP laws in individual economies and an evaluation of the concrete benefits that robust IP systems provide. The GIPC Index helps business and government leaders alike better understand how strong IP environments create unlimited potential to attract investment, fuel economic growth, and foster innovation.

The GIPC Index maps the IP environment of 30 economies, comprising nearly 80% of the global gross domestic product (GDP). An economy's GIPC Index score is evaluated based on 30 indicators which are indicative of a robust IP system. The result is a rigorous statistical tool that policy makers and industry leaders can use to evaluate the strength of an economy's IP regime.

The third edition of the GIPC Index evaluates the IP environment in the economies included in the second edition of the GIPC Index:

[Argentina]
[Australia]
[Brazil]
[Canada]
[Chile]
[China]
[Colombia]
[France]
[India]
[Indonesia]
[Japan]
[Malaysia]
[Mexico]
[New Zealand]
[Nigeria]
[Russia]
[Singapore]
[South Africa]
[Thailand]
[Turkey]
[United Arab Emirates]
[Ukraine]
[United Kingdom]
[United States]
[Vietnam]

The third edition also examines five new economies:

[Germany] **[South Korea]** **[Taiwan]**
[Peru] **[Switzerland]**

Key Findings

The GIPC Index highlights economies that have embraced strong IP protections as well as economies that would be well served to seek improvements to their IP regime. For the first time, the GIPC Index includes correlations on the ways that strong IP protections serve as a gateway to building innovative economies. Specifically, the GIPC Index identified a positive relationship between the following:

- **Strong IP rights and research and development (R&D) expenditure:** Companies in economies with advanced IP systems are 40% more likely to invest in R&D.

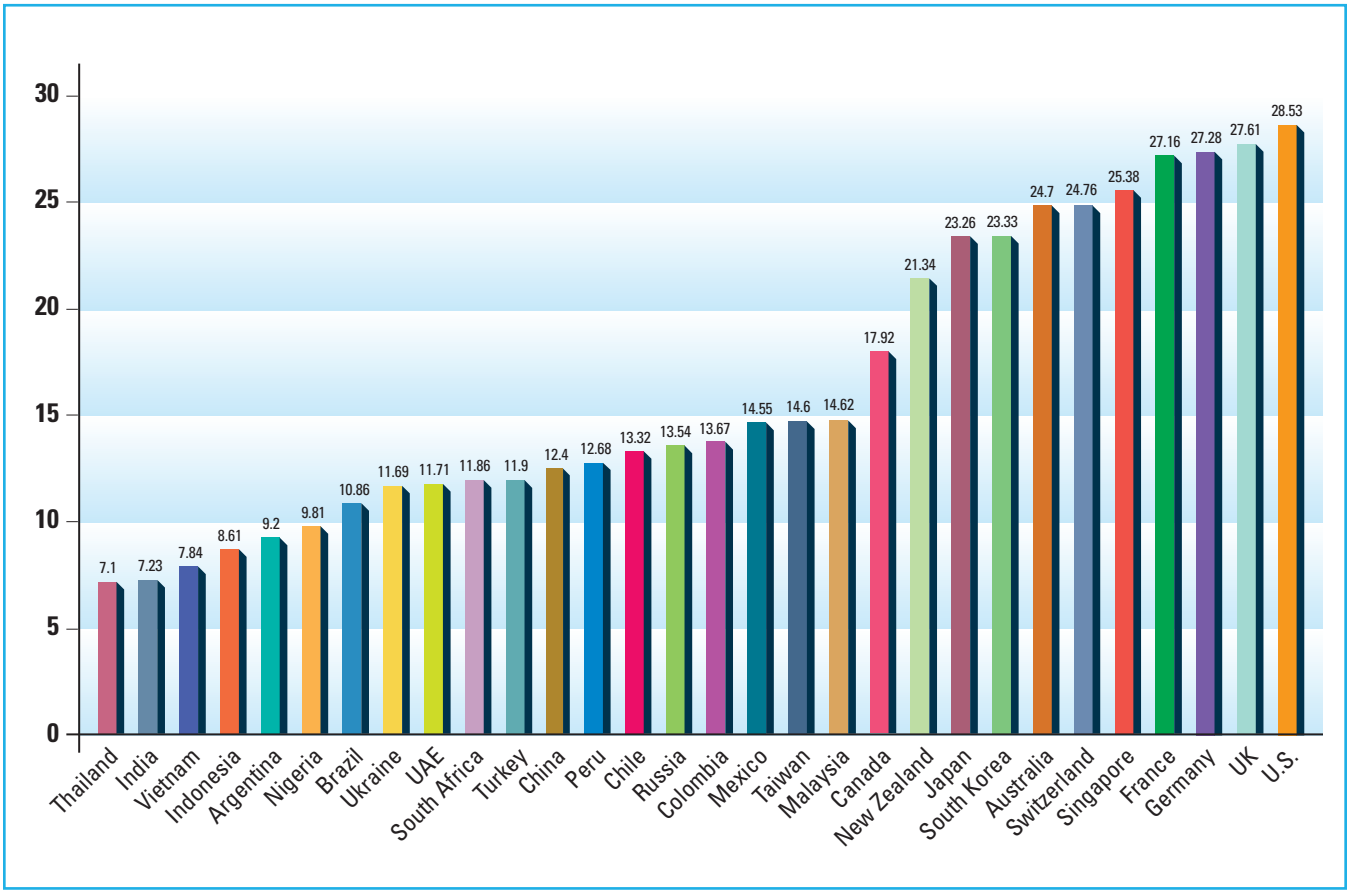
- **Strong IP rights and high-value job growth:** Economies with favorable IP regimes employ more than half their workforce in knowledge-intensive sectors.

- **Strong IP rights and foreign direct investment (FDI):** Strong IP protections in the life sciences sector account for 40% of life sciences investment. Additionally, economies with beneficial IP protection see 9–10 times more life sciences investment than economies with weak IP protections.

- **Strong IP rights and innovative activity:** Economies with robust IP environments yield 50% more innovative output compared with economies with IP regimes in need of improvement.

Recognizing the vast benefits of strong IP protections, a number of economies took steps to improve their IP system over the past year. Key highlights include the following:

Overall Economy Scores



- Canada acceded to the World Intellectual Property Organization (WIPO) Internet Treaties. Further, the released text of the Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union (EU), if ratified and implemented, would significantly improve Canada's IP environment.

- In India, the Modi administration's national intellectual property rights (IPR) think tank recently released the Draft National IPR Policy, which recognized the fundamental links between IP, innovation, and the successful development of innovative products. Additionally, the formation of a high-level IP working group as part of the Trade Policy Forum has the potential to elicit measurable and sustainable changes to India's IP system.

- Indonesia passed copyright legislation that included a notification system giving the government the power to block infringing websites.

- The Trans-Pacific Partnership (TPP) negotiating economies continued to take steps to improve their IP regimes, including the following:

  - The Australian Supreme Court confirmed the patentability of important biotech inventions through their ruling in *D'Arcy v. Myriad Genetics* regarding the patentability of isolated genetic material.

  - Mexico passed amendments to the Federal Telecommunications and Television Law and

the Copyright Law, which limit retransmission of broadcasts unless authorized by the rights holder.

- Singapore passed amendments to the Copyright Act, which included a direct mechanism for rights holders to seek an injunction against a website hosting copyright-infringing material.

Most economies included in the GIPC Index have ample room to further strengthen their IP laws in order to harness the economic benefits that IP provides. Key areas of improvement include the following:

- Canadian courts continue to apply a heightened standard for patent utility that imposes an arbitrary patentability test on inventions. The unique patent utility test raises uncertainty about how much information needs to be disclosed in patent applications, and represents a significant erosion of patent rights.

- Several economies in the GIPC Index, including France, New Zealand, South Africa, Thailand, and the United Kingdom, are considering introducing plain packaging legislation.

- TPP negotiating economies Chile and Peru have yet to implement key provisions of the free trade agreements (FTAs) with the United States. Should the Chilean and Peruvian governments bring their IP systems in line with their FTA obligations, their GIPC Index scores would improve significantly.

- Although the IP environment in India has improved slightly, several opportunities exist for the Modi administration to make further enhancements, particularly by amending patentability requirements, renouncing the use of compulsory licenses as a commercial tool, and strengthening the copyright framework to address online and physical piracy.

- While Switzerland scores quite high overall on the GIPC Index, significant gaps in Switzerland's copyright legislation create a challenging environment to combat copyright infringement.

- Although the United States has introduced several successful initiatives to shut down rogue websites—such as the "In Our Sites" operation—for a top-tier economy, it scores poorly in the enforcement indicators due to ineffective border measures to seize counterfeit goods.

Conclusion

IP laws are building the road to a knowledge-based economy. The global acceptance and adoption of strong IP systems is critical to the success of both individual markets and the broader global economy. For industry and policy makers alike, the GIPC Index is a roadmap that will help unleash the unlimited potential of the human innovative capacity.

3. Overview of the GIPC International IP Index Third Edition

The Global Intellectual Property Center International IP Index (GIPC Index) is a unique, first-of-its-kind, academically rigorous, empirical assessment of what economies are doing well and what they can be doing better with respect to their national intellectual property (IP) environment. The GIPC Index is a constructive roadmap for policy makers to build 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—IP—when operating overseas.

In December 2012, the GIPC published *Measuring Momentum*, the first edition of the GIPC Index. One year later, in January 2014, the GIPC published the second edition of the GIPC Index, *Charting the Course.* This edition saw a significant expansion of the GIPC Index with regard to both the number of economies benchmarked and indicators measured. The total number of indicators mapped and measured increased from 25 to 30, and the total number of economies increased from 11 to 25. The expansion of the GIPC Index to 30 indicators and the more than doubling of the economies sampled provided users with an even richer source of data and information about the IP environment at both the national and the global level than did the first edition.

This year, the third edition of the GIPC Index has been expanded to 30 economies, with 5 new economies added. As in previous editions the new economies added are a mix of developed economies and emerging markets. The new economies are: Germany, Peru, South Korea, Switzerland, and Taiwan.

The 30 economies sampled in the third edition of the GIPC Index are listed in table I.

Table I: Third Edition GIPC Index Economies by World Bank Economy Group[1]

LOWER-MIDDLE-INCOME ECONOMIES	UPPER-MIDDLE-INCOME ECONOMIES	HIGH-INCOME ECONOMIES	HIGH-INCOME OECD MEMBERS
India	Argentina	Russia	Australia
Indonesia	Brazil	Singapore	Canada
Nigeria	China	Taiwan	Chile
Ukraine	Colombia	UAE	France
Vietnam	Malaysia		Germany
	Mexico		Japan
	Peru		New Zealand
	South Africa		South Korea
	Thailand		Switzerland
	Turkey		United Kingdom
			United States

Source: World Bank (2014)

The GIPC Index can be used on a multitude of levels.

- First, the GIPC Index gives governments and policy makers insight and a roadmap 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 economies consider further developing their own innovative and creative industries, seek greater investment, and promote their economic and cultural development.

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

- Third, the GIPC Index measures not only the existence or availability of a relevant IP law or regulation, but also the actual enforcement or application of that law or regulation.

- Fourth, as is detailed in Annex 2, because of the methodological construction of the GIPC Index, it is possible to compare and benchmark economies either for the total national IP environment or for specific forms of IP rights or sectors. The GIPC Index allows users to extract specific indicators and develop unique, tailored measures of particular industries or sectors across the economies.

- Finally, with an economy set that represents all regions of the globe, all levels of economic development, and the vast majority of global gross domestic product (GDP) and trade and investment flows, the GIPC Index enables users to draw broad conclusions about the state of IP protection globally.

4. IP Rights as a Gateway to Building Innovative Economies

One key discussion in the GIPC Index has centered on the extent to which economies that make improvements to their national IP environments experience tangible economic benefits. A great deal of debate on the topic has taken place, particularly since the creation and introduction of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). Over the past 20 years, this debate has generated a substantial body of empirical literature showing a robust relationship between strengthening levels of IP protection and an increase in different economic benefits such as foreign direct investment (FDI), technology transfer, job creation, and economic development. Analysis from the Organisation for Economic Cooperation and Development (OECD), World Intellectual Property Organization (WIPO), and numerous other organizations suggests that, while IP rights are just one factor of several (and the results may vary by stage of development, level of income, and other factors), economies that make improvements to their IP environments also tend to experience quantifiable economics benefits.[2]

With the expansion of the GIPC Index to 30 economies in this third edition, it is possible to use the GIPC Index itself to estimate the relationship between IP rights and different measures of economic benefits using correlation and regression analysis. Correlation analysis is a highly useful method for providing a picture of the links between different inputs and outputs on a statistical scale, and for understanding the likelihood of two elements occurring together.[3] In the context of IP rights, correlations enable an understanding and, to some extent, prediction of the relationships between various aspects of national IP environments and other economic activities. Complementing correlations, regression analysis reveals causal relationships between inputs and outputs.[4] This section presents a mix of analyses based on both correlations and causal relationships. Similar methods have been applied in relation to exploring the relationship between IP protection and economic activities, for instance in a 2012 study by the U.S. Department of Commerce and U.S. Patent Office and in a 2013 study by the European Patent Office and European Union (EU) Office for Harmonization in the Internal Market.[5] Such an approach sheds light on key patterns and trends in specific aspects of IP rights as well as on the overall IP environment on a global scale.

The statistical analysis in this section seeks to add to the existing body of knowledge about the role and impact of IP rights in at least two ways. First, by utilizing the GIPC Index to measure IP protection, the analysis provides a more nuanced and comprehensive measure of economies' IP environments, enabling an even clearer picture of how IP rights relate to other economic variables. Second, the analysis in this section goes beyond looking at broad measurements of economic activity to measure tangible, deep-rooted benefits to economies that relate to IP rights—from investment in high-value research and development (R&D) and job growth to actual innovation and the integration of knowledge-based activities across the economy.

In this light, one element that is also unique to the GIPC Index is the ability to isolate IP rights specific to a sector or area of IP protection, and measure their relationships with related economic activities—for instance the association between copyright protection and creation of and access to digital media. Looking both at the overall environment in an economy as well as at specific areas provides a detailed picture of the range of benefits economies tend to see as they improve their IP protection. Such an approach also sheds light on which types of IP protection matter most for specific types of economic activities, and affords economies with a roadmap for strengthening areas and sectors of interest.

The purpose of this section is to provide a snapshot of the benefits associated with strong IP rights using a sample of statistical analyses. These analyses show a strong

positive relationship between IP protection (as measured by the GIPC Index scores) and economic activities that are crucial for developing and maintaining globally competitive economies and modern societies.

Specifically, the analysis in this section identifies the following relationships:

- **IP rights and R&D expenditure:** Firms in countries with advanced IP rights in place are 40% more likely to invest in R&D activities compared with those in countries whose IP regimes lag behind.
- **IP rights and high-value job growth:** More than double the workforce is concentrated in knowledge-intensive sectors in economies with favorable IP regimes, compared with those in countries that trail in terms of IP protection.
- **IP rights and FDI:** Using the life sciences sector as a case example, IP protection can explain about 40% of life sciences investment (as measured by clinical trial activity). In addition, economies with beneficial IP protection see on average 9–10 times more life sciences investment than those lacking key aspects of IP protection.
- **IP rights and innovative activity:** Economies with state-of-the-art IP environments produce 50% more innovative output compared with those whose environments require significant strengthening. This link is even stronger when magnifying components of innovative output, such as online creativity, which, in economies with highly supportive IP regimes, tends to be more than double the amount in those where there is still substantial room for improvement.

4.1 IP Protection and Private-Sector Spending on Research and Development

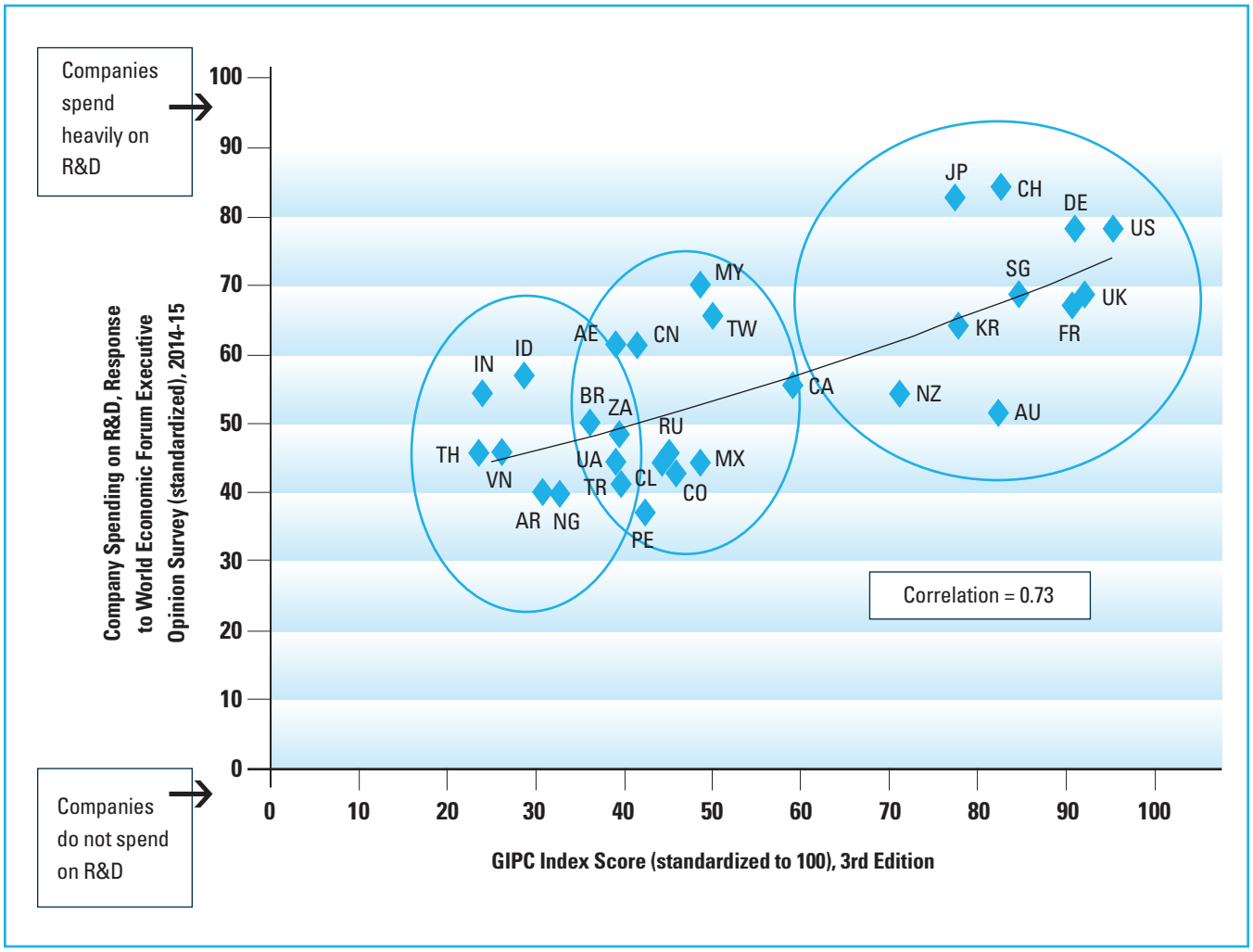
Spending on R&D supports innovative activities in different sectors and establishes a foundation for long-term economic growth. It also enables economies and governments to develop and enhance technologies that address pressing global needs, such as communicable and non-communicable diseases, crop depreciation, and climate change. Gross global spending on R&D today tops an estimated $1.5 trillion and continues to increase, growing at a rate of 6% between 2012 and 2014.[6]

High levels of private-sector expenditure on R&D, in particular, reflect the ability of companies and industries to innovate, meet demand, and remain competitive.[7] This is especially true for firms in high-tech sectors, such as software, electronics, digital media, pharmaceuticals, and biotechnology. Innovative activities can range from incremental improvements to existing products to the discovery or creation of groundbreaking technologies. Although public investment in R&D is equally critical, having a high amount of firm-level spending on R&D suggests the presence of a grassroots and durable source of innovative activity—one that is not limited by changing public budgets.

IP rights are especially important for companies' ability and willingness to make advanced investments, such as in R&D in an economy. For instance, the extent to which inventors may own their inventions and are assured that they will not risk the unauthorized use of their proprietary technologies and know-how by investing more deeply in the market play a significant role in whether or not they invest in R&D activities in a given economy.[8]

Firms in countries with relatively robust IP rights are more likely to invest in R&D activities than those in countries with weaker IP environments. There is a very strong correlation, with a coefficient of 0.73, between GIPC Index scores and the level of private-sector R&D spending as measured by the World Economic Forum's Executive Opinion Survey.[9]

Figure I: Association Between IP Protection and Private Sector R&D Spending



Source: GIPC, World Economic Forum
Legend: AE – UAE, AR – Argentina, AU – Australia, BR – Brazil, CA – Canada, CH – Switzerland, CL – Chile, CN – China, CO – Colombia, DE – Germany, FR – France, ID – Indonesia, IN – India, JP – Japan, KR – South Korea, MX – Mexico, MY – Malaysia, NG – Nigeria, NZ – New Zealand, PE – Peru, RU – Russia, SG – Singapore, TH – Thailand, TR – Turkey, TW – Taiwan, UA – Ukraine, UK – United Kingdom, U.S. – United States, VN – Vietnam, ZA – South Africa

Figure I indicates that, on average, a rise in an economies GIPC Index score is associated with an increase in the level of spending on R&D by firms in that economy. Specifically, firms in economies scoring in the middle third of the GIPC Index are about 5% more likely to invest in R&D compared with those in the economies scoring in the bottom third, with firms in economies among the top performers seeing an even greater amount of private-sector R&D spending—about 40% more than the middle group of economies.

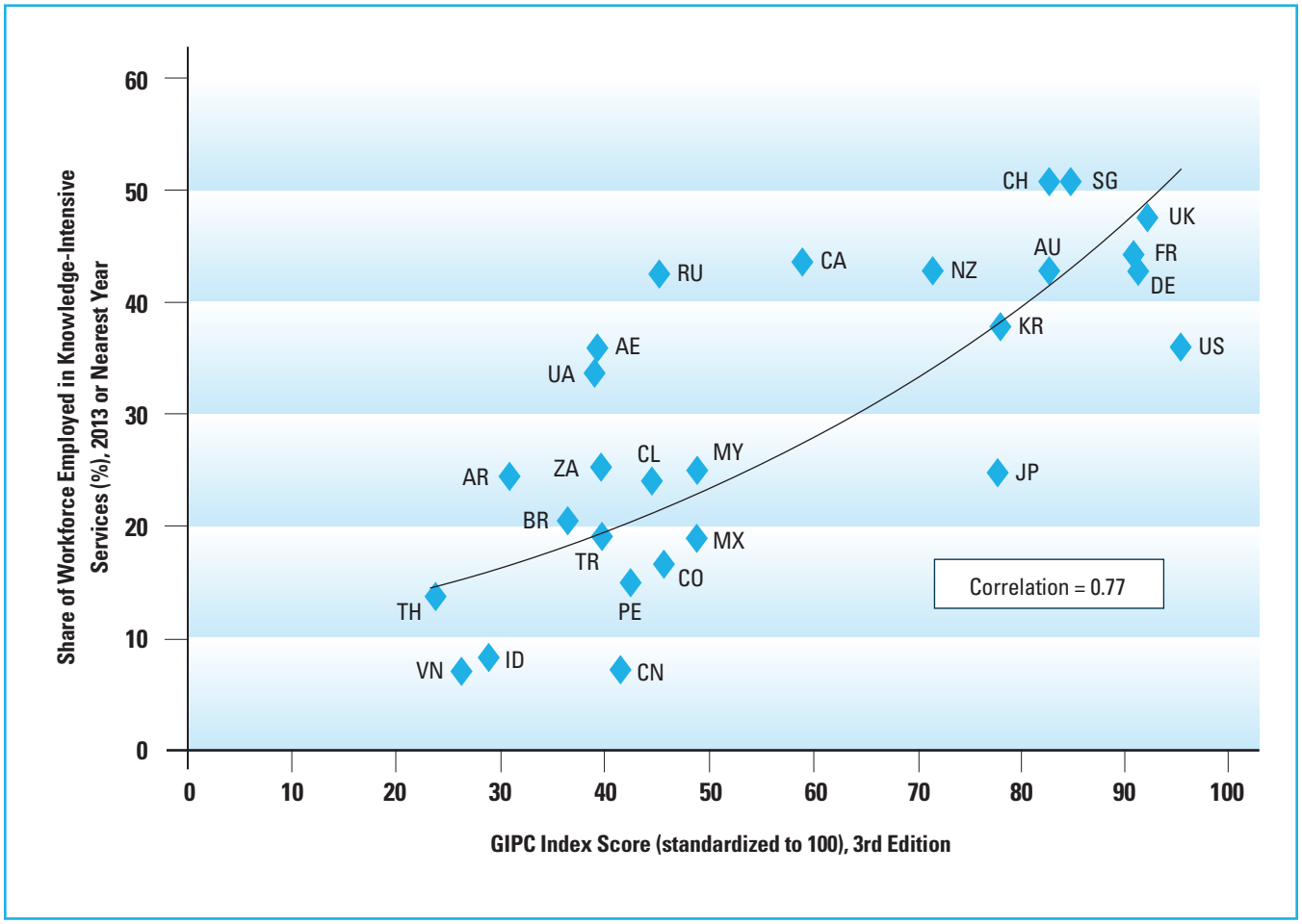
4.2 IP Protection and High-Value Job Creation

Employment growth is a key sign of a healthy economy, particularly growth of jobs in high-tech and knowledge-intensive sectors. Many recent studies indicate that knowledge-intensive sectors—and jobs in those sectors—make a significant contribution to economic activity.[10] Knowledge-intensive companies tend to be characterized by highly educated and skilled employees who bring the skills and capacity for innovative and creative activities.

Knowledge-intensive sectors have also been shown to generate greater profits and sales per employee—and ultimately greater contribution to GDP—compared with relatively less knowledge-intensive industries.[11]

Knowledge-intensive sectors rely heavily on IP rights and a strong IP environment in order to operate effectively and to expand and generate jobs. Empirical data reveal that IP protection for proprietary assets and know-how are instrumental for enabling knowledge-based companies to create and share new products and services.[12]

Figure II: Association Between IP Protection and Employment in Knowledge-Intensive Sectors

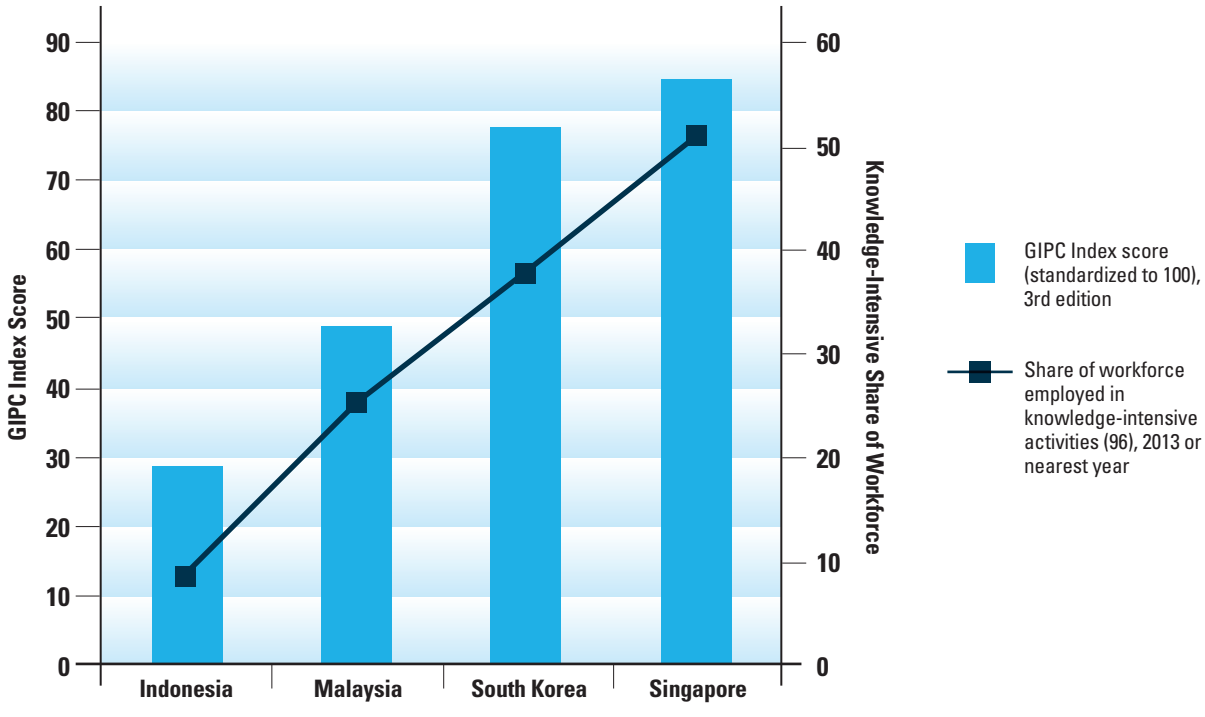


Sources: GIPC, International Labor Organization ILOSTAT Database[13]
Legend: AE – UAE, AR – Argentina, AU – Australia, BR – Brazil, CA – Canada, CH – Switzerland, CL – Chile, CN – China, CO – Colombia, DE – Germany, FR – France, ID – Indonesia, IN – India, JP – Japan, KR – South Korea, MX – Mexico, MY – Malaysia, NG – Nigeria, NZ – New Zealand, PE – Peru, RU – Russia, SG – Singapore, TH – Thailand, TR – Turkey, TW – Taiwan, UA – Ukraine, UK – United Kingdom, U.S. – United States, VN – Vietnam, ZA – South Africa

Not surprisingly, there is a positive link between the GIPC Index scores and rates of employment in knowledge-intensive sectors. Figure II shows a very strong correlation of 0.77 between the GIPC Index scores and the share of the workforce in a given economy employed in knowledge-intensive activities. The figure also displays a fairly clear divide between economies that score below 50% of the total possible GIPC Index score and those that score above 50% (15 out of 30 and above). In fact, on average, more than double the workforce is concentrated in knowledge-intensive sectors in economies with IP regimes ranked above 50% of the total possible GIPC Index score, compared with economies in the lower 50%.

Looking at a slice of the data on a regional scale, Figure III focuses on a sample of Asian economies and shows a more incremental increase in knowledge-intensive jobs associated with a similar rise in GIPC Index score. There is a remarkable jump in the concentration of knowledge-intensive jobs—about 200%—between Indonesia (scoring below 30% of the total possible score, or below 9 out of 30) and Malaysia (with a score of about 14.5). In addition, displaying relatively high GIPC Index scores, South Korea and Singapore (with scores of about 23 and 25 out of 30, respectively) show close to 40%–50% of the workforce composed of knowledge-intensive jobs.

Figure III: Association between IP Protection and Employment in Knowledge-Intensive Sectors: Sample of Asian Economies



Sources: GIPC, International Labor Organization ILOSTAT Database

4.3 IP Protection and Foreign Direct Investment

FDI is a well-established measure of an economy's attractiveness for investment and doing business. Depending on how FDI is defined and measured, it can also reflect the level of technology transfer and local capacity building taking place in an economy.

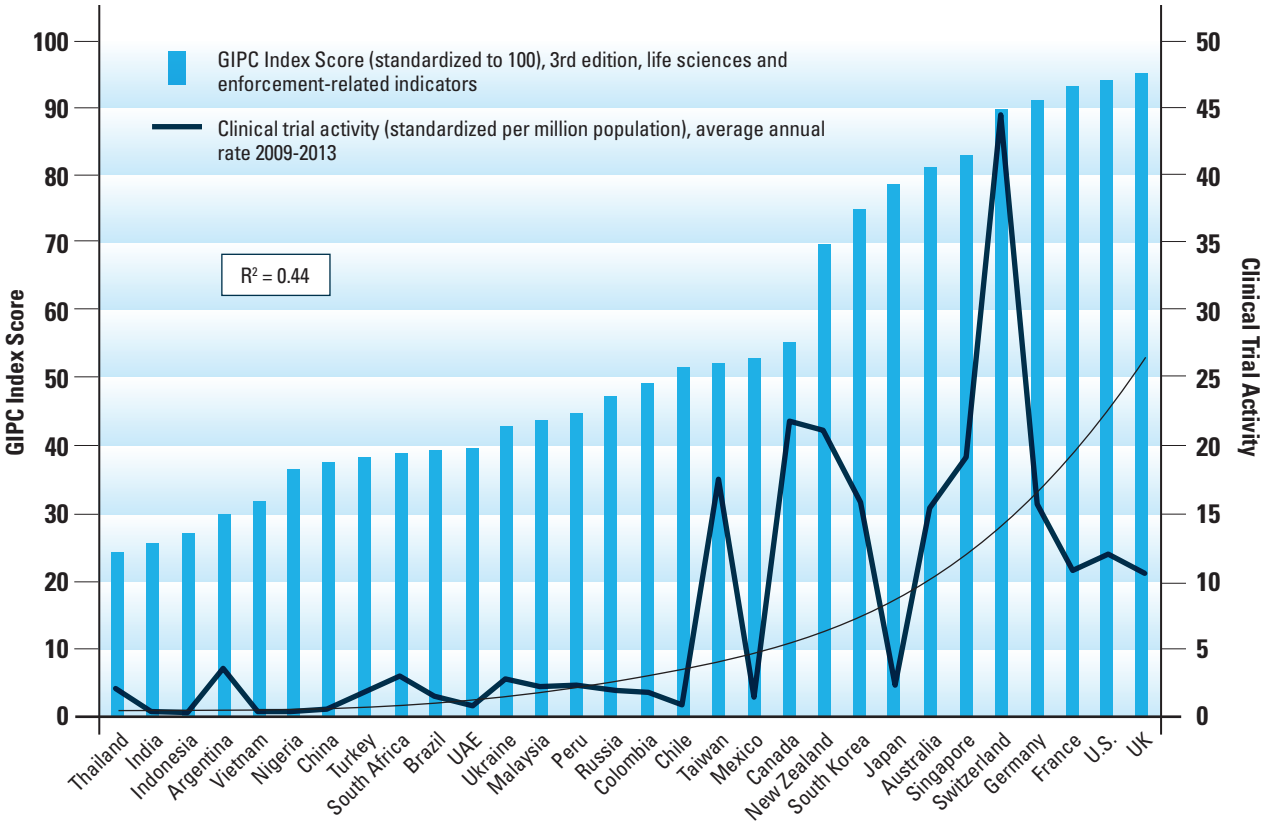
The link between strength of IP protection and FDI flows is supported by a large body of literature. Looking at FDI in its most general sense (typically understood as a foreign investor owning at least 10% of the voting power in a local enterprise), some of the most well-known analysis is the OECD's statistical modeling measuring the relationship between IP rights and FDI, among other economic variables. Looking specifically at patent rights, for instance, a 2010 OECD study found that a 1% change in the strength of an economy's patent rights environment was associated with a 2.8% increase in FDI inflows.[14]

However, it is important to make a distinction between basic FDI—for instance, packaging or labeling of an end product—and FDI that actually involves substantial integration of operations within an economy, such that personnel, equipment, know-how, and overall capacity are transferred and built up domestically. It is a challenge to define and identify cross-economy, market-wide measurements of FDI and technology transfer that isolate in-depth investment. Therefore, one route for measuring meaningful FDI is to focus on a specific sector and identify an activity within that sector that reflects an extensive level of FDI.

For instance, a proxy for FDI in the life sciences and biomedical fields might consist of the number of clinical trials conducted in a given economy (which in the majority of cases are conducted by multinational companies[15]). Clinical research often entails extensive investment from foreign companies and brings significant added value to an economy. Clinical trials represent the most complex and riskiest portion of biomedical R&D (between 55% and 77% of the total process), and can involve the integration of a substantial portion of sponsors' operations and/or know-how into hosting economies' local biomedical research systems.[16] In many cases, in addition to providing access to treatments, clinical testing also enables professional development of local clinicians, improvements to infrastructure in local communities, and exposure to new techniques and standards.[17]

In fact, the GIPC Index scores for indicators relevant to the life sciences field and their enforcement[18] exhibit a strong link to, and even explanatory power for, clinical trial intensity (as measured by a leading database of economy-level clinical trial data, Clinicaltrials.gov).[19] Specifically, the analysis in Figure IV suggests that IP protection can explain about 40% of clinical trial intensity, which represents a higher rate than other relevant variables such as the number of hospital beds and physicians, and the level of health spending in a given economy. In addition, although there are a few outliers—namely, Taiwan, Japan, and Switzerland—there is a clear jump in clinical trial activity between economies in the lower half of the GIPC Index life sciences–related indicators and those in the upper half. Economies in the upper half host on average 9–10 times more clinical trials than those in the lower half.

Figure IV: Association between IP Protection and FDI: Case Study of the Life Sciences in Terms of Clinical Trial Activity

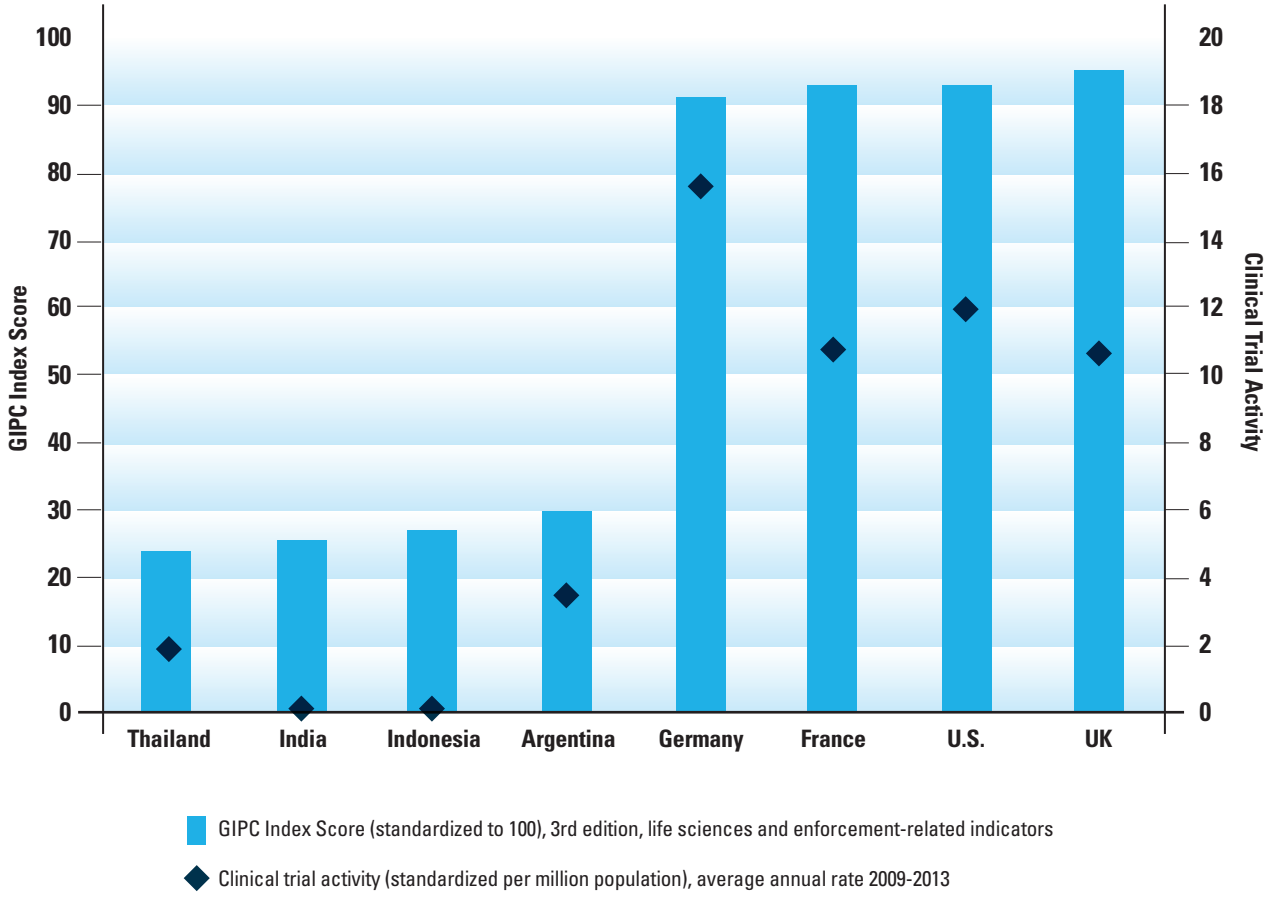


Sources: GIPC and Clinicaltrials.gov[20]

The fact that Switzerland and Taiwan host a disproportionately high number of clinical trials may be at least partially explained by the fact that the life sciences fields, and clinical research in particular, receive a great deal of focus in both economies. Switzerland boasts a world-leading life sciences sector and is home to two of the biggest biopharmaceutical companies in the world, Novartis and Roche. Taiwan, besides providing a relatively low-cost market, has made considerable efforts in recent years to raise its clinical environment to international standards and to streamline the regulatory process.[21] In contrast, Japan tends to have a relatively weak clinical trial intensity due to a lack of culture of clinical research, specific local regulatory hurdles, and high relative costs.[22]

The gain in clinical trial activity associated with stronger levels of IP protection is even more visible when zooming in on the top and bottom economies. Figure V displays the amount of clinical trial activity experienced by the top four and bottom four economies in terms of GIPC Index scores (of life sciences–related indicators).

Figure V: Association between IP Protection and FDI: Case Study of the Life Sciences in Terms of Clinical Trial Activity: Top Four and Bottom Four Economies

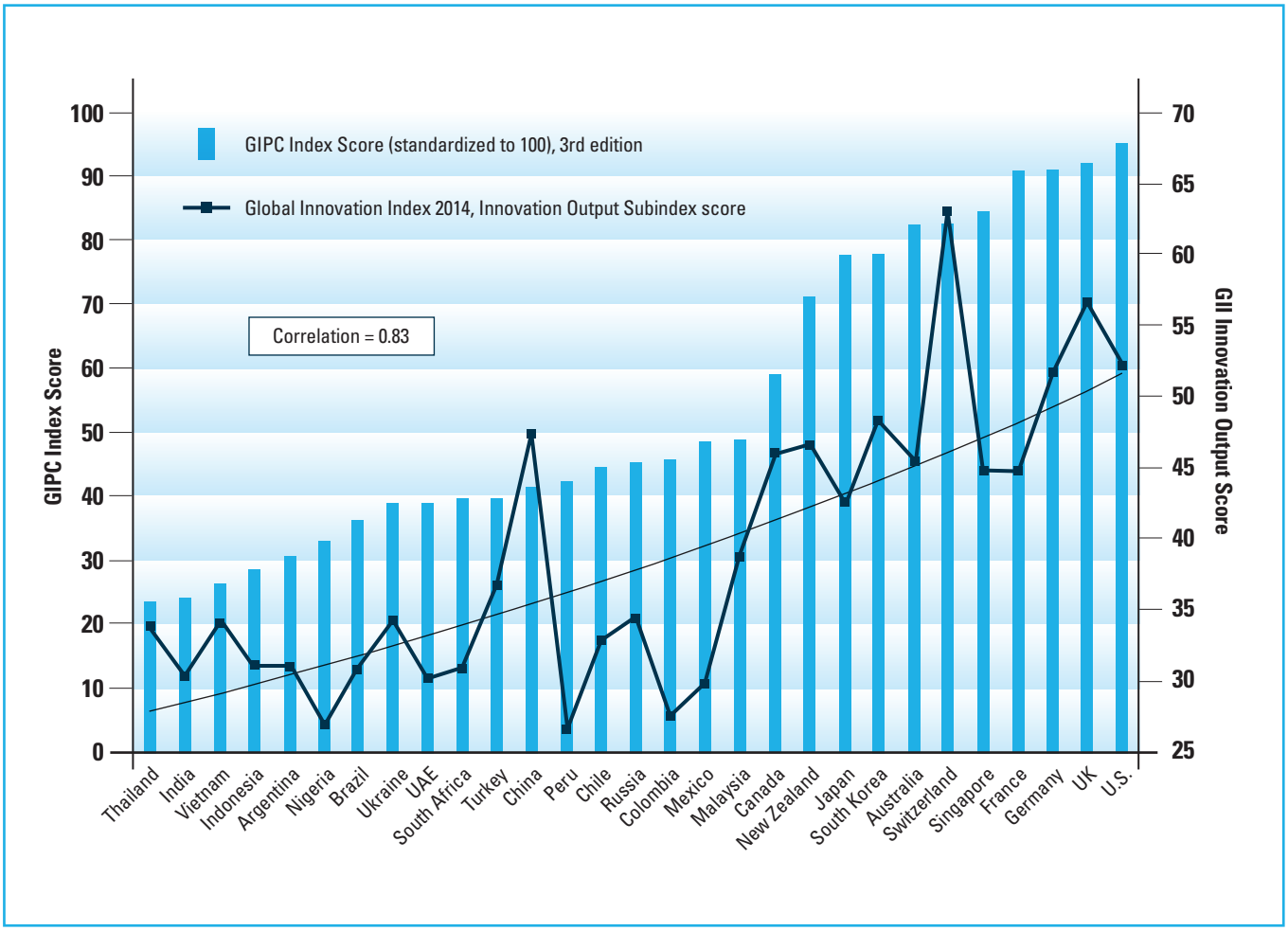


Sources: GIPC, Clinicaltrials.gov

4.4 IP Protection and Innovative Output

Investment in R&D is an essential component of innovation and is often used as a gauge of innovative capacity; however, actual innovative output is also a crucial reflection of the degree to which inventive efforts are translated into real-life products and services in a given economy. This sub-section tests the relationship between the overall GIPC Index scores and the Global Innovation Index (GII)—one of the most-cited global measures of innovation—specifically the portion of the GII score dedicated to an economy's innovative output. The GII Innovative Output Sub-Index captures a range of variables, those that reflect creation of both knowledge-based and creative products (such as technologies, media, and services), as well as their diffusion and use across the economy.

Figure VI: Association between IP Protection and Innovative Output



Sources: GIPC, WIPO/INSEAD/Cornell

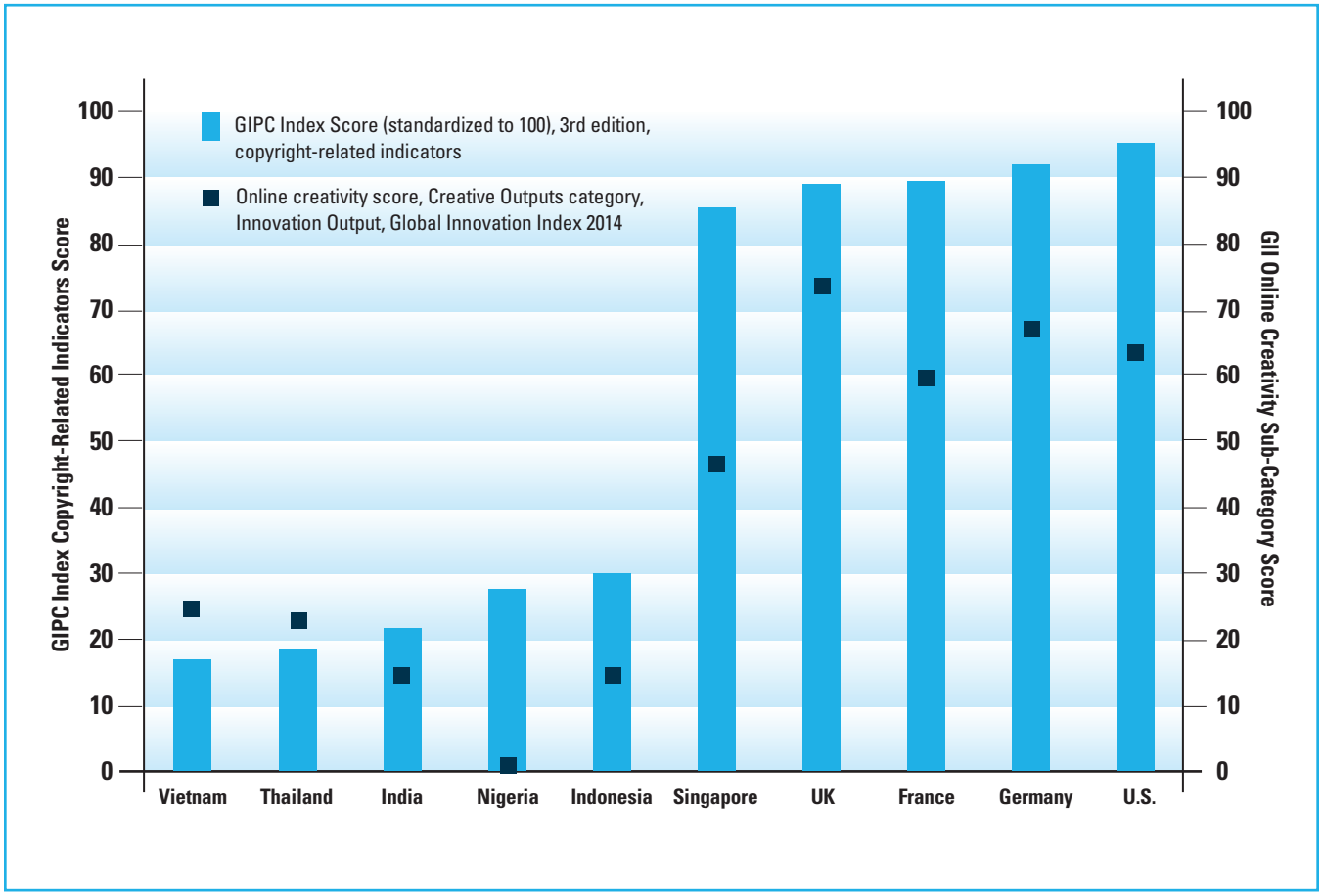
The GIPC Index scores display a very strong correlation with innovative output, as measured by the GII Innovative Output Sub-Index score—about 0.83. As Figure VI shows, economies with robust national IP environments produce a significantly higher level of innovative output. Specifically, economies scoring in the upper half of the GIPC Index (as a percentage of the total possible score) experience on average 50% more innovative output than economies scoring in the lower half (as reflected in a difference of 49 versus 33 in the average GII Output Sub-Index score of the two groups).

The key exception among economies in the lower half is China. China's relatively high level of innovative output (on par with many high-income economies covered in the GIPC Index) can be explained by its emphasis on production and export of high-tech and creative goods and services. It should be noted, however, that a large portion of this output centers on end-stage manufacturing and re-shipment, rather than on R&D activities.[23]

It is also worthwhile to look more closely at the nuances of the association between IP rights and innovative output—for instance by zeroing in on creative output in particular—in order to understand which aspects of the relationship are strongest. It is possible to do so by isolating the copyright-related indicators in the GIPC Index[24] and examining their relationship to the scores of the Creative Outputs pillar of the GII Innovative Output Sub-Index, which captures outputs specifically related to creative content, media, and information and communication technology (ICT) (for which copyrights are especially relevant).

There is a fairly strong correlation between the GIPC copyright-related indicators and creative outputs—a correlation of 0.67. However, what is remarkable about this correlation is that, within the category of creative outputs, the area of online creativity shows a particularly strong correlation with IP protection—0.78. Specifically, as Figure VII suggests, economies with stronger levels of copyright protection (scoring above 50% of the total possible score among copyright-related indicators) exhibit more than double the amount of online creativity than economies scoring below 50% of the total possible score

Figure VII: Association between IP Protection and Online Creativity: Top Five and Bottom Five Economies



Sources: GIPC, WIPO/INSEAD/Cornell

(corresponding to an average online creativity score in the GII of 56 versus 26). In other words, economies that offer and enforce strong copyright protection, for digital works and on the Internet, tend to benefit from greater production and availability of new Web content such as websites, applications, and audiovisual media.

Using the GIPC Index, the analysis in this section has provided a picture of the level and nature of the economic benefits associated with strengthening the availability and enforcement of IP rights. The analysis shows that IP protection is an elemental component of economic activity and growth, and one driver of job creation, innovation, creativity, and FDI and R&D spending. The next section presents the key results and findings from the third edition of the GIPC Index.

5. Overall Findings

5.1 Three Editions of the GIPC Index: Impressions on the Global IP Environment

The first edition of the GIPC Index, published in 2012, mapped and compared the national IP environments in 11 economies. The third edition of the GIPC Index includes 30 economies, almost tripling the economy coverage in the span of three editions. The increase in the number of economies benchmarked has significantly expanded the amount of data and information on the state of IP protection and enforcement across the world. Indeed, covering close to an estimated 80% of world GDP in the 30 economies included, the GIPC Index is fundamentally a global measure of the performance and state of the protection and enforcement of IP rights.[25] An additional benefit of this GIPC Index, over time, is that it provides a map of trends, both within a given economy and across all indexed economies.

What is perhaps most striking about the results of the third edition is the degree to which the protection of IP and enforcement of IP rights has improved—or at least not weakened—since the second edition of the GIPC Index. Table II compares overall scores for a sample of the 25 economies mapped in the second edition of the GIPC Index and the scores of the same 25 economies in the third edition of the GIPC Index. The table also shows how scores have changed relative to the total possible GIPC Index score since the last edition, and shows overall trends in performance. Where are economies' national environments heading? Up, down, or standing still?

It is fairly clear from Table II that, in many of the economies sampled in both editions, the national IP environment is either improving or, at the very least, not regressing. Out of the 25 sampled economies in both editions, 20 economies

Table II: Up, Down, or Standing Still? Trends in Economies' National IP Environments from the Second to the Third Edition*

ECONOMY	TREND	3RD EDITION SCORE	% OF POSSIBLE SCORE (3RD)	2ND EDITION SCORE	% OF POSSIBLE SCORE (2ND)
Singapore	↑	25.38	85%	25.12	84%
Australia	↑	24.7	82%	24.18	81%
Japan	↑	23.26	78%	23.24	77%
Canada	↑	17.92	60%	17.4	58%
Malaysia	↑	14.62	49%	14.36	48%
Mexico	↑	14.55	49%	14.27	48%
Russia	↑	13.54	45%	13.28	44%
Chile	↓	13.32	44%	13.55	45%
China	↑	12.4	41%	11.62	39%
Turkey	↓	11.9	40%	12.38	41%
South Africa	↑	11.86	40%	11.6	39%
Argentina	↓	9.2	31%	9.45	32%
Indonesia	↑	8.61	29%	8.09	27%
India	↑	7.23	24%	6.95	23%

**Only economies with a change in the percentage of the possible score between the second and third editions are included.*

showed movement in a positive direction, with 11 making substantial forward progress. Moreover, only 3 of the economies' IP environments significantly regressed. A few specific economies stand out. For instance, China and India are both moving up. Other middle-income economies, such as Mexico and Indonesia, are also enhancing their environments and moving up in score.

Nevertheless, overall movements at times mask what can be significant deterioration in specific sectors or forms of IP rights. For example, while Indonesia's score has improved overall, this is primarily the result of the introduction of a new copyright law and the strengthening of the legal environment in this category of the GIPC Index. Conversely, in other categories and industry sectors, such as the life sciences, relevant indicators show a much more challenging environment with unaddressed fundamental weaknesses, including use of compulsory licenses, a lack of biopharmaceutical IP rights, and market access being conditioned on the forced sharing of IP and technology.

And while positive movement can be substantial—for example, in both Indonesia and China the score increase and corresponding percentage point jumps have been relatively significant—many economies with score increases have seen only a very slight increase. Most of these economies are in the bottom half of the GIPC Index. Likewise, the economies whose environments have deteriorated from the second edition to the third edition are also in the lower half of the GIPC Index. As Section 4 illustrated, these economies cannot afford to miss experiencing the positive economic impact an improved national IP environment can deliver.

As in previous editions, the results show that most high-income economies have robust national IP environments in place. Singapore, the United States, European Union member states, Japan, South Korea, and Switzerland all set the tone with their high overall scores and strong environments. Yet even in these economies, strong total scores can hide weaknesses in certain sectors. Switzerland, for example, has a long-standing challenge in the form of high online piracy levels and an online copyright regime that is not in tune with international best practices. Of note is how, as in the past, Brazil, Canada, Chile, Russia, and the United Arab Emirates (UAE) all have noticeably weaker overall environments and scores than do other high-income economies and even some upper-middle-income economies. So, too, does newcomer to the GIPC Index, Taiwan. However, here there is also some positive movement. After many years of being a signatory, Canada finally ratified and acceded to the WIPO Internet Treaties. And when final implementation and ratification of the Comprehensive Economic and Trade Agreement (CETA) occurs, Canada's score and IP environment are likely to further improve.

Generally speaking, upper-middle-income economies face more challenges and have weaker national IP environments. No upper-middle-income economy scores over 50% of the total possible score—Malaysia and Mexico, as in the past, come the closest, both at 49%. And as will be discussed, most upper-middle-income economies have significant weaknesses across the board in a majority of the GIPC Index's categories. Yet there are examples of economies moving ahead both overall and in certain industry sectors and categories of the GIPC Index. For example, Malaysia, Mexico, and Colombia all outperform high-income economies Russia and Chile. Malaysia, again, has improved its overall score in the GIPC Index for the second consecutive year, with stronger enforcement efforts against copyright piracy. And out of the BRICS, China's overall percentage score has improved.

With regard to lower-middle-income economies, as in previous editions, they are all in the bottom third of the GIPC Index. Significant challenges abound with regard to both the existence and availability of IP rights and their enforcement. But here, too, there are positive developments. India—while still posing significant challenges to rights holders across the board—has seen a small improvement in its score and performance. A new government led by Prime Minister Narendra Modi has made positive statements on the need for reform and sharpening of India's IP environment. Similarly, Ukraine's State IP Service released a National Strategy of the Development of the Field of Intellectual Property that broadly aims to harmonize IP laws and

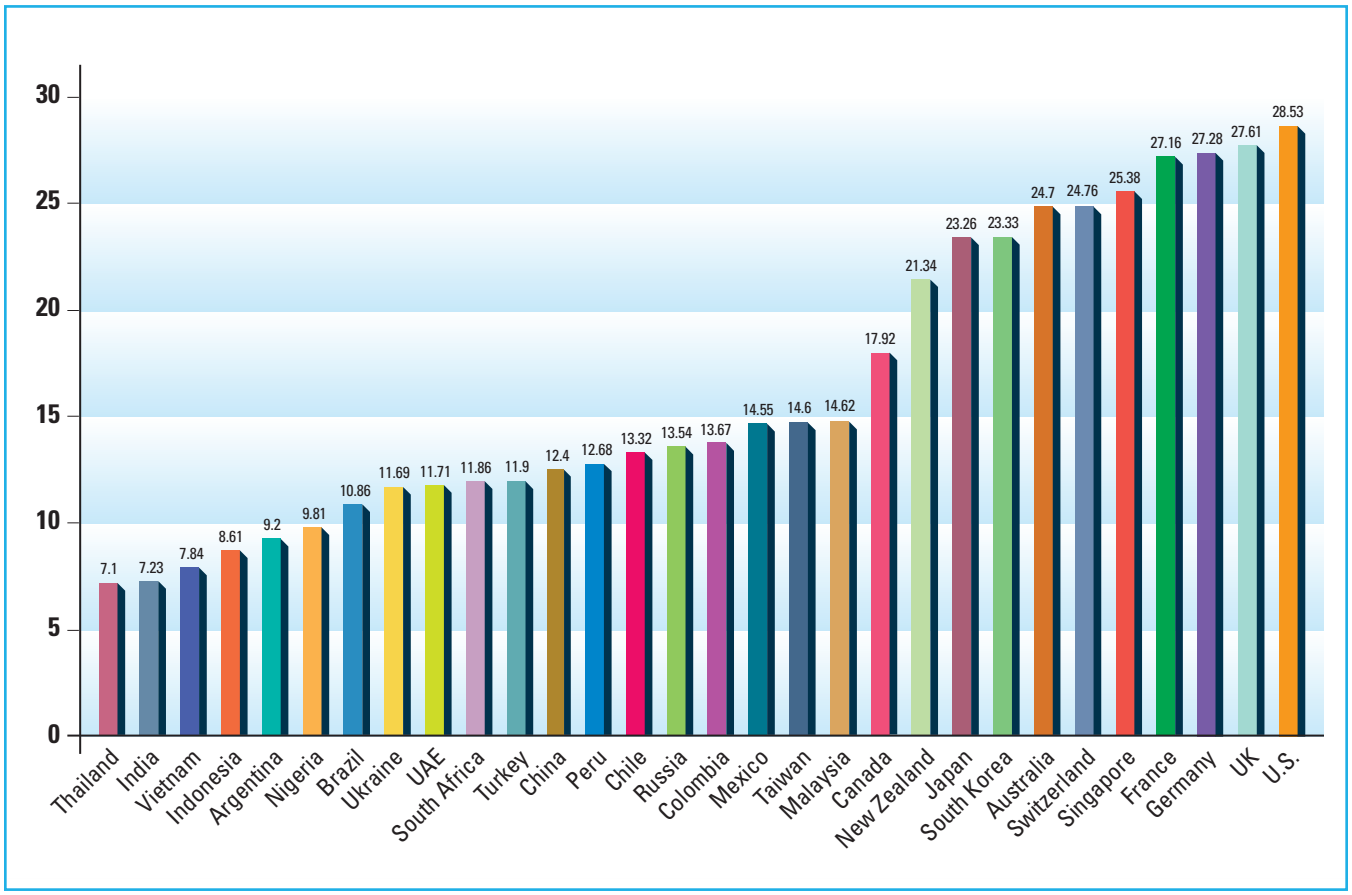
regulations to EU and international standards. Vietnam is on the brink of signing an FTA with the EU that includes substantive provisions on IP rights and would significantly improve Vietnam's score upon signing and implementation. For example, looking at Malaysia, it is clear from the analysis in Section 4 that a stronger IP environment is creating more knowledge-intensive jobs and stimulating more company investment in R&D.

As these examples illustrate, there is a broad range of performance within and between the different categories of the GIPC Index, types of IP rights, and industry sectors. For example, some economies that score poorly overall in the GIPC Index perform highly in certain sectors or categories. Conversely, a number of economies that score well by comparison with their peers in some categories display significant weaknesses in others. And while the overall numbers and scores of economies are what will naturally capture the headlines, of equal—or even more—importance is how individual economies have performed at the category and indicator level. Below is an overview of each category of the GIPC Index and a detailed discussion of each economy's score compared with other economies.

5.2 Overall Economy Scores

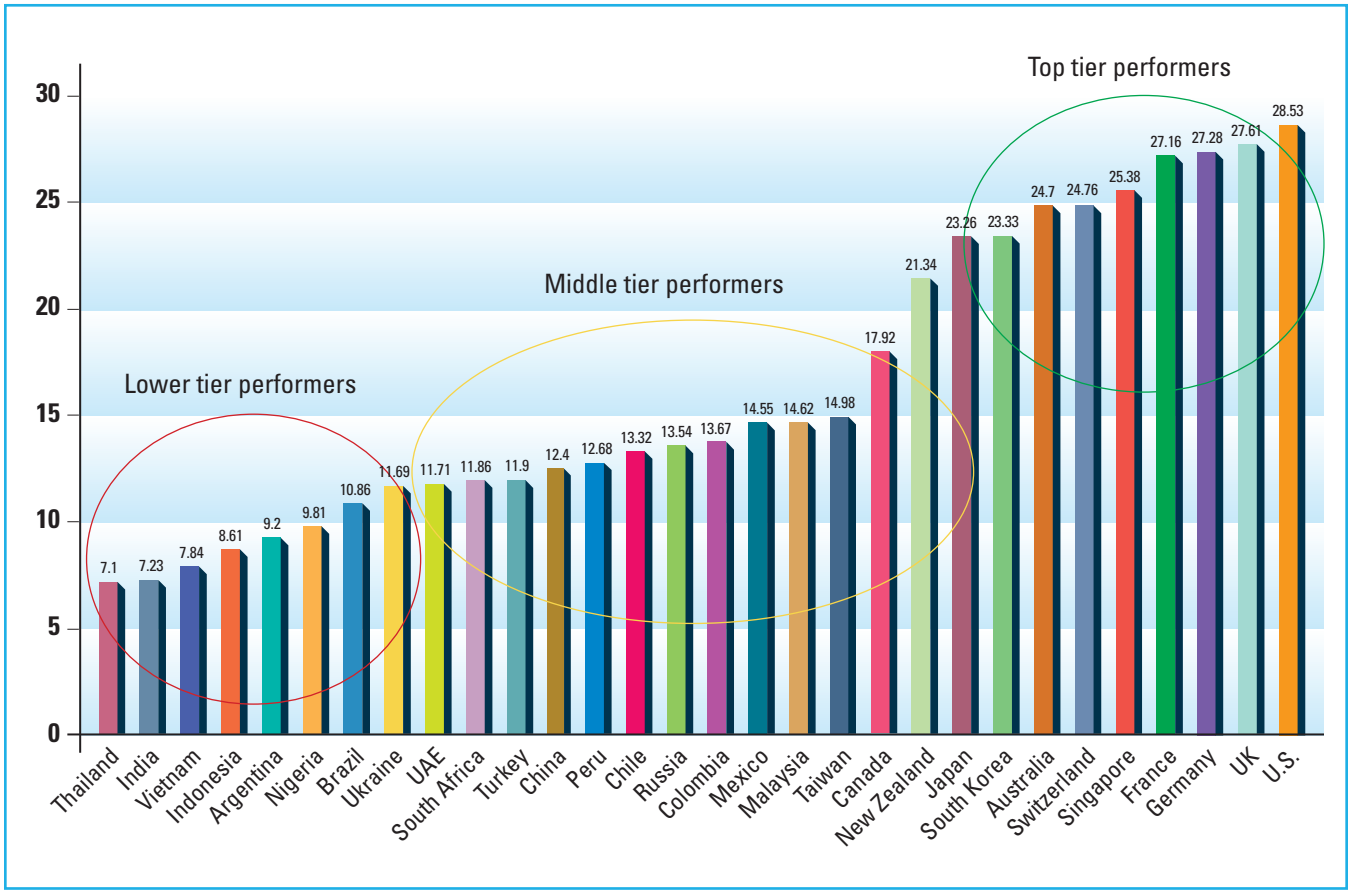
The GIPC Index consists of 30 indicators divided into 6 major categories. Each indicator is scored between 0 and 1. The maximum available score for the entire GIPC Index is 30. Figure VIII summarizes the total scores for all 30 economies benchmarked and ranks them in order of their total scores, from lowest to highest.

Figure VIII: Overall Economy Scores



It is also useful to view the scores in terms of economy groupings. Figure IX provides the overall results, with economies grouped based on their performance relative to the entire sample, with a top 25%, middle 50%, and bottom 25%.

Figure IX: Tracking Performance: Moving at Different Speeds?



As in past editions, developed, high-income economies perform the best, with the top four performers bunched quite closely together. The United States, United Kingdom, newcomer Germany, and France are separated by just under 1.5 points. The next set of high-income economies clustered together is Singapore, Switzerland, and Australia, which are separated by less than a point. Below them are Japan and newcomer South Korea. While overall retaining very robust national IP environments, each of these economies faces some specific challenges: Switzerland in the copyright space; Australia with regard to plain packaging for tobacco products (where it remains an international outlier); the United States on patentability requirements for biotechnology; and Japan and South Korea, which both are significantly weaker in Category 6: Membership and Ratification of International Treaties, than in other categories.

For the European Union as a whole—at both a member state level and a central EU level—there is the separate issue of plain packaging for tobacco products, which a number of member states, including the United Kingdom and France, are considering introducing. The EU Tobacco Product

Directive issued April 3, 2014, permits the introduction of plain/standardized packaging for tobacco products (Directive 53), but does not require it, nor does it direct member states to pursue such policies. The Directive also states that such laws need to be compatible with local law and international agreements.[26]

As has been discussed in previous editions of the GIPC Index, providing blanket "power" to governments to regulate trademarks, trade dress, and brands based on broad objectives of public health could expose a variety of other products in the future to similar regulation, legislation, and *de facto* prohibition. Many products could be at risk of such regulation (e.g., high sugar/calorie/fat food products and drinks, alcohol and liquor). It is also worth noting that the EU Directive does not require economies to study the potential unintended consequences of such policies, including, for example, the establishment or growth in illicit trade of regulated products and black markets.

The remaining high-income economies are characterized by how far they are behind the others. New Zealand is more than 7 points behind the United States (the top score), and there is almost an 11-point drop between the top performers and Canada. As in previous editions, Canada continues to exhibit significant weaknesses by 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, as noted before, Canada's score would increase considerably with full ratification and implementation of the CETA, which would affect scores in life sciences–related indicators and international treaties. The draft consolidated treaty agreement was released to the public in September 2014, with Article 9 confirming the minimum protection periods and standards for patent enforcement and patent term restoration for pharmaceuticals—two indicators on which Canada currently does not score well. 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—newcomer Taiwan, Chile, and the UAE—are even further from the top. As in previous editions, Chile scores 15 points behind the best performing economies and the UAE nearly 17 points behind the United States, with none of these economies achieving a score of 50% of the GIPC Index. Taiwan performs a bit better, almost reaching a score of 50%. But here, too, significant challenges are in place. File-sharing, streaming, and deep-linking sites—particularly based outside Taiwan—represent the top platforms for illegal content. Enforcement is also difficult. The administrative and judicial system is sluggish, with cases facing significant delays (the average timeframe for a first instance case is close to eight months) and often suspended indefinitely. For all three economies, fundamental, basic IP rights challenges persist across the board, particularly in the enforcement space, as is 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, in 2012 introduced significant changes to its copyright laws and has continued to build on that this past year. In 2014, in a positive development that has widely been seen as reaffirming copyright protection in the digital sphere, amendments to the Mexican Federal Telecommunications and Television Law and the Copyright Law limit retransmissions of broadcasts to those that have been authorized by the rights holder. Both economies score the best out of the upper-middle-income group and even outperform some high-income economies. Score-wise, Colombia and newcomer Peru are just below these economies, with significant challenges remaining, particularly in Category 2: Copyrights, Related Rights, and Limitations. Physical piracy is widespread in Peru, and online piracy is also growing. Industry calculations estimate an 80% rate of music piracy and a 65% rate of software piracy.

At the top of the non-BRICS lower-middle-income economies sampled, Ukraine's total score receives a significant boost from its high score in Category 6: Membership and Ratification of International Treaties. As in previous editions, in all other categories, Ukraine is at or near the bottom of the rankings, which is reflected in the 2013 Office of the United

States Trade Representative's (USTR) Special 301 report in which Ukraine was the only economy labeled a "Priority Foreign Country." Nigeria, Indonesia, and Vietnam are further down with some of the lower scores in the sample.

The five BRICS economies—Brazil, Russia, India, China, and South Africa—if anything, embody the mix of positive movement coupled with remaining challenges.

Brazil has made limited progress since the publication of the first edition of the GIPC Index. Indeed, many of the challenges that were in place in the first edition 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. There have been suggestions to repeal the 10-year-minimum patent period guarantee, which is in place to compensate innovators for the long delays and backlog at the Brazilian Patent Office (INPI). If enacted, these reforms would significantly weaken Brazil's already challenging patent environment. Regrettably, major legislative achievements (including the Internet Bill of Rights) in 2014 have not significantly strengthened Brazil's national IP environment. Rights holders continue to face challenges, particularly in the biopharmaceutical sector. For example, court proceedings in the "mailbox" cases relating to pharmaceutical product patents filed in the mid-1990s continue, with (at the time of research) two of the initial decisions having favored innovators and one favoring INPI. The court proceedings follow the invalidation and nullification of these mailbox patents by the INPI in 2013.

As in previous editions, 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. In terms of recent developments, in March 2014, President Putin signed into law a new set of amendments to the Russian Civil Code, including Part IV, which covers all major forms of IP rights offered in Russia. The package of amendments is far-ranging and touches on patents, copyrights, trademarks, and trade secrets. The overall impact of the amendments is somewhat mixed. For example, positive action has been taken with regard to setting pre-established damages for patent infringement and trade secrets. However, other changes, such as the imposition of new processes and requirements with regard to the application for patent term restoration for pharmaceuticals and agrochemicals, may end up causing confusion and, in effect, limit the availability of this protection for rights holders.

India's national IP environment remains quite challenging overall; nevertheless India's score has improved since the second edition of the GIPC Index. Indications by the new government that India will review its national IP environment and the launch of a draft national IPR policy suggest there are reasons to be hopeful that further enhancements could be forthcoming. India's overall score has improved from previous editions, rising to 24% of the total possible score (with a score of 7.23). Nevertheless, India's overall score is still less than a quarter of the available score, and a number of concerns continue to exist: India's patentability requirements remain outside established international best practices; India's history and current practices of using compulsory licensing for commercial and non-emergency situations is deeply troubling; there is a lack of specific IP rights for the life sciences sector; a challenging enforcement environment, with corresponding high levels of physical and online piracy, persists; and, finally, 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.

China's score in the third edition of the GIPC Index is higher than in previous editions, rising by 2 percentage points. The improvement in score results from increased attention to enforcement, including the creation of new specialized IP Courts, 2014 campaigns against counterfeits and copyright-infringing websites, and increased government commitment to combat trade secret theft and infringement. In certain

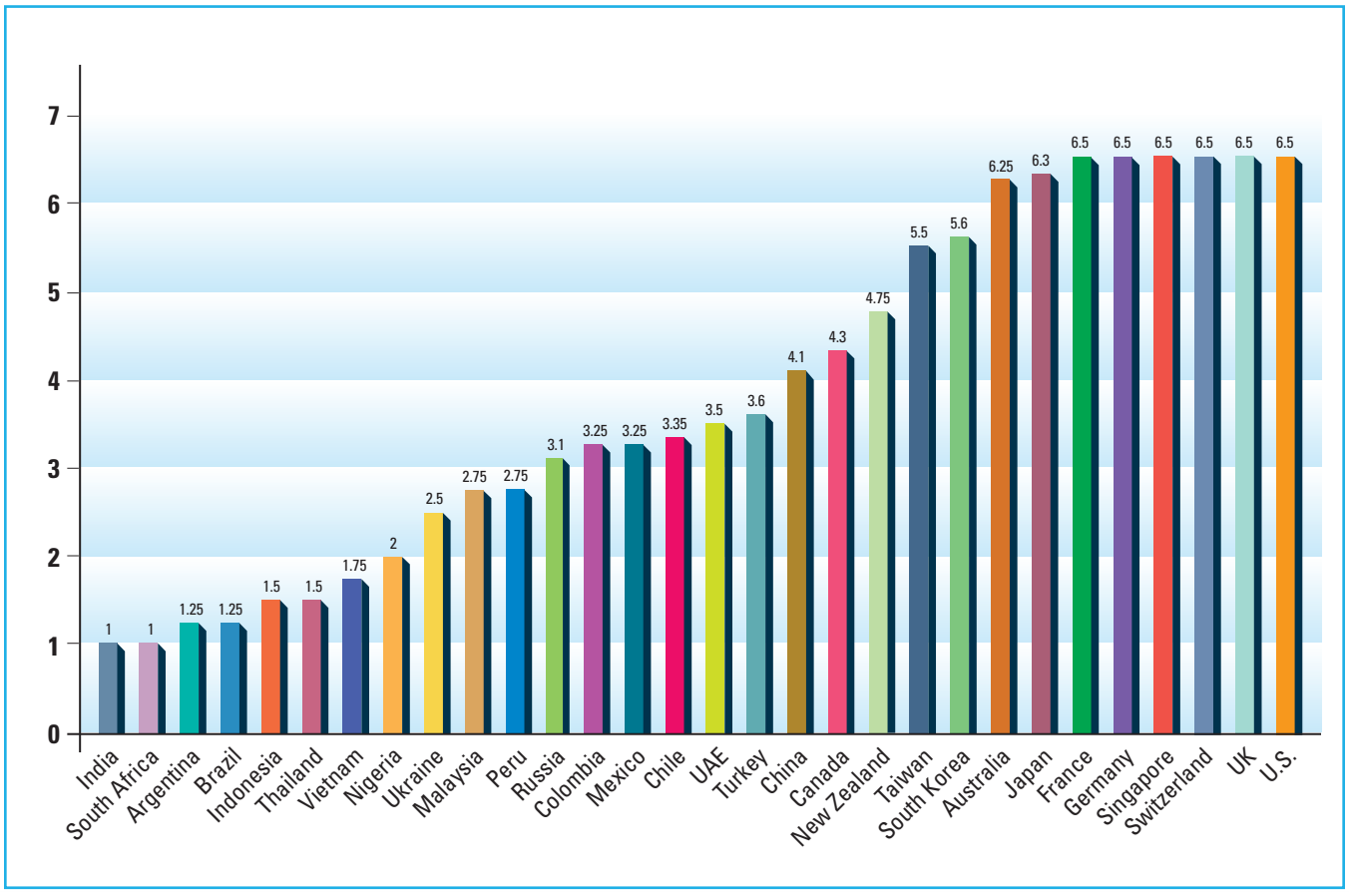
categories, China is an upper-middle-income economy leader. For example, in Category 1: Patents, Related Rights, and Limitations, China ranks ahead of the other BRICS economies and just behind Canada. Other categories and indicators, although showing some improvement, remain more of a challenge, particularly in the areas of enforcement of IP rights, protection of trade secrets, and application of existing laws.

South Africa's score has increased from the past edition. This is primarily because of greater enforcement activity, particularly with regard to software and online piracy. Overall, South Africa does relatively well compared with the other BRICS and, as in previous editions, obtains the highest score out of the BRICS 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. However, 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.

5.3 Category 1: Patents, Related Rights, and Limitations

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

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



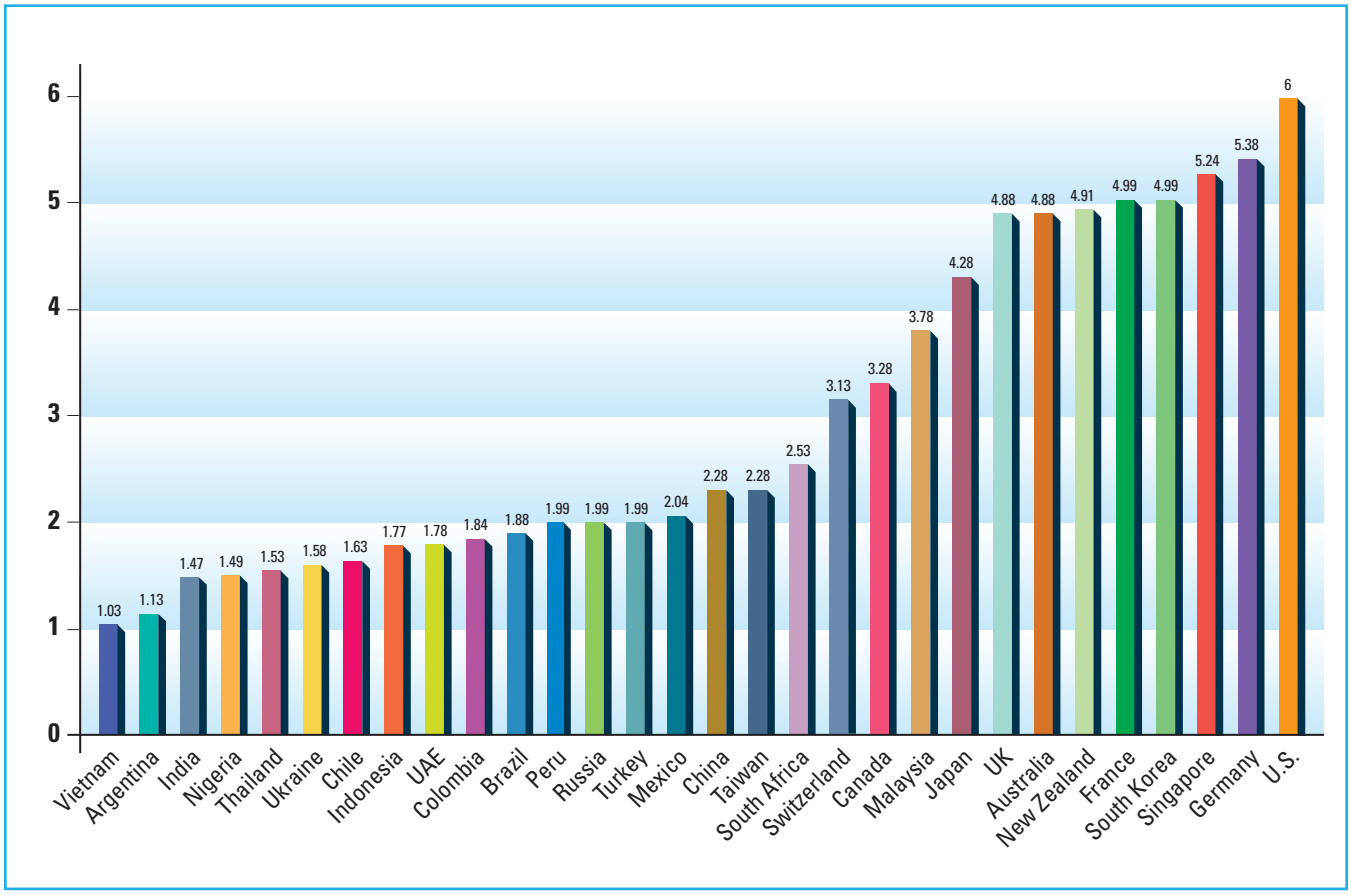
As expected from the overall scores, developed high-income economies do very well, with the United States, United Kingdom, Singapore, France, Japan, and Australia achieving the highest scores. Newcomers Germany and Switzerland perform very well in this category, with South Korea only slightly behind. As in previous editions, of note is how New Zealand and Canada are significantly behind these economies, with weaknesses in their patenting environment especially relating to the life sciences. Indeed, both economies fall behind both Taiwan and South Korea, and are only just ahead of China.

As in previous editions, China is in the top half of economies and is an upper-middle-income leader in this category. A number of economies—Turkey, UAE, Chile, Mexico, Colombia, Russia, Peru, Malaysia, and Ukraine—receive a score of between 2.5 and 3.6. From this group, there is a sharp drop to economies with a score at or below 2, which make up over 25% of the total sample size. Overall, a high number of economies have weak patenting environments, with Brazil, South Africa, India, and Argentina standing out.

5.4 Category 2: Copyrights, Related Rights, and Limitations

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



As in Category 1, developed high-income economies such as the United States, Germany, Singapore, and France achieve the highest scores. Of note is how Singapore has strengthened its environment for this category in 2014 and increased its score. This is due to new copyright amendments that successfully improved Singapore's copyright regime, giving rights holders an avenue to apply directly to the High Court for an injunction against "flagrantly" infringing websites. Of the new economies included in this edition of the GIPC Index, South Korea stands out for its reform efforts in the copyright space, and has over the past half-decade taken an increasingly active stance toward combating online piracy. In 2009, amendments to the Copyright Act introduced a graduated warning system, which is widely viewed as a success. Following this reform effort, piracy rates declined and the sale of digital music sales rose almost by 15%.[27] Unlike South Korea, Switzerland has had long-standing issues with online piracy, a relatively weak legal framework for copyright, and a challenging enforcement environment. There is a lack of penalties for certain infringing acts, such as unlawful distribution of DVDs. Switzerland has also become a central hub for sites hosting infringing content, with the USTR's list of notorious marketplaces including sites hosted in Switzerland. Furthermore, Switzerland's private use exception is interpreted broadly and has been confirmed by the Swiss government and existing case law to include the download and distribution of infringing content.

As with both the overall scores and Category 1, Canada lags significantly behind other developed high-income economies, and is in this edition also behind Malaysia, which has improved its score.

As with Category 1, the relative weakness of the environments in the majority of the sampled economies stands out. No middle-income economy—bar Malaysia—achieves a score of 50% or higher in this category. Particularly weak environments were found in Nigeria, India, Thailand, Argentina, and Vietnam, which all fail to achieve a score of 25% in this category.

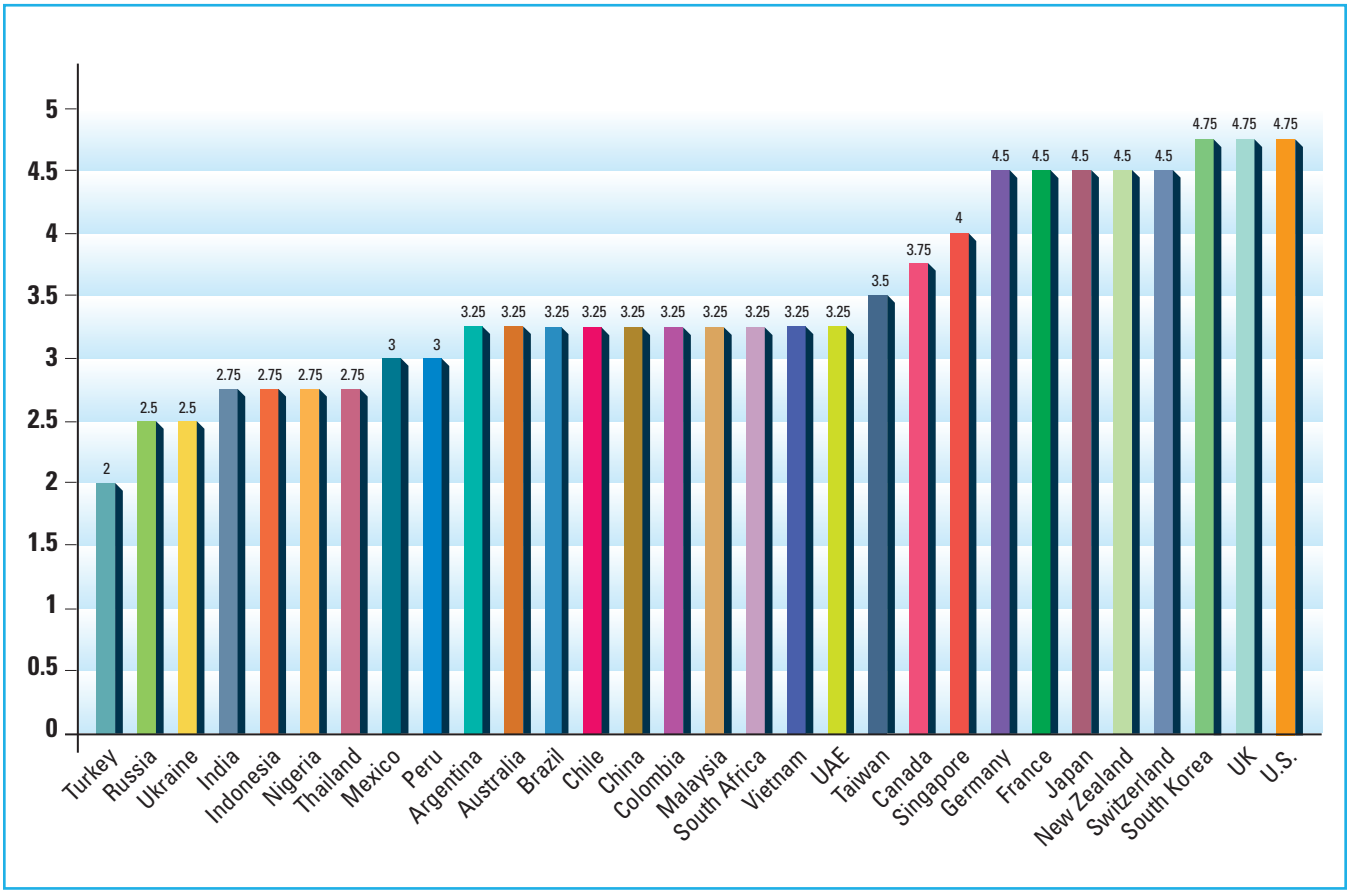
5.5 Category 3: Trademarks, Related Rights, and Limitations

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

For trademark strength, the United States, United Kingdom, European Union member states, Switzerland, South Korea, 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 and the corresponding trade dress on retail packaging of tobacco products, and limits the ability of trademark owners to utilize their brands, trademarks, and trade dress. 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. A similar situation exists in France and the United Kingdom, with government officials in both economies pushing ahead with plain packaging legislation. In the United Kingdom, draft regulations have been published by the Department of Health.

As was noted in the second edition of the GIPC Index, it is striking how few economies—even high-income—have effective mechanisms to combat the increased sale of counterfeit goods online in place, as measured by indicator 18. Such sales include the sale of counterfeit goods through online auction houses, stand-alone websites, marketplace sites, and the newly emerging, deeply concerning threat of hijacked sites. There are private initiatives—such as e-Bay's Verified Rights Owner (VeRO) Program—which are operational in most economies included in the GIPC Index. But the effectiveness and application of these initiatives varies from jurisdiction to jurisdiction. South Korea has successfully implemented a program of online monitoring that detects the posting of counterfeit goods and that stops, blocks, and deletes such posts through requests by the Korean IP Protection Association.

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



5.6 Category 4: Trade Secrets and Market Access

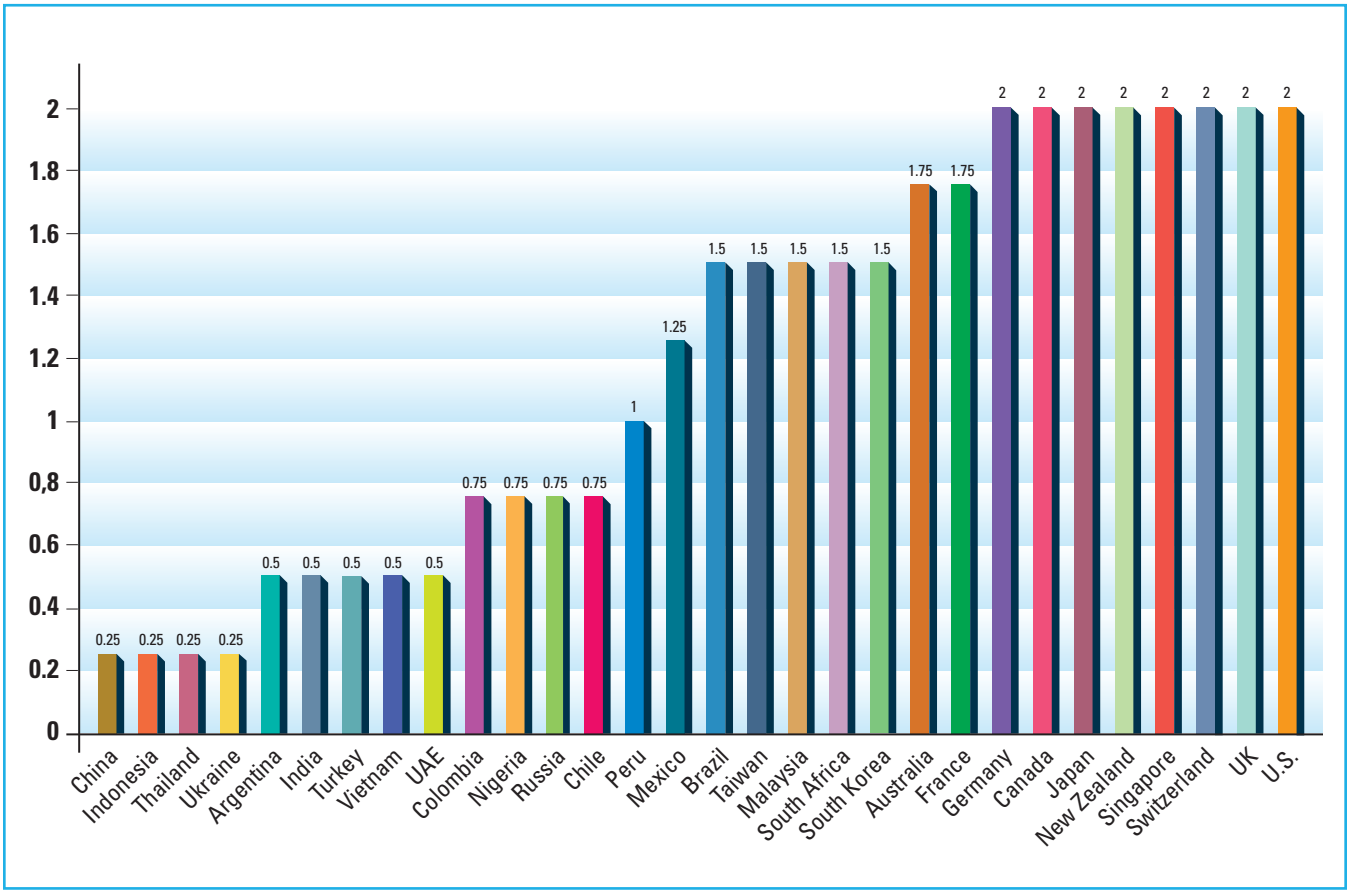
Figure XIII summarizes the total scores for Category 4. This category measures the strength of the environment for trade secrets and market access. The category consists of two indicators, with a maximum possible score of 2.

In this category the United States, United Kingdom, Switzerland, Singapore, New Zealand, Japan, Canada, and Germany score the full 2 points.

Overall, the protection of trade secrets remains problematic in the majority of economies. Many economies do not protect trade secrets through specific laws. In other economies in which legislation does exist, the enforcement and practical protection of trade secrets is lacking. For example, Peruvian law provides for a limited level of trade secret protection, which is derived from unfair competition law. A recent 2014 report from the OECD notes that the Peruvian approach only allows protection for the legal right of "fair competition" irrespective of other rights affected by violations of trade secrets. In addition, to date, no noted criminal enforcement of trade secret violations has taken place. Moreover, evidence suggests that it is arduous to prove in administrative and judicial proceedings unauthorized disclosure of trade secrets by former employees.

With regard to IP-based barriers to market access, this is an area of growing concern, with a number of economies

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



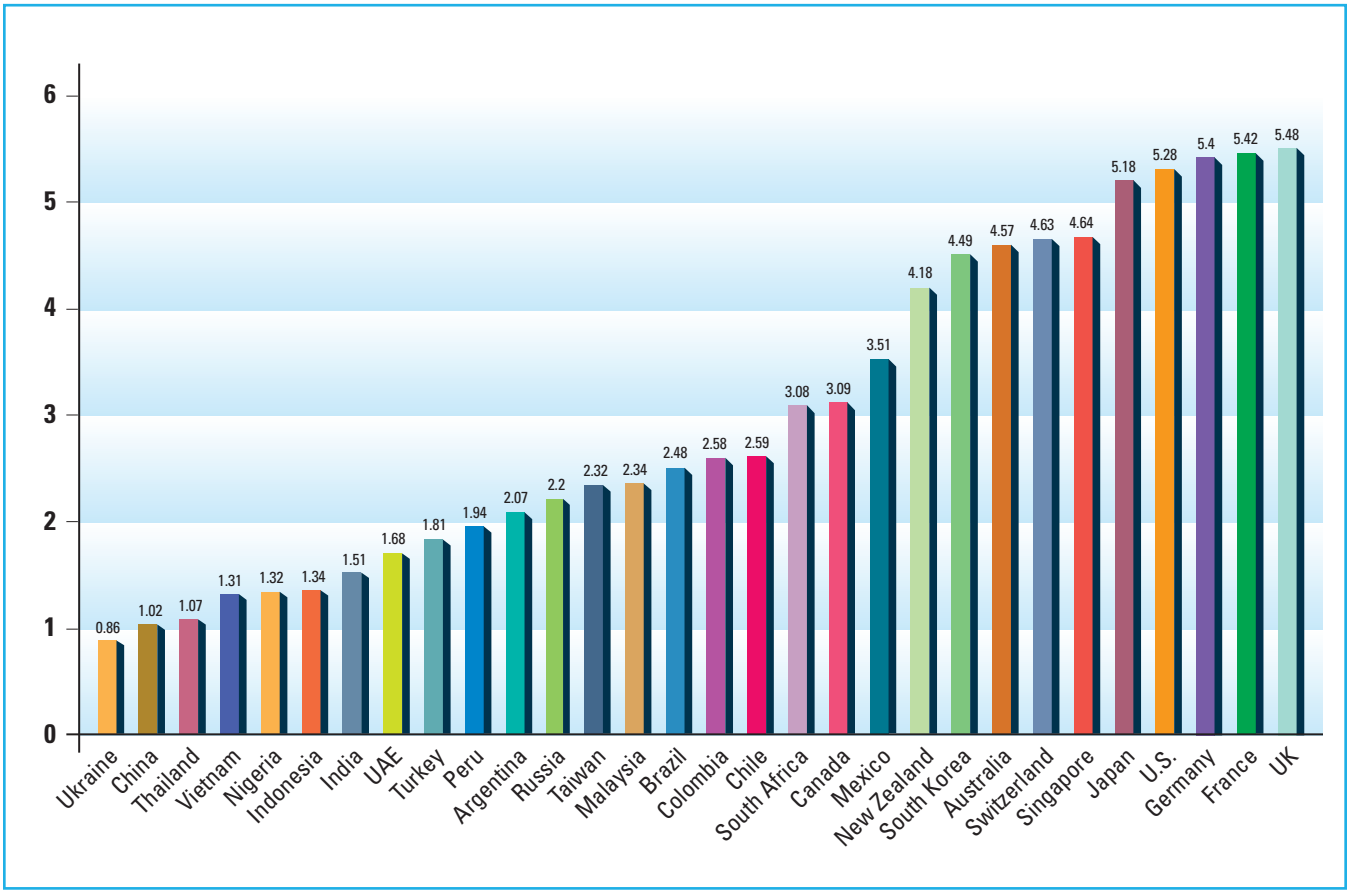
launching official policies aimed at forcing rights holders to share IP and sensitive information with local partners or state-owned entities. Examples include China, Indonesia, India, and the UAE.

5.7 Category 5: Enforcement

Figure XIV 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.

The European Union member states perform well in this category, with the United States and Japan trailing behind. Again, Canada places outside the top tier of economies, landing behind Mexico and South Africa. Canadian border officials have traditionally not had *ex officio* powers to search and seize goods suspected of infringing IP rights, and a court order has been required for seizure and detaining of suspected goods by customs officials, both under the Copyright Act and the Trade-Marks Act. Bill C-8, enacted into law in late 2014, introduces more robust border measures, including new civil and criminal options as well as expanded powers for customs officials by, for example, enabling the detention of goods suspected of copyright or trademark infringement. Final guidelines on the new customs

Figure XIV: Scores, Category 5: Enforcement



regime and the actual practice and manner in which the legislation is applied will determine its effectiveness.

Enforcement as a category is one of the weakest for all economies, with a third of the sampled economies receiving a score of less than 2, or only a third of the available score. Significant weaknesses abound, with many economies 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. Nevertheless, improvements have been made, and some economies have taken decisive action. For example, in Mexico in 2013–14, raids by the Special Unit for the Investigation of Copyright and Industrial Property Crimes (UEIDDAPI) of the Attorney General's Office intensified. Raids focused on both pirated entertainment material and pirated software, including hard copies and copying/circumvention devices.

Even some developed high-income economies show weaknesses in key indicators. For instance, both France and Canada have relatively high rates of software piracy as measured by the BSA | The Software Alliance (BSA), at 36% and 25%, respectively.

5.8 Category 6: Membership and Ratification of International Treaties

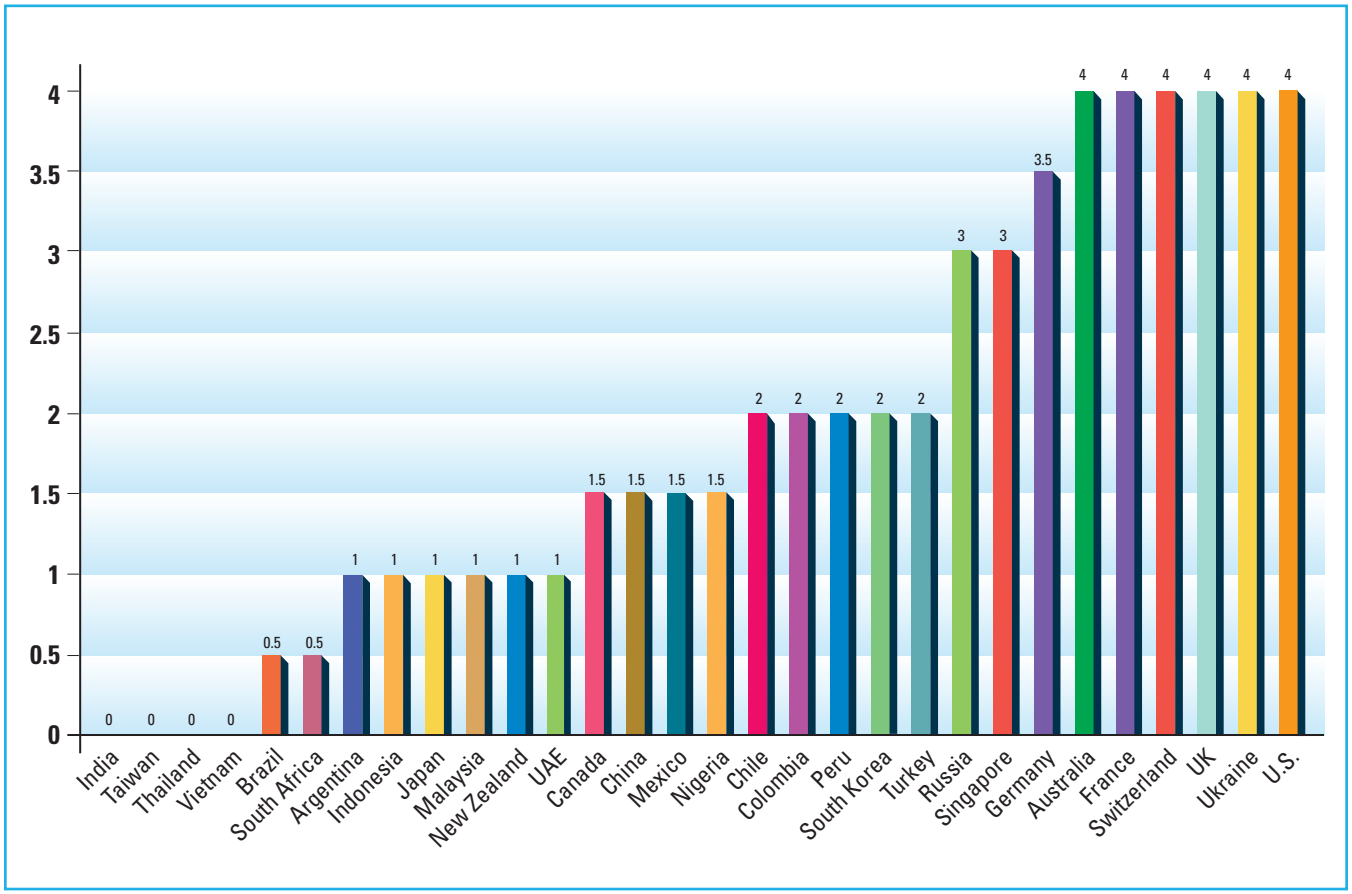
Figure XV summarizes the total scores for Category 6. This category measures whether an economy (1) is a signatory of and (2) has ratified/acceded to international treaties on the protection of IP. The category consists of four indicators, with a maximum possible score of 4.

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

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

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

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



6. Applying the GIPC Index: Economy Overviews

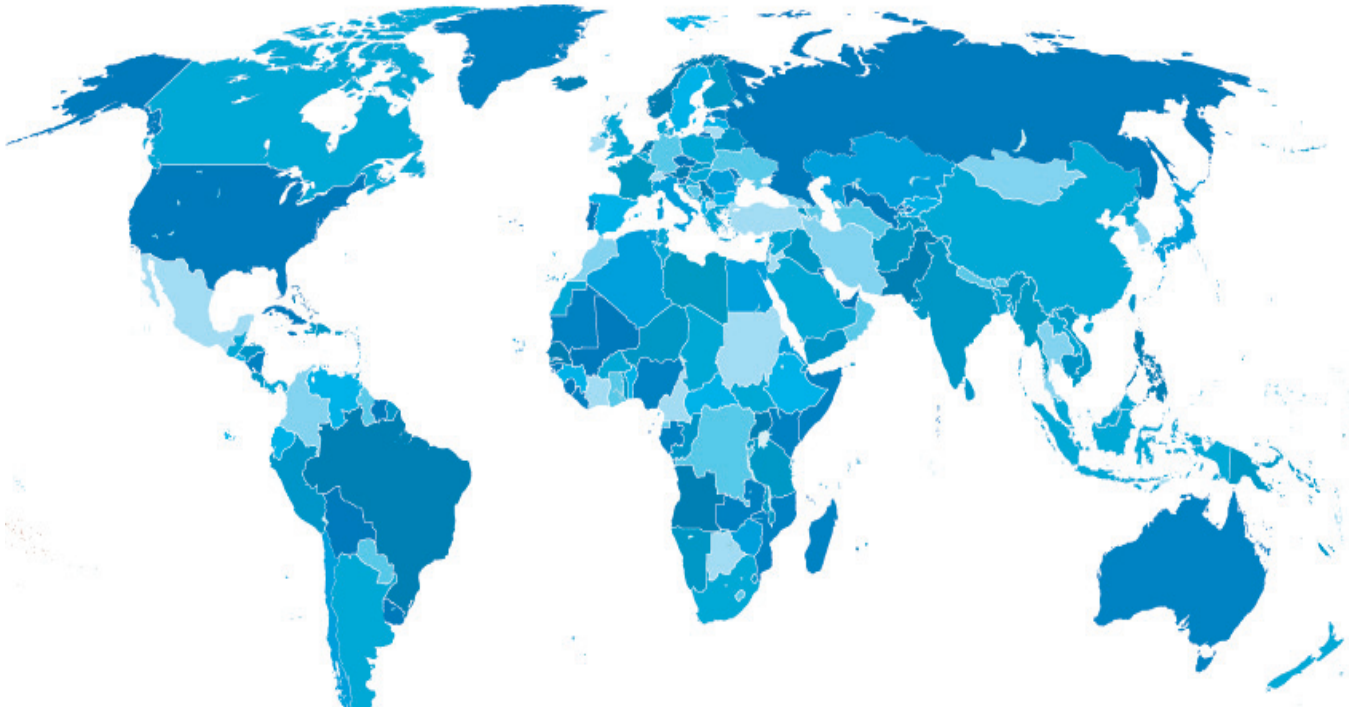
Introduction

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

In addition to the scores, each economy 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 sub-section, titled "Spotlight on the National IP Environment."

Where relevant for each economy, there is a separate discussion, titled "Other Areas of Note." These discussions zero in on areas of IP law and/or enforcement which are not directly covered in the 30 indicators, but nevertheless have a significant impact on an economy's total IP environment and are relevant to wider issues of innovation, economic development, and job creation.

For economies included in previous editions of the GIPC Index, an additional discussion is included, titled "Past Editions versus Current Scores," in which the economy's score in the preceding editions is discussed and contrasted with its current score.



[ Argentina]

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. Copyright (and related rights) term of protection	0.63[28]	
9. Legal measures which 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 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[29]	
22. Software piracy rates	0.31[30]	
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	**9.2**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• 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 • Extensive patent backlogs • Major holes in legal framework for enforcing copyrights • Lacks ISP liability/notice and takedown system • Judicial procedure slow and court decisions non-transparent/deterrent

Spotlight on the National IP Environment

Past Editions versus Current Scores

Argentina's overall score dropped slightly from 32% of the total possible score (with a score of 9.45) in the second edition of the GIPC Index to 31% (with a score of 9.2) in the third edition. The drop in score is mainly a result of continued issues surrounding restrictions on pharmaceutical patentability and no movement to reverse substantial patent office delays.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Argentine patentability requirements include novelty, inventive step, and industrial application. The patent law approaches process patents strictly, and generally speaking, process and method of treatment patent claims rarely meet the industrial application requirement and are difficult to defend in Argentine courts. The 2012 Guidelines for the Examination of Patent Applications on Pharmaceutical Inventions further tighten requirements for the patentability of pharmaceutical inventions, including making second-medical-use claims unavailable. In 2014, the patent office, *Instituto Nacional de la Propiedad Industrial* (INPI), continued to suffer from major patent backlogs. As a result, industry reports suggest that companies face significant challenges to securing and enforcing patent protection for biopharmaceutical and biotech inventions in Argentina.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Argentina does not have an effective patent enforcement and resolution mechanism. Under Articles 83 and 87 of Law No. 24,481, preliminary injunctions are available to rights holders as a means of patent enforcement during the course of an infringement trial. In practice, however, rights holders report that, despite these provisions, they are typically unable to obtain injunctive relief in a timely manner during the course of infringement proceedings.

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 a major threat to the copyright industries. Illegal operation of cyberlockers, peer-to-peer (P2P) file sharing, and direct downloads (for example, Cuevana.tc and Argentinawarez.com) remain the major infringement methods used. Software piracy continues to be quite high, with no improvement or change in the overall situation. Successful action was taken in 2014 by the National First Instance Civil Court in *CAPIF v. The Pirate Bay,* where the court issued an injunction against The Pirate Bay website. However, such rulings are limited and have had little impact given a pattern of inaction in previous case law. For example, in 2013, the National Court of Criminal Appeals did not take criminal action against 10 YouTube users accused of publishing a copyrighted film on the platform. The same court refused a request by HBO to issue an injunction against the website Cuevana in relation to the hosting of copyright-infringing material. Argentina also suffers from a lack of adequate 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." In 2014, a Supreme Court ruling reiterated this stance, rejecting joint or indirect liability for ISPs, particularly search engines, in online copyright infringement (Court of Appeals in *Rodríguez, María Belén v. Google Inc.*). Moreover, the court ruled that rights holder notice is not sufficient to justify takedown by ISPs in cases that do not involve extreme unlawfulness (defined by the court as areas such as child pornography, racism, etc.); for other illegal or infringing activities, a court order is necessary. At present, industry notifications receive very little response from ISPs. Rights holders must approach the court for a formal injunction in order to prevent online copyright infringement; recourse through the courts, however, is poor. While some ISPs have special procedures for processing rights holder claims, others still require a judicial order before taking any action. As noted in the previous version

of the GIPC Index, a draft bill addressing ISP liability, which was submitted to the Argentine Congress in March 2013, provides only a partial solution. Under the proposed measure, ISPs would 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 a judicial doctrine in line with the Berne three-step test. The second edition of the GIPC Index discussed Bill No. 2995-D-2012, which would introduce an overly broad private-use exception; the bill, however, is no longer active.

Trademarks, Related Rights, and Limitations

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** Argentine Trademark Law provides a basic legal framework for the protection of rights holders' exclusive rights. The legislation does not seem to provide for protection specific to cybersquatting; however, in practice, courts do provide redress. Although enforcement of trademarks in Argentina is generally poor, recent examples of positive judgments exist. In 2014, the Civil and Commercial Federal Court of Appeals refused an application to register a trademark based on likelihood of confusion with an existing mark (*Vi Da Producciones SA v. Advanced Magazine Publishers Inc.*). In addition, a court of appeal upheld trademark owners' exclusive rights to a mark in *Matos Berna, Beatriz Noelia v. Recurso de casación* (2014). However, such positive movements in the courts are overshadowed by Argentina's counterfeit market, which, according to the Argentina Chamber of Medium-Sized Businesses, in 2011 made up 3% of Argentina's GDP ($9.71 billion), and the fact that the largest informal market in Latin America (turning more than $10 million per day) is located in the Argentine capital of Buenos Aires.

Enforcement

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:** As noted in last year's GIPC Index, 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 relation to pharmaceuticals, the process is still drawn out. Criminal courts are directing some focus to physical and online counterfeiting and piracy. 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. These deficiencies in the court system are due to inadequate human resources and poor infrastructure, as well as a culture of viewing criminal penalties as mere formalities in cases of IP infringement.

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 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	1	
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	**6.25**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyright (and related rights) term of protection	0.63[31]	
9. Legal measures which 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 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[32]	
22. Software piracy rates	0.79[33]	
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	0.5	
Total Score—Enforcement	**4.57**	**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	**24.7**	**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 • Digital rights management legislation • Relatively low counterfeiting and piracy rates	• Restrictions on the use of brands, trademarks, and trade dress 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

Past Editions versus Current Scores

Australia's overall score rose slightly, from 81% of the total possible score (with a score of 24.18) in the second edition of the GIPC Index to 82% (with a score of 24.7) in the third edition. This increase in score is mainly due to a major Supreme Court decision supporting patentability of important biotech inventions as well as improvements to the enforcement environment, particularly in the ability to secure effective civil remedies.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** In a landmark judgment in 2014, the Australian Federal Court confirmed the patentability of isolated genetic material in *D'Arcy v.*

Myriad Genetics. In the decision, the court found that claims containing isolated genes are acceptable if the claimed structure or potential function does not exist in the gene's natural state. The court ruled that isolated gene sequences that result in non-natural structures and/or uses with economic significance should be considered patentable subject matter. The Australian Federal Court's ruling comes in the face of an opposite ruling by the U.S. Supreme Court in 2013, in which the court invalidated Myriad's claims on isolated genes.

3. **Patentability of computer-implemented inventions:** Recent case law by the Federal Court suggests that the patent office is moving toward a stricter view of software patentability that would raise the bar for CII beyond the current requirement of producing a physical effect *(Research Affiliates LLC v Commissioner of Patents,* 2013; *RPL Central Pty Ltd v. Commissioner of Patents,* 2013). However, the courts' stance and the patent office's official policy on the issue remain undetermined, with the Federal Court ruling in favor of the patent office in one case but not in the other. Both cases were appealed to the Full Court, and in November 2014 the Court affirmed that the CIIs at issue in the Research Affiliates case were not patentable. However, the Full Court has not yet ruled on the second case. In the future, Australia's score for this indicator may change, depending on the outcome of the second case and any resulting guidance from the patent office.

6. **Patent term restoration for pharmaceutical products:** As noted in previous versions of the GIPC Index, 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 R&D. The report was finalized in 2014; however, as a result of the change in government in 2013, the current government has stated that the report will have no bearing on its policy, and the current regime for patent term restoration in Australia still stands.

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):** Under the Copyright Act, rights holders have the exclusive right to reproduce, perform, trade, and distribute protected goods; however, the actual protection of these rights and the responsibility for deterring or preventing their infringement online is lacking. In particular, although the Copyright Act and Copyright Regulation establish a system that seeks to both eliminate infringing materials from the online environment and penalize users who access infringing material, the entities responsible for carrying out such actions and the manner for doing so are not well defined. The Australian government is currently considering the introduction of a graduated response scheme, which could result in temporary suspension of end-users' Internet accounts following cease and desist notifications.

10. **Availability of frameworks that promote cooperative action against online piracy:** The Copyright Law provides for a fairly substantive framework for notice and takedown, although only certain types of ISPs are required to act upon becoming aware of infringing material. Recent case law (most notably, *Roadshow Films Pty Ltd v. iiNet Ltd*, 2012) raises the threshold for ISP liability further than before. ISPs also lack an industry code or enforced standard related to notice and takedown. The new government has sought to introduce greater clarity on ISP liability and notice and takedown requirements. In 2014, the government held a public consultation on recommendations for amending the Copyright Act to extend authorization liability for ISPs even where an ISP does not have direct power to prevent a person from committing an infringing act, and to extend injunctive relief against foreign infringing sites. The consultation closed in September 2014, with the government currently reviewing responses at the time of research.

11. **Scope of limitations and exceptions to copyrights and related rights:** The Australian Law Reform Commission conducted a review of exceptions to copyright in the digital environment and issued recommendations in February 2014. The report

recommends amending the Copyright Act in order to introduce a new, broad exception modeled on the fair use exception found in U.S. copyright law. Under the recommendation, the fair use exception would replace several specific exceptions, including research, criticism, parody, reporting news, professional advice, format shifting, time shifting, temporary uses, and caching.

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. This includes limitations on use of trade dress elements such as color and design. 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 economies.

    Two recent studies by KPMG highlight the unintended consequences such policies can create: In October 2013, KPMG found that that, in the wake of Australia's plain packaging law, sales of branded black market cigarettes rose 154%. In a second study in April 2014, KPMG reported that, since the enactment of plain packaging, the decrease in the consumption of legal cigarettes has been largely offset by the increase in consumption of illegal cigarettes, with total consumption of tobacco in Australia remaining broadly stable.[34] Reports by customs officials also indicate that the number of seized cigarettes has more than doubled in the past two years. Since the introduction of the law, a number of economies have brought action against Australia in the World Trade Organization (WTO) on the basis that the law violates its WTO commitments, specifically under the Technical Barriers to Trade, TRIPS, and General Agreement to Tariffs and Trade (GATT). In 2014, the WTO Dispute Settlement Body confirmed five dispute panels and agreed to appoint a single panel to study the five complaints.

Enforcement

23. **Civil and procedural remedies:** The Patents Act, Trade Marks Act, and Copyright Act provide for civil remedies, which include claims for damages, seizure, and injunctions. Injunctions are granted in most cases in which they are sought, especially in relation to pharmaceutical patents, and there is evidence of interlocutory injunctions being heard at an increased pace (*Eli Lily v. Generic Health,* 2013; *Warner-Lambert v. Apotex*, 2014). In addition, an increase in patent filings by 13% since 2013 suggests an improved enforcement environment in Australia.

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** While Australia's Patent Act, Trade Marks Act, and Copyright Act include language concerning mechanisms for determining damages that should be awarded in cases of infringement, existing evidence indicates that these provisions are not being applied consistently and only a percentage of calculated damages are being awarded in some cases (*Bugatti GmbH v. Shine Forever Men Pty Ltd,* 2013 and 2014; *Seafolly Pty Limited v. Fewstone Pty Ltd,* 2014).

26. **Effective border measures:** Under the Copyright and Trade Marks Acts, customs officials are not given *ex officio* authority to act against goods they suspect of infringement; a rights holder must first submit a notice objecting to the importation of infringing goods before an official may detain or suspend the goods. With a notice from the rights holder, officials are authorized to seize a certain type of good in transit, "transhipped goods"; other types of in-transit goods are not officially subject to seizure. This is because transhipped goods remain under customs control while being shipped through Australia to other destinations, and are therefore subject to seizure if a notice of objection is in place and the rights holder can demonstrate that the goods are infringing. Although the Raising the Bar Act of 2012 introduced amendments to strengthen customs action, no specific amendments relate to the *ex officio* actions of customs officials. There is a reported increase in the number and quality of imported counterfeit goods in circulation in Australia.

[ 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. Copyright (and related rights) term of protection	0.63[35]	
9. Legal measures which 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 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[36]	
22. Software piracy rates	0.5[37]	
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	**2.48**	**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	0.5	
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	**10.86**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Although still high, software piracy has come down by 3% according to latest BSA survey • Basic IP framework introduced in mid-1990s includes 20-year patent protection • *Ex officio* powers granted to customs officials under Patent and Trademark Act	• New Internet law has not strengthened the protection of copyright online through a robust notice and takedown mechanism • Patentability requirements relating to pharmaceuticals are not TRIPS-compliant • Pharmaceutical-related patent enforcement and resolution mechanism not available • RDP not available for human use products • Patent term restoration not available • Low rate of membership and/or ratification of international IP treaties

Spotlight on the National IP Environment

Past Editions versus Current Scores

Brazil's overall score remains at 36% of the total possible score (with a score of 10.86) for the third edition of the GIPC Index. Regrettably, major legislative achievements (including the Internet Bill of Rights) in 2014 have not significantly strengthened Brazil's national IP environment. Rights holders continue to face challenges, particularly in the biopharmaceutical sector, where existing and proposed standards of patentability and protections fall outside international best practices. There was some positive movement during the year. For example, with regard to the invalidation of "mailbox" patents and subsequent court cases relating to pharmaceutical product patents filed in the mid-1990s, there were some positive court rulings.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** As noted in previous editions of the GIPC Index, the Brazilian National Health Surveillance Agency (ANVISA) continues to have 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. Brazil also does not allow patents for secondary claims for novel uses. In addition, the INPI continues to have a long backlog of patents, estimated at 8–10 years. This is particularly pronounced for sectors such as pharmaceuticals and agrichemicals, where a number of applications filed in the late 1990s are still awaiting a decision. This includes, for example, insecticide Movento manufactured by Bayer. Introduced last year, a pending patent reform initiative emulates many of the requirements of India's Section 3(d), including a narrowing of patentability criteria and the disallowing of patents on new uses or new forms of known substances unless a significant improvement to the known efficacy is present. In addition, there have been suggestions to repeal the 10-year minimum patent period guarantee, which is in place to safeguard innovators for the long delays and backlog at INPI and to reduce an innovator's exclusivity period to a fraction of the 20-year period. If enacted, these reforms would significantly weaken Brazil's already challenging patent environment. Finally, court proceedings in the "mailbox" cases relating to pharmaceutical product patents filed in the mid-1990s continue (at the time of research), with two of the initial decisions having favored innovators and one the INPI. The court proceedings follow the invalidation and nullification of these mailbox patents by the INPI in 2013.

6. **Patent term restoration for pharmaceutical products;**
7. **Regulatory data protection term:** Brazil does not provide for patent term restoration for pharmaceutical products, and RDP is still 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:** Having been debated and discussed for the past few years, the Marco Civil da Internet (Internet Bill of Rights, Law No. 12,965) was passed in April 2014. Although primarily concerned with issues of data privacy and network neutrality, this law contains important provisions relating to the protection of content and copyright online. Specifically, Section 3 and Articles 18–20 of the act provide a broad safe harbor provision for ISPs relating to third-party infringement, with ISPs required to act and make infringing content unavailable only once a court order has been issued unambiguously finding that the content is infringing. Given that the Brazilian justice system generally suffers from long processing times and high costs of litigation, the

need for a court order would not seem to lead to an expeditious removal of infringing content. As was noted in previous editions of the GIPC Index, there has been and remains some cooperation between ISPs and rights holders, but this is piecemeal, ad hoc, and not systematic.

Trademarks, Related Rights, and Limitations

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:** In 2012, as part of its agreement to host the 2013 FIFA Confederation Cup and 2014 World Cup, Brazil enacted the "World Cup Law" (Law No. 12,663). The purpose of this law was to provide additional protection for FIFA and its partners during the course of the FIFA sporting events hosted by Brazil in 2013 and 2014. Of note are the special protections (including recognition as famous marks) granted to FIFA- and World Cup–related trademarks, as well as the fast-track procedures put in place for INPI to process and register FIFA-related applications. The legislation also addressed the issue of "ambush marketing" outlining civil as well as criminal penalties. Post–World Cup legal analysis suggests that both FIFA and its partners were able to successfully rely on this legislation and their special treatment from the INPI to protect their trademarks and IP rights before and during the tournaments. However, the fact that this special legislation and fast-track procedures were needed affirms the challenges faced by rights holders in Brazil with regard to long processing and administrative waiting times at the INPI and the overall levels of trademark infringement. For example, while FIFA may have been relatively successful in protecting its rights, others, such as Centauro (the biggest sports retailer in Brazil) were forced to lower the price of their World Cup jerseys by 35% due to the large supply of counterfeit shirts.

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.

[ Canada]

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. Copyright (and related rights) term of protection	0.53[38]	
9. Legal measures which 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	0.75	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	1	
Total Score—Copyrights	**3.28**	**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	0.75	
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[39]	
22. Software piracy rates	0.75[40]	
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	0.25	
Total Score—Enforcement	**3.09**	**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	0.5	
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	**1.5**	**4**
Total Overall Score	**17.92**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Accession to WIPO Internet Treaties
- Release of full text of CETA confirms how final ratification would significantly strengthen Canada's IP environment, particularly for the life sciences sector
- Legislation introduced to sign and accede to Singapore Treaty on Law of Trademarks
- Patentability of CIIs
- Central government ICT procurement guidelines include documentation on licensing as well as evidence of auditing taking place

Key Areas of Weakness

- Onerous patentability requirements narrow the scope of inventions, particularly for life sciences
- Pharmaceutical-related patent enforcement and resolution mechanism under Notice of Compliance procedure deficient; possible change upon implementation of CETA
- Patent term restoration not available; possible change upon implementation of CETA
- No takedown mechanism in ISP notification system
- DRM regulation ineffective; wide availability of circumvention devices
- Established counterfeit market
- Poor application and enforcement of civil remedies and criminal penalties

Spotlight on the National IP Environment

Past Editions versus Current Scores

Canada's overall score has increased from 58% of the total possible score (with a score of 17.4) in the second version of the GIPC Index to 60% in the third version of the GIPC Index (with a score of 17.92). The score rise is a result of the successful accession to the WIPO Internet Treaties in May of 2014, a slight drop in rates of software piracy, and approval of Bill C-8 and more robust border enforcement laws. The overall score is, however, hampered by ineffective enforcement of 2012 DRM legislation against the continued sale and dissemination of circumvention devices. As noted in previous editions of the GIPC Index, Canada's score would increase considerably with full ratification and implementation of the CETA, which would affect scores in life sciences–related indicators, border enforcement, and international treaties. The draft consolidated treaty agreement was released to the public in September 2014, with Article 9 confirming the minimum protection periods and standards for patent enforcement and patent term restoration for pharmaceuticals.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** As mentioned in previous editions, 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, despite the fact that these medicines were found to be safe and effective by Health Canada and were being used by hundreds of thousands of Canadian patients. The Canadian standard of utility established through this expanding case law differs from international standards embodied in TRIPS and the Patent Cooperation Treaty, and from practices of patent offices in the United States and European Union. The utility test is accompanied by a heightened evidentiary burden, requiring innovators to demonstrate the effectiveness of a pharmaceutical in light of the court's subjective construed "promise." The test raises uncertainty as to how much information needs to be disclosed in patent applications, and discriminates against pharmaceutical patents.

4. **Pharmaceutical-related patent enforcement and resolution mechanism; 6. Patent term restoration for pharmaceutical products:** As noted in previous editions of the GIPC Index, 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. Similarly, Canada is one of a few high-income OECD economies that do not offer patent term restoration or alternative mechanisms for patent term restoration for pharmaceuticals. However, as noted, the adoption and implementation of CETA would, on the one hand, introduce more effective rights of appeal for applicants before generic entry into the marketplace, and would also ensure a minimum patent restoration period for pharmaceuticals.

7. **Regulatory data protection term:** Canada provides for an eight-year term of RDP. Canada amended its Food and Drugs Act in November 2014 to include broad provisions that would allow the Health Minister to disclose confidential business information, including trade secrets, submitted to Health Canada as part of the regulatory approval process for pharmaceutical and medical device products. This is viewed by the life sciences sector as a negative development. IP and trade secrets contained in clinical trial data can be protected only if Health Canada puts in place strict safeguards to limit and control the release of information.

Copyrights, Related Rights, and Limitations

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." Although initially slated to be introduced with an accompanying set of regulations, the "notice-and-notice" mechanism recently came into effect in January 2015. While there was no legislative action, 2014 did see increased activity through the courts to curb online piracy. For instance, in *Voltage Pictures, LLC v. Doe* (2014), the Federal Court concluded that the rights holder (the

film production company Voltage) was entitled to gain access to the contact details of alleged copyright infringers, and the ISP (Teksavvy) was ordered to provide this information. This ruling could potentially be setting an important precedent for rights holders to obtain identification of alleged copyright infringers. However, it remains to be seen how the conditions and process the court has laid down for obtaining these contact details will affect the practical availability of this mechanism to rights holders.

12. **Digital rights management legislation:** Canada's 2012 copyright amendments introduced new legislation prohibiting the use, distribution, manufacture, and importation of circumvention devices. This significantly strengthened the legal framework and mechanisms available for the protection of copyright. Previous editions of the GIPC Index described these amendments as a positive step. However, industry reports from 2014 suggest that circumvention devices and modification software remain widely available in Canada, particularly for video games. A survey of video game developers and companies conducted for the Entertainment Software Association of Canada in 2013 reveals that "IP appropriation by consumers"—that is, piracy—was viewed by respondents as the biggest negative factor affecting growth for the video game industry.

Trademarks, Related Rights, and Limitations

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:** Canada has an advanced and well-developed legal framework for the protection of trademarks. As noted in previous editions of the GIPC Index, the concern for rights holders is the enforcement against counterfeit goods and prevalence of such goods in Canada. For example, in the Motion Picture Association of America's most recent 2014 submission to the USTR on the world's most notorious markets for pirated products, Canada (together with Northern Ireland) was the only high-income OECD economy to be listed as having a notorious market for the trade of physical goods, in the greater Toronto area. As part of the CETA and wider reform process, the Canadian Parliament is considering amendments to the Trade-Marks Act, as well as accession to the Madrid Protocol, the Nice Agreement, and the Singapore Treaty on the Law of Trademarks. Major changes to the Trade-Marks Act would include the elimination of any need to use a trademark in Canada or abroad before registration, the elimination of required filing grounds at the time of filling for a trademark application, and the elimination of a statement of use or intention to use a trademark in Canada. The signing, ratification, and accession to these international treaties would be a positive and important step in aligning Canada's trademark environment with international best practices. It would also result in a higher score in the GIPC Index.

Enforcement

26. **Effective border measures:** As noted in previous editions of the GIPC Index, Canadian border officials have traditionally not had *ex officio* powers to search and seize goods suspected of infringing IP rights, and a court order has been required for seizure and detaining of suspected goods by customs officials under both the Copyright Act and the Trade-Marks Act. Bill C-8 (previously known as Bill C-56, and reintroduced in October 2013) was passed by the Canadian Parliament and received Royal Assent in December 2014. This bill introduces more robust border measures, including new civil and criminal options as well as expanded powers for customs officials by, for example, enabling the detention of goods suspected of copyright or trademark infringement. However, while customs officers are given a right of detention, it is not yet clear whether in practice this right will extend to goods for which rights holders have not made a "request for assistance."

Membership and Ratification of International Treaties

Canada acceded to the WIPO Internet Treaties in May 2014, thereby raising its score by 0.5. It remains a signatory to but has not yet ratified the Patent Law Treaty (although the Canadian Parliament is in the process of reviewing Bill C-43, which would bring Canadian patent law in line with the treaty) and is not a contracting party to the Singapore Treaty on the Law of Trademarks. However, as discussed, Canada has made its intention to accede to the latter clear in its Economic Action Plan 2014. Canada concluded negotiations in September 2014 for CETA, which includes substantial provisions on IP rights, and expects the signing, ratification, and implementation in 2015. Once this process is complete, Canada's score for this indicator will be raised. Additionally, Canada is a negotiating party to the TPP.

[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. Copyright (and related rights) term of protection	0.63[41]	
9. Legal measures which 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 requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total Score—Copyrights	**1.63**	**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	**0.50**	**2**

Enforcement		
21. Physical counterfeiting rates	0.93[42]	
22. Software piracy rates	0.41[43]	
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	0.25	
Total Score—Enforcement	**2.59**	**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	**13.32**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Legislation provides for fair and transparent use of compulsory licensing
- Legal measures providing necessary exclusive rights to copyright holders and voluntary notification system
- Non-discrimination/non-restrictions on the use of brands in packaging
- Civil and procedural remedies in legislation
- Border officials demonstrate commitment to rights holder cooperation

Key Areas of Weakness

- Patentability of pharmaceutical inventions
- Absence of an effective pharmaceutical-related patent enforcement and resolution mechanism
- Gaps in regulation governing pharmaceutical and agrochemical data protection
- Lack of sufficient framework to promote action against online piracy
- Inadequate DRM legislation
- Diminished dedication to addressing software piracy in government agencies
- Trade secret protection weak, and application is ineffective
- Legal measures aimed against unauthorized use of trademarks ineffective
- Weaknesses in pre-established damages

Spotlight on the National IP Environment

Past Editions versus Current Scores

Chile's overall score has dropped from 46% of the total possible score (with a score of 13.55) in the second edition to 44% (with a score of 13.32) in the third edition. Evidence of stronger cooperation of border officials with rights holders led to a slight increase, but Chile's overall score dropped due to persistent gaps in software licensing among government agencies and failure to improve protection against disclosure of pharmaceutical and agrochemical test data submitted to regulatory authorities as a prerequisite for market access.

Areas of Note

Chile is currently undertaking reforms to its Industrial Property Law; the proposed amendments have already passed the Cultural Committee in Congress and now sit with Senate. The draft law includes measures that, among other changes, widen the scope of protections for trademarks and trade secrets, while also narrowing patentability standards for software and medicines. The draft also raises penalties for violations of patents, trademarks, and trade secrets, as well as remedies available for misuse of patents. These measures, once passed, will affect Chile's score for a number of indicators.

Patents, Related Rights, and Limitations

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** As noted in the previous GIPC Index, Chile has not yet instituted a patent linkage mechanism despite its commitment to do so in its FTA with the United States. In this context, infringing products are known to be approved, and resolution of patent disputes is often severely delayed. Since 2012, the Chilean Congress has considered an amendment to the Industrial Property Law No. 19,039 that 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. However, no movement on the measure is evident in 2014 (up until the time of research). Moreover, the measure is missing from the draft amendments to the Industrial Property Law.

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 only required to remove infringing content upon 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. Law No. 20,435 introduced a voluntary system under which ISPs are to forward notices from rights holders to suspected infringers. The recording industry has recently reported improved cooperation with major ISPs in Chile in relation to the voluntary system; however, the fact remains that there are no consequences for ISPs that fail to act after acquiring the requisite knowledge of an infringement outside of a court order.

13. **Clear implementation of policies 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 purchase and license software they use, but across public agencies there is generally a low awareness of the need to pay for software licenses, and, in some cases, evidence of blatant software piracy exists. Although government spending on software has increased over the past five years, a relatively high level of software piracy and continued reports of illegal use of software in central government agencies indicate that stronger efforts are necessary. Instead of addressing gaps in

implementation, in 2014, the Chilean government and National Congress placed emphasis reducing the budget for licensed software in government agencies.

Trademarks, Related Rights, and Limitations

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:** Unregistered and well-known trademarks will be recognized in Chile if they are widely used in its territory. The Supreme Court has, however, deviated from this rule, accepting global evidence submitted by a well-known mark owner opposing a third-party registration. The proposed Industrial Property Law reform would further validate this approach by barring registration of trademarks that are likely to be confused with, or would dilute, trademarks that are well known in Chile and/or abroad. The draft law also introduces a mechanism against trademark squatting under which marks must be used within five years of registration in order to enjoy protection.

Trade Secrets and Market Access

19. **Protection of trade secrets:** Law No. 19,039 provides for the protection of trade secrets but is not fully in line with international standards. The draft Industrial Property Law, if passed, would strengthen Chile's trade secrets regime, including expanding the definition of a trade secret to include all business environments and incorporating the due diligence obligation outlined in TRIPS Article 39(2), Note 10. The draft law would also raise prison sentences and fines for trade secret violations. If passed, Chile's score for this indicator would increase. However, important holes in the application of the existing law remain, particularly concerning disclosure of trade secrets in legal proceedings.

20. **Barriers to market access:** While under Chilean law it is mandatory for biopharmaceutical and agrochemical companies to submit undisclosed, proprietary test data in order to obtain market authorization for new chemical entities, the existing Industrial Property Law does not provide sufficient guarantee that this data will not be shared with third parties or relied on to approve other products. Amendments to the Industrial Property Law that would ensure against disclosure and reliance on proprietary data as part of market approval continue to be excluded from the proposed reform bill.

Enforcement

23. **Civil and procedural remedies; 25. Criminal standards, including minimum imprisonment and minimum fines:** Existing Chilean law provides criminal penalties for IP rights infringement. However, criminal penalties are quite low and are typically sanctioned by courts. Prosecution of IP infringement is hindered by gaps in the legal framework and lack of resources. The draft Industrial Property Law, if passed, would resolve some of these concerns. The proposed amendments would raise the minimum penalties for patent, trademark, and trade secret violations and introduce an explicit mechanism for prosecuting counterfeiting, including imprisonment.

26. **Effective border measures:** Law No. 19,912 gives customs officials *ex officio* authority to detain goods entering Chile, but only for five days, after which a formal seizure order is required to retain the goods; such a short period limits the ability of customs officials to effectively assess whether goods are infringing and the ability of rights holders to respond to customs notices of seized products. However, the preponderance of evidence suggests that, in 2014, despite the short time frame, border officials demonstrated a commitment to notifying rights holders of seizures and taking action swiftly. The law is ambiguous concerning goods in transit and whether they may be suspended or seized; in practice, Chile is a key entry point into the South American market for physical pirated goods coming from Southeast Asia.

[ China]

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. Copyright (and related rights) term of protection	0.53[44]	
9. Legal measures which 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 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	0.25	
Total Score—Trademarks	**3.25**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.25	
20. Barriers to market access	0	
Total Score—Trade Secrets and Market Access	**0.25**	**2**

Enforcement		
21. Physical counterfeiting rates	0.01[45]	
22. Software piracy rates	0.26[46]	
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	
Total Score—Enforcement	**1.02**	**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	**12.4**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• New trademark law introduces some improvement to registration and enforcement • Proposed amendments to the copyright law (if adopted) increase penalties, extend copyright protection to live broadcasts, and strengthen enforcement of IP • New dedicated IP courts in major cities • Demonstrated ability to launch nationwide enforcement campaigns against counterfeiting and piracy activities in specific sectors • Increased government commitment to combatting trade secret theft	• Drug Registration Rules amendments would remove rudimentary patent linkage mechanism • Actual trade secret theft remains high, and legislation has not been updated • Policies requiring sharing of know-how in exchange for market access continue to be present • Inconsistent criminal prosecution against counterfeiters in many industry sectors • Non-Transparent Anti-Monopoly Law (AML) investigations targeting foreign businesses

Spotlight on the National IP Environment

Past Editions versus Current Scores

China's overall score has increased from 39% of the total possible score (with a score of 11.62) in the second edition of the GIPC Index to 40% (with a score of 11.9) in the third edition. The improvement in score results from increased attention to enforcement, including the creation of new specialized IP courts, 2014 campaigns against counterfeits and copyright infringing websites, and

increased government commitment to combat trade secret theft and infringement. Approval and implementation of the third draft of copyright amendments, which, among other elements, aim to raise damages for infringement and improve protection for audiovisual works, would also raise China's score in future editions of the GIPC Index.

Patents, Related Rights, and Limitations

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** As noted in last year's GIPC Index, the Drug Registration Rules (DRR) provide a basic process of patent linkage; however, 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). A commitment by the Chinese government to allow for the supplementation of data during patent examination proceedings was welcomed last year. Although it remains unclear whether this commitment is being implemented, the United States and China committed at the 2014 United States-China Joint Commission on Commerce and Trade (JCCT) plenary meeting to continue technical-level exchanges and engagement on specific cases. 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 very difficult to obtain. China is also undertaking a revision of its Drug Administration Law, with a draft expected to come out in 2015. This legislative amendment will provide an opportunity for China to embrace an innovation ecosystem for the life sciences sector.

5. **Legislative criteria and use of compulsory licensing of related products and technologies:** In 2012, China amended its patent law to bring measures on compulsory licensing largely in line with the TRIPS Agreement.

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); 10. Availability of frameworks that promote cooperative action against online piracy:** Legislation has not fully addressed key gaps relating to online copyright, and application is somewhat mixed. As noted in last year's GIPC Index, the "2012 Network Rules" Judicial Interpretation issued by the Supreme People's Court (which entered into force on January 2013) addressed some concerns with ambiguity in the existing legislative framework, including the knowledge required for ISPs to be held liable for infringement (via contributory infringement). The third draft of copyright amendments (still under discussion at the time of research) would more explicitly provide for joint liability for ISPs that facilitate infringement or fail to promptly remove infringing conduct after obtaining knowledge (or it is considered that they should have known) of infringing conduct. Additional concerns relate to new sharing services that provide for the download of digital books, textbooks, and journals via purchase with digital coins earned by uploading similar documents. In terms of application of the legislative framework, 2014 has seen increasing commitment by Chinese authorities to reducing online infringement, such as through a campaign run by the National Leading Group on the Fight against IPR Infringement, which targets shutdown of major illegal websites and warns infringing users. Websites themselves, such as Taobao.com, have also strengthened their efforts against copyright infringement, although key issues relating to ISPs' involvement in use of unlicensed and circumvented software, as well as infringing music and publishing, remain unaddressed.

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 some notorious piracy sites without permission. Proposed copyright amendments would include the introduction of greater limitations on use by state authorities, libraries, and news agencies; require that use of other persons' works not involve use of the main or substantive part of the work; and require users of software copyrights to obtain licenses from rights holders once they are made aware of the copyright. Additional amendments from the third draft of copyright amendments would reinforce elements of the Berne three-step test by requiring that fair use not interfere with the normal use of the work or rights holders' legitimate rights. The amendments would also provide protection to all audiovisual works instead of the more limited protection for cinematographic works; this would bring China in line with international practices. Upon approval and implementation of these amendments, China's score for this indicator would increase.

Trademarks, Related Rights, and Limitations

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:** As noted in last year's edition of the GIPC Index, 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. New trademark amendments from 2013, which came into effect in 2014, do not alter this position. In addition, while the new trademark law tries to improve the situation of protecting against 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/removal of an appeal of the opposition decision, and the fact that the appeals process can often involve considerable delays, may allow bad-faith applicants to not only freely use the mark but also threaten suits against legitimate brand owners.[47] Moreover, judicial authorities are less willing to pursue cases of bad faith once two similar marks have co-existed for a certain period. In practice, there are slight movements by judicial authorities toward allowing defense of marks with a degree of notoriety in China. In October 2014, China's Supreme People's Court issued draft "Provisions of the SPC on Certain Issues Related to Trials of Administrative Cases Involving the Grant and Confirmation of Trademark Rights," which, if implemented, would strengthen the ability of the courts in China to adjudicate trademark disputes, including addressing bad-faith trademarks. On an additional positive note, draft rules released by the Trademark Review and Adjudication Board (TRAB) in 2014 maintained current timelines for filing of arguments and evidence; an earlier draft had shortened the timelines, which would have prevented the filing of all relevant evidence, particularly from enterprises based outside China.

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** Often, online trading platforms in China require proof of infringement before a takedown will be considered. Alibaba Group, owner of Taobao.com, has suggested that it removed more than 1 million entries on the site in response to rights holder notices, although companies still document a major presence of counterfeit versions of their brands on the site. There continue to be reports of major distribution of counterfeit medicines via Internet pharmacies. The sheer number of listings offering counterfeit products at any given time makes takedown systems

inefficient, and new postings offering the same infringing goods are placed almost immediately after takedown. Criminal investigation remains very rare, courts remain reluctant to hold business-to-consumer sites liable for non-responsiveness to rights holder notices, and repeat and large-scale offenders face non-deterrent sentences. In 2014, the Supreme People's Court announced plans to issue a judicial interpretation addressing key concerns relating to online sale of counterfeit goods.

Trade Secrets and Market Access

19. **Protection of trade secrets:** Although the protection of trade secrets in China remains quite challenging, some positive developments have taken place over the past year. The newly amended Civil Procedure Law provides for preliminary injunctions in civil cases (Section 100). Some degree of application of these amendments is already visible. In late 2013, the Shanghai First Intermediate Court issued the first preliminary injunction in favor of a foreign company for trade secret theft (*Eli Lilly & the Company and Lilly China Research and Development Co., Ltd.*), and a court in Beijing ordered damages for trade secret theft (*Angel Chemical Technology Co., Ltd. v. Beijing Response-Chem Specialty Chemical Technologies*). In 2014, the government of China issued a circular aimed at combating IP rights infringement in which it called for the strengthening of administrative and judicial protection of trade secrets. However, legislation in this area needs to be updated, as trade secret law is contained in the Anti-Unfair Competition Law, which is the only IP-related major piece of legislation that has not been updated in China. China will reportedly conduct a legislative study of a revised law on trade secrets, but no concrete timeline has been announced.

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, China has changed direction somewhat; for instance, making commitments to delink innovation policies from government procurement preferences in 2011. However, significant restrictions remain for the procurement of information security products, which require IP rights within the Chinese territory, and the Chinese government has continued since 2011 to embed within a range of policy measures that require local ownership of IP to qualify for procurement and other forms of government support. The State Administration for Industry and Commerce (SAIC) in 2014 released for public comment long-awaited draft rules under the Anti-Monopoly Law to govern the abuse of IP. If implemented as drafted, the rules would regulate the legitimate exercise of IPR such that holding a dominant market position could suffice to qualify as a violation of the AML; and they would interfere significantly with the ordinary and legitimate exercise of IPR in ways that fail to protect or stimulate innovation. Similarly, forcing companies with a dominant market position to license "essential IP" to competitors and others per Article 7 is a form of appropriation of IPRs, and undermines the very essence of IPRs – that is, the right to exclude others. If claims of IPR abuse involving legitimate exercise of IPR are given credence, Chinese innovation and competition could be seriously impacted. In addition, government investigations into foreign companies in 2013–14 under the auspices of violations of Chinese AML, as well as court-imposed rulings on royalty caps (such as Huawei v. InterDigital), reflect a trend among Chinese authorities to force foreign companies to license their IP rights below market value and under highly non-transparent conditions. Moreover, China has increasingly used merger reviews to deem patents as standard-essential patents (SEPs), effectively extracting unwarranted concessions from foreign companies in the domain of IP in exchange for engaging in corporate M&A activity. At the end of 2014, China made commitments at the United States-China JCCT to improve the transparency and due process accorded to U.S. companies in AML enforcement that, if implemented fully, could represent a step forward in limiting the

potential for government abuse, both administrative and judicial, in this area.

Enforcement

23. **Civil and procedural remedies:** Rights holders consider available civil remedies in China to be limited and non-deterrent, and the remedy process cumbersome. Courts are typically given only 48 hours to determine whether an injunction against the export of infringing goods can be secured. Draft copyright amendments would raise the statutory maximum for administrative fines to five times (as opposed to the existing three times) the illegal gains where damages are greater than RMB 40,000. The draft amendments also give law enforcement greater powers to seize illegal goods. Practically, China has increased transparency by requiring all judicial opinions to be published online within seven days (*Supreme People's Court Decision on Publishing Written Judgment of People's Court on the Internet,* issued in January 2014) and administrative sanctions against IP piracy to be disclosed to the public, except for business confidential and private information (*State Council Opinion on Disclosure of Information on Administrative Sanctions against IP Piracy,* issued in November 2013), although the infrastructure and resources to accomplish this are still needed. In addition, in late 2014, China initiated the first of three new specialized IP Courts in Beijing; the other two IP Courts are to be set up in Shanghai and Guangzhou. The intention of the new courts is to establish a more uniform and dedicated approach to prosecution of IP rights cases in China.

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** Proposed copyright amendments would introduce heightened statutory damages and provide punitive damages to intentional infringers. The third draft of copyright amendments proposes to provide for double statutory damages, which could be increased up to threefold for repeat infringers. Additionally, damage calculations can be awarded based on actual loss suffered by rights holders or based on the unlawful gain by infringers. The new trademark law, which came into effect in May 2014, increases statutory damages sixfold and attaches heavier penalties to multiple infringements. Additionally, the new trademark law introduces a new method of calculation of damages based on 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.

25. **Criminal standards, including minimum imprisonment and minimum fines:** Key legislative and enforcement gaps remain. Administrative sanctions are typically weak, and criminal penalties for infringement are not consistent enough to deter ongoing infringement. 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. However, several government campaigns dedicated to strengthening policing and prosecution of counterfeiting and piracy have taken place. For example, SAIC has overseen campaigns targeting online sales of counterfeit goods (Notice No. 60) and digital piracy (through the annual Red Shield and Internet Sword Special Campaign, No. 116). Recent prosecution has resulted in conviction and sentencing of the founder of 7yin online services (15 months imprisonment, fine of RMB 50,000, and confiscation of illegal income of RMB 100,000). Additionally, Baidu and QVOD were convicted of hosting P2P networks with copyright infringing material. The services were ordered to cease facilitation of copyright infringing material and were charged with the maximum administrative fine (RMB 250,000). The CFDA has committed to placing electronic drug monitoring codes on essential drugs, allowing for the tracing of legitimate products and verification of registered goods. Additionally, the CFDA undertook a five-month crackdown against online sales of counterfeit drugs, in which the government required that all major search engines filter out posts relating to fake drug sales. However, there still remains a need to monitor local chemical companies that produce and sell bulk chemicals without registration.

[ 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. Copyright (and related rights) term of protection	0.84[48]	
9. Legal measures which 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 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[49]	
22. Software piracy rates	0.48[50]	
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	**2.58**	**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	**13.67**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Basic patentability framework
- Policy present 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 Areas of Weakness

- Key pharmaceutical IP rights missing or with significant holes in application
- Uncertainty in RDP scope for biologics and actual implementation across the board
- Failure to implement FTA provisions relating to notice and takedown, DRM or statutory damages for copyright infringement
- Lack of clarity on copyright exceptions in legislation and application
- Prosecution in online copyright environment weak
- Gaps in legal protection for unregistered marks
- Delay in redress of trademark infringement
- High digital and physical piracy rates
- Delayed, inadequate prosecution and non-deterrent sentencing
- Mixed application of border measures

Spotlight on the National IP Environment

Past Editions versus Current Scores

Colombia's score remains essentially the same as in the second edition of the GIPC Index, at 46% of the overall score (with a score of 13.66 in the second edition and 13.67 in the third edition). Key remaining gaps in IP protection include significant and persistent holes in implementation in regard to Colombia's FTA commitments, uncertainty in the scope and implementation of RDP for biopharmaceuticals, and poor recourse through the courts. Although promising legislation has been presented throughout 2013 and 2014, constitutional challenges and lack of progress across the board have resulted in Colombia remaining in the status quo for the third edition of the GIPC Index.

Areas of Note

In 2014, Colombia issued Decree 1782, which establishes the marketing approval evaluation requirements for all biologic medicines. As part of the decree, Colombia has established an unprecedented abbreviated pathway for registration of non-comparable products, which is inconsistent with World Health Organization (WHO) or U.S. Food and Drug Administration (FDA) standards and could result in the approval of medicines that are not safe and/or effective. In contrast to the Full Dossier Route (for originators) and the Comparability pathway (pathway for Biosimilars) found in WHO guidelines, the "Abbreviated Comparability Pathway" as described in the decree allows for summary approval of non-comparable products and does not provide adequate controls or any clarity regarding how the safety or efficacy of a product approved via this pathway will be evaluated and ensured. Furthermore, per the decree, a product approved via the "Abbreviated Comparability Pathway" will use the same non-proprietary name as the innovator, despite the fact that the proposed similar biologic product is not the same as the innovative product. Assigning identical non-proprietary names to products that are not the same could result in inadvertent substitution of the products and would make it difficult to quickly trace and attribute adverse events to the correct product.

Patents, Related Rights, and Limitations

7. **Regulatory data protection term:** Decree 2085 of 2002 provides for a five-year period of RDP for both pharmaceuticals and agrochemicals. However, some uncertainty exists as to the application of RDP to biologics. Decree 1782, signed in September 2014, which modifies the registration process for biological medicines, does not discuss RDP for biologics. As a result, in regard to RDP, the legislation introduces ambiguity as to whether five years of protection will in fact be afforded to biologics under the new regime. Continued lack of clarification or restriction of RDP to chemical entities only may result in Colombia's score for this indicator dropping by 0.25 in future editions of the Index.

Copyrights, Related Rights, and Limitations

11. **Scope of limitations and exceptions to copyrights and related rights:** Colombia's exceptions for copyright works are not in line with the Berne three-step test. An attempt to introduce legislation (Bill 1520, known as "Ley Lleras 2"), which would have included provisions on fair use as well as other key elements missing from Colombia's copyright framework, was struck down in 2013 by the Constitutional Court on procedural grounds. No progress was made on a new bill in 2014.

12. **Digital rights management legislation:** At present, DRM measures are mentioned only in the Criminal Code, and violation of the measures is punishable only by a fine. No other substantive legislation provides for DRM, and widespread music and book piracy suggests that enforcement is lacking. The proposed Law 306 contains an article aimed at implementing Colombia's FTA obligations that would introduce protection against the circumvention of technological protection measures (TPMs) as well as the manufacture, import, distribution, and sale of circumvention devices. The draft bill underwent a consultation period in 2014, but was not yet

approved at the time of research. On approval and implementation of this bill, Colombia's score for this indicator would increase in future editions of the GIPC Index.

Enforcement

21. **Physical counterfeiting rates; 22. Software piracy rates:** While Colombia has taken steps to better protect IP rights by increasing penalties for trademark violations, counterfeit goods distribution through shopping areas such as San Andresitos remains a major and growing concern. Additionally, online piracy and software piracy remains very high, even though Colombia has one of the lowest software piracy rates in Latin America.

23. **Civil and procedural remedies; 25. Criminal standards, including minimum imprisonment and minimum fines:** As noted in the previous version of the GIPC Index, Andean law and the Colombian Criminal Code generally provide for civil remedies for infringement, including banning sale of infringing goods or cessation of infringing acts, damages, and destruction of goods, as well as criminal penalties. In 2014, there were a handful of instances in which courts handed down sentences for IP rights violations, for instance in relation to patent trolls (*Disenos y Sistemas v. Jairo Cabezas*). In addition, efforts were made to streamline administrative and civil procedures for litigation. However, in general, such procedures fail to provide adequate due process guarantees for rights holders, and litigation can last nearly a decade. Moreover, on the whole, prosecution is weak and sentencing, when it occurs, 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 United States-Colombia FTA, which entered into force in May 2012 and includes substantial provisions on IP rights (Chapter 16 of the agreement).

[ France]

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. Copyright (and related rights) term of protection	0.74[51]	
9. Legal measures which 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 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[52]	
22. Software piracy rates	0.64[53]	
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	**5.42**	**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	**27.16**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Strong and sophisticated national IP environment • Sector-specific IP rights, such as RDP and patent term restoration, in place • Effective trademark protection • Strong civil remedies and criminal penalties in place • Commitment to and implementation of international treaties	• Campaign for plain packaging announced in September 2014—upcoming proposed legislation by Ministry of Health • Online copyright infringement still a concern; HADOPI considering introduction of new measures • Although a slight drop in recent BSA survey, still high levels of software piracy in comparison with other high-income OECD economies

Spotlight on the National IP Environment

Past Editions versus Current Scores

France's overall score remains roughly the same as in the previous version of the GIPC Index, at 91% of the total possible score (with a score of 27.16). The consistent strong score is a result of France's advanced national IP framework and robust legal institutions. Nevertheless, there are areas of concern. For example, in September 2014, the French Ministry of Health published an action plan (*Programme national de réduction du tabagisme*) to reduce smoking and use of tobacco by 10% within the next

five years. The action plan includes plain packaging for tobacco products, with legislation set to be introduced by the Ministry of Health. Moreover, infringement of copyright (particularly online) is still a challenge to rights holders. Further, in the latest BSA survey of software piracy rates, the estimated rate of pirated software on the French market was 36%, a relatively high figure for a high-income OECD economy.

Patents, Related Rights, and Limitations

7. **Regulatory data protection term:** RDP legislation in the European Union is provided by Article 10 of Directive 2004/27/EC (amending 2001/83/EC). The EU's basic term of protection is guided by an 8+2 formula. According to this formula, new pharmaceutical products are entitled to eight years data exclusivity and two years of marketing exclusivity (in which generic companies would be allowed to submit bio-equivalence tests).[54] Although the term of protection for RDP is not under review in the European Union, since 2010, concerns have been raised over the disclosure policies by the European Medicines Agency (EMA). Up until 2010, EMA's disclosure policies and the "nondisclosure" element of the EU's RDP regime was clear and undisputed. Guided by Regulation 1049 of 2001 (regarding public access to European Parliament, Council, and Commission documents), the EMA did not release to the public documents contained in or as part of a marketing authorization application, as these were judged as being of a confidential nature. This changed in 2010, when the EMA shifted its position following a ruling by the European Ombudsman and began actively developing new policies and guidelines for the release of clinical trial data contained in marketing authorization applications. The agency released its final policy guidelines in October 2014. These guidelines include a number of important potential safeguards to stakeholders that were agreed on, including limitation of access (through on-screen access versus actual document), redacting, and a period of consultation and potential judicial intervention in case of disagreement. These are all important elements that have now been better defined than in previous versions of the guidelines. Nevertheless, concerns remain over definitions of commercially confidential information (CCI), the implementation and functioning of these guidelines, and as potential recourse mechanisms in instances of misuse of accessed data. It should also be noted that, while other stringent drug regulatory authority (including the U.S. FDA, the TGA in Australia, and Health Canada) are considering and consulting on the issue of increasing clinical trial transparency, no economy is seeking to emulate EMA's policy in full. EMA's proposed policies also stand in stark contrast to those initiatives taken by the private sector and research-based biopharmaceutical manufacturers. Beginning in 2014, members of European Federation of Pharmaceutical Industries and Associations (EFPIA) and the Pharmaceutical Research Manufacturers of America (PhRMA) have committed to increasing transparency and release of information and data relating to their clinical research. These initiatives include enhanced data sharing with scientific researchers, making publicly available synopses of clinical study reports, and a renewed commitment to seek publication of all clinical research results regardless of the research outcome.

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); 10. Availability of frameworks that promote cooperative action against online piracy:** As noted in previous editions of the GIPC Index, the French government in 2009 introduced a new set of anti-piracy laws centered on a graduated "three-strikes" response scheme that could lead to the disconnection of Internet access for alleged copyright infringers and the creation of an enforcement agency, *Haute Autorité pour la Diffusion des Oeuvres et la Protection des Droits sur Internet* (HADOPI). 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 economies. Despite these impressive accomplishments, in 2013, the French government announced significant alterations to these laws, with the threat of suspended Internet access replaced by a fining system and the disbandment of the enforcement agency. In May 2014, the French government published a roadmap of proposals for addressing the issue of online piracy and counterfeiting. The document (*Outils opérationnels de prévention et de lutte contre la contrefaçon en ligne*) includes a number of measures relating to online infringement, most notably including the creation of a public list containing websites conducting major copyright infringement, engagement and involvement of online payment providers and other relevant stakeholders through the signature of a proposed public charter, and the creation of an extended takedown notice. Of particular note is that the latter would require not only the initial removal of infringements, but also sustained monitoring to ensure continued compliance for a fixed period. Although the proposals are still at a developmental stage and operational responsibilities are yet to be fully determined, successful introduction and enforcement would nevertheless strengthen existing legal mechanisms.

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** Building on previous announcements in September 2014, the French Ministry of Health published an action plan (Programme national de réduction du tabagisme) to reduce smoking and use of tobacco by 10% within the next five years. The action plan includes plain packaging for tobacco products. Specifically, the plan calls for standardized cigarette packaging using the same shape, size, color, and typography for all packages. Formal legislation is set to be introduced by the Ministry of Health during the current parliamentary session. Like similar legislation introduced in Australia in 2012, the introduction of plain packaging in France would significantly restrict the use of brands, trademarks, and trade dress 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 France's score in this indicator from 1 to 0.

Membership and Ratification of International Treaties

France has signed and acceded to all 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. The European Union has agreed in principle on a major trade agreement with Canada and is in negotiations with the United States on a trade agreement.

[ Germany]

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. Copyright (and related rights) term of protection	0.63[55]	
9. Legal measures which 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 requiring proprietary software used on government ICT systems to be licensed software	1	
Total Score—Copyrights	**5.38**	**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	0.89[56]	
22. Software piracy rates	0.76[57]	
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	1	
26. Effective border measures	1	
Total Score—Enforcement	**5.4**	**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	0.5	
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	1	
Total Score—Treaties	**3.5**	**4**
Total Overall Score	**27.28**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Advanced and sophisticated national IP environment • Sector-specific IP rights, such as RDP and patent term restoration, in place • Broad online copyright protection • Legal measures to address unauthorized use of trademarks • Efficient and timely application of civil remedies and criminal penalties	• Uncertainty over RDP protection under EMA's new disclosure policy • Damages awards historically not very high • Patent Law Treaty signed but not ratified

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. However, the EU's system of patent enforcement through member state courts (including Germany) is generally considered by major stakeholders as providing an effective and transparent resolution

system. Germany has four courts that specialize in patent infringement: Dusseldorf, Mannheim, Hamburg, and Munich. These courts are all highly regarded and handle an estimated 1,000 cases per year. Preliminary injunctions can be granted in Germany within a few days or weeks, and a decision on the merits can be made within 6 to 12 months.

7. **Regulatory data protection term:** RDP legislation in the European Union is provided by Article 10 of Directive 2004/27/EC (amending 2001/83/EC). The EU's basic term of protection is guided by an 8+2 formula. According to this formula, new pharmaceutical products are entitled to eight years data exclusivity and two years of marketing exclusivity (in which generic companies would be allowed to submit bio-equivalence tests). Although the term of protection for RDP is not under review in the European Union, since 2010 concerns have been raised over the disclosure policies by the EMA. Up until 2010, EMA's disclosure policies and the "nondisclosure" element of the EU's RDP regime was clear and undisputed. Guided by Regulation 1049 of 2001 (regarding public access to European Parliament, Council, and Commission documents), the EMA did not release to the public documents contained in or as part of a marketing authorization application, as these were judged as being of a confidential nature. This changed in 2010, when the EMA shifted its position following a ruling by the European Ombudsman and began actively developing new policies and guidelines for the release of clinical trial data contained in marketing authorization applications. The agency released its final policy guidelines in October 2014. These guidelines include a number of important potential safeguards to stakeholders that have been agreed on, including: limitation of access (through on-screen access versus actual document), redacting, and a period of consultation and potential judicial intervention in case of disagreement. These are all important elements that have now been better defined than in previous versions of the guidelines. Nevertheless, concerns remain over definitions of commercially confidential information (CCI), the implementation and functioning of these guidelines, and potential recourse mechanisms in instances of misuse of accessed data. It should also be noted that, while other stringent drug regulatory authority (including the U.S. FDA, TGA in Australia, and Health Canada) are considering and consulting on the issue of increasing clinical trial transparency, no economy is seeking to emulate EMA's policy in full. EMA's proposed policies also stand in stark contrast to those initiatives taken by the private sector and research-based biopharmaceutical manufacturers. Beginning in 2014, members of the European and American biopharmaceutical trade associations EFPIA and PhRMA have committed to increasing transparency and release of information and data relating to their clinical research. These initiatives include enhanced data sharing with scientific researchers, making publicly available synopses of clinical study reports, and a renewed commitment to seek publication of all clinical research results regardless of the research outcome.

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); 10. Availability of frameworks that promote cooperative action against online piracy:** The protection of online content in Germany is relatively strong. The Copyright Act provides authors with exclusive rights of reproduction, distribution, and exhibition. With regard to online infringement, third parties (such as ISPs), and specific rights, Article 101 gives rights holders the option of requesting an ISP to disclose the name and address of a subscriber suspected of infringing copyright. Although a court order is generally required for these details to be shared, German legal analysis suggests that most courts rule in favor of such requests. As in other European Union member states, German law has implemented the E-Commerce Regulations 2002 (European Commission Directive) and applicable

requirements of expeditious removal of any infringing material once an ISP has been notified or has received knowledge of any illegal activity. This is primarily through Articles 8–10 of the Telemedia Act. German case law has a long-established concept of *Stoererhaftung* (Breach of Duty of Care), which requires of third parties (such as hosting providers) not only expeditious takedown upon notification, but also prevention of repetition of the specific infringement and other clearly recognizable infringements of the same form. While the case law is still evolving, a number of prominent cases have established these principles. They include, for instance, *Atari v. Rapidshare,* 2012, where the Federal Court of Justice ruled that Rapidshare (the host company) had a duty of care that extended to ensure that similar uploads of pirated files did not continue. Similarly, in a 2007 case involving eBay and the sale of counterfeit Rolex watches, the court ruled that the auction site had a duty of care not only for removing the infringing advertisements, but also to take measures to prevent future offers of infringement relating to Rolex.

Trademarks, Related Rights, and Limitations

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** Mechanisms against the online sale of counterfeit and infringing goods are available in Germany under the Trademarks Act and Telemedia Act through contributory or secondary infringement as well as established case law. Specifically, auction sites can be found to have had secondary or contributory liability in cases of infringement. As mentioned above, in a number of cases involving eBay, German courts have confirmed that the auction site had a duty to take effective measures to prevent the sale of counterfeit Rolex watches sold on its platform, and found eBay liable for trademark infringement, as it was in a position to prevent the infringement. While on the one hand the case law is clear that there is no blanket responsibility for monitoring all potential infringement, on the other hand relevant case law states that online merchants "must not only immediately disable access to the actual [infringing] offer, but also take precautions to ensure that as far as possible no further similar trademark infringements [with core similarities] occur."

Enforcement

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** Germany does not have statutory damages in place. There are, however, well-established mechanisms in place to calculate and determine the amount of damages generated by infringement. These mechanisms include a calculation based on profits obtained by the infringer, losses actually suffered, and hypothetical royalties due. Historically, German damage awards have not been high. Unlike other jurisdictions, there are no punitive damages, and damage assessments are traditionally not intended to punish alleged infringers. In addition, German courts tend to place high proof thresholds for the awards of loss of profits, with rights holders obliged to present clear evidence that profits lost were linked to the alleged infringement.

Membership and Ratification of International Treaties

Germany has signed and acceded to all the international treaties included in the GIPC Index, save for the Patent Law Treaty, which Germany has signed but not acceded to. Furthermore, the European Union has concluded and ratified several FTAs with substantive IP provisions, such as the EU-Korea Trade Agreement of 2010. The European Union has agreed in principle on a major trade agreement with Canada and is in negotiations with the United States on a trade agreement.

[ 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. Copyright (and related rights) term of protection	0.47[59]	
9. Legal measures which 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 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	0.25	
Total Score—Trade Secrets and Market Access	**0.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.36[60]	
22. Software piracy rates	0.4[61]	
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	**1.51**	**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	**7.23**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Potential fundamental change in India's IP framework announced by new government
- New Preferential Market Access (PMA) exempts private sector from procurement requirements
- Basic IP framework introduced in mid-2000s, including 20-year patent protection
- *Ex officio* powers introduced in 2007 for the deputy and assistant commissioners of customs

Key Areas of Weakness

- Patentability requirements outside international standards
- RDP and patent term restoration not available
- History of using compulsory licensing for commercial and non-emergency situations
- Limited framework for addressing online piracy and circumvention devices
- High levels of software piracy, music piracy, and counterfeit goods
- Market access barriers
- 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

Past Editions versus Current Scores

With the recent election of Prime Minister Modi, announcements by the new administration that India will reform its national IP environment, and the launch of a new national IP rights strategy, there are reasons to be optimistic that the new government will take steps to strengthen India's IP environment. The sentiments expressed in the new draft National IP Rights Strategy document that the "objective of the IPR strategy is to transform India into an innovative economy as would reflect in high rankings in appropriate development and innovation indices" is a laudable and achievable goal. New bilateral dialogue mechanisms between the United States and India—including the high-level IP Working Group of the Trade Policy Forum—have potential to elicit positive changes to India's IP system. In terms of the GIPC Index, India's overall score has improved from previous editions, rising to 24% of the total possible score (with a score of 7.23). This is primarily a result of the decision to revise the Preferential Market Access policy and exempt the private sector from this requirement. This is a positive step and has been recognized by the international business community. Nevertheless, there remain a number of concerns: India's patentability requirements remain outside established international best practices; there is a lack of specific IP rights for the life sciences sector; the enforcement environment remains challenging, with corresponding high levels of physical and online piracy persisting; and, finally, 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.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** As noted in last year's edition of the GIPC Index, 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 the Supreme Court of India ruled 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. The new *Guidelines for Examination of Patent Applications in the Field of Pharmaceuticals* have not done anything fundamentally to address these challenges of interpreting Section 3(d). In 2014, Indian authorities did take some positive steps to protect rights holders. For instance, the Indian Intellectual Property Appellate Board's decision to stay the Indian Patent Office's 2013 order revoking Pfizer's patent on Detrol was a positive development.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** While no additional compulsory licenses for biopharmaceuticals were issued by Indian authorities in 2014, in two negative developments, the Bombay

High Court in July 2014 upheld the compulsory license granted to Natco for the sale of Bayer's cancer drug Nexavar, and the Supreme Court of India rejected Bayer's appeal in December 2014. Furthermore, early in 2014, a panel was appointed by the Indian government to examine the issuing of compulsory licenses for over 20 different medicines from a broad range of therapeutic areas. Reports suggest that these medicines were from across therapeutic areas and range from treatments for diabetes to HIV/AIDS. Although no public announcement has been made regarding the recommendations of this committee, news reports suggest that the Department of Industrial Policy and Promotion (DIPP) received a recommendation to support the issuing of compulsory licenses for three oncology drugs. At the time of research, it seems that the DIPP has pared down this number to one drug and is currently considering the issue. Any further issuance of compulsory licenses would be a step back for India's patent environment and a further erosion of innovators' rights.

Trade Secrets and Market Access

20. **Barriers to market access:** As noted in previous editions, India has in place a number of policies making market access contingent on the sharing or divulging of IP. 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. In a positive step, working in dialogue with a variety of stakeholders, including the international business community, the Indian government earlier in 2014 announced a revision to its Preferential Market Access (PMA) policy. Originally, the PMA policy had included procurement by private-sector entities as well the public sector. However, with the new policy in place, the private sector has been exempt from the policy.

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 2015.

[ Indonesia]

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. Copyright (and related rights) term of protection	0.52[62]	
9. Legal measures which 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	0.25	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total Score—Copyrights	**1.77**	**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[63]	
22. Software piracy rates	0.16[64]	
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	**1.34**	**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	**8.61**	**30**

Strengths and Weaknesses

Key Areas of Strength

- New Copyright Act passed in September 2014—includes introduction of rudimentary notification system, potential blocking of infringing websites, and limited protection for TPMs
- Basic IP framework in place, including 20-year patent term of protection
- FTA obligation for legal government software
- Basic trademark exclusive rights available
- Major auction sites provide notice and takedown for online counterfeiting

Key Areas of Weakness

- Persistent high levels of piracy
- Software piracy rates in BSA 2014 survey at 84%—highest of all economies included in GIPC Index
- History of pharmaceutical compulsory licensing
- No patent term restoration or RDP available
- Limited protection for unregistered marks
- No specific coverage of trademark dilution or cybersquatting
- Market access conditional on local manufacturing requirement or licensing IP
- Rudimentary judiciary, non-deterrent/ transparent penalties

Spotlight on the National IP Environment

Past Editions versus Current Scores

Indonesia's overall score has increased to 28% of the GIPC Index's total possible score (with a score of 8.61). This is primarily the result of passage of a new copyright law. A number of steps—including the introduction of a notification system and introduction of basic TPMs—were taken to partially address rights holders concerns with persistent high levels of copyright infringement. Nevertheless, challenges remain, particularly, in life sciences–related sectors, where Indonesia does not have in place key IP rights and has a history of granting "government use licenses" (the equivalent of compulsory licenses).

Patents, Related Rights, and Limitations

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** The Indonesian government has issued nine "government use" licenses, which remain in force in 2014, 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. As noted in previous editions of the GIPC Index, 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 on 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); 10. Availability of frameworks that promote cooperative action against online piracy; 12. Digital rights management legislation:** A new Indonesian Copyright Act was passed in September 2014 with a number of potentially important changes relating to the provision and enforcement of copyright. The new act introduced a new ministerial notification system on online infringement that would give the government the power to block infringing websites. The act also introduced a basic form of DRM legislation that provides protection against the circumvention of TPMs. While there are notable holes in this new legislation (for instance, the trafficking and manufacture of circumvention devices does not appear to be covered) and the exact impact of these measures will depend on subsequent regulations and actual application, together they are a positive step toward remedying what is a very challenging environment for copyright holders. The copyright term of protection for rights holders was also extended to life of the author and 70 years.

Trademarks, Related Rights, and Limitations

Proposed amendments to the Law on Marks have been put forward. At the time of research, no new laws had been enacted. The proposed amendments are significant in scope and would potentially weaken Indonesia's mechanisms for the administration and registration of trademarks. Specifically, under the proposed amendments, the Indonesian trademarks office (Indonesian Directorate General of Intellectual Property Rights) would change the review and opposition period. After an initial review, applications would be published and a three-month period of potential opposition filing would begin. The purpose is to speed up the processing time by combining substantive examination with any potential opposition filing. However, these reforms raise potential concerns for rights holders, as it is not clear what recourse mechanism (if any) a rights holder would have to oppose a bad-faith application subsequent to the initial three-month period of publication. As was noted in previous editions of the GIPC Index, given the prevalence of bad-faith filings (particularly involving

international marks) in Indonesia, it would be regrettable if the registration process for potential pirates is potentially made less rigorous. On a positive note, the proposed amendments would introduce higher criminal fines.

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 before initiating actions. Moreover, local legal analysis suggests that Indonesia's first-to-file system has been widely abused by local operators, 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. As mentioned in previous editions, 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. In another more recent judgment (*DKSH Malaysia v. Muktar*), the Supreme Court rejected a claim for well-known status by DKSH on the basis that the trademark in question had not been actively promoted in Indonesia. While the Court did find that there was confusion and similarity between DKSH's mark and that of Muktar (the defendant), there was no judgment of bad-faith registration, as the mark was not viewed as sufficiently well-known in Indonesia; this despite the fact the mark had been registered and in use since the 1980s in neighboring Malaysia, Singapore, and Thailand. The judgment confirms that the definition and criteria relating to well-known marks is still open to interpretation and will vary on a case-to-case basis.

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 to and has ratified the WIPO Internet Treaties.

[Japan]

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. Copyright (and related rights) term of protection	0.53[65]	
9. Legal measures which 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 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[66]	
22. Software piracy rates	0.81[67]	
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	**5.18**	**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	**23.26**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Robust and sophisticated national IP framework in place
- Life-sciences IP rights in place and enforced
- Strong protection for CIIs
- Effective patent enforcement and resolution process through courts
- Trademark exclusive rights in place and generally enforced
- Industry-based standards and policy on notice and takedown are in place
- Trade secret enforcement
- *Ex officio* customs authority and in-transit detainment present

Key Areas of Weakness

- Accession to international IP-specific treaties and FTAs lacking—accession to TPP would change this
- Limited notice and takedown mechanism in place
- Copyright damages awarded relatively low

Spotlight on the National IP Environment

Past Editions versus Current Scores

Japan's overall score remains roughly the same as in previous editions of the GIPC Index, with a small increase to 78% of the GIPC Index's total possible score (with a score of 23.26). This change in score is a result of a slight decrease in software piracy as calculated in the BSA's 2014 survey. Overall, Japan maintains a strong national IP enforcement, with a sophisticated legal framework and a strong enforcement environment, particularly with regard to the prevention of counterfeit goods.

Other Areas of Note

While not directly affecting scores on related indicators, wider reforms have taken place during 2014 with regard to the protection of both patent and trademark rights. On patent rights, the 2014 patent amendments have reintroduced a period of post-grant opposition, while the Japan Patent Office (JPO) has set a target of reducing the patent examination period to 14 months or less by 2023. The Trademark Act was also revised and now, under the definition of trademark, includes combinations of colors, letters, signs, and three-dimensional shapes. Furthermore, the implementation of the TPP treaty would improve Japan's score in Category 2: Copyrights, Related Rights, and Limitations and Category 6: Membership and Ratification of International Treaties.

Patents, Related Rights, and Limitations

3. **Patentability of computer-implemented inventions:** As noted in previous editions of the GIPC Index, 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.

7. **Regulatory data protection term:** Like most other developed OECD economies included in the GIPC Index, Japan provides a period of protection for submitted clinical test data. Since 2007, through the Pharmaceutical and Food Safety Bureau (PFSB) Notification No. 0401001, regulatory authorities in Japan have provided a data protection term of eight years for medicinal products with new active ingredients.

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); 10. Availability of frameworks that promote cooperative action against online piracy:** As noted in previous editions of the GIPC Index, with the exception of a notice and takedown framework, Japan has in place relatively robust mechanisms for the protection for copyrighted materials online. 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 provides for a limited notice and takedown mechanism. However, unlike many other economies' approach, Law No. 137 maintains that ISPs must inform the alleged infringer of the allegation of infringement before any takedown of the infringing material. Upon 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. In 2014, with the launch of the Manga-Anime Guardians Project (MAGP), there was increased enforcement activity with regard to the online infringement of Manga and Anime comic books and videos. As part of a broad coalition of industry and content creators, the Japanese Ministry of Economy, Trade, and Industry will "monitor and remove illegally uploaded copies of around 580 works" of both Anime and Manga content. This enforcement effort will be coupled with a redirection

of users to legally available content through a new, specially designed website. Given the estimated total damage to Japan from piracy—$20 billion—and the popularity of both Manga and Anime, this is an important initiative.

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 TPP Agreement. Japan is a signatory to 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. Copyright (and related rights) term of protection	0.53[68]	
9. Legal measures which 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	0.5	
12. Digital rights management legislation	0.75	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total Score—Copyrights	**3.78**	**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	0.5	
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[69]	
22. Software piracy rates	0.46[70]	
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	**2.34**	**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	**14.62**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Intensified enforcement against online piracy in 2014 • Strong package of copyright reforms passed in 2012—broadly in line with international best practices • Statutory civil damages introduced in the 2012 amendments to the Copyright Act • Acceded to the WIPO Internet Treaties • Five-year RDP term in place	• Despite intensifying efforts, still high levels of counterfeiting, software, and music piracy • *De facto* RDP full term of protection is not offered to new products • Patent term restoration not allowed • *Ex officio* powers not used by customs officials • Accession to international IP-specific treaties and FTAs lacking

Spotlight on the National IP Environment

Past Editions versus Current Scores

Malaysia's overall score has increased from 48% of the total possible score (with a score of 14.36) in past editions of the GIPC Index to 49% in the current edition (with a score of 14.62). This is due primarily to intensifying enforcement efforts against online copyright infringement. While a significant and positive step, there nevertheless remain a number of challenges, particularly with regard to the availability of physical and online pirated goods.

Patents, Related Rights, and Limitations

7. **Regulatory data protection term:** As noted in previous editions of the GIPC Index, 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

9. **Legal measures that provide necessary exclusive rights that prevent infringement of copyrights and related rights (including Web hosting, streaming, and linking):** As noted in previous editions of the GIPC Index, Malaysia has embarked on a number of important reform initiatives to enhance existing mechanisms for the protection of copyright and to introduce new laws, particularly to protect against digital and online piracy. The 2012 Copyright Act amendments were an especially significant legislative milestone, as they fundamentally reshaped Malaysia's copyright environment, and have been discussed in detail in previous editions of the GIPC Index. As a result of this new legislation and continued enforcement efforts, the national IP environment and that related to copyright and protection of content in Malaysia has improved over the past few years. This has continued into 2014. For example, during the past year, raids and arrests have continued to be carried out, in particular against software pirates, by the Enforcement Division of the Ministry of Domestic Trades, and Consumerism (MDTCC) and other branches of Malaysia's enforcement authorities. This builds on the 2013 efforts by the MDTCC, the arrest of the suspected operator of the websites jiwang.org and syok.org (one of the largest providers of online pirated materials in Malaysia), and the launch of the "Ops Semak Tulen" anti-software piracy campaign. The latter, through a government watch list, monitors the software at 20,000 businesses in Malaysia.

Trademarks, Related Rights, and Limitations

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** Malaysia provides a basic legislative framework for trademark rights. The Trademark Act provides rights holders with exclusive rights of use of the registered trademark. In addition, the 2011 Trade Descriptions Act provides criminal remedies in relation to "false trade description in relation to trademark," including minimum fines and potential imprisonment. Domain name disputes are guided by the Domain Name Dispute Resolution Policy and can go through a standard court procedure or the Domain Name Dispute Resolution Proceeding, in which case the proceedings will take place before the Regional Centre for Arbitration Kuala Lumpur (KLRCA). Local legal analysis suggests that rights holders have a good chance of being successful before the KLRCA. Since its inception, the KLRCA has heard 23 disputes, of which 14 have been decided in favor of the original owner of the related trademark. Malaysia is currently reforming its Trademark Office and amending the Trademark Act as part of the accession process to the Madrid Protocol. As a member of the Association of Southeast Asian Nations (ASEAN), Malaysia has committed to accede to this treaty by 2015. The Minister of Domestic Trade, Co-operatives, and Consumerism stated earlier in 2014 that it was his view that Malaysia should join and accede to the Madrid Protocol according to this timetable. Accession to this treaty would be an important step in helping streamline trademark applications for rights holders and would allow Malaysia to fully adopt international best practices.

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 TPP 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. Copyright (and related rights) term of protection	0.79[71]	
9. Legal measures which 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 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[72]	
22. Software piracy rates	0.46[73]	
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	0.75	
26. Effective border measures	0	
Total Score—Enforcement	**3.51**	**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	**14.55**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Fair and transparent use of compulsory licensing
- Validation of digital copyright in recent amendments to broadcast retransmission rules
- Use of licensed software in government agencies
- Pre-established damages for copyright infringement
- Signatory to WIPO Internet Treaties

Key Areas of Weakness

- Ambiguity surrounding RDP
- Lack of patent term restoration for pharmaceutical patents
- Insufficient prosecution of trade secret violations
- Lack of sufficient framework to promote action against online piracy
- No trademark opposition before registration
- Exclusive rights lacking for well-known unregistered marks
- Gaps in application of civil remedies and criminal penalties
- Ineffective border measures

Spotlight on the National IP Environment

Past Editions versus Current Scores

Mexico's score rose slightly from 48% of the overall score (with a score of 14.27) in the second edition of the GIPC Index to 49% in the third edition (with a score of 14.55). Although Mexico has not experienced sufficient progress on key areas of patent enforcement, RDP, and trade secrets, it has seen some movement forward in terms of copyright reform as well as increased public-private initiatives vis-à-vis software piracy and heightened criminal investigation and action.

Areas of Note

The lower house of the Mexican Congress, the Chamber of Deputies, is currently discussing amendments to Federal Copyright Law and Criminal Code. The draft law includes measures that, among other changes, introduce ISP liability, ISP takedown of infringing sites following notice from the Mexican Institute of Industrial Property (IMPI), a graduated user warning system involving IMPI and ISP cooperation, and heightened penalties for individuals and ISPs for online copyright infringement. Once passed, the amendments could affect the scores for a number of indicators in future editions of the GIPC Index.

Patents, Related Rights, and Limitations

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** The biopharmaceutical industry reports that it continues to experience major challenges surrounding the enforcement of patents in Mexico. Gaps remain specifically in the ability to prevent market authorization of infringing formulation and use patents, as well as generally in securing timely and effective remedies for patent infringement through the court. There is also concern that the existing patent enforcement system may not be effectively preventing abuse of the Bolar system through the importation and selling of infringing active ingredients before the expiration of the patent term.

7. **Regulatory data protection term:** The Federal Commission for the Protection against Sanitary Risks (COFEPRIS) published guidelines in June 2012 that, for a maximum of five years, provide protection against use of undisclosed test data by any person for the purpose of marketing approval. However, the effective application of the guidelines remains an ongoing concern. One specific issue is the extent to which RDP will be granted to both large and small molecules.

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):** Amendments to Mexico's Industrial Property Law, proposed at the end of 2013 and discussed throughout 2014, would introduce a graduated user warning system involving cooperation between IMPI and ISPs. However, progress on the law continues to be slow. Software piracy is still a major concern, although, in 2013–14, efforts have been made in cooperation with industry to improve awareness among domestic companies of the need to use legally obtained software. Camcording and P2P file sharing remain key challenges, particularly because of the requirement in Section 424bis in the Criminal Code to demonstrate a profit motive. This has led to wide distribution of pirated material before action can be taken by authorities, and courts tends to downgrade these types of copyright violations.

10. **Availability of frameworks that promote cooperative action against online piracy:** Mexican IP law lacks a legal basis for ISP liability for online copyright infringement; notice and takedown provisions as such are missing from copyright legislation and other related legislation. In practice, there is not adequate clarity regarding how ISPs should respond to rights holder notices. Draft amendments to the Copyright Law and Criminal Code appear to introduce ISP liability for hosting unauthorized content as well as a type of notice system under which ISPs are to remove infringing sites. However, the system would provide for notice by the IMPI rather than by rights holders.

11. **Scope of limitations and exceptions to copyright and related rights:** The existing Copyright Law provides relatively standard fair use limitations on copyright, including for quotation or illustration (short fragments), scientific research, use by educational institutions, and private or temporary use. In a positive development in 2014 that has widely been seen as reaffirming copyright protection in the digital sphere, amendments to the Federal Telecommunications and Television Law and the Copyright Law limit re–transmissions of broadcasts to those that have been authorized by the rights holder. Mexico's score for this indicator may rise in future editions of the GIPC Index as evidence of implementation of this measure is visible. Nevertheless, at present major concerns remain in relation to abuse of copyright exceptions, including in relation to book piracy and unauthorized photocopying of academic materials.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** As noted in the previous version of the GIPC Index, the Industrial Property Law establishes the exclusive right to use a mark upon 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 cancellation action against a registration based on prior use; however, the proprietor of the unregistered trademark must make application for registration and be awarded registration before 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

25. **Criminal standards, including minimum imprisonment and minimum fines:** The Industrial Property and Copyright Laws 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 deterrent. Proposed amendments to the Criminal Code would strengthen penalties for online infringement, as well as add penalties for failure to respond to IMPI notices, in the amount of up to six years imprisonment and fines of up to 1.4 million pesos (about $100,000). Criminal enforcement suffers from lack of coordination and resources among different authorities targeting IP crimes. However, in 2013–14 raids by the special IP unit, Special Unit for the Investigation of Copyright and Industrial Property Crimes (UEIDDAPI), of the Attorney General's Office intensified. Raids focused on both pirated entertainment material and pirated software, including hard copies and copying/circumvention devices. In 2014, seizures reported have included over 300,000 videos, CDs, and CD/DVD burners, and destruction of 350,000 seized items (from 2013–14) took place. In addition, in relation to counterfeit medicines, from January to July 2014, 2,600 inspections and seizure of 586,000 counterfeit products worth about 4.5 million pesos (about $350,000) occurred.

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 North American Free Trade Agreement (NAFTA) with the United States and Canada, the European Union, and Japan, came into force before its membership in the TRIPS Agreement or only contain very general and brief IP provisions. Mexico is a negotiating party to the TPP.

[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. Copyright (and related rights) term of protection	0.66[74]	
9. Legal measures which 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 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[75]	
22. Software piracy rates	0.8[76]	
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	**4.18**	**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	**21.34**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Copyright (Infringing File Sharing) Amendment Act and corresponding regulation provides relatively strong framework against online piracy
- Legislation and common law provides protection for unregistered marks
- Exclusive rights for trademarks in place and generally enforced

Key Areas of Weakness

- Plain packaging bill making its way through New Zealand Parliament; long-standing commitment from government behind it
- Life sciences IP rights not as extensive and terms of protection not as long as those of other developed high-income economies
- 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 economies
- 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

Past Editions versus Current Scores

New Zealand's total score has increased slightly from 21.32 in the previous edition of the GIPC Index to 21.34. As a percentage, New Zealand's overall score remains the same as in the previous edition at 71%. The change in score is due to a drop in software piracy rates from 22% in 2011 to 20% in 2014 as estimated by the BSA. Overall, New Zealand maintains a relatively strong national IP environment, albeit with particular weaknesses in regard to IP rights in the life sciences sector. The government of New Zealand is also committed to the passing of plain packaging legislation; a move that would considerably weaken the rights of trademark owners.

Patents, Related Rights, and Limitations

6. **Patent term restoration for pharmaceutical products; 7. Regulatory data protection term:** As noted in previous editions, New Zealand's legal framework does not currently match international best practices on the IP rights offered or term of protection for the life sciences sector. New Zealand does not offer patent term restoration for pharmaceuticals. Although discussed throughout the debate on patent reform, the final 2013 Patent Act did not address this issue, and New Zealand continues to lag behind other high-income economies and many emerging markets. Additionally, with regard to the protection of biopharmaceutical test data and RDP, 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 (that of the EU) used in this GIPC Index as well as the term in place in most other high-income economies.

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 standardized (plain) packaging legislation for tobacco products. The stated purpose of this legislation is to standardize all tobacco packaging, remove brand-specific information, and disallow the use of trademarks and trade dress. The Smoke-Free Environment Amendment Bill passed its first reading in February of 2014, was approved by the New Zealand Parliament's Health Committee in August, and currently awaits a second reading. The government has indicated that it will await the outcomes of the legal cases filed against the Australian government before passing plain packaging legislation. Like similar legislation introduced in Australia, in 2012 the introduction of plain packaging in New Zealand would significantly restrict the use of brands, trademarks, and trade dress 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

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 to the Trade Marks Act in 2011 introduced a concept of "Enforcement Officers," which includes customs authorities. Under these amendments, Enforcement Officers were granted powers of search, examination, and seizures. As in previous editions, it remains 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 TPP. New Zealand is a signatory to 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. Copyright (and related rights) term of protection	0.74[77]	
9. Legal measures which 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 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	0.5	
18. Availability of frameworks that promote action against online sale of counterfeit goods	0	
Total Score—Trademarks	**2.75**	**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	**1**	**2**

Enforcement		
21. Physical counterfeiting rates	0.63[78]	
22. Software piracy rates	0.19[79]	
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	**1.32**	**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	**9.81**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Intensified use of technology for monitoring of counterfeit and substandard medicines • 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 RDP • Rudimentary digital copyright regime • No DRM • High rates of software piracy • Limited and sporadic enforcement of trademarks • High rates of counterfeit goods • Weak enforcement environment • Low participation in international IP treaties

Spotlight on the National IP Environment

Past Editions versus Current Scores

Nigeria's total score has stayed roughly the same, with a slight increase from 9.8 in the previous edition of the GIPC Index to 9.81. As a percentage, Nigeria's overall score remains the same at 33%. There were some positive developments in 2014, including intensified enforcement efforts against counterfeit goods, particularly with regard to the use of technology and messaging services to verify the authenticity of medicines. Nevertheless, overall, Nigeria's national IP environment faces many challenges. IP laws and regulations are lacking or only partially in existence (particularly in the life sciences sector), and rights holders face enormous enforcement challenges, with persistently high levels of piracy across industries and sectors.

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); 10. Availability of frameworks that promote cooperative action against online piracy:** Nigeria's copyright environment remains challenging in 2014. As noted in last year's edition of the GIPC Index, the Nigerian Copyright Act provides rights holders with general exclusive rights; however, there are no specific references to the online space. Nigeria does not have legal provisions dealing with notice and takedown of infringing content online in its Copyright Act. However Part 3, Section 11 of the 2008 "Guidelines for the Provision of Internet Service," published by the Nigerian Copyright Commission (NCC), includes a notice and takedown mechanism, safe harbor provisions for ISPs as content intermediaries, and a general obligation of ISPs to disconnect subscribers upon being made aware of infringing conduct. Yet it remains unclear what practical force or effective application these guidelines have. Efforts to reform the Copyright Act led by the NCC have continued in 2014, but, at the time of research, there was no legislative action.

The Nigerian Senate passed the Cybercrime Bill (Senate Bill SB.669) in late 2014, and it is now being considered by the Nigerian Lower House. This is a broad piece of legislation addressing many aspects of online crime and piracy, ranging from protection of national infrastructure such as computer networks to identity theft and child pornography. While Part I of the draft act states that it seeks to protect IP rights, it remains to be seen what particular sections in any finalized version will explicitly address IP rights and infringement. With regard to enforcement, the NCC continues to be an active agency and voice of the importance of protecting copyright and fighting piracy. The agency has continued with its enforcement activities, including arrests, seizures, and anti-piracy operations. Still, hardcopy piracy of copyrighted material is rampant. For example, news reports from Nigeria suggest that, before the official screening and cinematic release of the highly anticipated Nigerian movie *Half a Yellow Sun*, physical pirated copies of the film could be found at street vendors and the film was made available online. The film is reportedly the most expensive production in Nigeria to date.

Trademarks, Related Rights, and Limitations

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:** Counterfeit and substandard medicines have long been a challenge in Nigeria. A 2011 report by BBC News estimated that more than two-thirds of anti-malaria drugs were either counterfeit or substandard. For the past few years, Nigeria has made increasing use of innovative and mobile technologies to combat counterfeit and substandard medicines and to ensure patient safety. In 2014, Nigeria's National Agency for Food, Drug Administration, and Control (NAFDAC) announced that these efforts would intensify, with a greater

regulatory emphasis on expanding the use of SMS text messaging through the Medicines Authentication System (MAS). This allows patients to verify whether a package of medicines are genuine articles or counterfeit or substandard through use of a unique code on each package. NAFDAC announced in July 2014 that pharmaceutical manufacturers must now comply with this requirement and that the agency would be enforcing it more vigorously.

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 to and has ratified the Patent Law Treaty.

[ Peru]

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	1	
6. Patent term restoration for pharmaceutical products	0	
7. Regulatory data protection term	0.25	
Total Score—Patents	**2.75**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyright (and related rights) term of protection	0.74[80]	
9. Legal measures which 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	0.5	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	0.25	
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	0.5	
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	0.25	
20. Barriers to market access	0.75	
Total Score—Trade Secrets and Market Access	**1**	**2**

Enforcement		
21. Physical counterfeiting rates	0.34[81]	
22. Software piracy rates	0.35[82]	
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	**1.94**	**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	**12.68**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic 20-year patent term of protection in place • No compulsory license issued • Basic exclusive rights for copyright in place • Non-discrimination/non-restrictions on the use of brands in packaging • Basic legal framework for trademark enforcement • *Ex officio* and in-transit customs detainment provided for in legislation	• No patent examination process in place • CIIs' patentability very limited • No patent term restoration • No RDP protection for biologics • Lack of effective pharmaceutical-related patent enforcement and resolution mechanism • Rudimentary digital copyright regime • No notice and takedown • Failure to implement Software Legalization Decree • High rates of software piracy and counterfeiting • Weak enforcement environment

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Peru's Industrial Property Rights Law provides for the protection of patents provided they meet the requirements of novelty, inventiveness, and susceptibility to industrial application. However, the patentability requirements lack clarity as to the protection of biotechnologically derived pharmaceutical products. In addition, Peru does not consider treatment methods as patentable subject matter, and the Andean Court of Justice has barred the recognition of second medical use patents within Andean Community member economies. The patent examination process involves major delays, and patent authorities tend to lack technical expertise.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Under Article 16.10.3 of the United States-Peru Trade Promotion Agreement (USPTPA), Peru is obligated to ensure patent holders are made aware of potentially infringing biopharmaceutical applications before market authorization. The Peruvian Health Authority (PHA) does maintain a publicly available list of drug registration applications on its website; however, it alone is not sufficient to provide an effective patent enforcement system. It does not address existing challenges in relation to the ability to secure timely relief through the court system, which can take, on average, more than four years.

6. **Patent term restoration for pharmaceutical products:** Peru has not implemented patent term restoration provisions in its law as is required by Article 16.9.6(c) of the USPTPA.

7. **Regulatory data protection term:** Peruvian law provides for a five-year term of RDP for pharmaceutical products under Legislative Decree 1072. However, the Peruvian government has taken the position that biologics do not fall under the ambit of the legislation, with the PHA denying RDP for several biologics. In addition, the biopharmaceutical industry reports that products that have benefitted from RDP in Peru are granted on average a three-year term of protection. A proposed law currently under consideration, Bill 995/2011, would require new drug applications to publicly disclose sensitive information as a precondition of obtaining a sanitary registration. Approval of the bill would essentially render null and void non-disclosure, a crucial component of RDP, and as such Peru's score would drop to 0.

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 Copyright Act and associated laws provide for a basic framework of general exclusive rights. In addition, Peru has promoted several initiatives aimed at combating piracy. For example, Law No. 28289, *Ley de Lucha contra la Piratería* (Law Concerning the Fight against Piracy) included criminal sanctions and customs procedures. However, physical piracy is widespread in Peru, with online piracy also growing despite insubstantial Internet penetration figures. Industry calculations for 2013 estimate an 80% rate of music piracy and a 65% rate of software piracy. Internet cafes around Peru provide a hotbed for the downloading and burning of illegal files, and free access to P2P networks is reportedly granted at universities and Internet cafes. Moreover, Peru has been cited as having the highest levels of unauthorized camcording of U.S. motion pictures in Latin America.

10. **Availability of frameworks that promote cooperative action against online piracy:** Peru has failed to make provision for notice and takedown of infringing content online, despite its obligation to do so in Article 29(b)(ix) of the USPTPA.

13. **Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software:** Peru has complied with its obligations under Article 16.7.6 of the USPTPA

through the Software Legalization Decree (*Decreto Supremo* No. 013-2003-PCM), which requires the use of legal software by public entities and provides for the establishment of effective controls to ensure legal software use. Although Peru extended the decree's implementation deadline from 2005 to 2011, it continues to be delinquent in meeting its full obligations in terms of implementation.

Trademarks, Related Rights, and Limitations

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:** Peru has a basic framework in place for protecting registered trademarks and well-known marks. However, in national law, jurisprudence, and Andean Community Legislation, there is a lack of clarity on the distinction between well-known marks, famous marks, and marks with a reputation, and on the protection afforded to them. Some clarity is provided in case law, which indicates that it is unnecessary to prove bad-faith registration in order to secure protection for a well-known mark. In addition, existing precedent suggests that awareness of a mark by 60% of the public is sufficient for establishing knowledge of the market. In regard to the effect of a mark's notoriety in other economies, notoriety in an economy that is a member of the Andean Community will have binding effect, whereas notoriety in all other economies will have only informative effect.

Trade Secrets and Market Access

19. **Protection of trade secrets:** Peruvian law provides for a limited level of trade secret protection, which is derived from unfair competition law. A recent 2014 report from the OECD notes that the Peruvian approach only allows protection for the legal right of "fair competition," irrespective of other rights affected by violations of trade secrets. In addition, to date, no noted criminal enforcement of trade secret violations has taken place. Moreover, evidence suggests that it is arduous to prove in administrative and judicial proceedings unauthorized disclosure of trade secrets by former employees.

Enforcement

23. **Civil and procedural remedies; 25. Criminal standards, including minimum imprisonment and minimum fines:** Peru has a limited legal framework for civil and criminal remedies; however, it has made efforts to strengthen enforcement for IP-related infringement. For example, recent amendments increased the minimum sentencing for copyright infringement to four or more years, and established the creation of four specialized IP courts and one special appeals court with national jurisdiction on IPR crimes. Nevertheless, the overall enforcement environment remains weak. Prosecutors do not pursue piracy cases through to the final stages of judgment, and the judiciary often lacks independence in relation to sensitive IP decisions. For criminal prosecutions, delays can last between three and five years, and the judiciary typically sees IP crimes as benign. As a result, Peru maintains high levels of piracy and has been ineffective in deterring or changing the culture of piracy in the economy.

26. **Effective border measures:** Peru provides for both *ex officio* and in transit customs measures under Legislative Decree No. 1092 of 2008 and its regulation, Supreme Decree No. 003-2009-E. However, Peru still struggles with enforcement at its borders, with widespread availability of counterfeit and pirated products.

Membership and Ratification of International Treaties

Of the international treaties covered in the GIPC Index, Peru is only a contracting party to the WIPO Internet Treaties. The USPTPA includes substantial provisions on IP rights. Peru's lack of accession to the Patent Law Treaty is in breach of its commitments under the USPTPA.

[ Russia]

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. Copyright (and related rights) term of protection	0.74[83]	
9. Legal measures which 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 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	0.25	
20. Barriers to market access	0.5	
Total Score—Trade Secrets and Market Access	**0.75**	**2**

Enforcement		
21. Physical counterfeiting rates	0.57[84]	
22. Software piracy rates	0.38[85]	
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	
26. Effective border measures	0.5	
Total Score—Enforcement	**2.2**	**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	**13.54**	**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 RDP term introduced in 2010 • Notice and takedown framework introduced in 2013 • *Ex officio* powers for customs officials	• RDP not implemented • Limited DRM legislation • Limited notice and takedown framework; applies only to certain types of content • High levels of online and physical piracy • Poor application and enforcement of civil remedies and criminal penalties

Spotlight on the National IP Environment

Past Editions versus Current Scores

Russia's overall score has increased to 13.54, compared with 13.28 in the previous edition of the GIPC Index, and as a percentage is 45% the total possible score. This is largely a reflection of the changes that were introduced in the amendments to the Civil Code Part IV; for example, introducing pre-established damages for patents and reforming trade secret protection. However, the rise in Russia's overall score masks considerable downward movement in certain indicators and increased challenges in others. For example, new policies have been introduced and are in effect with regard to localization requirements and access to Russia's pharmaceutical market being conditioned on the sharing of IP with local entities.

Other areas of note

President Putin in March 2014 signed into law a new set of amendments to the Russian Civil Code, including to Part IV, which covers all major forms of IP rights offered in Russia. The package of amendments is far-ranging and touches on patents, copyrights, trademarks, and trade secrets. The overall impact of the amendments are somewhat mixed. For example, positive action has been taken with regard to setting pre-established damages for patent infringement. However, other changes, such as the imposition of new process and application requirements with regard to the application for patent term restoration for pharmaceuticals and agrochemicals, may end up causing confusion and effectively limit the availability of this protection for rights holders.

Patents, Related Rights, and Limitations

6. **Patent term restoration for pharmaceutical products:** The Civil Code Part IV Article 1363 provides a mechanism for patent term restoration for biopharmaceuticals, agrochemicals, and pesticides. The term of extension is a maximum of five years. The 2014 amendments introduce several new layers and requirements for rights holders when applying for this restoration. To begin with, the new amendments require the issuing of an additional patent incorporating the claims of the original patent. Legal analysis suggests that the creation of an additional patent may lead to confusion and potential uncertainty, particularly with regard to questions of validation of the patent whether it be in a potential infringement or revocation proceeding. Additional procedural requirements have also been added in the form of the Russian Patent Office now being able to request additional materials from an applicant, with response time being 3 months, extendable to 10 months. This has the potential to add additional administrative burdens to rights holders and applicants.

7. **Regulatory data protection term:** Under its WTO commitments and the 2010 Law of Medicines, Russia has committed to implementing a RDP 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 previous editions of the GIPC Index, there remains a lack of progress in implementing this commitment and developing a fully functioning form of RDP. In addition, proposals have been put forward to define an innovative drug eligible for RDP as a product for which the active ingredient is patented. Placing the focus on the patent status of a product as opposed to its market authorization status risks creating confusion and may limit the availability of this protection.

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); 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 included a notice and takedown provision with regard to the responsibilities of "information intermediaries," which included an obligation to act upon a notice of infringement from a rights holder. These amendments also included 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 was given the power to issue notices to the hosting service provider requiring (1) notification to the alleged infringer and (2) if no action is taken, the restriction of access to the alleged infringing material. As noted in the previous edition of the GIPC Index, these amendments refer only to "exclusive film rights, including movies and TV films." Since the beginning of 2014, new legislation has been discussed by the Russian Duma and relevant stakeholders to extend these provisions, including other forms of content. At the time of research, no legislation had been passed. News reports suggest that ROSKOMNADZOR may take action separately and include other forms of content, including music and books, in its monitoring activities, but this remains unconfirmed. With regard to the application and enforcement of the 2013 amendments, reports from the Russian government suggest that traffic onto websites with legitimate content were increasing

as a result of the law. However, in other areas, enforcement challenges persist. For example, online piracy rates continue to remain high in Russia. VK.com remains one of the most visited websites in the world and was included as the first website on the Motion Picture Association's 2014 "Online Notorious Markets." VK.com was also successful in its defense against a RUB 700,000 lawsuit initiated by Eksmo, a Russian publishing house. At the time of research, no verdict had been reached in a separate proceeding involving VK Sony Music Russia, Universal Music Russia, and Warner Music UK. This has the potential to become a landmark case and to significantly affect the piracy landscape in Russia.

Trade Secrets and Market Access

19. **Protection of trade secrets:** As part of the Amendments to the Civil Code Part IV, Russia also amended its laws relating to trade secrets and know-how. Specifically, these amendments clarify that trade secret protection is now available to entities even if no "trade secret regime" has been introduced. Nevertheless, the environment for the protection of trade secrets remains very challenging in Russia. Industrial espionage is rife, and protecting confidential information and trade secrets difficult. The OECD's Trade Secrets Protection Index ranked Russia second to last, behind China and India, with particular weaknesses in its enforcement environment.

20. **Barriers to market access:** Russia is known for having recently introduced a pharmaceutical regime that on the one hand seeks foreign investment and the growth of a local innovative industry, and on the other hand protects its existing local industry. Among its key goals, the central initiative, Pharma 2020—which was introduced in 2009–10—offers to increase local companies' share of the patented medicines market to 60% (in terms of value) and domestic medicines' share of the total pharmaceutical market to 50%–70% by 2020. (In 2012, the share was about 20%.) In addition, by 2020, at least 85%–90% of the medicines on Russia's Essential Drug List should be locally manufactured and exports increased by eight times. Specifically, 57 strategic drugs have been identified for local production rather than import, including in the areas of oncology, infectious diseases, and diabetes. In order to achieve these goals, the Russian government has adopted (or proposed) a range of measures intended to drive local development and production of pharmaceuticals. These include both direct requirements (e.g., conducting local clinical trials), under which registration and market access cannot be achieved without meeting the requirement, as well as more indirect punitive measures that place foreign drugs at a significant disadvantage in the market (e.g., not included or non-competitive in government tenders). In addition, it is worth noting that the legal distinction between local and foreign products is based on a local content requirement, or the requirement that a portion of a biopharmaceutical product—in this case, at least a substance included in the drug or the drug's delivery form—must be produced in Russia. These policies have intensified in 2014 and raise significant questions as to the ability of rights holders to access the Russian market without market access being made contingent on sharing their IP and/or technology with a local entity.

Enforcement

24. **Pre-established damages and/or mechanisms for determining the amount of damages generated by infringement:** Up until 2014, the Civil Code Part IV Article 1301 provided statutory damages of 10,000 to 5 million rubles (to be determined by a court) in cases of copyright infringement. However, available prominent cases in Russia suggested that courts were often reluctant to grant damages up to the maximum of this amount. As part of the amendments to the Civil Code Part IV, Russia has extended these statutory damages to now cover patents, utility models, and industrial designs. This is a positive step, yet it remains to be seen if actual application of these new damages will follow.

Membership and Ratification of International Treaties

Russia is a contracting party to and has signed and acceded to all the international treaties included in the GIPC Index. However, full implementation and enforcement of the obligations enshrined in these treaties is lacking, particularly in the WIPO Internet Treaties. Since Russia only 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. Copyright (and related rights) term of protection	0.74[86]	
9. Legal measures which 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	0.75	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	1	
Total Score—Copyrights	**5.24**	**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[87]	
22. Software piracy rates	0.68[88]	
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	**4.64**	**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	**25.38**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Amendments to the Copyright Act strengthen overall framework and mechanisms available against online piracy
- 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

Key Areas of Weakness

- While dropping, still relatively high rates of software piracy as surveyed by BSA in 2014
- High rates of per capita P2P sharing
- Relatively high rates of trademark counterfeiting
- Limits on *ex officio* powers with regard to in-transit seizure

Spotlight on the National IP Environment

Past Editions versus Current Scores

Singapore's overall score has increased from 84% of the total possible score (with a score of 25.12) in 2014 to 85% in 2015 (with a score of 25.38). The resulting increase is due to amendments introduced in July 2014, which successfully strengthened Singapore's copyright regime, particularly against online piracy. Singapore offers an advanced national IP framework with an emphasis on strong protection for pharmaceutical patents and copyright, although there are still relatively high rates of physical and online piracy.

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); 10. Availability of frameworks that promote cooperative action against online piracy:** As noted in the previous edition of the GIPC Index, 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 found that Singapore had the highest per capita incidents of P2P infringement in Asia. On July 8, 2014, the Singapore Parliament passed a bill to amend the Copyright Act. The purpose of this bill is to provide a more direct mechanism for rights holders against "flagrantly" infringing sites. These amendments provide rights holders with an avenue to apply directly to the High Court for an injunction "requiring the network service provider to take reasonable steps to disable access to the flagrantly infringing online location." The legislation contains a non-exhaustive list of conditions and factors the High Court may consider when determining whether flagrant infringement is taking place. These factors include whether the main purpose of the "online location" is to infringe copyright, whether circumvention instructions are included on the site, and "whether the owner or operator of the online location demonstrates a disregard for copyright generally."

Enforcement

26. **Effective border measures:** As noted in the previous edition of the GIPC Index, border measures are available under the Trade Marks Act, Trade Marks (Border Enforcement Measures) Rules, and Copyright Act. Under these laws, customs 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. The movement of counterfeit goods is a growing challenge in Singapore, as is illustrated by the World Customs Organization in its latest *Illicit Trade Report* listing Singapore as the departure economy with the fourth highest number of cases in 2013 for counterfeit goods.

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 United States-Singapore FTA includes substantial provisions on IP rights. Singapore is a negotiating party to the TPP Agreement. 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. Copyright (and related rights) term of protection	0.53[89]	
9. Legal measures which 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	0.25	
12. Digital rights management legislation	0.5	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total Score—Copyrights	**2.53**	**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	0.67[90]	
22. Software piracy rates	0.66[91]	
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	**3.08**	**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	**11.86**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic IP framework in place • Increased enforcement against software piracy • Basic notice and takedown framework in place • Legal protection for unregistered marks in common law • Exclusive rights for trademarks in place	• Weak patents and related rights environment • Non-examining patent office • New IP reform initiative confirms no patent term restoration or RDP • High levels of copyright piracy • Intention to introduce legislation that discriminates/ restricts use of brands in packaging • High level of counterfeit goods • Enforcement of IP rights lacking; deterrent sentences are unavailable

Spotlight on the National IP Environment

Past Editions versus Current Scores

South Africa's overall score has increased from 39% of the total possible score (with a score of 11.6) in the previous edition of the GIPC Index to 40% (with a score of 11.86). The resulting increase is due to greater enforcement against software piracy. Overall, South Africa's national IP environment is challenging, with both laws and enforcement mechanisms lacking. Moreover, South Africa is in the process of considering a patent reform bill as well as plain packaging legislation for tobacco products. Both bills in their current format, if passed, would fail to improve the national IP environment.

Patents, Related Rights, and Limitations

As noted in the previous edition of the GIPC Index, a wide-ranging patent reform package is being discussed and consulted on by the South African government and being developed by the Department of Trade and Industry. At the time of research, the reform bill is still under discussion. This package contains a number of measures that are not encouraging for rights holders, particularly in the life sciences. For example, it includes 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. The reform package also does not address the issue of patent term restoration or the introduction of a RDP framework.

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 South African Copyright Act provides rights holders with general exclusive rights; however, there are no specific references to the online space. The score for this indicator has been increased to 0.5 for the third edition of the GIPC Index as a result of improved enforcement against pirated goods and online piracy in 2014. For example, in March 2014, Microsoft's Digital Crimes Unit (DCU) and Anti-Piracy teams worked together with the South African Police Service's Directorate Priority Crimes Investigations in tracking and successfully raiding and arresting suspected software pirates. A number of raids resulted in the confiscation of fake software and the arrests of several suspects. Furthermore, a South African court heard the first online piracy case in the economy, which centered on the uploading of a film to a torrent site. The judge found the defendant guilty and handed down a three-year prison sentence suspended for five years. While these results are encouraging, online piracy is a growing challenge. Industry figures from 2014 suggest that South Africans downloaded approximately 1 million pirated movies per month and had the highest rate of illegal downloading in Africa.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** The South African government has announced its intention to introduce plain packaging legislation for tobacco products in 2015. South African Minster of Health Aaron Motsoaledi stated in July 2014 that the legislation would be introduced irrespective of the current WTO investigations against Australia. The introduction of plain packaging in South Africa 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 South Africa's score in this indicator from 1 to 0.

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.

[South Korea]

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	
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	0.6	
Total Score—Patents	**5.6**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyright (and related rights) term of protection	0.74[92]	
9. Legal measures which 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 requiring proprietary software used on government ICT systems to be licensed software	0.5	
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	1	
Total Score—Trademarks	**4.75**	**5**
Trade Secrets and Market Access		
19. Protection of trade secrets	0.75	
20. Barriers to market access	0.75	
Total Score—Trade Secrets and Market Access	**1.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.37[93]	
22. Software piracy rates	0.62[94]	
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	**4.49**	**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	**23.33**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Patentability of CIIs • Fairly strong online copyright regime • Relatively robust legal framework and enforcement of trademark protections • Enforcement environment rapidly progressing • Negotiating/signed FTAs that uphold high standards of IP protection	• Challenges in IP protection of biologics and pharmaceuticals • Incomplete application of requirements regarding software licensing in government agencies • Holes in trade secret protection • Gaps in application of adequate damages • Membership in key international treaties on patents and trademarks lacking

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** The Patent Act provides for standard patentability requirements, including novelty, inventive step, and industrial applicability, and these principles are typically applied in practice. In addition, patent amendments approved by the National Assembly in 2014 (with entry into force in 2015) streamline the patenting process and lift aspects of economy-specific red tape. This includes the ability to file Patent Cooperation Treaty (PCT) applications in English, rather than in Korean, and to set the filing date based on the date of PCT

application. Nevertheless, challenges exist with regard to requirements for submitting additional materials with the patent application for certain types of inventions. Specifically, with regard to biopharmaceutical patents, South Korean patent law and examiners require vast amounts of pharmacological data to be submitted in the original patent application, not—as is the more common international practice—during either patent prosecution or post–grant validity proceedings.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Amendments to the Korean Pharmaceutical Affairs Act (KPAA) in 2012 introduced a patent linkage system that partially satisfies South Korea's commitments under the Korea-United States FTA (KORUS). The system involves the creation and maintenance of a publicly available list—a "Green List"—of patents applicable to registered biopharmaceutical products, based on which generic companies are to notify rights holders of any patents directly associated with a generic application. Recent figures suggest that notification of the patent holder occurs in about 80% of generic applications where relevant patents have been identified. However, the current system entails several hurdles for innovator companies. The patent listing requirements appear to call for innovators to share patent information beyond what is typically provided in similar patent lists (e.g., in the United States' Orange Book), and listing applications can be rejected by the Korean Ministry of Food and Drug Safety (MFDS) if they do not meet specific criteria (although approximately 85% of patent listing applications are reportedly accepted). In addition, it is possible for patent information submitted by rights holders to be modified somewhat in the final list published by MFDS. Concerns have been raised that the new system as such does not strengthen patent enforcement. As part of further implementation of KORUS, under proposed amendments to the KPAA, innovator companies would be able to secure, based on an MFDS decision, a 12-month stay on the sale of a generic drug in case of an infringement dispute. The amendments are expected to be approved by the National Assembly shortly and to enter into force in 2015. Nevertheless, draft amendments to the National Health Insurance Act, currently under consideration, may weaken the new system by requiring innovators to provide the South Korean government with an offset of profits accrued during the course of the stay should they lose the patent action, without a similar requirement for generic applicants.

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):** Over the past five years, South Korea has taken an increasingly active stance toward combating online piracy. In 2009, amendments to the Copyright Act introduced a graduated warning system operated by the Ministry of Culture, Sport, and Tourism and the Korean Communication Commission (KCC). Under the law, the KCC sends three sets of notices to infringing users and online service providers, and can order suspension of users' accounts for up to six months if inadequate response is secured. In 2013, the KCC reported that fewer initial notices were issued compared with 2012 (with close to 200,000 notices in 2013), but it did not have to take a more graduated response (such as account suspension) in any case. Government figures suggest that about 70% of infringing users respond positively to first notices.

10. **Availability of frameworks that promote cooperation action against online piracy:** The Copyright Act provides for a strong notice and takedown system, including the possibility of rights holder notices of infringement and safe harbors for online service providers that speedily remove access to infringing works/sites upon such notice. There have been some discussions surrounding the responsibility of ISPs within the mechanism.

13. **Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software:** Since 2011, South Korea has instituted government-wide policies that require government agencies and public institutions to use properly licensed software as well as to introduce dedicated monitoring of implementation on an agency-specific basis. Although there is evidence to suggest that software piracy among government institutions has declined somewhat since the introduction of the policies, and that the South Korean government has conducted inspection of a number of public bodies, consistent auditing across government agencies is

required. Moreover, there are reports of gaps in funding for purchasing software licenses, leading to incomplete implementation of the requirements.

Trademarks, Related Rights, and Limitations

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:** The Trademark Act provides protection for well-known or famous marks regardless of whether they are registered in South Korea. Specifically, the owner of a mark that is famous or well-known both inside and outside South Korea can prevent the registration of a confusingly similar mark, even if the goods are not the same. In addition, elements of the Trademark Act, Unfair Competition Act, and Internet Address Resources Act provide for most standard exclusive rights. Implementation of these measures is well established. For example, the South Korean Supreme Court has upheld well-known mark protection in several instances, including in relation to the registrations of "Bellagio" (which infringed the United States-owned hotel-casino) and "Butterfly" (which infringed the Japanese-owned table tennis/sportswear mark) in 2008 and 2010, respectively. Courts also tend to rule in favor of well-established trademark and domain-name owners, regardless of their level of fame in South Korea. Nevertheless, rates of physical counterfeiting in South Korea remain high. Trademark amendments passed in 2014 further weaken protection by lowering the standard somewhat for determining likelihood of confusion in the registration of a mark bearing similarity to an existing mark (by permitting registration of second marks that enjoy a lower level of public knowledge than in previous versions of the law). At the same time, the amendments introduce stronger protection for well-known marks, specifically banning from registration marks that lack distinctiveness from, and/or would potentially dilute, famous marks, as well as those that demonstrate a bad-faith motive. The amendments also deny damages to marks that are registered but not in use.

Trade Secrets and Market Access

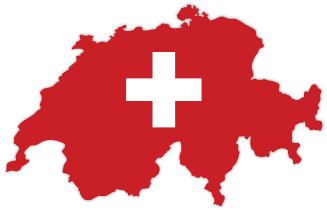
19. **Protection of trade secrets:** The Unfair Competition and Trade Secrets Prevention Act provides fairly standard protection against unauthorized disclosure and use of trade secrets. Relief is afforded in the form of injunctions, damages, and restoration of business reputation. Although the legal framework for trade secret protection is relatively strong—and a number of recent court cases suggest that relief is available for trade secret violations—significant challenges exist surrounding leaks of sensitive commercial information submitted to regulatory authorities, and in some cases, subsequent industrial espionage. These challenges reportedly affect a range of sectors, including chemicals, cosmetics, and food products.

Enforcement

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:** South Korean laws provide a relatively strong framework for enforcing IP rights, both in terms of civil remedies and criminal penalties for infringement. These include statutory damages and various mechanisms for determining adequate damages, although actual sums awarded in some cases can be relatively small (for instance, in Apple Inc. v. Samsung Electronics Co, Ltd., 2012). Still, while challenges remain, South Korea has made significant progress in enforcing IP rights on the ground. For example, the Japanese government has indicated that pirated goods imported into Japan from South Korea have dropped from almost half of the total in the mid-2000s to less than 2% of the total. As another illustration, raids conducted in 2013 resulted in destruction of close to 14 million pirated materials, which represents a more than 20-time increase from the previous year. The South Korean government has also created a special multi-agency anti-piracy task force, whose efforts in 2013 led to the indictment of persons implicated in 10 sites and who caused damages of over $800 million.

Membership and Ratification of International Treaties

South Korea scores low in its participation in and ratification of international treaties. In large measure, this is due to South Korea not being a contracting party to the Patent Law Treaty or the Singapore Treaty on the Law of Trademarks. South Korea has acceded to the WIPO Internet Treaties. It has concluded the KORUS, which entered into force in 2012 and includes substantial provisions on IP rights (Chapter 18 of the agreement).



[Switzerland]

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. Copyright (and related rights) term of protection	0.63[95]	
9. Legal measures which 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 requiring proprietary software used on government ICT systems to be licensed software	1	
Total Score—Copyrights	**3.13**	**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**

Enforcement		
21. Physical counterfeiting rates	0.62[96]	
22. Software piracy rates	0.76[97]	
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	1	
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	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	**24.76**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Advanced national IP environment • Application of patent requirements • RDP; patent term restoration • Clear implementation of policies requiring the use of licensed software in government agencies • Non-discrimination/non-restriction on the use of brands in packaging • Protection for well-known marks • Protection of trade secrets	• Overly broad interpretation of limitations and exceptions for copyright • Crucial gap in enforcement and prosecution of online copyright infringement • Relatively high level of physical counterfeiting and online piracy in comparison with other high-income economies

Spotlight on the National IP Environment

Patents, Related Rights, and Limitations

2. **Patentability requirements:** Swiss law provides for standard patentability criteria, and in general Switzerland takes a broad approach to patent protection. The Swiss system covers a wide range of inventions, which is reflected in a robust level of innovation across several high-tech sectors, including life sciences, biopharmaceuticals, and biotech.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Although the Therapeutic Products Act does not allow market authorization of a generic drug if an exclusivity period on the original drug is still active, no formal mechanism exists for linking patent status with market authorization and for dispute resolution within the approval process. Having said that, injunctive relief against infringing pharmaceuticals is well established in Switzerland. In 2014, the Federal Patent Court decided in at least two cases that a patentee must have the ability to enjoy the monopoly of a patented drug for its full lifespan. The court ordered a third party to discontinue promoting the market entry of a generic (including the specific date of entry) before the expiration of the patent term applicable to the original product.

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):** Although Switzerland provides for general exclusive rights for copyright holders, the legislative regime in relation to online infringement is weak and aggravated by poor enforcement. Online piracy in Switzerland is a long-standing issue and a departure from Switzerland's otherwise gold-standard IP regime. Broad precedent established in the landmark 2010 Federal Supreme Court decision *Federal Data Protection and Information Commissioner v. Logistep AG*—in which IP addresses were viewed as constituting "personal data"—severely limits the ability to identify and build cases against infringing users. This development has discouraged Swiss prosecutors from taking on such cases. Additional concerns with the legal framework include the lack of penalties for certain infringing acts, such as unlawful distribution of DVDs. Without a legal tool for targeting infringing users or the platforms on which they operate, digital and online piracy is rife. Perhaps more important, Switzerland has become a central hub for sites hosting infringing content. The USTR's list of notorious marketplaces includes sites hosted in Switzerland such as the Bulgarian-operated site Zamunda.net. In 2014, the Swiss government charged the Federal Department of Justice and Police to draw up copyright amendments based on the recommendations of the Swiss Working Group on Copyright (AGUR12). However, at the time of research, no movement on these amendments had been made. In regard to ISPs, the AGUR12 recommendations place emphasis on removal of uploaded unauthorized content (rather than actions involving downloads of such content only), proposing that hosting providers be required to remove content illegally uploaded upon notification. In addition, a "stay down mechanism" has been proposed, which would prevent the further uploading of such content.

11. **Scope of limitations and exceptions to copyrights and related rights:** Switzerland's private use exception is interpreted broadly and has been confirmed by the Swiss government and existing case law to include the download and sharing of infringing content. More specifically, Article 19 of the Copyright Act asserts that the downloading of content (other than software) for private use is not a copyright infringement (although distribution of such content that does not amount to private use, as well as any uploading of the content, represents an infringement punishable by Swiss courts). Such an expansive private use exception differs from other broad private copy exceptions—such as in Germany—in that, in Swiss law, there is no distinction made between whether or not the downloaded copy is itself a legal version. In other words, even if the material has been made available in an illegal manner, the private use exception still applies in Switzerland.

13. **Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software:** Switzerland provides for the licensing of government software through its General Terms and Conditions for the Procurement and Maintenance of Software (2010). Regular audits of government agencies—for example,

the 2014 audit of the Central Compensation Office—occur through the Swiss Federal Audit Office.

Enforcement

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:** Although, as discussed, major gaps exist in regard to enforcement of copyrights in the online and digital sphere, the Swiss legal regime for enforcement is fairly strong in other respects. The Trademark, Patent, and Copyright Acts provide for damage claims, injunctions, and destruction of infringing goods. Mechanisms for determining damages have been established in case law and applied regularly (for instance, most recently in *World Connect AG v. John Rusillon*, 2014). Nevertheless, although potential for future improvement to the situation exists, the current and established negligence toward copyright enforcement in Switzerland means it scores relatively lower than it otherwise would for these indicators in this edition of the GIPC Index. Other problematic areas include a lack of criminal penalties in relation to trademark and unfair competition infringement.

26. **Effective border measures:** The Trademark, Patent, and Copyright Acts provide for both *ex officio* and in-transit action by customs officials. Recent statistics indicate an increase in the number of seizures and the value of counterfeit products seized. In addition, in a measure to protect against the availability of counterfeit medicines in Switzerland, Swissmedic, in collaboration with customs authorities, has outlawed the importing of medicines in quantities that exceed one month's supply (Article 20(2)(a) and 27 of the Swiss Law on Therapeutic Products). In 2013, customs authorities took in-transit action and seized 1 million fake Xanax tablets at Zurich Airport.

Membership and Ratification of International Treaties

Switzerland has signed and acceded to all the international treaties included in the GIPC Index. Furthermore, as a member of the European Free Trade Association (EFTA) and European Economic Area (EEA), Switzerland has acceded to Annex XVII of the EEA Agreement, which includes substantive provisions on IP that in large part mirror EU standards.

[Taiwan]

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	0.25	
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	**5.25**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyright (and related rights) term of protection	0.53[98]	
9. Legal measures which 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	0.5	
12. Digital rights management legislation	0.5	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	0	
Total Score—Copyrights	**2.03**	**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	0.5	
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	0.5	
Total Score—Trademarks	**3.5**	**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	0.2[99]	
22. Software piracy rates	0.62[100]	
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	0.5	
Total Score—Enforcement	**2.32**	**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	**14.6**	**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 • Fairly strong well-known mark protection in legislation	• CIIs' patentability very limited • No patent term restoration or effective RDP • Major holes in digital copyright regime • DRM lacking in practice • High rates of software piracy • Limited and sporadic enforcement of trademarks; high rates of infringement • Weak enforcement environment

Spotlight on the National IP Environment

Areas of Note

Substantial amendments to the Copyright Law aimed at modernizing copyright protection were proposed in April 2014. Among other elements, the draft amendments introduce the concept of right of distribution and public communication, as well as revise the definition of public transmission and broadcast to include aspects applicable in the digital and online arenas. The amendments also seek to further clarify exceptions to copyright provided under its fair use doctrine for education, libraries, software, and antenna systems. In addition, the amendments expand criminal liabilities beyond

possession or distribution of physical goods specifically to works more broadly (which can thereby include digital works). Although the proposed legislation addresses several outstanding/problematic issues in the current Copyright Law, several gaps in protection are not covered, for instance in regard to the introduction of a clear and effective notice and takedown system and liability of infringing sites hosted abroad. At the time of research, the amendments continued to be discussed in the Legislative Yuan.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** The Patent Law generally adheres to international patentability standards. However, the Pharmaceutical Law (amended in 2007) excludes several different subject matter from patentability, including methods of treatment and new indications, and places significant limitations on patenting biological compounds. In a positive sense, Taiwan has committed to cutting down processing time and has entered into a Patent Prosecution Highway (PPH) agreement with the United States and Japan. In 2014, Taiwan made progress in this area, with patent processing times shortening by 8 months compared with 2013 (to about 36 months).

3. **Patentability of computer-implemented inventions:** The Taiwan Intellectual Property Office (TIPO) grants patents for software and CIIs that are linked to a technical process or feature. In general, examiners take into account features that contribute to the technical character of the claims as well as those that interact with technical features for solving a technical problem.

4. **Pharmaceutical-related patent enforcement and resolution mechanism:** Taiwan does not provide for an adequate patent linkage mechanism. The 2005 amendments to the Pharmaceutical Affairs Law introduced a regular listing of patents on registered pharmaceutical patents. Nevertheless, this alone has not proved sufficient to prevent approval and reimbursement of patent-infringing products, particularly in light of gaps in administrative and judicial enforcement. Survey data suggest that more than 50 such approvals have taken place in Taiwan in recent years.

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 Copyright Act provides for many standard exclusive rights, including reproduction and performance. It does not, however, adequately address copyright in the sphere of the Internet. Digital and online piracy remains a major problem in Taiwan. File-sharing, streaming, and deep-linking sites, particularly from abroad, represent the top platforms for illegal content. In this context, the current Copyright Law lacks language that could be used to curtail P2P and foreign file-sharing sites. Moreover, the law contains ambiguous wording that can be construed to support certain infringing acts, such as the practice of media box piracy. On top of the current copyright amendments, other efforts to strengthen the legislative framework include a law proposed in 2013 that would have penalized ISPs that were identified by authorities as sharing illegal content. However, the law was never taken forward. For over a decade, Taiwan has taken a relatively active stance toward combating piracy on the ground through creating and maintaining a special IPR Police Force. However, there is a recent trend toward reducing support, including through cuts to the budget, reduction in police and administrative forces focused on copyright infringement, and cuts to public education on copyright protection.

10. **Availability of frameworks that promote cooperative action against online piracy:** In 2009, amendments to the Copyright Act introduced a notice and takedown mechanism including safe harbors for ISPs that remove access to infringing sites or forward notices from rights holders to infringing users. However, the measures contain a great deal of ambiguity regarding how the mechanism should be implemented. For instance, they do not clearly define infringements that ISPs should take action against, nor do they explain how ISPs should handle or respond to notices. In practice, although evidence suggests that local

ISPs frequently respond to rights holder notices, the law does not provide sufficient mechanisms for addressing non-hosted or foreign content, which have become major sources of online piracy.

12. **Digital rights management legislation:** Taiwan's copyright law protects against circumvention of technological protection measures as well as possessing, distributing, or importing circumvention devices or any unauthorized copy of a work that involves circumvention of electronic information. Nevertheless, several areas of copyright infringement that rely on circumvention of TPMs have become major problems in Taiwan (including media box piracy and use of protected e-books and academic material), suggesting that its circumvention provisions are not being applied in practice.

Trademarks, Related Rights, and Limitations

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:** Taiwan affords protection to well-known marks that have not been registered in the economy, mainly in Articles 20 and 30 of the Fair Trade Act. The Fair Trade and Trademark Acts also provide for standard exclusive rights for trademarks. Existing case law has generally supported the legislative framework, with decisions against registration of similar marks that have a strong likelihood of confusion with or will lead to dilution of well-known and/or registered marks. Such decisions have generally resulted in damages paid to rights holders. In 2014, some confusion has been introduced as to whether or not a test is needed to demonstrate the degree of fame of a foreign well-known mark (for instance, in Taipei District Court's ruling for Burberry and in the case 102-Xing-Shang-Gong-Zi No. 3), and has not yet been fully resolved. In addition, in practice, Taiwan has a very high level of counterfeiting, and is considered one of the top sources of counterfeit goods seized at U.S. borders.

Trade Secrets and Market Access

18. **Protection of trade secrets:** A new Trade Secrets Protection Act (2013) raised trade secret protection in Taiwan and appears to be in line with Article 39 of the TRIPS Agreement. The law also introduced criminal penalties for trade secret violations. Since the law's entry into force, courts have applied criminal charges in several cases (for instance, in a 2013 case against six HTC employees).

Enforcement

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:** Taiwan law provides for fairly standard civil remedies and criminal penalties for IP rights infringement. However, the administrative and judicial system is sluggish, with cases facing significant delays (the average timeframe for a first instance case is close to eight months), and cases are often suspended indefinitely. These delays are partly due to lack of expertise (despite the establishment of a specialized IP court in 2008). Challenges also exist with regard to evidence discovery and preservation, which is particularly problematic given that heavy evidence requirements are often imposed. Sufficient damages are typically difficult to secure, particularly for small consignments (500 articles or fewer). However, recent case law suggests the acceptance in some cases of non-standard calculation methods that enable adequate damages to be obtained (for instance, *Q Patnet v. OSIM*, Supreme Court Decision 102 Tai-Shan No. 843, 2014). Proposed amendments to the copyright law would enhance penalties for online and physical goods copyright infringement.

Membership and Ratification of International Treaties

Taiwan scores a 0 for its participation and ratification of international treaties. Taiwan is not a contracting party to the WIPO Internet Treaties, the Singapore Treaty on the Law of Trademarks, or the Patent Law Treaty. It should be noted that Taiwan's political status limits its ability to participate in international treaties. In addition, Taiwan has not signed any post-TRIPS FTA that includes substantial provisions on IP rights.

[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. Copyright (and related rights) term of protection	0.53[101]	
9. Legal measures which 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 requiring proprietary software used on government ICT systems to be licensed software	0.5	
Total Score—Copyrights	**1.53**	**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	0.25	
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[102]	
22. Software piracy rates	0.29[103]	
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	**1.07**	**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	**7.1**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Basic patentability framework • Basic exclusive rights in place for copyright • Administrative notice and takedown mechanism for sale of counterfeit goods recently introduced • Elemental legal framework for enforcement of IP rights	• Holes in patentability • History of compulsory licenses violating TRIPS • Ineffective regulation of RDP • 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 and effective action

Spotlight on the National IP Environment

Past Editions versus Current Scores

Thailand's overall score has dropped slightly from 25% of the total possible score (with a score of 7.34) in the second edition of the GIPC Index to 24% in the third edition (with a score of 7.1). The decrease in score is mainly due to an overly expansive understanding of private use and academic exceptions to copyright, including inadequate attention to book piracy and, specifically, to curtailing unauthorized mass distribution and sale of books under the auspices of educational exceptions.

Areas of Note

Thailand is currently reviewing several bills that involve amendments to its IP regime, including the Copyright Act, Trademark Act, Trade Secrets Act, and Customs Act. Among other elements, the amendments seek to address ISP liability, enforcement of TPMs, unauthorized camcording in movie theaters, software and education exceptions to copyright, protection of well-known marks, and customs action against transshipments of infringing goods. A number of bills have been discussed by the National Legislative Assembly and marked for expedited passage and enactment. The amendments are directed toward outstanding gaps in the Thailand's IP framework, although the existing measures do not fully resolve these gaps. Nevertheless, upon enactment, the amendments would raise Thailand's score to a certain degree in future editions of the GIPC Index.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** As noted in last year's edition of the GIPC Index, 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 be destroyed only by an invention widely known or used in the domestic area before filling of 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. Patent examination guidelines released in late 2013 appear to limit patentability of medical use claims and of new uses for known substances. In addition, although the guidelines were reportedly intended to streamline the patent examination process and to help reduce severe patent backlogs, thus far the guidelines have resulted in further delays and requests for additional information from patent applicants, particularly for applications related to second medical use. As of December 2014, the backlog had reached over 20,000.

Copyrights, Related Rights, and Limitations

10. **Availability of frameworks that promote cooperative action against online piracy; 11. Scope of limitations and exceptions to copyrights and related rights:** Although the current available draft of amendments to the Copyright Act would introduce liability of ISPs for online copyright infringement and the requirement to take down infringing content upon knowledge of such content, this requirement would not be based on direct rights holder notice, but rather on a court order. The amendment as such falls short of international notice and takedown standards. There is also ambiguity on the scope of liability of ISPs, including the possible expansion of ISPs' liability beyond failure to cooperate with takedown of infringing sites. In addition, the draft copyright amendments introduce language that would clarify exceptions to copyright, particularly in regard to private use, education, and software. Nevertheless, in an environment where book piracy occurs on an extensive scale, the amendments do not appear to place adequate limits on the extent of material that may be duplicated or on third party use of material made available by educational institutions.

12. **Digital rights management legislation:** The copyright amendments would introduce the concept of TPMs as well as penalties for circumventing TPMs. However, the amendments do not address key concerns related

to the sale and distribution of circumvention devices. In addition, the amendments do not appear to protect against inadvertent acts of circumvention.

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 product names, marks, and importer or manufacturer names on tobacco products. While there has been little movement on the law as such, new regulation on the size of health warnings may have the effect of restricting the existing size of trademarks on tobacco product labels. The regulation requires warning labels of all cigarette packages to cover 85% of a package, up from the previous 55%. Similar regulation may also be extended to alcoholic products.

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** As noted in the previous version of the GIPC Index, the Trademark Act does not formally recognize well-known marks; however, it is possible to achieve protection through various means. 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 rights holder must prove prior use of the mark in Thailand and elsewhere, and that this use has been long and consistent. Proposed amendments to the Trademark Act would aim to implement the Madrid protocol and strengthen the legal framework for the protection of well-known marks, including in terms of introducing penalties for refilling, selling, and distributing products that bear well-known marks listed in the Department of Intellectual Property's (DIP) records. If passed, this would represent a positive step forward in addressing the prevalence of online sales of counterfeit medicines. Currently, however, there are reports that the DIP's Board of Well-Known Marks is not actively reviewing applications, severely weakening the ability to acknowledge and protect well-known marks in Thailand.

Enforcement

25 **Criminal standards, including minimum imprisonment and minimum fines:** The copyright amendments would reportedly raise criminal penalties for copyright infringement to six months through four years of imprisonment. The amendments also appear to provide double penalties for intentional mass distribution of infringing content. Upon approval, the score for this indicator may rise in future editions of the GIPC Index. Although cases of government operations exist, such as the destruction of about 80,000 goods seized by DIP, in 2014, police and judicial action against IP rights violations was sluggish compared with previous years. At the time of research, the number of arrests recorded by the Royal Thai Police and DIP in relation to infringements under the Copyright and Trademark Acts were at 50% of the levels seen in 2013. In addition, criminal cases filed with the Central Intellectual Property and International Trade Court were about 30% behind the number of cases achieved in 2013.

26. **Effective border measures:** Customs officials have *ex officio* confiscation powers for goods suspected of infringing IP rights. In 2014, the Thai government made efforts to improve border enforcement, installing additional checkpoints at key border crossings. However, greater action by customs officials is still required. Draft amendments to the Customs Act would empower border officials to seize transshipments of pirated goods. Once passed, Thailand's score for this indicator may increase.

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 Australia-New Zealand Free Trade Agreement, 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. Copyright (and related rights) term of protection	0.74[104]	
9. Legal measures which 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 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	0.25	
Total Score—Trade Secrets and Market Access	**0.5**	**2**

Enforcement		
21. Physical counterfeiting rates	0.16[105]	
22. Software piracy rates	0.4[106]	
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	**1.81**	**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	0.5	
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	**2**	**4**
Total Overall Score	**11.9**	**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 • Increase in anti-counterfeiting campaigns, especially pharmaceuticals	• Weak RDP • No patent term restoration or patent linkage; preliminary injunctions difficult to obtain • Opaque online copyright environment; awaiting reform • High online piracy rates • Copyright exceptions overly broad, especially in academic sphere • Lack of implementation of policy requiring legal software in government • 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

Past Editions versus Current Scores

Turkey's overall score has dropped slightly from 41% of the total score (with a score of 12.38) in the second edition of the GIPC Index to 40% (with a score of 11.9) in the third edition. Pockets of improvement occurred in trademark enforcement, including judicial recourse for bad-faith registration and anti-counterfeit drug campaigns. Despite this, key gaps in IP protection, particularly patents and copyrights, persist in Turkey, with little movement made on these fronts in 2014. In addition, new guidelines on qualification of industrial goods for market access effectively mandate partnerships and technology and asset transfer to local firms.

Areas of Note

Draft amendments to the Decree Concerning Protection of Patent Rights (1/756) and the Law on Intellectual and Artistic Works (No. 5846) continue to be under discussion in 2015. The content of the amendments are mixed, on the one hand filling in existing holes in the protection of patents and in the online/digital copyright space, while on the other hand introducing new challenges for patent enforcement and reducing penalties for infringement. Once approved and implemented, these amendments may affect scores for certain indicators in future editions of the GIPC Index.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** An invention will be patentable in Turkey if it is new, involves an inventive step, and has industrial application. Because of Turkey's membership to the European Patent Convention, European standards apply to patents that fall under the European Patent Convention. However, a lack of specific guidance on patentability requirements leads to discrepancies in relation to the examination and prosecution of patent cases, and IP courts often narrowly interpret patentability standards. Nevertheless, there is evidence to suggest that certain types of claims, such as for second medical use, are patentable in Turkey. Proposed amendments to patent law, still under consideration and debate, would limit the ability of patent applicants to seek recourse before the grant of the patent.

5. **Legislative criteria and use of compulsory licensing of patented products and technologies:** Turkey provides a standard compulsory license framework and to date has not granted a compulsory license relating to the manufacture and supply of pharmaceutical products. The recourse mechanism provided by legislation is, however, very strict in Turkey, providing a patentee with only one or two months (depending on the situation) to raise objections against an issued compulsory license.

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 service providers and hosting services but lacks an adequate framework for addressing foreign-hosted infringing material as well as repeat offenders. Online piracy is still prevalent and problematic in Turkey, with the Entertainment Software Agency reporting in 2013 that Turkey ranked 11th in the world in terms of the number of connections by peers engaging in unauthorized file sharing.

10. **Availability of frameworks that promote cooperative action against online piracy:** Turkish copyright law lacks a clear obligation for ISPs to expeditiously cooperate with rights holders when they have knowledge of infringement without an official order from a prosecutor's office or court. The draft copyright amendments appear to introduce secondary liability for ISPs and a notice and takedown mechanism based on private action as opposed to a court order. Once approved, Turkey's score for this indicator is likely to rise.

12. **Digital rights management legislation:** Existing legislation provides a vague DRM framework applying only to computer programs. Trafficking in pirated materials involving circumvention of TPMs and of circumvention technologies, components, and devices has increased in Turkey. The draft copyright amendments seek to broaden the scope to cover the circumvention of all types of TPMs and the trafficking in circumvention devices. 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

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** In Turkey, unregistered trademarks are protected via unfair competition rules provided for in the Commercial Code. In addition, it is possible for a rights holder to bring an opposition against a trademark registration applicant, including in cases of bad-faith registration. In practice, in the recent past, courts have tended to uphold the registration granted in Turkey. Nevertheless, in the first time in more than a decade, a foreign rights holder successfully obtained the cancellation of a mark registered in bad faith, and was awarded damages (Regal Raptor, 2014).

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 its 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. Although there have been no major legislative advancements, with major issues pertaining to counterfeit goods, Turkey has sponsored several enforcement initiatives that have had tangible results. For example, Turkey has introduced a pharmaceutical tracking system aimed at removing counterfeit (as well as substandard) drugs from the market. In 2014, more than 40,000 stakeholders were using the system, 6.5 billion drugs were in the system, and up to 7.9 million drugs had been recalled since 2010. Turkey has prosecuted several individuals for the online sale of counterfeit pharmaceuticals, as well as seized counterfeit drugs and materials used to create packaging for counterfeit drugs.

Trade Secrets and Market Access

20. **Barriers to market access:** Turkey has had in place a regime that discriminates against foreign companies and products for over a decade, but in 2014, these types of barriers intensified and took on a nature that is likely to involve sharing of proprietary know-how and assets. Public Procurement Law No. 4734, introduced in 2002, provides up to a 15% price advantage to local goods in government tenders. The goods that qualify for such a preference have up until now been determined annually by the Ministry of Science, Industry and Technology. In 2014, the threshold for being considered a local product was raised considerably as part of Communiqué 2014/35, issued in September 2014. Specifically, in order to be considered a local product, at least 51% of the total cost of manufacturing must be derived from local materials or labor. In addition, substantive stages of the manufacturing process must take place locally. Requiring foreign companies to localize production in Turkey to this extent likely entails transfer of IP rights to domestic entities in some, if not many, cases.

Enforcement

21. **Physical counterfeiting rates:** The counterfeit goods market in Turkey remains a major concern, with the European Community ranking it in the top five economies responsible for the production of counterfeit products in Europe. Turkey's counterfeit goods market, measured by the number of legal suits filed against infringing products, is ranked second in the world, after China.

23. **Civil and procedural remedies:** Turkey continues to experience judicial delays and non-deterrent sentences. Proposed amendments to the patent law appear to include a decrease in the upper limit of judicial fines for infringement, which could further encourage inadequate and ineffective sentencing.

26. **Effective border measures:** The Customs Law of Turkey allows for the temporary detainment of suspected counterfeit goods on an *ex officio* basis. Additionally, goods in transit fall under the scope of customs officials' authority to detain. However, Turkey continues to be one of the main producers and exporters of sought-after counterfeit products such as luxury goods, digital media, and textiles.

[ Ukraine]

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. Copyright (and related rights) term of protection	0.58[107]	
9. Legal measures which 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 requiring proprietary software used on government ICT systems to be licensed software	0.25	
Total Score—Copyrights	**1.58**	**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	0.25	
Total Score—Trade Secrets and Market Access	**0.25**	**2**

Enforcement		
21. Physical counterfeiting rates	0.19[108]	
22. Software piracy rates	0.17[109]	
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	**0.86**	**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	**3**	**4**
Total Overall Score	**11.69**	**30**

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
• Contracting party to all international treaties included in the GIPC Index and FTA with substantial IP provisions • Patent term restoration for pharmaceuticals available • Proposed notice and takedown regime approximating international standards	• Weak and ambiguous compulsory licensing framework • Lack of application of RDP • Broad copyright exceptions applied • Failure to curb government use of illegal software • Little administrative/judicial action against online piracy and counterfeiting • High rates of piracy and counterfeiting • Extremely poor enforcement environment

Spotlight on the National IP Environment

Past Editions versus Current Scores

Ukraine's score remains largely the same as in the second edition of the GIPC Index, at 39% of the overall score (with a score of 11.68 in the second edition and 11.69 in the third edition). Although Ukraine received credit for a recent FTA signed with the European Union, it experienced a corresponding drop in score due to established and increasing ambivalence toward illegal software use in

government agencies, a growing trend toward punitive measures for foreign companies that do not partner with local laboratories, and demonstrated holes in anti-counterfeiting efforts in online and physical marketplaces as well as at borders.

Areas of Note

Given that the political and security situation in Ukraine is fast-moving and fluid, and that the policy environment is relatively unstable, it is somewhat difficult to assess the state of IP rights developments on the ground. Nevertheless, the new Ukrainian government has demonstrated a commitment to strengthening the IP environment in Ukraine. For example, in 2014, the State IP Service (SIPSU) drafted a National Strategy of the Development of the Field of Intellectual Property in Ukraine, which broadly aims to harmonize IP laws and regulations to EU and international standards. In addition, SIPSU appears to be proceeding with IP reforms, including amendments to the Copyright Act. Approval of outstanding legislation and effective implementation of new measures are needed in order to secure actual improvements to the level of IP protection afforded in Ukraine.

Patents, Related Rights, and Limitations

5. **Legislative criteria and active use of compulsory licensing of patented products and technologies:** The law is unclear about the application of compulsory licenses, and it appears to provide for issuing a license for commercial purposes or industrial aspirations. In addition, there does not seem to be a strong recourse mechanism. A new piece of legislation, Resolution 877 "On Approval of the Procedure for Granting Authorization to Use an Object of Intellectual Property Regarding a Medicinal Product by the Cabinet of Ministers of Ukraine," adopted in late 2013, makes the process more complex and less transparent.

7. **Regulatory data protection term:** As noted in last year's edition of the GIPC Index, 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 that the law does not identify when and by whom registration of a generic product would be denied on the basis of RDP. In practice, there are reports of the regulatory agency approving a generic drug application based on a protected clinical dossier.

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. Throughout 2013 and 2014, SIPSU discussed amendments to the Copyright Act that would provide for notice and takedown. The most recent version of the bill introduced in 2014 includes a mechanism for takedown upon rights holder notice and ISP liability for not taking action, punishable by a fine of 500 to 1,000 month's wages. Unlike previous drafts, the current version appears to reduce the burden on rights holders and provides for injunctions against infringing websites and content. However, based on their response reinstate access, it is not clear how efficient or effective the system would be in practice as the measure also provides for ISPs to send warnings to infringing websites and users based on their response reinstate access. Depending on the final version of the draft and its application, Ukraine's score for this indicator may rise 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:** Ukraine made little progress in regard to legalization of software used in government agencies in 2014. The State Agency on Science and Innovation has reported

that, at present, about 400,000 units of software are not yet properly licensed, representing costs of $1.5 billion. Yet in 2014, no funds were earmarked for purchase of outstanding software licenses. The government's current approach to software legalization severely undermines the regulation requiring proper licensing of software that does exist. Based on these challenges, Ukraine's score for this indicator drops to 0.25. In a potential shift in stance, in the aforementioned 2014–18 National Strategy, the SIPSU included software legalization as a key priority for Ukraine. If, in future, progress is made in regard to implementing regulations, guidelines, and budgets aimed at software legalization, as well as to actual application in government agencies, the score may increase.

Trademarks, Related Rights, and Limitations

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** Ukraine provides for a basic legal framework promoting protection of trademarks. A major gap in the legislation is the lack of clarity in relation to protection of famous trademarks against dilution. Ukraine suffers from rampant counterfeiting, with a wide number of counterfeit products openly sold on the market. In 2014, the situation worsened, particularly in regard to medicines and biotech and ag-bio products, with an estimated 35% of well-known foreign brands being counterfeited in Ukraine.

18. **Availability of frameworks that promote action against online sale of counterfeit goods:** Ukraine has no fixed law present relating to safe harbor or secondary liability of ISPs for online trademark infringement. Although there are isolated examples of auction sites in Ukraine providing platforms for cooperating with rights holders (such as eBay Ukraine), the overwhelming majority demonstrate little commitment to removing infringing content. For example, the auction site Aukro.ua fails to provide for notice and takedown and, rather, places the responsibility of removing infringing content online on the seller. Industry reports indicate that counterfeit goods are widely advertised online.

Enforcement

21. **Physical counterfeiting rates:** As noted in indicator 17 above, counterfeiting remains a major concern in Ukraine. The Ukraine Alliance against Counterfeiting and Piracy in 2014 estimated the value of counterfeit products to be as high as $1.3 billion annually, with losses to trademark counterfeiting counted at above $700 million. The Seventh Kilometer Market in Ukraine is regarded as one of Europe's largest markets for counterfeit and pirated products—reported to serve over 100,000 customers per day—without any publicly noted enforcement activity concentrated on the market.

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. In 2014, rights holders cited a rise in counterfeit products—particularly in the biopharmaceutical and ag-bio sectors—passing through customs undetected, as well as entering economies from Ukraine.

Membership and Ratification of International Treaties

Ukraine is a member of all the treaties covered in the GIPC Index, and as such its score is high in this category. In 2014, as part of the Ukraine-EU Association Agreement, Ukraine signed and ratified an FTA with the European Union that includes substantial provisions on IP rights (in Chapter 9). Nevertheless, actual application of the FTA portion of the agreement (which is not covered in this indicator) has been postponed until the geopolitical situation in Ukraine stabilizes.

[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. Copyright (and related rights) term of protection	0.53[110]	
9. Legal measures which 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 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[111]	
22. Software piracy rates	0.64[112]	
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	**1.68**	**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	**11.71**	**30**

Strengths and Weaknesses

Key Areas of Strength

- 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 exceptions being digital copyright and counterfeits
- Substantial trademark reform in advanced stages

Key Areas of Weakness

- Patentability framework lacking, including regarding methods, biologics, CIIs, and patent backlogs
- No patent term restoration and RDP for pharmaceuticals
- Rudimentary copyright regime fails to address growing piracy
- Lack of collection society framework
- Increased availability of circumvention devices
- Relatively high levels of software piracy given economic development
- Uncertainty on treatment of prior use for trademarks
- Gaps in border controls
- *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

Past Editions versus Current Scores

The UAE's overall score has stayed broadly the same as in the second edition of the GIPC Index, at 39% of the total possible score (with a score of 11.72 in the second edition and 11.71 in the third edition). Though the IP environment on the ground remains challenging, with worsening software piracy rates and a noticeable hike in counterfeit exports that pass through the economy, the UAE has taken significant steps in 2014 to set the stage for improving its legal framework for trademark protection.

Areas of Note

Two pieces of trademark legislation are awaiting enactment by the UAE government. The Federal National Council approved an Anti-Commercial Fraud Bill that, among other elements, expands protection against similar (not only identical) goods, raises penalties for counterfeiting, and codifies destruction of counterfeit goods. At the time of research, the bill had yet to be signed and enacted. In addition, the Gulf Cooperation Council (GCC), of which UAE is a member, has agreed to a new unified trademark law, which will come into effect once all six member economies have approved it. The UAE is in the process of enacting elements of the law within the Anti-Commercial Fraud Bill (including those mentioned above). However, many components of the draft GCC Trademark Law do not appear to be included in the anti-fraud bill and have yet to be enacted. The GCC law introduces uniform requirements for registration and enforcement (but not a unified process or office for managing trademarks or a single court or dispute resolution authority) within the GCC. Elements most affecting the UAE include provisions strengthening well-known mark protection, civil remedies such as preliminary injunctions, and *ex officio* action by customs officials against suspected infringing goods, including those in transit. As a major trading hub in the Gulf region, the enactment and entry into force of the implementing regulations of the GCC Trademark Law would have significant commercial and trade implications for the UAE, and would largely lead to a rise in score for several indicators in future editions of the GIPC Index.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** The UAE provides for the standard patentability requirements of novelty, inventive step, and industrial application. However, there remain significant restrictions to patentability, including in relation to methods used in business, software, and medical treatment, as well as for biologic products. In addition, the patent examination process is subject to considerable delays, with backlogs particularly for substantive examinations.

Copyrights, Related Rights, and Limitations

12. **Digital rights management legislation:** The current law contains only rudimentary protection against circumvention of TPMs. Enforcement efforts in previous years have decelerated, and there is a visible growth in violations involving the circumvention of TPMs, especially in the Dubai trading zone. Industry estimates suggest piracy cost the UAE economy almost $200 million (AED 735 million) in 2013. In addition, in 2013, the UAE was ranked the second worst offender of online copyright in the Middle East in terms of number of downloads of pirated Sony PlayStation 3 titles.

Trademarks, Related Rights, and Limitations

15. **Non-discrimination/non-restrictions on the use of brands in packaging of different products:** In recent years, the UAE has introduced stricter regulations on packaging that require manufactures to cover up to 50% of cigarette packages with graphic images and health warnings in both Arabic and English. In 2014, the UAE Ministry of Health proposed legislation that would mandate removal of brands from tobacco packaging, standardize appearance, and increase the proportion of images to 70%. Upon adoption, the UAE's score for this indicator would decrease to 0.

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** In recent years, registration of trademarks has been on a "first to file" basis, and oppositions relying on the concept of prior use of a trademark has not been considered except in certain situations. In addition, evidence exists of bad-faith registration of domain names in the UAE (for example, *Huawei Technologies Co. Ltd. v. Jingeng Hong*, WIPO Case No. DAE2014-0004, 2014). Enactment of the GCC Trademark Law would provide greater clarity on and improve protection afforded to rights holders, particularly those of well-known marks. The law includes provisions strengthening protection against bad-faith registrations and the

ability to protect well-known marks, including narrowing the possibility of likelihood of confusion with similar products by introducing the concept of similar products existing in different classes. The law also explicitly prohibits registration of marks that are the same or similar to well-known marks on both same/similar products and dissimilar products that the public is likely to confuse with well-known marks or that might interfere with the rights holder's exercise of the mark. In addition, the law introduces criteria for determining well-known marks, which include the extent of use in other economies, the value of the mark, and the link between the mark and the commercial value of the associated product or products. Implementing these provisions would reduce the existing evidentiary burden associated with proving that an infringing mark misleads the public. Upon enactment of a domestic law implementing these measures of the GCC Trademark Law, the UAE's score for this indicator would rise.

17. **Legal measures available that provide necessary exclusive rights to redress unauthorized uses of trademarks:** As noted in last year's edition of the GIPC Index, the UAE provides for standard exclusive rights relating to trademarks, but is missing key elements, including in relation to cybersquatting. The law does not address protection of unauthorized mark usage in domain names. Instead, the owner of a registered trademark has to file a complaint under the Uniform Domain Name Resolution Policy. The UAE's anti-fraud bill extends protection against counterfeits to goods bearing similar (rather than only identical) trademarks to a registered trademark. The score for this indicator would rise upon passage of that bill.

Enforcement

21. **Physical counterfeiting rates:** The UAE estimates a loss to its economy of $408 million (AED 1.5 billion) per year from counterfeit goods. In addition, the Dubai Customs Agency valued the counterfeit goods seized in the first quarter of 2014 at AED 6.7 million, an estimated 180% increase from the first quarter of 2013 (when it was valued at AED 2.4 million).

23. **Civil and procedural remedies:** Implementation of the GCC Trademark Law would allow rights holders to obtain a preliminary injunction against potentially infringing goods on an ex parte basis. This would greatly improve the ability of rights holders to prevent trademark infringement, particularly trafficking in counterfeit goods, before it occurs.

25. **Criminal standards, including minimum imprisonment and minimum fines:** The Anti-Commercial Fraud law would increase penalties for counterfeiting of both registered and unregistered marks (raising the maximum prison sentence from one year to three years and significantly increasing maximum fines by about 100 times to close to AED 1 million (over $250,000). Maximum penalties for deliberate sale of counterfeit goods would increase to one year and AED 250,000 (close to $70,000). However, the minimum fine is relatively low, at AED 50,000, which could arguably be non-deterrent. Under the GCC Trademark Law, repeat infringers receive double penalties. The most recent version of the Anti-Commercial Fraud Law also provides for destruction of counterfeit goods, in contrast to previous drafts that would have allowed counterfeit goods to be re-exported to the economy of origin. Finally, the Gulf trademark law creates a new single anti-counterfeiting authority for all the Emirates.

26. **Effective border measures:** Existing UAE law does not provide for the confiscation of in-transit goods or *ex officio* action by customs authorities. However, the GCC Trademark Law does include measures authorizing customs officials to take *ex officio* action against large shipments of goods suspected of infringing trademarks. This authority includes seizure of in-transit goods. The fact that the article does not apply to small quantities of products has the potential, upon enactment of the law, to become a loophole for the import or export of counterfeit goods, particularly those sold in small batches online. The extent to which the UAE's score for this indicator would rise following enactment would be contingent on how it is implemented by customs officials in this sense.

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 has acceded to 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. Copyright (and related rights) term of protection	0.63[113]	
9. Legal measures which 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	0.75	
12. Digital rights management legislation	1	
13. Clear implementation of policies 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	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	0.72[114]	
22. Software piracy rates	0.76[115]	
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	**5.48**	**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	**27.61**	**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 action against online piracy • DRM legislation • Commitment to and implementation of international treaties • Consistent, effective, and innovative border protection against counterfeited and pirated goods	• Draft plain packaging regulations for tobacco products published, and government moving toward full introduction of standardized packaging • New private-copy exception does not provide rights holders with mechanism of compensation • Relatively high level of software piracy in comparison with other high-income economies

Spotlight on the National IP Environment

Past Editions versus Current Scores

The UK's overall score has increased from 27.59 in the previous edition of the GIPC Index to 27.61. As a percentage the score remains the same, at 92% of the total possible score. Overall, the United Kingdom has an advanced and highly sophisticated IP legislative framework, and enforcement levels are high.

Patents, Related Rights, and Limitations

7. **Regulatory data protection term:** RDP legislation in the European Union is provided by Article 10 of Directive 2004/27/EC (amending 2001/83/EC). The EU's basic term of protection is guided by an 8+2 formula. According to this formula, new pharmaceutical products are entitled to eight years data exclusivity and two years of marketing exclusivity (in which generic companies would be allowed to submit bio-equivalence tests).[116] Although the term of protection for RDP is not under review in the EU, since 2010 concerns have been raised over the disclosure policies by the European Medicines Agency. Up until 2010, EMA's disclosure policies and the "nondisclosure" element of the EU's RDP regime was clear and undisputed. Guided by Regulation 1049 of 2001 (regarding public access to European Parliament, Council, and Commission documents), the EMA did not release to the public documents contained in or as part of a marketing authorization application, as these were judged as being of a confidential nature. This changed in 2010, when the EMA shifted its position following a ruling by the European Ombudsman and began actively developing new policies and guidelines for the release of clinical trials data contained in marketing authorization applications. The agency released its final policy guidelines in October 2014. These guidelines include a number of important potential safeguards to stakeholders that have been agreed on, including limitation of access (through on-screen access versus actual document), redacting, and a period of consultation and potential judicial intervention in case of disagreement. These are all important elements that have now been better defined than in previous versions of the guidelines. Nevertheless, concerns remain over definitions of commercially confidential information (CCI), the implementation and functioning of these guidelines, and potential recourse mechanisms in instances of misuse of accessed data. It should also be noted that, while other stringent drug regulatory authority (including the U.S. FDA, TGA in Australia, and Health Canada) are considering and consulting on the issue of increasing clinical trial transparency, no economy is seeking to emulate EMA's policy in full. EMA's proposed policies also stand in stark contrast to those initiatives taken by the private sector and research-based biopharmaceutical manufacturers. Beginning in 2014, members of the European and American biopharmaceutical trade associations EFPIA and PhRMA have committed to increasing transparency and release of information and data relating to their clinical research. These initiatives include enhanced data sharing with scientific researchers, making publicly available synopses of clinical study reports, and a renewed commitment to seek publication of all clinical research results regardless of the research outcome.

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 previous editions of the GIPC Index, implementation of the DEA has been subject to delays. In 2014, the U.K. government announced that an integral part of the legislation—the sending of warning letters to suspected infringers—has been suspended indefinitely. The announcement came on the back of the launch of the "Creative Content UK" campaign, an industry-led effort to (1) educate the British public on the negative impact of piracy and on the value of creativity and creative content and (2) introduce a "subscriber alerts programme" to notify suspected copyright infringers of their activities. The second part of the campaign is based on a memorandum of understanding signed between leading content

creators in the United Kingdom (Motion Picture Association and the British Recorded Music Industry) and the main ISPs—BT, Sky Broadband, TalkTalk, and Virgin Media—in which content creators will work together with ISPs to monitor and alert users of potential infringement taking place on their internet accounts.

11. **Scope of limitations and exceptions to copyrights and related rights:** In 2014, important changes were introduced to the United Kingdom's copyright limitations and exceptions. Clarifications on the permitted use of copyrighted material in a number of areas were introduced, ranging from caricatures, parodies, and pastiches; to use of quotations; to the use of copyrighted material in education and teaching, research, and private study; to text and data mining. A new personal copy exception was also introduced. The Copyright and Rights in Performances (Personal Copies for Private Use) Regulations 2014 came into force on October 1, 2014. These regulations now allow consumers to make copies of creative works (except computer software) for private and personal use. Rights holders have raised concerns over the new regulations' lack of accompanying levy system and form of compensation. Unlike most private copy exceptions, there is no added levy system to compensate rights holders for the making of these private copies.

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 in the United Kingdom, and that it would wait for further evidence from Australia before deciding whether to introduce plain packaging in the United Kingdom. In November 2013, the U.K. government announced that it would continue to review the evidence for standardized or plain packaging of tobacco products, and commissioned an independent inquiry into review the matter. A number of developments took place in 2014, including the Chantler Review publishing its findings in April. After its publication, the Under Secretary of State for Health announced that the government was "minded" to introduce plain packaging regulations. In March 2014, the Children and Families Act 2014 was passed into law. Section 92 of this act seeks to give the Secretary of State powers to introduce regulations on the plain (or standardized) packaging of tobacco products. Draft regulations have been published by the Department of Health, and at the time of research, a second period of consultation was under way. The introduction of plain packaging in the United Kingdom 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 coming into force of the proposed regulations would decrease the United Kingdom's score in this indicator from 1 to 0.

Membership and Ratification of International Treaties

The United Kingdom has signed and acceded to all 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	0.75	
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	**6.5**	**7**
Copyrights, Related Rights, and Limitations		
8. Copyright (and related rights) term of protection	1[117]	
9. Legal measures which 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	1	
12. Digital rights management legislation	1	
13. Clear implementation of policies requiring proprietary software used on government ICT systems to be licensed software	1	
Total Score—Copyrights	**6**	**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[118]	
22. Software piracy rates	0.82[119]	
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	**5.28**	**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	**28.53**	**30**

Strengths and Weaknesses

Key Areas of Strength

- Pharmaceutical-related patent enforcement and resolution mechanism
- Patentability of CIIs (with strict definition)
- Court decisions set appropriate boundaries on copyright exceptions (excluding ongoing e-book debate)
- DRM legislation
- Protection of trade secrets
- Generally deterrent civil remedies and criminal penalties
- Commitment to and implementation of international treaties

Key Areas of Weakness

- Increasingly narrow interpretation of patentability of biotech inventions
- Ambiguity concerning ISP obligation to respond to trademark holder notice of infringement
- Concerns over border officials' ability to share information with rights holders, and newer methods of export
- Inconsistent enforcement against counterfeit and pirated goods, especially goods sold online

Spotlight on the National IP Environment

Past Editions versus Current Scores

The United States' overall score remains the same as in the second edition of the GIPC Index, at 95% of the total possible score (with a score of 28.52 in the second edition and 28.53 in the third edition). Nevertheless, the United States' score did change on two indicators. The score for patentability fell by 0.25 due to new guidelines from the United States Patent and Trademark Office (USPTO) that substantially constrain patenting of key biotech inventions. However, credit received for major court decisions in 2014, which define limits to copyright exceptions in the areas of broadcasts retransmission, and e-books (although debate continues on the latter issue), add 0.25 back to the United States' score.

Areas of Note

Various government bodies are currently conducting reviews of the U.S. copyright system in the online sphere. The House Judiciary Committee has held several hearings as part of its ongoing review of U.S. copyright law. In 2014, the hearings covered a wide range of issues, including copyright terms, broadcasts protection, the scope of fair use, various licensing models for online and digital content, and copyright remedies (such as statutory damages and penalties for online infringement). No legislation had been considered at the time this report was researched. It is anticipated that the review will continue for some time. In parallel, the U.S. Copyright Office is conducting reviews of numerous issues, including music licensing structures, implementation of the making available right, and orphan works. Similarly, the Department of Commerce and USPTO's Internet Policy Task Force conducted a number of roundtables on copyright policy as part of a consultation on its 2013 Green Paper, *Copyright Policy, Creativity, and Innovation in the Digital Economy*, that have addressed statutory damages, the digital first sale doctrine, and remixes. That same task force is also shepherding a multi-stakeholder discussion of the effectiveness and efficiency of the notice and takedown system.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** In April 2014, the USPTO issued new guidelines on the patentability of biotechnology inventions aimed at providing further clarification and interpretation of recent judicial decisions (namely, *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 2013, and *Mayo Collaborative Services v. Prometheus Laboratories, Inc.,* 2012). In particular, the guidelines extend the holdings from these decisions by introducing restrictions on patenting of naturally occurring substances (including genomic DNA, proteins, and stem cells), even if isolated and purified, if there is not sufficient distinction shown between a claim and the substance as found in nature. In a break from its typical approach of providing guidance on certain gray areas and leaving it to the courts to determine specific limits on wider issues, the new guidelines place broad restrictions on key areas of biotechnology. As such, they have considerable implications for many fields of biotechnology research, such as antibiotic, antiviral, and stem-cell research. The guidelines have generated significant uncertainty as to the scope of patentable subject matter for biotechnology inventions, and the biotech and biopharmaceutical industries have noted an increase in rejections of claims related to the guidelines since their introduction. The guidelines and their subsequent application widen the gap between current U.S. practice and that in other jurisdictions, such as the European Union, Australia, and Japan where, for instance, purified genomic DNA and proteins are patentable. In a positive step, however, the USPTO opened the guidelines to public consultation following their release, and is expected to issue an updated version shortly; depending on the outcome of this revision, the United States' score for this indicator may change.

3. **Patentability of computer-implemented inventions:** In a landmark case in 2014, the U.S. Supreme Court's judgment in *Alice Corporation Pty. Ltd. v. CLS Bank International* confirmed the patentability of software while introducing stricter approach to the patentability of CIIs. In doing so, the court narrowed the definition of a patentable CII under Section 101 of the Patent Act to one that goes beyond linking an abstract idea (that in itself is not patentable) with generic computer implementation. The USPTO has indicated it will release guidance based on the ruling in the near future.

7. **Regulatory data protection term:** The United States is the first economy 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. In its most recent guidance on the legislation, the U.S. FDA confirmed the 12-year term of protection afforded to biologics, although it indicated there will be no extension of this term for new indications, formulations, or modes of administration.

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):** As noted in the previous edition of the GIPC Index, in 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 reduction in Internet speed, removing access to frequently visited websites, and mandatory completion of online tutorials, relating to copyright infringement, depending on the ISP. Following one full year of operation, the Center for Copyright Information reported in May 2014 that, to date, close to 1.3 million educational alerts were disseminated. Of these, only 265 challenges were filed (just 0.02% of the total number of alerts), and no alerts were ultimately found to be invalid. Rights holders report that the Copyright Alert System has helped address piracy on P2P services, which in the past has been difficult to deter through the notice and takedown system.

11. **Scope of limitations and exceptions to copyrights and related rights:** The debate in the United States on the scope of fair use in relation to mass digitization of books continued in 2014. A federal appeals court ruling in *Authors Guild v. HathiTrust* found that universities are able to digitize their libraries to create searchable databases under the fair use doctrine based on, among other elements, the idea that the universities had implemented security measures that would protect against unauthorized access to the works. However, the fair use principle in the distribution of e-books more generally remains unresolved, with the Authors Guild currently appealing a circuit court's dismissal of its suit against Google, Inc. in late 2013. However, some ambiguity regarding private use in retransmissions of broadcasts and public performances was resolved in the 2014 Supreme Court ruling in *American Broadcasting Companies, Inc. v. Aereo, Inc.* The court determined that retransmission of broadcasts over the Internet in lieu of a cable provider constitutes a public performance of works; thus, such a retransmission does not fall under a private use exception and must be subject to license fees. The ruling reversed and remanded an appellate court decision, denying a preliminary injunction against Aereo.

12. **Digital rights management legislation:** Section 1201 of the DMCA protects against both the circumvention of technological measures implemented to control access to copyright protected works and the manufacture, import, offer, and trafficking in such circumvention devices. U.S.

court rulings are generally consistent with the existing standards. For instance, in April 2014, the Court of Appeals confirmed the 2012 decision in U.S. v. Silvius, in which the accused was found guilty of knowingly and willfully trafficking in modification chips and swap discs designed to circumvent copyright protection features found inside the Sony PlayStation 2, Microsoft Xbox, and Nintendo Wii video-game consoles. In addition, the Unlocking Consumer Choice and Wireless Competition Act, approved by Congress in 2014, provided clarity concerning the application of the DMCA to device unlocking by determining that the practice of unlocking mobile phones should be considered an exception to the circumvention measures in the DCMA, although some uncertainty remains as to how this measure will be applied.

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. In 2014, work progressed on introducing civil trade secret legislation at the federal level. The Trade Secrets Protection Act (2014 H.R. 5233), which thus far has been approved by the House Judiciary Committee, would provide for permanent injunctions and damages (including treble damages) where willful and malicious trade secret misappropriation is present. The act also allows for *ex parte* seizures of evidence or property necessary to prevent trade secret dissemination in certain circumstances. As noted in the previous edition of the GIPC Index, U.S. court rulings are generally consistent with existing standards for protection established in legislation. For example, in 2014, a federal jury in U.S. v. Liew found the accused guilty of 22 counts of economic espionage, trade secret theft, false statements, and witness tampering, and, on charges of theft of DuPont's trade secret recipe, he was sentenced to 15 years imprisonment. In relation to enforcement efforts, the United States has strengthened the FBI unit aimed at the investigation of trade secret violations, which includes recent action against Chinese army officials for the misappropriation of trade secrets from U.S. companies.

Enforcement

23. **Civil and procedural remedies; 25. Criminal standards, including minimum imprisonment and minimum fines:** As noted in previous editions of the GIPC Index, administrative, judicial, and police efforts to strengthen IP rights enforcement are ongoing, with several different campaigns taking place in 2013–14. The National Intellectual Property Rights Coordination Center (IPR Center) continued its "In Our Sites" operation, aimed at shutting down rogue websites, and seized control of over 1,400 websites trading in pirated and counterfeit goods in 2013. In addition, in 2013, the IPR Center logged 411 indictments, 465 IP rights crime convictions, and 693 arrests. In relation to counterfeit medicines, the FDA took action against about 1,700 rogue Internet pharmacy websites in 2013 as part of a worldwide enforcement operation. In 2014, the FDA identified at least 2,000 websites supplying counterfeit medicines to U.S. consumers, and sent notifications to ISPs. The Department of Justice also took action against search engines and shipping companies involved in facilitating the black medicines market.

26. **Effective border measures:** Under customs law, customs officers have the responsibility and authority to seize goods they suspect of violating U.S. laws or regulations. Enforcement at border entry points is inconsistent. Customs officials do not necessarily perform adequate inspection of incoming cargo, with only about 2% of all cargo being inspected. This significantly limits the ability to identify and seize infringing goods. In addition, customs bodies report a need for newer methods of detection-based modern evasion technologies utilized by importers such as third-party payment

systems and small-quantity shipments through international mail, parcels, and express shipments. Nevertheless, there is evidence of increased efforts directed toward existing loopholes in customs protection. For instance, in 2014, in a joint FDA/ Customs and Border Protection operation targeting imported prescription drugs suspected of being fake, at least 600 packages were seized at key postal service facilities.

[Vietnam]

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. Copyright (and related rights) term of protection	0.53[120]	
9. Legal measures which 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 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[121]	
22. Software piracy rates	0.19[122]	
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	**1.31**	**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	**7.84**	**30**

Strengths and Weaknesses

Key Areas of Strength

- 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
- Action against online counterfeiting (registration of online retailers)
- Elemental framework for IP rights enforcement; some positive application of damages
- Negotiation of EU-Vietnam FTA

Key Areas of Weakness

- 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
- Strict interpretation of well-known marks
- Market access barriers
- Very high physical counterfeiting rates
- Enforcement generally poor; penalties insufficient; administrative inaction

Spotlight on the National IP Environment

Past Editions versus Current Scores

Vietnam's overall score remains the same as in the second edition of the GIPC Index, at 26% of the total possible score (with a score of 7.8 in the second edition and 7.84 in the third edition). Although Vietnam has taken judicial action against online piracy websites, unfortunately the action has been ineffective. Positively, negotiations are underway for the conclusion of an EU-Vietnam FTA, which contains a substantive IP chapter and is likely to increase Vietnam's score for this indicator upon signing and ratification. Vietnam has introduced a registration system for Internet retailers in an effort to track and curb the availability of counterfeit products online. There is also positive movement in the prosecution and civil remedies available for companies affected by counterfeiting. Nevertheless, new criminal penalties for counterfeiting in the online sphere, which came into effect in 2014, cannot be considered deterrent.

Patents, Related Rights, and Limitations

2. **Patentability requirements:** As noted in last year's GIPC Index, 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 Intellectual Property Office (NOIP). In addition, patent applications face substantial delays in obtaining grants. In 2014, the average delay between filing and granting of pharmaceutical patents stood at over four years (a 20% increase from 2012–13 and a 40% increase from 2009).

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):** As noted in last year's GIPC Index, 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 infringing cyberlockers. The Ministry of Culture, Sports, and Tourism recently issued cease and desist warnings to three local websites known for hosting infringing content (phim47.com, v1vn.com, pub.vn). While an important initial step toward enforcing copyright online, the actions did not represent effective deterrents; without any real penalty, the websites continue to hold an online presence on alternative platforms. Lack of effective administrative action, including delays and red tape, and of prior jurisprudence have contributed to low numbers of civil and criminal cases involving copyright infringement.

Trademarks, Related Rights, and Limitations

16. **Ability of trademark owners to protect their trademarks: requisites for protection:** The Intellectual Property Law, as amended in 2009 provides protection for well-known marks that are widely known throughout the Vietnamese territory. NOIP has in the past recognized that unregistered rights are established by domestic use of a mark to the extent that it builds a reputation. However, the recognition of well-known marks is becoming stricter than before. The NOIP requires intensive evidence showing use of a mark within the Vietnamese territory. For example, the public at large must be aware of a mark. Moreover, "spill-over" effects and use of well-known marks in other economies (including neighboring economies) is insufficient to prove the existence of a well-known status. In addition, although the Intellectual Property Law requires the NOIP to maintain a list of well-known marks, the agency has not done so. In practice, a rights holder must provide a high threshold of evidence of a mark's well-known status for each and

every case relating to the mark (rather than relying on a record of previous decisions).

Enforcement

23. **Civil and procedural remedies:** Of the limited amount of civil and administrative suits brought in Vietnam, the effectiveness of decisions in enforcing IP rights is mixed. In one case decided in 2014, *First News Publisher v. Huy Thi Enterprise*, the court refused to award damages for book piracy based on the fact that the pirated materials seized were never formally sold in the public market, and actually ruled in favor of the infringing distributor. In contrast, also in 2014 in *Videojet Technologies Inc. v. Nam Trinh JSC,* the Ho Chi Minh City Court ruled in favor of the plaintiff, awarding damages derived from the value of seized goods despite no proof that any sales had taken place (which also included legal fees incurred as part of the seizure process). The value of the damages, close to $20,000, is the highest-known damage return in Vietnam to date, and five times the amount of legal fees ever awarded. It is also worth noting that the seizure and destruction of the goods seized in *Videojet* were sufficient to bar the infringing producer from distributing the goods in the market. If this case and the action surrounding it becomes a model in the future, this could represent a major step forward in terms of the ability to secure effective civil remedies and reasonable damages in Vietnam.

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. Decree 185/2013/ND-CP, which came into effect in January 2014, provides more detail on remedies and penalties for online trade in counterfeit goods. However, given the high rates of counterfeiting in Vietnam, the scope and the lightness of penalties in the measure cannot be considered deterrent; these include confiscation of goods, suspension of operations, six-month to one-year, revocation of the domain name, and fines of VND 40–50 million ($1,900–$2,300).

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. However, Vietnam is in discussions with the European Union for the conclusion of an FTA that will include a substantive IP chapter. Upon signing and ratification of the FTA, Vietnam's score for this indicator is likely to increase.

Annex 1: Abbreviations

BSA	BSA | The Software Alliance
CETA	Comprehensive Economic and Trade Agreement
CIIs	Computer-implemented inventions
DRM	Digital rights management
EPO	European Patent Office
FDA	U.S. Food and Drug Administration
FDI	Foreign direct investment
FTA	Free trade agreement
GDP	Gross domestic product
GII	Global Innovation Index
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
IPR	Intellectual property rights
ISP	Internet service provider
OECD	Organisation for Economic Cooperation and Development
P2P	Peer-to-peer
PTR	Patent term restoration
RDP	Regulatory data protection
R&D	Research and development
TPM	Technological protection measure
TPP	Trans-Pacific Partnership
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

Annex 2: Methodology, Sources, and Indicators Explained

The GIPC Index consists of 30 indicators across six separate categories:

i) Patents, Related Rights, and Limitations
ii) Copyrights, Related Rights, and Limitations
iii) Trademarks, Related Rights, and Limitations
iv) Trade Secrets and Market Access
v) Enforcement
vi) Membership and Ratification of International Treaties.

As in previous editions, these categories are for ease of organizing the GIPC Index and **have no statistical impact on weightings or an economy's overall score in the GIPC Index.** Each indicator is explained in more detail below.

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

Table III: 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. Copyright (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 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. 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 WTO/TRIPS membership

1. Scoring Methodology

As in previous editions 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.

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 economy—or 1—if the particular IP component does exist in a given economy.

Numerical indicators are those indicators 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 the 95 years provided in the United States.[123] Thus, the numerical formula for this sub-category is *"n years of basic copyright term/95."* If a economy has a copyright term of 95 years, the value it scores in this indicator is 1. If it has a copyright term of less 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 IV.

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

- primary and/or secondary legislation (regulation) in place; and
- the actual application and enforcement of that primary and/or secondary legislation.

Mixed indicators are the majority of indicators used in the GIPC Index, with 21 of the 30 indicators being 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 GIPC Index to more effectively accommodate "gray areas" in economy performance for a given indicator. Specifically, it is possible to assign a partial score, rather than only 0 or 1.

There are five possible scores available within a mixed indicator: 0, 0.25, 0.5, 0.75, and 1. 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 economies can receive partial scores for an indicator, which in some cases are a better approximation of their given reality.

Finally, there are also a few instances in which, 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.

2. Baselines Used

When possible, the GIPC Index uses baseline values, measures, and models. These values are based on best practices regarding 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 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 IV: IP Rights Baselines

BASELINES	BASELINE IN YEARS	LEGISLATION MODEL
Basic patent protection	20	TRIPS
Copyrights	95	United States
Trademarks	10	WIPO
Regulatory data protection	10	EU
Patent term restoration	5	EU/United States

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. Estimates will out of necessity 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 economy-specific (focusing on one or a relatively small sample of economies) or global, but not economy-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 economies 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.[124]

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 is available is 2009)[125]
- Software piracy rates compiled by the BSA (2014 being the latest survey)[126]

These sources are both robust and internationally recognized measures. Furthermore, they cover a large sample of economies, providing a sound basis for both cross-economy comparisons and long-term use within the GIPC Index. Both the BSA software piracy rates and the GTRIC-e Index are numerical measures and can be transposed into two respective 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 Index 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." The practical result is that a number of economies 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 ranks of Argentina, Brazil, Chile, and Mexico in the GTRIC-e Index is slightly misleading, as all four economies in other measures—not least the BSA software piracy estimates—have high rates of piracy. Furthermore, economies such as Argentina have high rates of physical piracy. For example, the *La Salada* street market outside Buenos Aires is estimated to be the largest informal market in Latin America, with a significant portion of goods sold being pirated.[128] More generally, the informal economy in Argentina has been estimated by the local chambers of commerce as being worth over 3% of GDP.[129]

The calculation for indicator 21, based on the GTRIC-e Index, is a simple numerical calculation of an economy's rank (based on its relative rate of counterfeiting), divided by the total number of economies (134) included in the GTRIC-e. For example, economy X ranks 45 on the GTRIC-e Index. Calculating that economy's GIPC Index score for indicator 21 is thus the numerical result of dividing 45 by 134. Table V provides an overview of the respective GTRIC-e ranking and GIPC Index score for indicator 21 for all 30 economies included in the 2015 GIPC Index.

Table V: GTRIC-e Ranking of Relative Rates of Physical Counterfeiting for 134 Economies[130]

ECONOMIES	GTRIC-E RANKING: FROM HIGHEST TO LOWEST LEVELS OF PHYSICAL COUNTERFEITING	INDICATOR 21 SCORE
China	1	0.01
Thailand	4	0.03
UAE	5	0.04
Vietnam	16	0.12
Malaysia	17	0.13
Turkey	21	0.16
Ukraine	25	0.19
Taiwan	27	0.20
Peru	45	0.34
India	48	0.36
South Korea	49	0.37
Indonesia	57	0.43
Singapore	61	0.46
Russia	77	0.57
Colombia	80	0.6
Switzerland	83	0.62
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	0.8
Canada	113	0.84
Japan	117	0.87
New Zealand	118	0.88
Germany	119	0.89
Chile	124	0.93

The BSA survey expresses an economy'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 is in an economy, the lower its score on the GIPC Index. For example, if economy 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 VI shows the latest BSA software piracy rate for all economies sampled in the third edition of the GIPC Index together with their respective score for indicator 22.

Table VI: BSA Ranking of Software Piracy Rates 2014:[131] GIPC Index Economies Sampled in the Third Edition

ECONOMIES	BSA SOFTWARE PIRACY RATE: FROM HIGHEST TO LOWEST LEVELS OF SOFTWARE PIRACY	INDICATOR 22 SCORE
Indonesia	84%	0.16
Ukraine	83%	0.17
Nigeria	81%	0.19
Vietnam	81%	0.19
China	74%	0.26
Thailand	71%	0.29
Argentina	69%	0.31
Peru	65%	0.35
Russia	62%	0.38
India	60%	0.40
Turkey	60%	0.40
Chile	59%	0.41
Malaysia	54%	0.46
Mexico	54%	0.46
Colombia	52%	0.48
Brazil	50%	0.5
Taiwan	38%	0.62
South Korea	38%	0.62
France	36%	0.64
UAE	36%	0.64
South Africa	34%	0.66
Singapore	32%	0.68
Canada	25%	0.75

Germany	24%	0.76
Switzerland	24%	0.76
United Kingdom	24%	0.76
Australia	21%	0.79
New Zealand	20%	0.80
Japan	19%	0.81
United States	18%	0.82

In addition to these two measures, individual economy-specific measures of physical and online software piracy are, when available and credible, used as part of the evidence for evaluating an economy's overall enforcement environment and application of relevant IP legislation.

4. Sources

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

5. Indicators Explained

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

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.[132] 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:** 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 and is 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 (on the basis of the essential facilities doctrine) and its application/enforcement is transparent and consistent with the following criteria: (1) the issuing should exclude any requirement for domestic manufacturing; (2) 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 European Union. This protection is aimed at restoring the patent term granted to innovative pharmaceutical products, due to the prolonged research, development, and regulatory approval periods of such products. This category does not include other forms of patent term restoration that are granted on the basis of prolonged examination periods. This is a numerical indicator.

7. **Regulatory data protection 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.[133] This is a numerical indicator.

Category 2: Copyrights, Related Rights, and Limitations

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

8. **Copyright (and related rights) term of protection:** Measured by the baseline term of protection not referencing the variable of the length of the author's life, which is the 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 economies (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 ISPs that expeditiously remove infringing material upon obtaining knowledge of it, in the context of an overall system that does not unduly burden ISPs, promotes cooperation between them 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).[134] 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) economies have passed primary and/or secondary legislation relating to DRM and TPMs and (2) this legislation is applied. This is a mixed indicator.

13. **Clear implementation of policies and guidelines requiring proprietary software used on government 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.

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 holders from using/putting their brands, trademarks, or corresponding trade dress on the packages of their products, thereby curtailing their 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 economies (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, cybersquatting, and violation of rights associated with a corresponding trade dress), 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 upon 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.[135]

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. Economies 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] & [2]). This is a mixed indicator.

20. **Barriers to market access:** The extent to which laws and regulations or *de facto* practices do not make access to an economy's market contingent on the sharing and/or disclosure of IP 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 IP 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.

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.[136] This is a numerical indicator.

22. **Software piracy rates**: Measured by rates of software piracy. This is a numerical indicator.[137]

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.

Category 6: Membership and Ratification of International Treaties

The indicators in this category measure whether an economy is (1) a signatory of and (2) has ratified or acceded to international treaties on the protection of IP. Indicators 27–29 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.[138] 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.

Endnotes

1 Note that the World Bank does not include Taiwan in its classification or its databank. However, based on current per capita income levels, Taiwan is classified as a high-income economy. World Bank (2014), "Country and Lending Groups," http://data.worldbank.org/about/country-and-lending-groups.

2 A review of major works from the OECD and other organizations relying on correlation analysis to show a positive effect of IP rights on technology transfer, FDI, and R&D can be found in: Park, W.G. & Lippoldt, D. (2014), "Channels of technology transfer and IP rights in developing countries," in Ahn et al., *Intellectual Property for Economic Development*, Cheltenham: Edward Elgar, pp. 33–78.

3 The closer a correlation is to 1 (near 70 or above), the stronger the association between the two studied variables; however, correlations falling very close to 1 are less meaningful because they indicate that a change in one variable is associated with an identical change in the other variable—and this is only likely to occur when the two variables are the same. To read more, see: "Correlation and Regression," BMJ, http://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one/11-correlation-and-regression.

4 See: Tanaka, H. & Iwaisako, T. (2014), "Intellectual Property Rights and Foreign Direct Investment: A Welfare Analysis," *European Economic Review,* Vol. 67, pp. 107–124.

5 European Patent Office (EPO) and the Office for Harmonization in the Internal Market (OHIM) (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; Economic and Statistic Administration and United States Patent and Trademark Office (USPTO) (2012), *Intellectual Property and the U.S. Economy: Industries in Focus,* U.S. Department of Commerce.

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11 Hill, D. (2014), "U.S. Knowledge-Intensive Services Industries Employ 18 Million and Pay High Wages," National Center for Science and Engineering Statistics InfoBrief, October 2014; Shapiro, R. & Pham, N. (2007), *Economic Effects of Intellectual Property-Intensive Manufacturing in the United States,* Sonecon, July 2007.

12 Shapiro, R. & Mathur, A. (2014), How India Can Attract More Foreign Direct Investment, *Create Jobs, and Increase GDP: Benefits of Respecting the Intellectual Property Rights of Foreign Pharmaceutical Producers,* Sonecon, January 2014.

13 ILOSTAT data not available for India, Nigeria, and Taiwan.

14 Cavazos, R., et al. (2010), "Policy Complements to the Strengthening of IPRs in Developing Countries," Trade Policy Working Paper 104, OECD.

15 Pugatch et al. (2014), *Scaling up Global Clinical Trial Activity: Key Trends and Policy Lessons.*

16 Paul, S. M. et al. (2010). "How to Improve R&D Productivity: The Pharmaceutical Industry's Grand Challenge," *Nature Reviews Drug Discovery,* Vol. 9, pp. 2013-2014.

17 Pugatch & Chu (2011).

18 Life sciences–related indicators consist of indicators falling under the Patent, Trademark, and Trade Secrets and Market Access categories of the GIPC Index, as well as those indicators in Enforcement and International Treaties that are relevant to the life sciences (specifically: 1–2, 4–7, 14–21, 23–26, and 28–30).

19 National Institutes of Health, Clinicaltrials.gov.

20 Note that the R-squared calculation in this figure is based on a slightly smaller subset of the economies (23 out of 30) included in the GIPC Index.

21 Tzou, M.C. (2013), "Recent Trend of Pharmaceutical Regulations in Taiwan," Taiwan Food & Drug Administration.

22 Chiu, Y. (2013), *Conducting Clinical Trials in Japan: A CRO Perspective,* Pharmaceutical Product Development.

23 Xing, Y. (2014), "China's High-Tech Exports: The Myth and Reality," *Asian Economic Papers,* Vol. 13, No. 1, pp. 109–123.

24 Copyright-related indicators consist of indicators falling under the Copyright category of the GIPC Index, as well as those indicators in Enforcement and International Treaties that are relevant to copyrights (specifically: 8–13, 21–27, and 30).

25 Estimates based on World Bank data of global GDP per country: World Bank (2013), Gross Domestic Product Ranking Table. Note: Taiwan is not included in these rankings.

26 The text of the relevant passage reads: "Tobacco and related products which comply with this Directive should benefit from the free movement of goods. However, in light of the different degrees of harmonisation achieved by this Directive, the Member States should, under certain conditions, retain the power to impose further requirements in certain respects in order to protect public health. This is the case in relation to the presentation and the packaging, including colours, of tobacco products other than health warnings, for which this Directive provides a first set of basic common rules. Accordingly, Member States could, for example, introduce provisions providing for further standardisation of the packaging of tobacco products, provided that those provisions are compatible with the TFEU, with WTO obligations and do not affect the full application of this Directive."

27 *New York Times,* "Music Industry Braces for the Unthinkable," January 23, 2011, http://www.nytimes.com/2011/01/24/technology/24music.html?_r=1.

28 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.

29 Calculated based on the OECD General Trade-Related Index of Counterfeiting of Economics (GTRIC-e) Index, where Argentina ranked 102 out of 134.

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

31 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.

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

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

34 KPMG (2014), *Illicit Tobacco in Australia,* p. 29.

35 Calculated as the average of the term for software (50 years) and the term for all other works (70 years), divided by the baseline term of 95 years.

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

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

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

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

40 Based on software piracy rates (25%) compiled by BSA.

41 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.

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

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

44 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.

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

46 Based on software piracy rates (74%) compiled by BSA.

47 See, for instance the 2014 settlement between Tesla Motors Inc. and Chinese businessman Zhan Baosheng over use of the "Tesla" trademark, as well as the 2012 settlement between Apple Inc. and Shenzhen Proview Technology Ltd. over the "iPad" trademark.

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

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

50 Based on software piracy rates (52%) compiled by BSA.

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

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

53 Based on software piracy rates (36%) compiled by BSA.

54 There is also the possibility of an additional year of protection available for new indications of existing products.

55 Calculated as the average of the term for joint authors, cinematographic works, and musical compositions (70 years); and photographic works (50 years), divided by the baseline term of 95 years.

56 Calculated based on the OECD GTRIC-e Index, where Germany ranked 119 out of 134.

57 Based on software piracy rates (24%) compiled by BSA.

58 There is also the possibility of an additional year of protection available for new indications of existing products.

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

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

61 Based on software piracy rates (60%) compiled by BSA.

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

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

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

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

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

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

68 Calculated by dividing the minimum term of protection of 50 years by the baseline term of 95 years.

69 Calculated based on the OECD GTRIC-e Index, where Malaysia ranked 17 out of 134.

70 Based on software piracy rates (54%) compiled by BSA.

71 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.

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

73 Based on software piracy rates (54%) compiled by BSA.

74 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); copyright works made by a person employed or engaged by the crown under a contract of apprenticeship or service (100 years); divided by the baseline term of 95 years.

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

76 Based on software piracy rates (20%) compiled by BSA.

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

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

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

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

81 Calculated based on the OECD GTRIC-e Index, where Peru ranked 45 out of 134.

82 Based on software piracy rates (65%) compiled by BSA.

83 Calculated by dividing the minimum term of protection of 70 years by the baseline term of 95 years.

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

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

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

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

88 Based on software piracy rates (32%) compiled by BSA.

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

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

91 Based on software piracy rates (34%) compiled by BSA.

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

93 Calculated based on the OECD GTRIC-e Index, where South Korea ranked 49 out of 134.

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

95 Calculated as the average of the minimum terms of protection for computer programs (50 years) and all other works (70 years), divided by the baseline term of 95 years.

96 Calculated based on the OECD GTRIC-e Index, where Switzerland ranked 83 out of 134.

97 Based on software piracy rates (24%) compiled by BSA.

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

99 Calculated based on the OECD GTRIC-e Index, where Taiwan ranked 27 out of 134.

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

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

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

103 Based on software piracy rates (71%) compiled by BSA.

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

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

106 Based on software piracy rates (60%) compiled by BSA.

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

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

109 Based on software piracy rates (83%) compiled by BSA.

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

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

112 Based on software piracy rates (36%) compiled by BSA.

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

114 Calculated based on the sum of the OECD GTRIC-e Index, where the United Kingdom ranked 97 out of 134.

115 Based on software piracy rates (24%) compiled by BSA.

116 There is also the possibility of an additional year of protection available for new indications of existing products.

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

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

119 Based on software piracy rates (18%) compiled by BSA.

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

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

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

123 Many economies 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 only uses 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.

124 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 economies. Because of this, the indicators measuring piracy and counterfeiting in the GIPC Index are primarily based on physical piracy and counterfeiting, with the data from BSA being 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 NBCUniversal 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 forecast for 2015 to be $455–$650 billion and $1,220–$1,770 billion, respectively. Out of this total, digitally pirated products were estimated at $30–$75 billion in 2008 and forecast to be $80–$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–$20 billion worth of digitally pirated recorded music was consumed in the United States, with an additional $1.4–$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 (2011), *Technical Report: An Estimate of Infringing Use of the Internet,* Cambridge, p. 2; Frontier Economics (2011), *Estimating the Global Economic and Social Impacts of Counterfeiting and Piracy,* London, pp. 56–58; and Smith, M.D. & Telang, R. (2012), *Assessing the Academic Literature Regarding the Impact of Media Piracy on Sales,* Social Science Research Network.

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

126 BSA (2014), *The Compliance Gap: BSA GLOBAL SOFTWARE SURVEY,* June 2014.

127 Ibid., pp. 1–2.

128 The Economist (2014), "Stall Stories," January 25, 2014.

129 Dialogo (2011), "Argentina: Black Market Targeted by Authorities," July 20, 2011.

130 OECD (2009).

131 BSA (2014).

132 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."

133 Half (0.5) of the available score is based on the term available for biologics or large molecule compounds. If an economy's relevant legislation/regulation either *de jure* or *de facto* does not cover such compounds, than the maximum score that can be achieved in this indicator is 0.5. The baseline numerical term used is that by the European Union of 10 years (8+2) of marketing exclusivity.

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

135 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 VeRO Program—that allows rights holders to protect their IP 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.

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

137 Software piracy rates compiled by the BSA (2014 being the latest survey).

138 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 only signed by WIPO member states in June 2012, however, it is too early to include it as a useful element of this indicator.

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