

Infinite Possibilities

U.S. Chamber International IP Index
Fourth Edition, February 2016



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

Foreword



Welcome to the 4th Edition of the U.S. Chamber of Commerce International IP Index.

Innovators are everywhere. Wherever and whenever imagination meets inspiration to serve a need, innovation takes place.

And where the necessary legal and financial pathways are in place, those innovations can reach and change the world.

Intellectual property, as the empirical analysis in this report demonstrates, provides a critical infrastructure that moves innovations from great ideas to tangible, real-world solutions, and makes them broadly available to others, everywhere.

Just as every country needs a system of roads — or, often today, a digital network — to bring goods and people to market, so every country at every level of development needs an intellectual property system to bring ideas to market as products.

And yet, as this report also shows, such infrastructure remains regrettably underdeveloped in much of the world, effectively denying innovators in those countries the opportunity to contribute their best ideas for their own and the world's advancement.

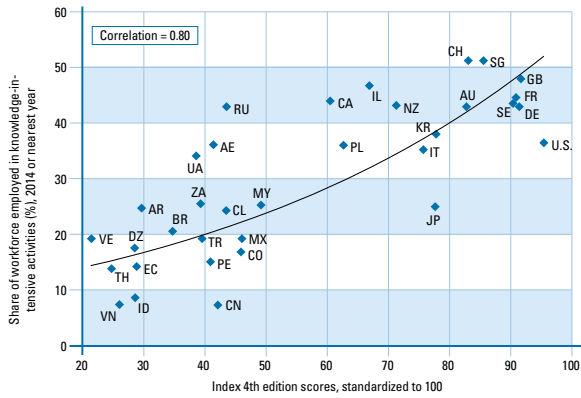
Accordingly, we offer the U.S. Chamber Index to innovators and policymakers everywhere as a guide to cultivating the infrastructure for innovative success in their own countries. It is a proven roadmap for developed and developing countries alike that has led to many if not most of the technological breakthroughs that expand, enhance, and extend the lives of people around the world today.

In these pages, that model is explained and outlined, and 38 prominent global economies are measured against it so that the opportunities for progress are clear. The U.S. Chamber of Commerce stands ready to work with every country that is ready to embrace this policy direction and empower its innovators to change the world for the better.

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

Robust IP systems deliver many economic benefits

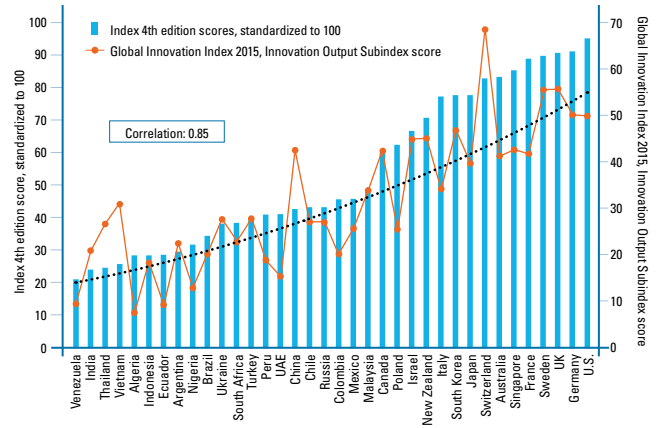
Jobs



Source: GIPC, International Labor Organization ILOSTAT Database
 Legend: AE - UAE, AR - Argentina, AU - Australia, BR - Brazil, CA - Canada, CH - Switzerland, CL - Chile, CN - China, CO - Colombia, DE - Germany, DZ - Algeria, EC - Ecuador, FR - France, GB - United Kingdom, ID - Indonesia, IL - Israel, IN - India, JP - Japan, KR - South Korea, MX - Mexico, MY - Malaysia, NZ - New Zealand, PE - Peru, PL - Poland, RU - Russia, SE - Sweden, SG - Singapore, TH - Thailand, TR - Turkey, UA - Ukraine, U.S. - United States, VE - Venezuela, VN - Vietnam, ZA - South Africa

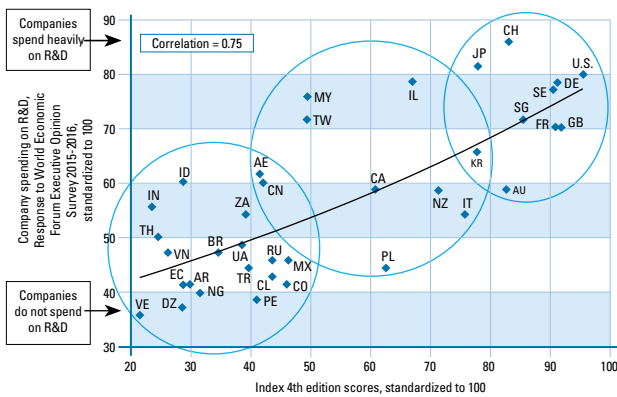
Nearly triple the workforce is concentrated in knowledge-intensive sectors in economies with favorable IP regimes.

Innovation



Economies with state-of-the-art IP environments produce nearly 70% more innovative output.

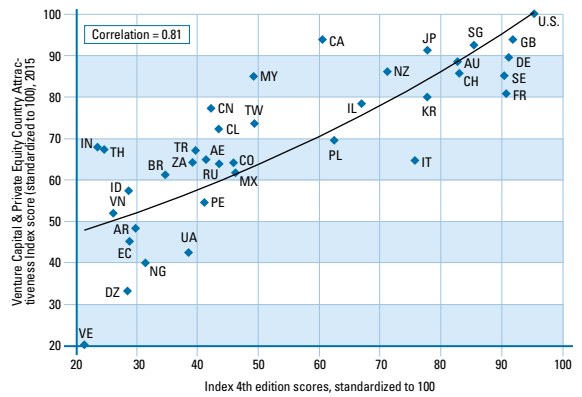
Research & Development



Source: GIPC, World Economic Forum/Executive Opinion Survey
 Legend: AE - UAE, AR - Argentina, AU - Australia, BR - Brazil, CA - Canada, CH - Switzerland, CL - Chile, CN - China, CO - Colombia, DE - Germany, DZ - Algeria, EC - Ecuador, FR - France, GB - United Kingdom, ID - Indonesia, IL - Israel, IN - India, JP - Japan, KR - South Korea, MX - Mexico, MY - Malaysia, NG - Nigeria, NZ - New Zealand, PE - Peru, PL - Poland, RU - Russia, SE - Sweden, SG - Singapore, TH - Thailand, TR - Turkey, TW - Taiwan, UA - Ukraine, U.S. - United States, VE - Venezuela, VN - Vietnam, ZA - South Africa

Firms in economies with advanced IP rights in place are nearly 50% more likely to invest in R&D activities.

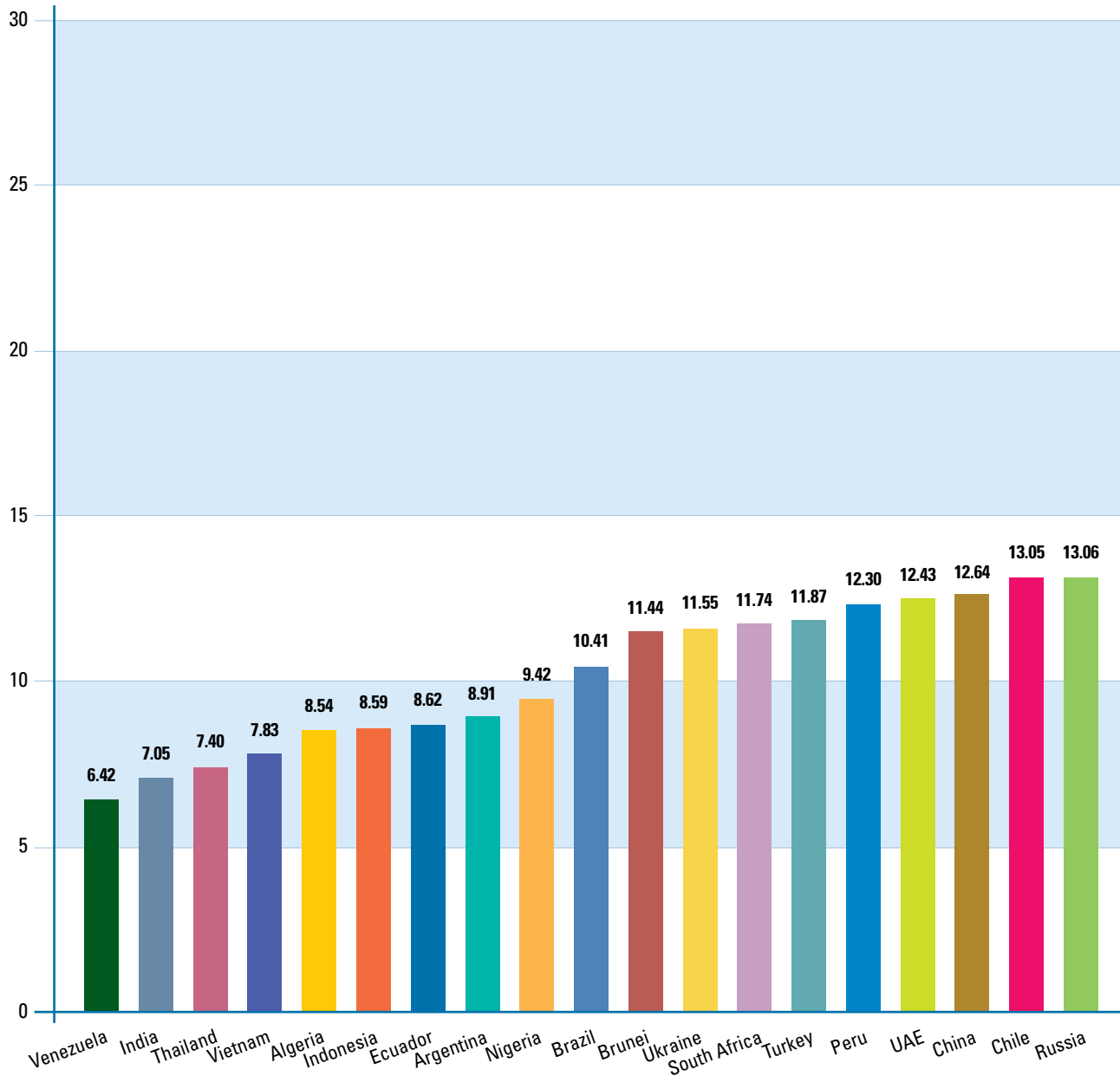
Access to Financing



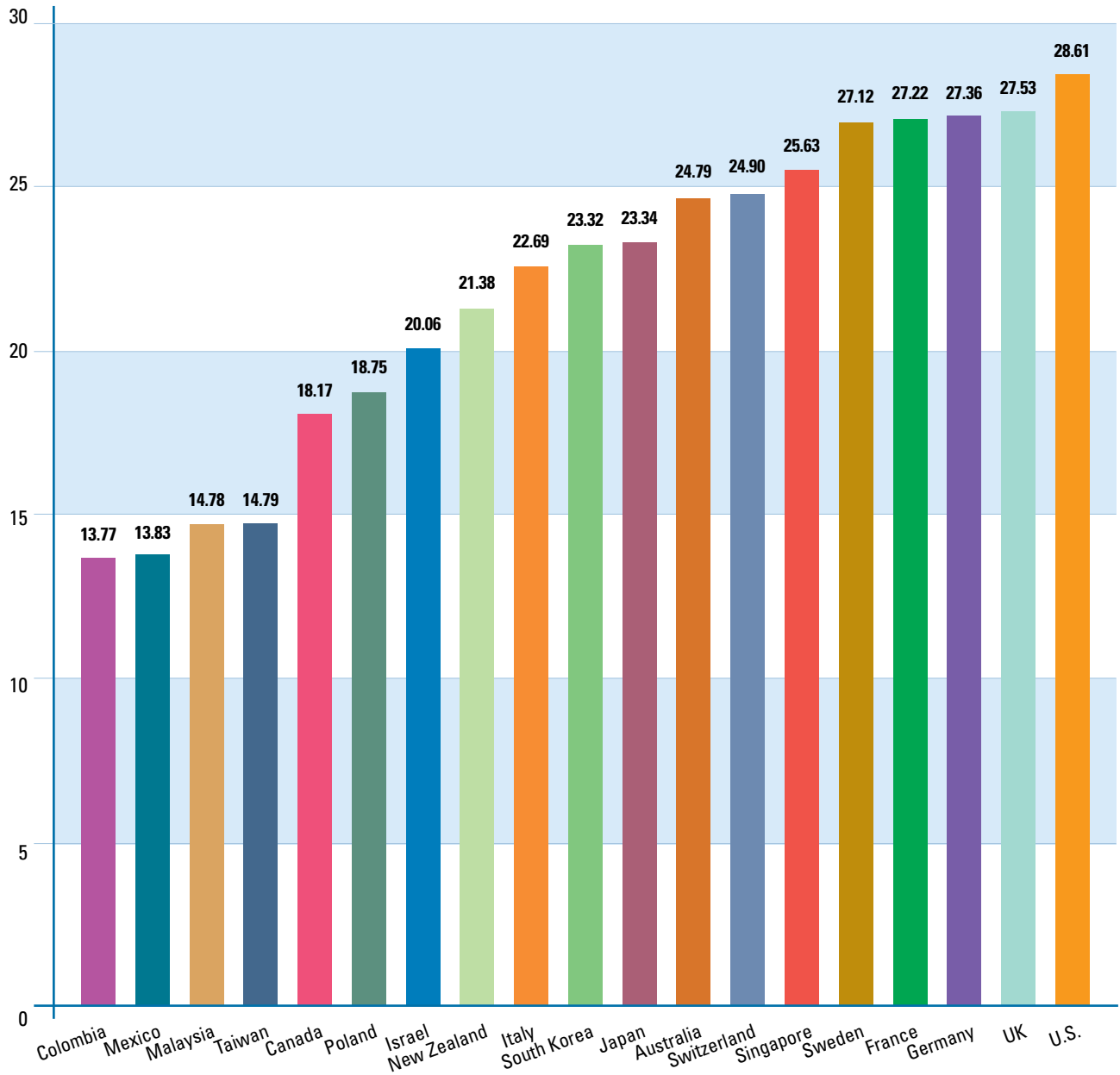
Source: GIPC, IESE Business School/Groh et al. (2015)
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Economies maintaining robust IP regimes are more likely to attract venture capital and private equity funds compared to economies whose IP regimes lag behind.

The Fourth Edition of the Index



Overall Economy Scores



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Executive Summary

Intellectual property (IP) fuels the creation of knowledge-based economies. By providing a legal infrastructure through which ideas can become products, robust IP systems foster innovation leading to economic growth, job creation, and sustained competitiveness in global markets. The U.S. Chamber’s International IP Index provides economies with a comprehensive roadmap to harnessing the benefits that robust IP systems provide.

The 4th edition of the Index, *Infinite Possibilities*, assesses the legislative, regulatory, and administrative strength of the IP environment in each country measured, providing domestic policy makers with a clear set of priorities for the development of an innovative knowledge economy.

These transformations in turn create limitless possibilities to attract investment and fuel economic competitiveness.

The Index maps the IP environment in 38 economies around the world, collectively accounting for nearly 85% of global gross domestic product (GDP). Each economy’s score is based on 30 indicators spread across six categories—Patents, Copyrights, Trademarks, Trade Secrets, Enforcement, and International Treaties. The 4th edition of the Index also includes an updated measure on physical counterfeiting to provide a more accurate estimate of the estimated level of counterfeiting in the economies benchmarked in the Index. An overall score approaching 30 is indicative of a highly robust IP system.

The 4th edition evaluates IP policies in 38 economies, with the addition of 8 new economies in the 2016 Index:

Algeria	Indonesia	South Korea
Argentina	Israel	Sweden
Australia	Italy	Switzerland
Brazil	Japan	Taiwan
Brunei	Malaysia	Thailand
Canada	Mexico	Turkey
Chile	New Zealand	Ukraine
China	Nigeria	United Arab Emirates
Colombia	Peru	United Kingdom
Ecuador	Poland	United States
France	Russia	Venezuela
Germany	Singapore	Vietnam
India	South Africa	

Key Findings

The Index includes many examples of positive momentum in economies that have recognized the infinite possibilities provided by robust IP protections and invested in a stronger innovation ecosystem:

- The Canadian government extended the copyright term for sound recordings to 70 years and implemented *ex officio* authority for customs officials.
- The Indonesian government introduced implementing regulations for the 2014 Copyright Act, which create an online notification system for rights holders to request action against alleged infringing websites.
- In Israel, a new Index economy, 2014 reforms significantly enhanced the environment for patent protection. In particular, Israel has introduced patent restoration for biopharmaceuticals and regulatory data protection for submitted clinical data.
- Malaysia's IP environment has improved gradually over the past four years, resulting in a cumulative increase in the country's score. As a TPP (Trans-Pacific Partnership) negotiating partner, the IP standards within the agreement—once ratified and implemented—will further strengthen Malaysia's IP environment.
- The United Arab Emirates introduced a series of measures to deter TV piracy and combat the production and trafficking of counterfeit goods.

Other economies still have ample room to improve their IP environment in order to unleash the benefits of intellectual property:

- Broadly, a number of economies, including Brazil, China, India, Indonesia, and Russia introduced or maintained policies that tie market

access to sharing of IP and technology. Such forced-localization policies tend to undermine the overall innovation ecosystem and deter investment from foreign IP-intensive entities.

- Copyright protection remains a particular challenge for many high-income economies in Europe, including Italy, Poland, Switzerland, and Sweden, particularly due to the absence of policies to more effectively combat online piracy.
- The Australian High Court reversed the earlier Federal Court ruling in *D'Arcy v. Myriad Genetics*, weakening the patentability of isolated-genetic material and biotechnology inventions.
- In Ecuador, another new Index economy, the government continues to actively pursue an innovation policy that in large measure undermines or weakens IP protection including the active use of compulsory license for biopharmaceutical products.
- While the United States excels at promoting IP-intensive industries in many ways, enforcement related to trade secrets theft and counterfeit seizures remains a relative weakness, causing the United States to be ranked fifth in enforcement.

The 4th Edition of the Index not only measures the relative strengths of each economy's IP environment, but also demonstrates the benefits associated with those strengths. The Index includes six new correlations on the relationship between strong IP rights and socio-economic benefits, as well as updated statistical information for 13 of the correlations from the 3rd edition of the Index. The new correlations include:

- **Access to finance:** Economies with robust IP regimes are more likely to attract venture capital and private equity funding.

- **High-quality human capital:** Economies with favorable IP protection possess on average 2.5 times more research and development (R&D)-focused personnel within their workforces.
- **Foreign direct investment attractiveness:** Economies with robust IP systems receive on average a 45% higher Standard and Poor's credit rating than economies whose IP systems lag behind.
- **Inventive activity:** The top 10 economies in the Index exhibit patenting rates more than 30 times greater than the Index's bottom 10 economies.
- **Advanced technology markets:** People and firms in economies scoring above the median level of the Index are 30% more likely to enjoy access to the most recent technological developments.
- **Streamlined and enhanced access to creative content:** Advanced and easy-access delivery of streaming services is 3 times greater in economies scoring above the median level of the Index, than in those scoring below the median, while access in the top 5 economies is up to 25 times greater than in the lowest 5.

Conclusion

Countries with a legal framework underpinned by robust IP protection create infinite possibilities to foster economic growth and global competitiveness. The Index serves as a roadmap to help economies achieve this goal, in turn nurturing the growth of new and emerging innovative hubs around the world.

Overview of the U.S. Chamber International IP Index Fourth Edition

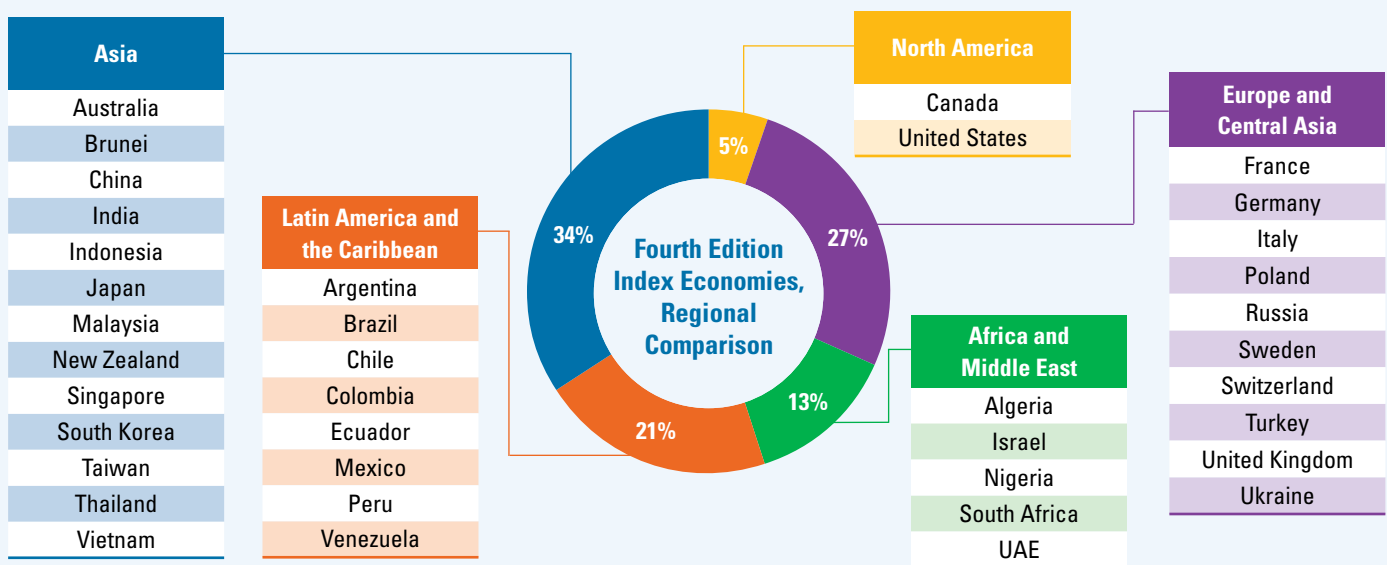
Now in its 4th consecutive year, the U.S. Chamber International IP Index remains a unique empirical assessment of the state of national IP environments in the world. A truly global measure, the latest edition of the Index covers 38 economies that together constitute over 85% of world GDP.¹ The Index covers all major forms of IP rights from patents, copyright, and trademarks to trade secrets and membership in international IP treaties. Together with a dedicated focus on understanding and assessing the active enforcement and application of IP rights, the Index provides a clear roadmap for both policy makers and businesses seeking to assess risk to one of their most valuable forms of capital—intellectual property—when operating overseas.

The Index consists of 30 indicators across 6 separate categories:

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

As with the 3rd edition, this Index also contains a unique Statistical Annex that seeks to use the Index’s findings to help explain the benefits of promoting IP. Specifically, the Annex shows the strong correlation between the strength of an economy’s national IP environment and economic activity across a range of indicators. Whether it is encouraging R&D; creating more high-value, knowledge-based jobs; or generating more cutting-edge innovation or access to venture capital, the evidence gathered in this Annex shows clearly that economies that protect IP tend also to see greater benefits in all these other measures of economic activity.

Geographic Coverage of the U.S. Chamber International IP Index Fourth Edition



Source: World Bank (2015)

In addition to regional and geographic diversity, the Index also contains economies from a broad spectrum of income groups as defined by the World Bank.

Fourth Edition Index Economies by World Bank Income Group

Lower-middle-income economies	Upper-middle-income economies	High-income economies	High-income Organisation for Economic Co-operation and Development (OECD) Members
India	Algeria	Argentina	Australia
Indonesia	Brazil	Brunei	Canada
Nigeria	China	Russia	Chile
Ukraine	Colombia	Singapore	France
Vietnam	Ecuador	Taiwan	Germany
	Malaysia	UAE	Israel
	Mexico	Venezuela	Italy
	Peru		Japan
	South Africa		New Zealand
	Thailand		Poland
	Turkey		South Korea
			Sweden
			Switzerland
			United Kingdom
			United States

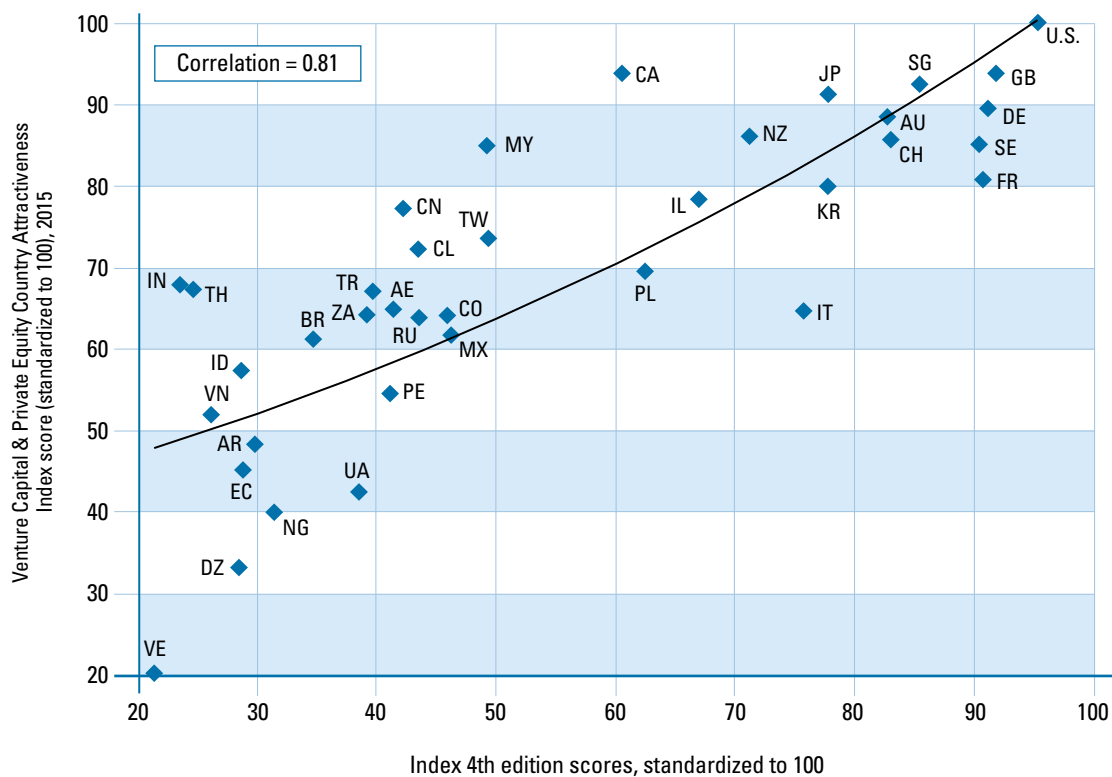
Source: World Bank (2015)

Building Paths to Innovation and Competitiveness Through IP Rights

From the first to the fourth edition, the Index has addressed the question of why IP matters for economies, governments, businesses, and the public at large. The third edition included a special section dedicated to examining this question empirically, using existing literature as well as the Index itself.

In the fourth edition, this section expands on the previous analysis to sharpen the image of how IP rights help build innovative and competitive economies and enable access to the benefits of a global marketplace.

A healthy IP environment increases access to venture capital Association between IP Protection and Access to Finance



Source: GIPC, IESE Business School/Groh et al. (2015)

Legend: AE – UAE, AR – Argentina, AU – Australia, BR – Brazil, CA – Canada, CH – Switzerland, CL – Chile, CN – China, CO – Colombia, DE – Germany, DZ – Algeria, EC – Ecuador, FR – France, GB – United Kingdom, ID – Indonesia, IL – Israel, IN – India, IT – Italy, JP – Japan, KR – South Korea, MX – Mexico, MY – Malaysia, NG – Nigeria, NZ – New Zealand, PE – Peru, PL – Poland, RU – Russia, SE – Sweden, SG – Singapore, TH – Thailand, TR – Turkey, TW – Taiwan, UA – Ukraine, U.S. – United States, VE – Venezuela, VN – Vietnam, ZA – South Africa

Looking at the same correlations from the 3rd edition in the 4th edition (with the sample size increased from 30 to 38 economies), the findings of the relationship between IP rights and economic benefits are confirmed and strengthened. This is particularly true when considering the relationship between IP rights and factors for building innovative capacity and competitive advantages in the fastest-growing high-tech sectors. For instance, the correlation between IP rights and investment in R&D identified in the previous edition is stronger under the larger sample size. This confirms that economies that strengthen IP tend to promote greater company-level spending on cutting-edge R&D—a crucial component for translating new technologies into concrete products. Similarly, an even more robust relationship was identified between IP rights and job creation in knowledge-intensive sectors, reflecting the importance of strong IP protection, among other elements, for generating jobs within the highest-value segments of the economy.

In addition to updating the data and enlarging the sample size for the existing correlations identified in the 3rd edition, the analysis in the 4th edition includes 5 new correlations that identify strong positive relationships between IP rights and:

1) Access to finance:

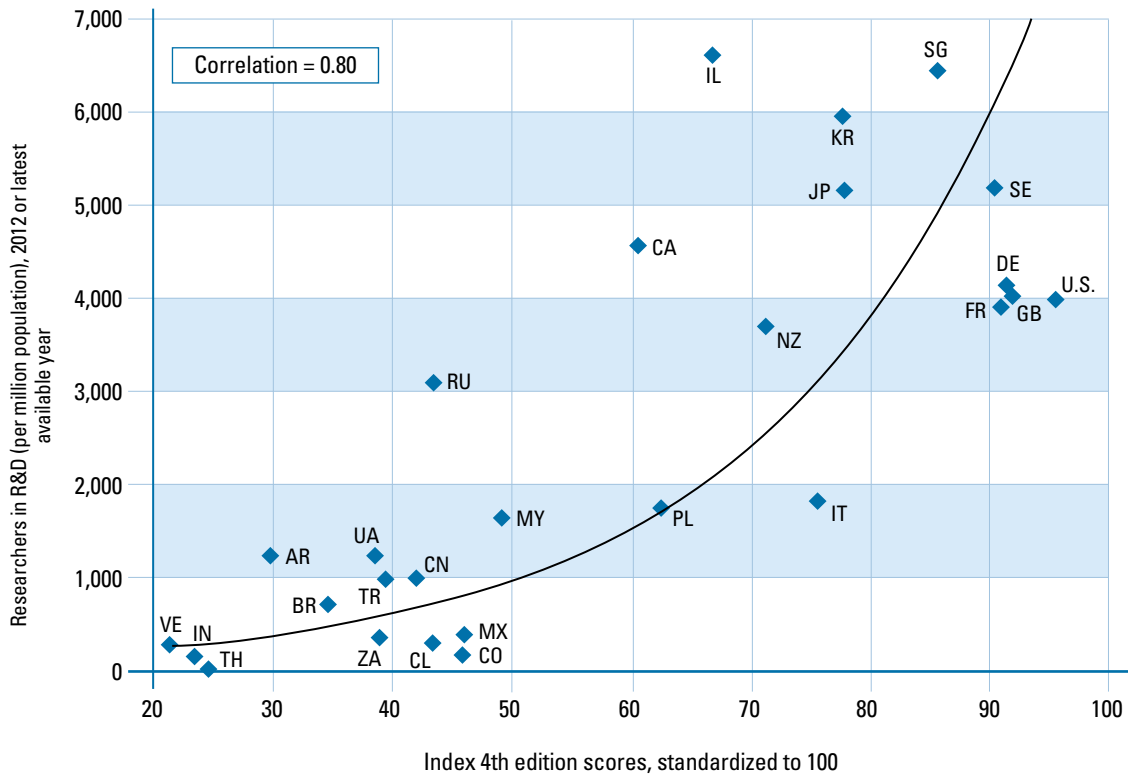
As the graph on the previous page indicates, the Index scores exhibit a very strong association to economies' attractiveness for venture capital as measured by the Venture Capital and Private Equity Economy Attractiveness Index.¹ Economies with robust IP regimes (scoring within the top third of the Index) are more likely to attract venture capital (VC) and private equity funding compared with economies whose IP regimes lag behind. Having a healthy VC market that supports the rise of domestic high-tech sectors depends on the guarantee that nascent technologies integral to the growth potential and value of start-up companies will be protected from freeriding in the market.

2) High-quality human capital:

As the graph on the next page shows, economies that provide favorable IP protection possess, on average, 2.5 times more R&D-focused personnel within their workforces. Comparatively, economies with moderate IP regimes (falling within the middle third of the Index) have twice as many R&D researchers than economies whose IP environments require the most improvement. Placing increasing emphasis on innovation-enabling policies, including strong IP protection, promotes domestic capacity building in terms of human capital, particularly for innovative activities.

Robust IP protection encourages development of human capital

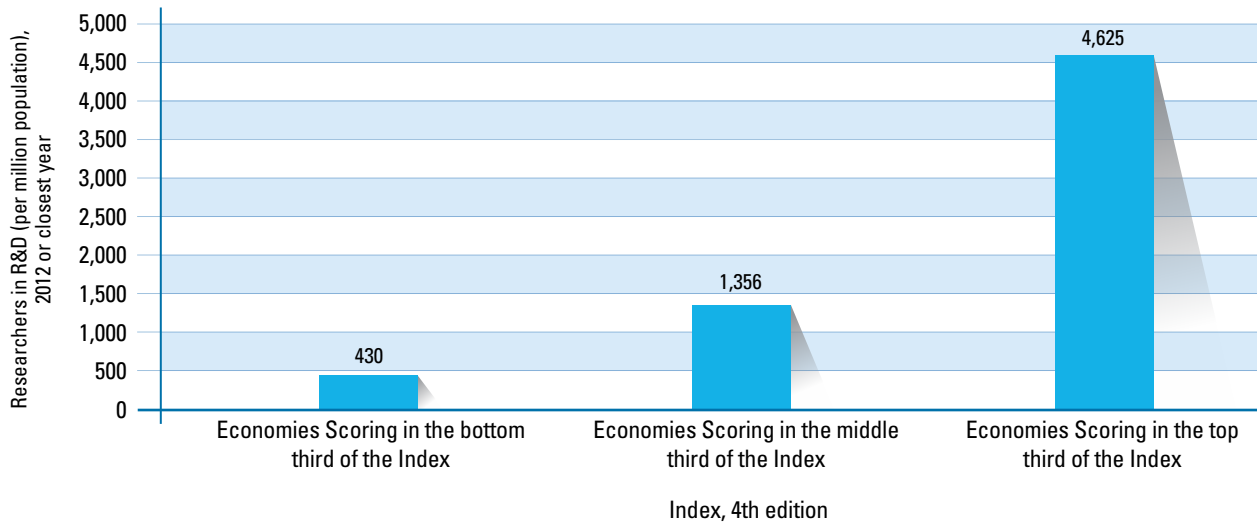
Association between IP Protection and Number of Researchers in R&D



Source: GIPC, World Bank

Legend: AR – Argentina, BR – Brazil, CA – Canada, CL – Chile, CN – China, CO – Colombia, DE – Germany, FR – France, GB – United Kingdom, IL – Israel, IN – India, IT – Italy, JP – Japan, KR – South Korea, MX – Mexico, MY – Malaysia, NZ – New Zealand, PL – Poland, RU – Russia, SE – Sweden, SG – Singapore, TH – Thailand, TR – Turkey, UA – Ukraine, U.S. – United States, VE – Venezuela, ZA – South Africa

Association between IP Protection and Researchers in R&D: Average Rates by Economy Group



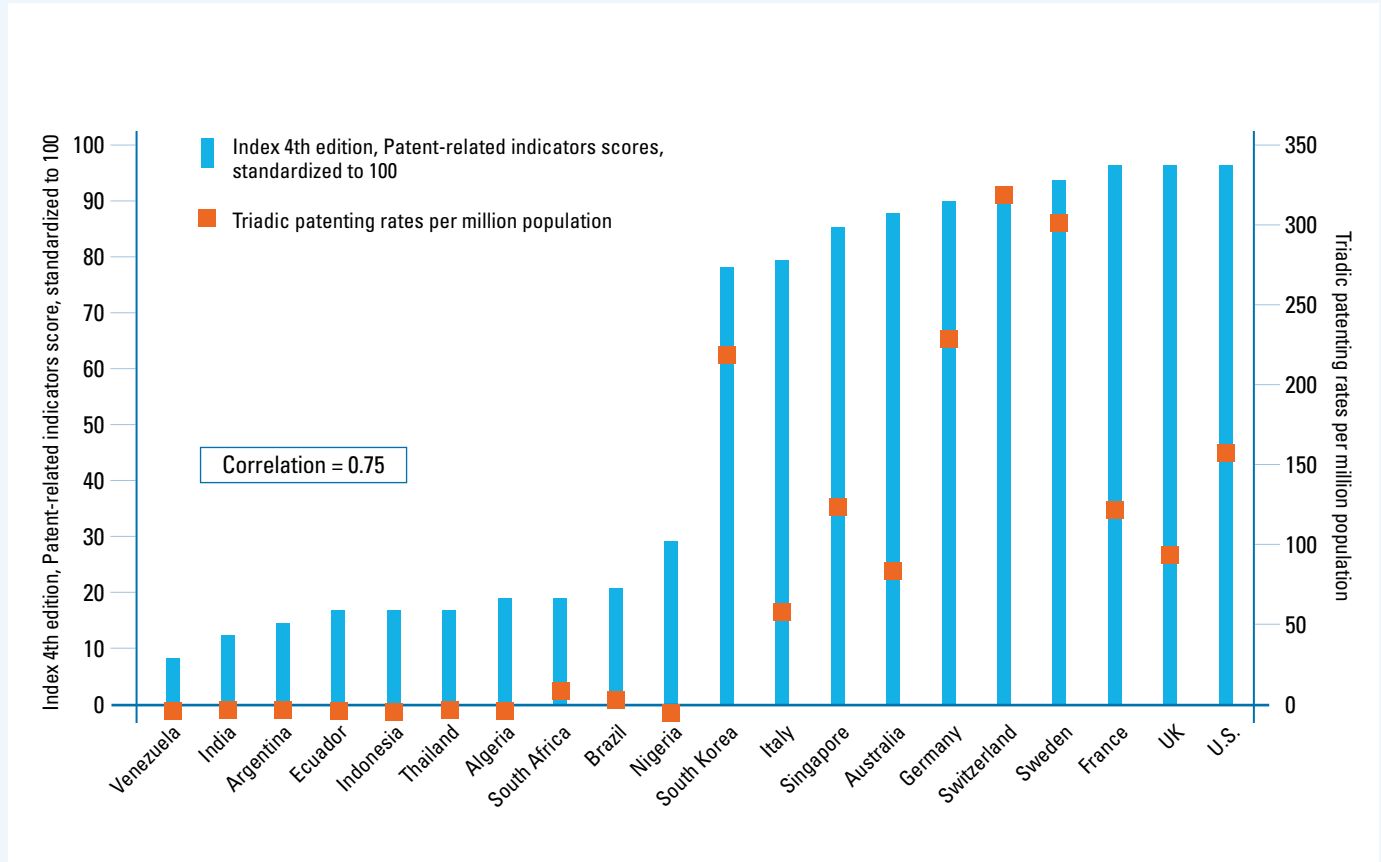
3) Inventive activity:

The top 10 economies in the Index exhibit patenting rates (in terms of triadic patents) more than 30 times

greater than economies placing in the Index's bottom 10 spots. The stronger the IP environment, the more likely economies are to create and possess a store of high-value inventions that serve as springboards for cutting-edge R&D initiatives and crucial levers for new local innovative firms.

Strong patent protection supports robust inventive activity

Association between Patent Protection and Triadic Patenting Rates: Top 10 and Bottom 10 Economies



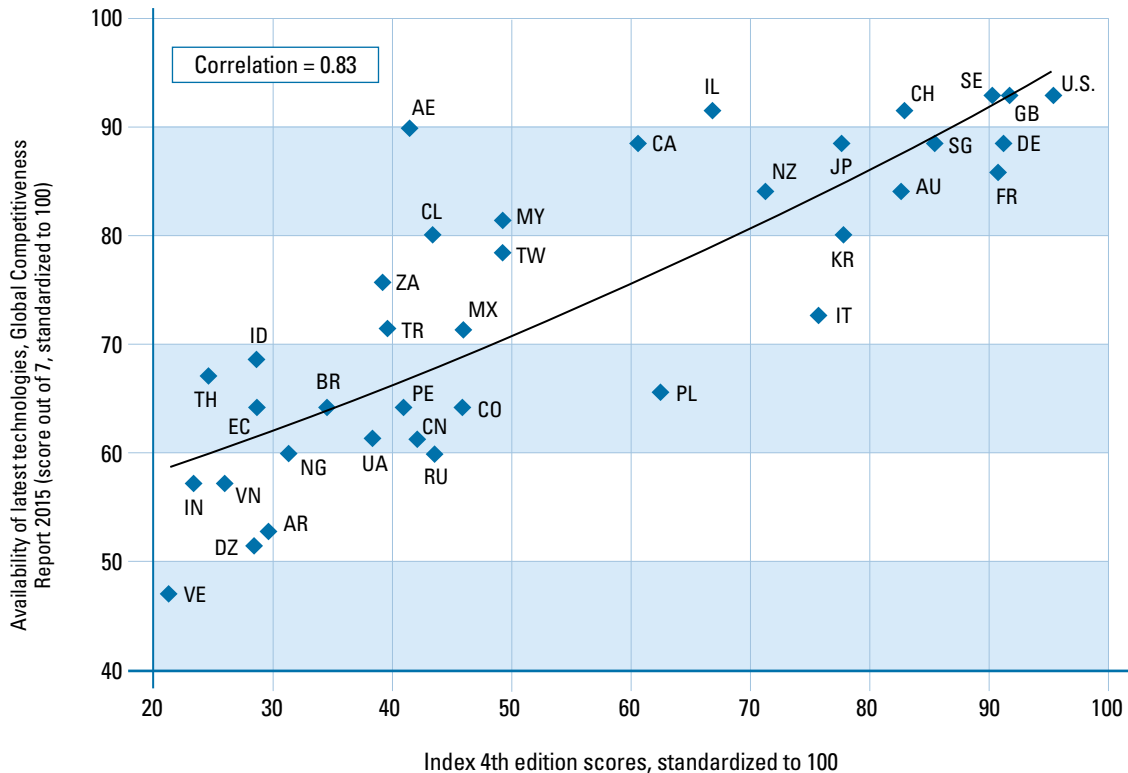
Source: GIPC, OECDStat, World Bank

4) Access to Technology:

Firms and people in economies that score above the median level of the Index are 30% more likely to

benefit from access to the most recent technological developments compared with those in economies whose IP environments trail behind. Improving IP protection promotes wider availability of pioneering tools and platforms that enable advanced innovation as well as reflect a high-tech economy and society.

A supportive IP environment promotes an advanced technology market Association between IP Protection and Access to the Latest Technologies



Source: GIPC, World Economic Forum/Executive Opinion Survey
 Legend: AE – UAE, AR – Argentina, AU – Australia, BR – Brazil, CA – Canada, CH – Switzerland, CL – Chile, CN – China, CO – Colombia, DE – Germany, DZ – Algeria, EC – Ecuador, FR – France, GB – United Kingdom, ID – Indonesia, IL – Israel, IN – India, IT – Italy, JP – Japan, KR – South Korea, MX – Mexico, MY – Malaysia, NG – Nigeria, NZ – New Zealand, PE – Peru, PL – Poland, RU – Russia, SE – Sweden, SG – Singapore, TH – Thailand, TR – Turkey, TW – Taiwan, UA – Ukraine, U.S. – United States, VE – Venezuela, VN – Vietnam, ZA – South Africa

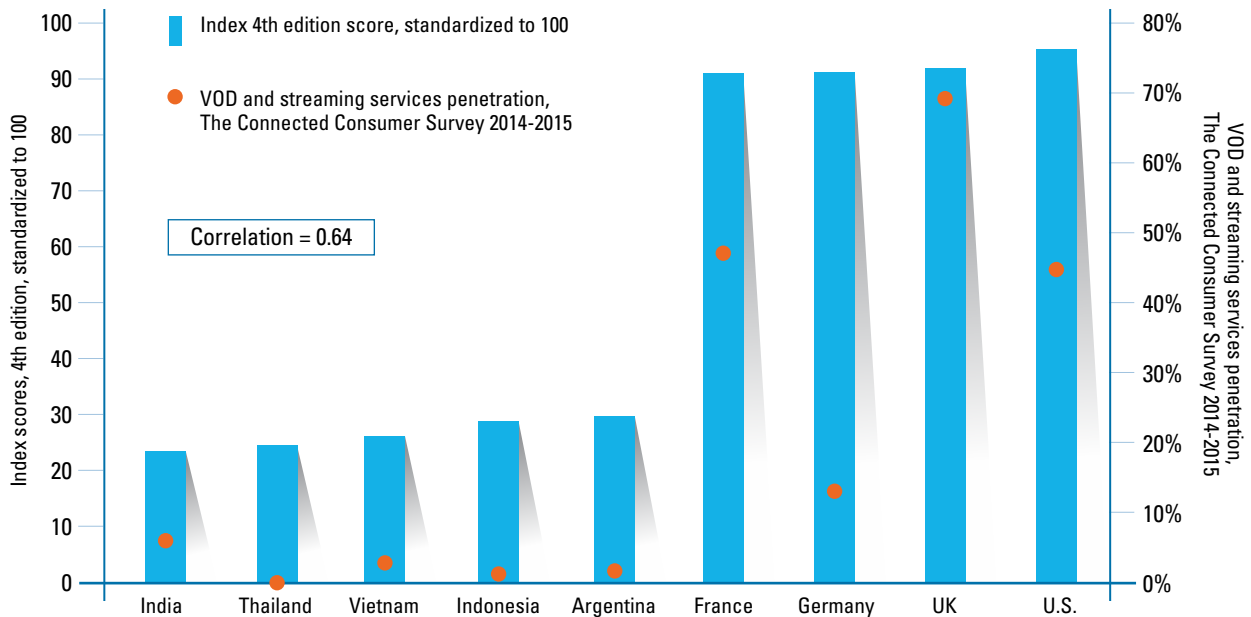
5) Streamlined and enhanced access to creative content:

Advanced and easy-access delivery of home entertainment through VOD and streaming services tends to be available to triple the population among economies placing in the top half of the Index

compared with economies in the bottom half. Strong IP protection, particularly of copyrights and related rights, encourages content providers to launch the latest platforms for accessing content, leading to greater availability of new and exclusive content from across the globe in a convenient and user-friendly manner.

Mature IP environments experience enhanced access to creative content

Association between IP Protection and Video-on-Demand (VOD) and TV Streaming Penetration:
Top Five and Bottom Five Economies



Source: GIPC, Connected Consumer Survey

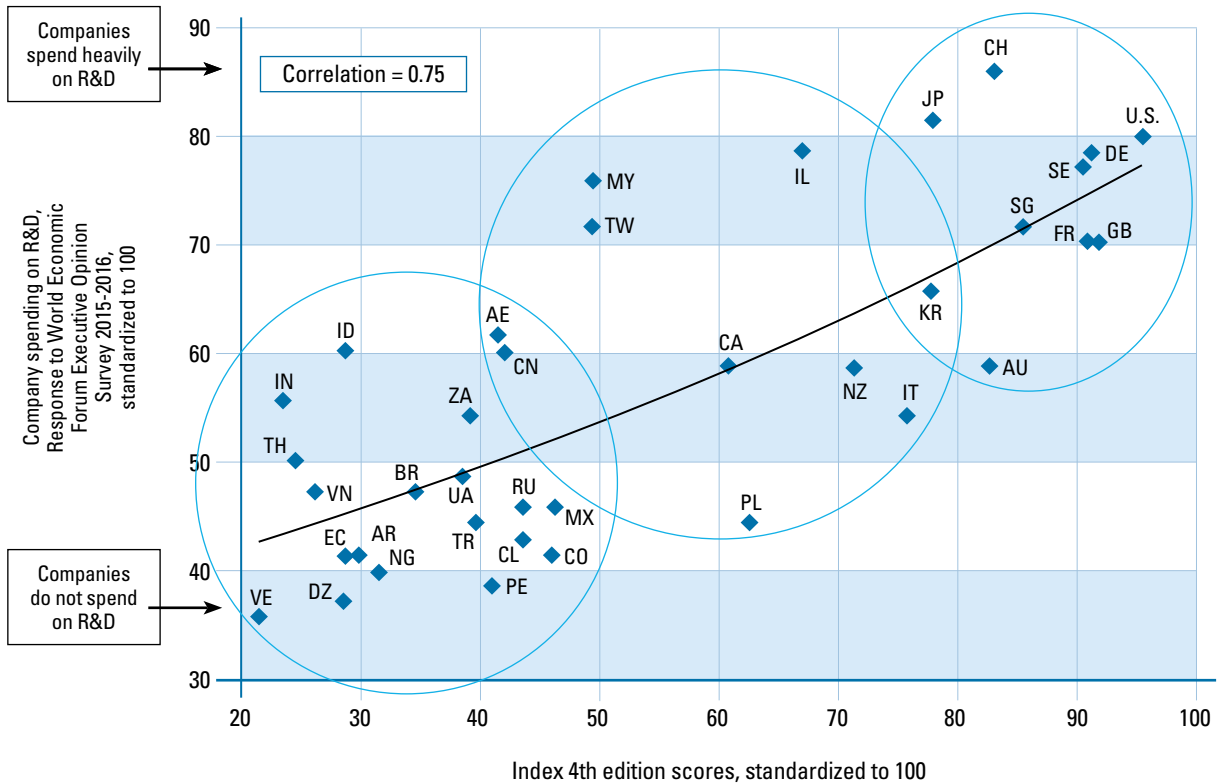
In economies scoring above the median level of the Index, advanced and easy-access delivery of home entertainment tends to be available to at least 30% of the population, compared with only 9% in economies whose IP regimes require greater improvement.

- On average, nearly half of the population in the Index's top 5 economies benefit from accessibility to exclusive global and national

programming via advanced services such as VOD and streaming, as opposed to only 2% of the population in the Index's bottom 5 economies.

Three correlations have been updated and expanded from the 3rd edition: IP rights and (1) R&D expenditure, (2) high-value job growth, and (3) biomedical foreign direct investment (FDI).

IP protection boosts private sector spending on R&D Association between IP Protection and Company Spending on R&D



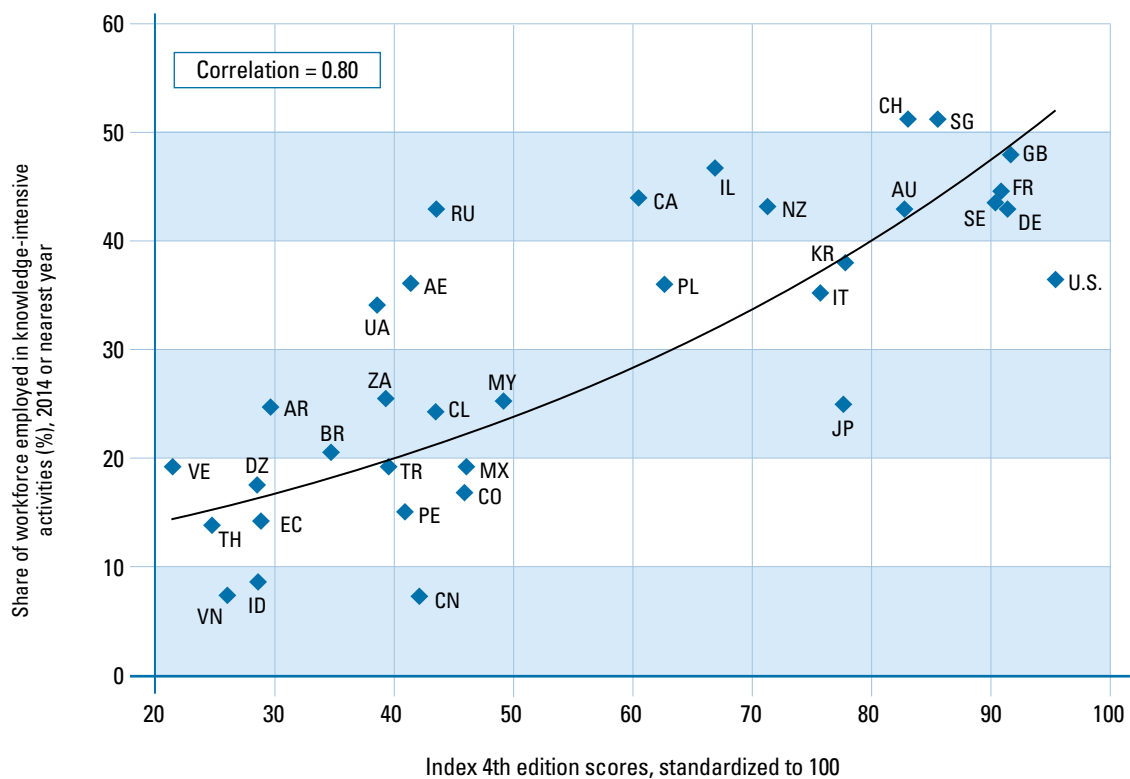
Source: GIPC, World Economic Forum/Executive Opinion Survey
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A strong correlation of 0.75 exists between the Index score and company-level spending on R&D. This link is confirmed by the fourth edition; with an increase of nearly 30% in the sample size, this correlation has risen from 0.73 to 0.75, strengthening the idea that a statistically significant relationship exists between IP protection and private sector spending on R&D. An

advanced IP environment is more likely to encourage local companies to invest in R&D activities and to a greater extent than economies with weaker IP regimes. Companies in economies scoring in the middle third of the Index are 15% more likely to invest in R&D activities compared with companies in economies scoring in the bottom third.

Strengthening IP rights supports high-value job creation

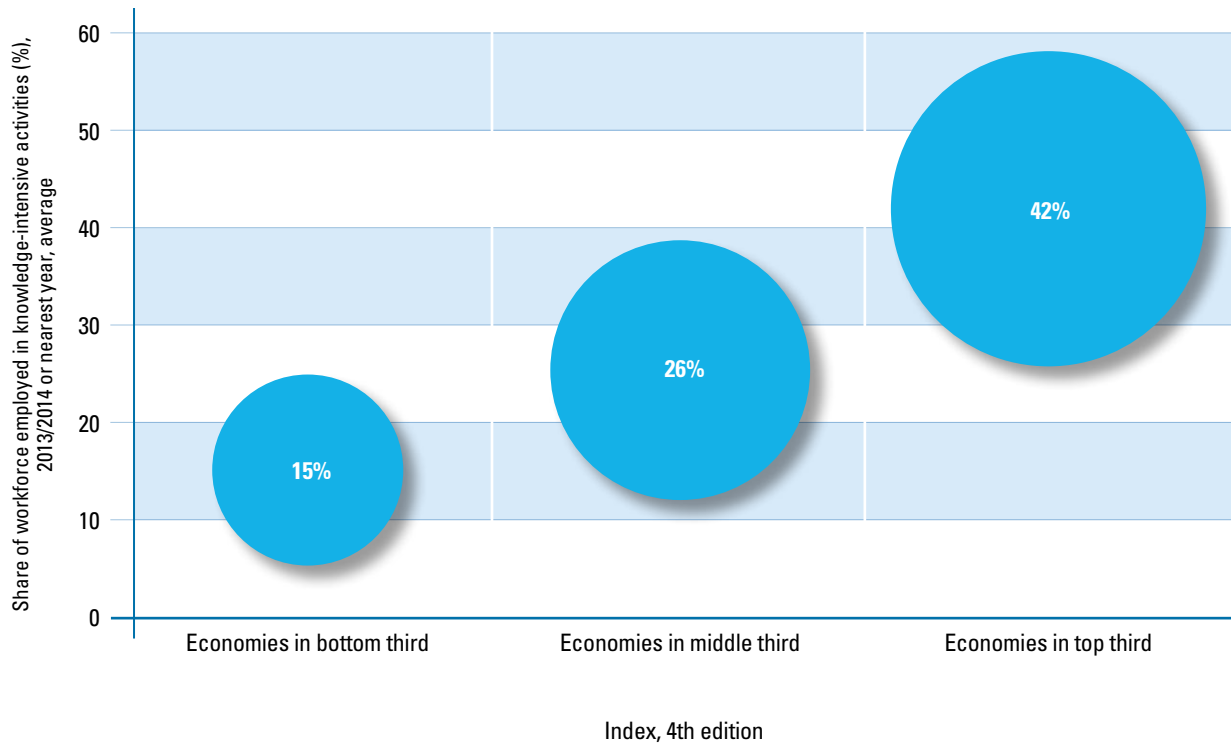
Association between IP Protection and Share of Workforce Employed in Knowledge-Intensive Servicesⁱⁱ



Source: GIPC, International Labor Organization ILOSTAT Database

Legend: AE – UAE, AR – Argentina, AU – Australia, BR – Brazil, CA – Canada, CH – Switzerland, CL – Chile, CN – China, CO – Colombia, DE – Germany, DZ – Algeria, EC – Ecuador, FR – France, GB – United Kingdom, ID – Indonesia, IL – Israel, IT – Italy, JP – Japan, KR – South Korea, MX – Mexico, MY – Malaysia, NZ – New Zealand, PE – Peru, PL – Poland, RU – Russia, SE – Sweden, SG – Singapore, TH – Thailand, TR – Turkey, UA – Ukraine, U.S. – United States, VE – Venezuela, VN – Vietnam, ZA – South Africa

Association between IP Protection and Share of Workforce Employed in Knowledge-Intensive Services by Index Scores

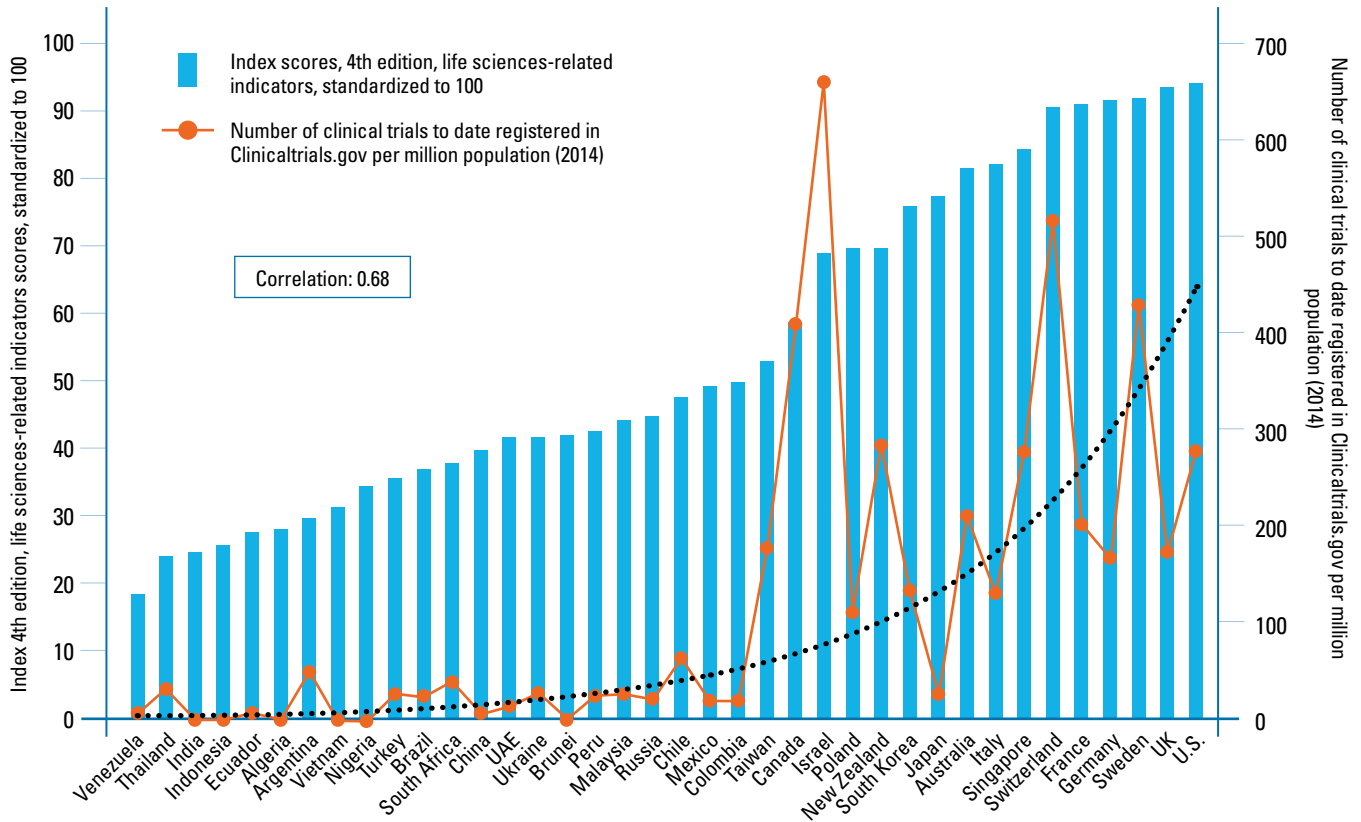


The Index score exhibits a very strong positive link with rates of employment in knowledge-intensive sectors. This link, based on an almost 30% increase in sample size, is even stronger in the fourth edition of the Index than in the third edition, with a rise in

correlation from 0.77 in the third edition to 0.80 in the fourth edition. An incremental increase in knowledge-intensive jobs associated with a similar rise in Index score is visible when looking at economies scoring in the bottom, middle, and top thirds of the Index.

IP rights lead to biomedical foreign direct investment

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



Source: GIPC, Clinicaltrials.gov

An economy's clinical trial intensity, serving as a proxy for life sciences FDI, displays a strong association to biomedical IP rights as measured by the Index's life sciences-related indicators' score. A clear distinction exists between economies

scoring above and below the median level of the Index in terms of the life sciences-related indicators specifically: on average, economies in the upper half host as many as 13 times more clinical trials compared with economies in the lower half.

Overall Findings

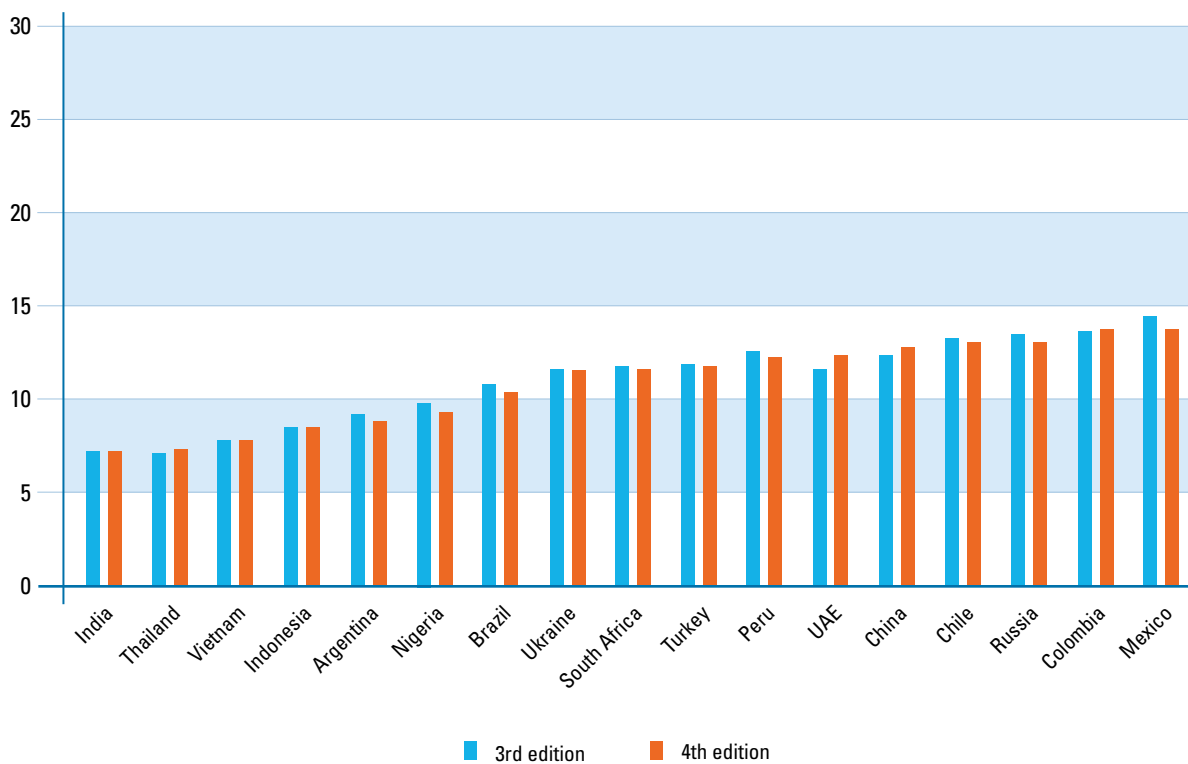
The Global IP Rights Environment in 2015

Have things improved or worsened for IP rights holders globally in 2015? Covering close to an estimated 85% of world GDP, the Index is a good approximation of the global state of the protection of intellectual property in the world. But how can we

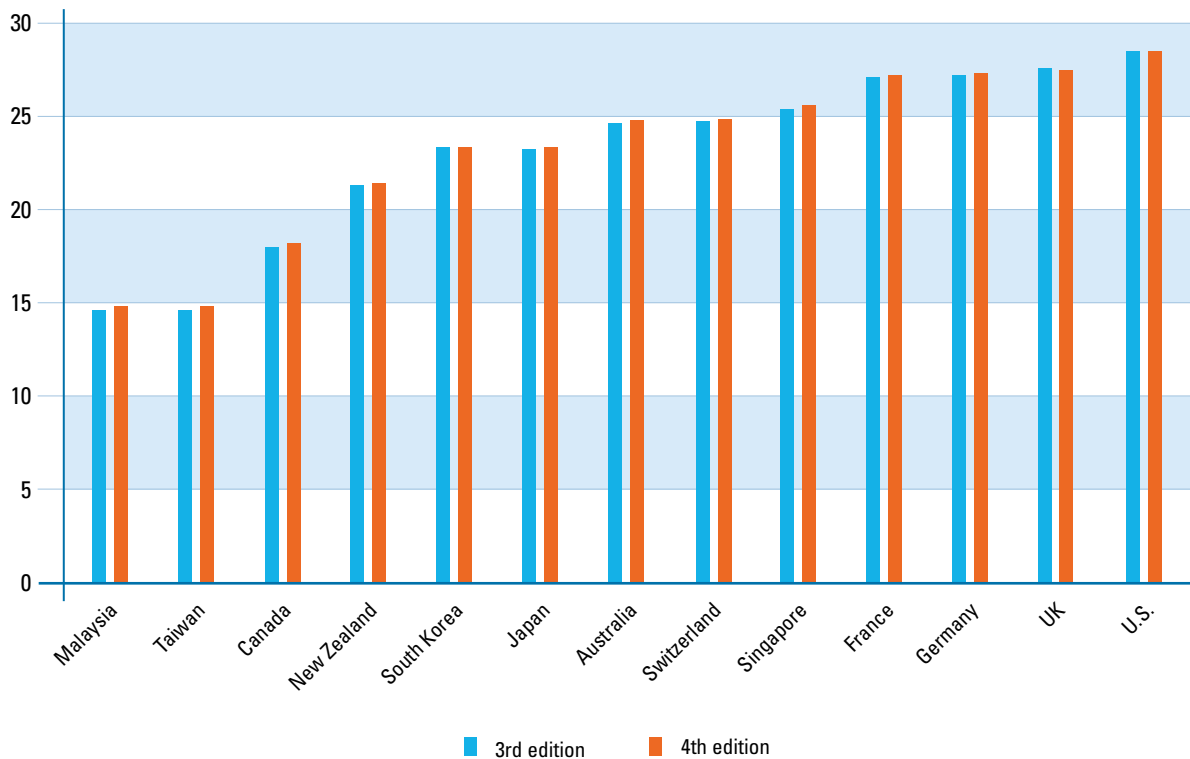
assess whether the environment has improved or deteriorated? To begin with, we can look at the past two editions of the Index. Have economies improved their score compared with last year? What do the individual economy results tell us?

The below charts show the differences in economy performances for the past two editions of the Index.

Index Third Edition versus Fourth Edition, Economy Score, Bottom Half



Index Third Edition versus Fourth Edition, Economy Score, Top Half

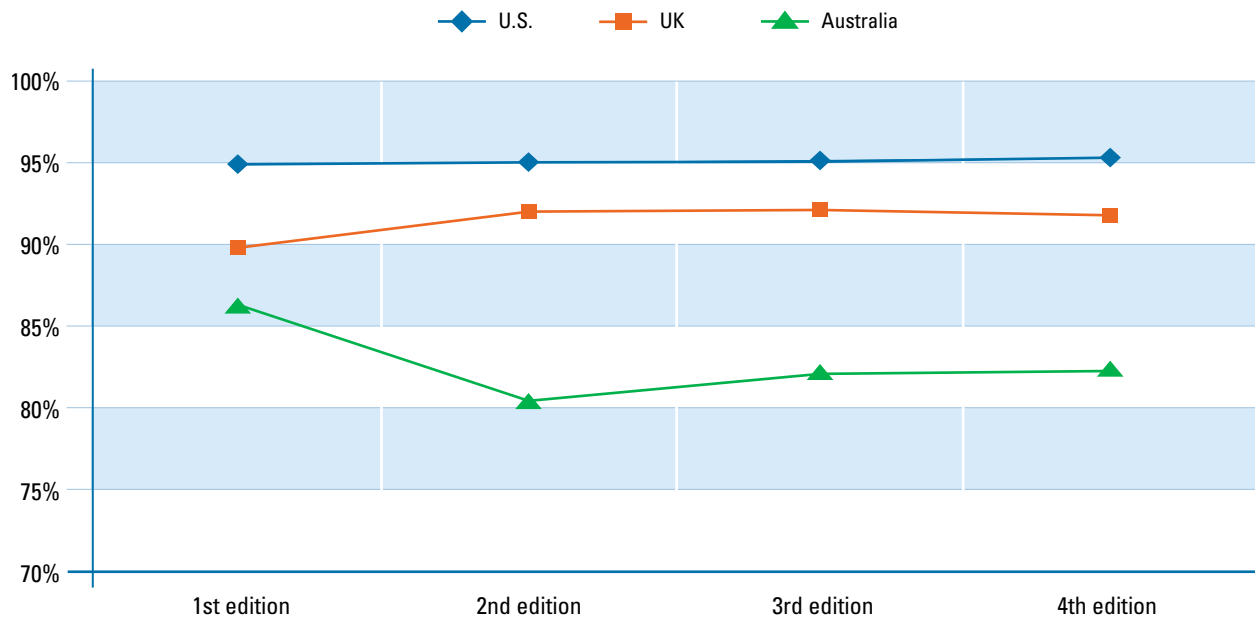


Comparing the 30 economies included in the past two editions of the Index, it is clear that performance is quite mixed. Half of the sampled economies saw their score increase while the other half saw their score decrease.

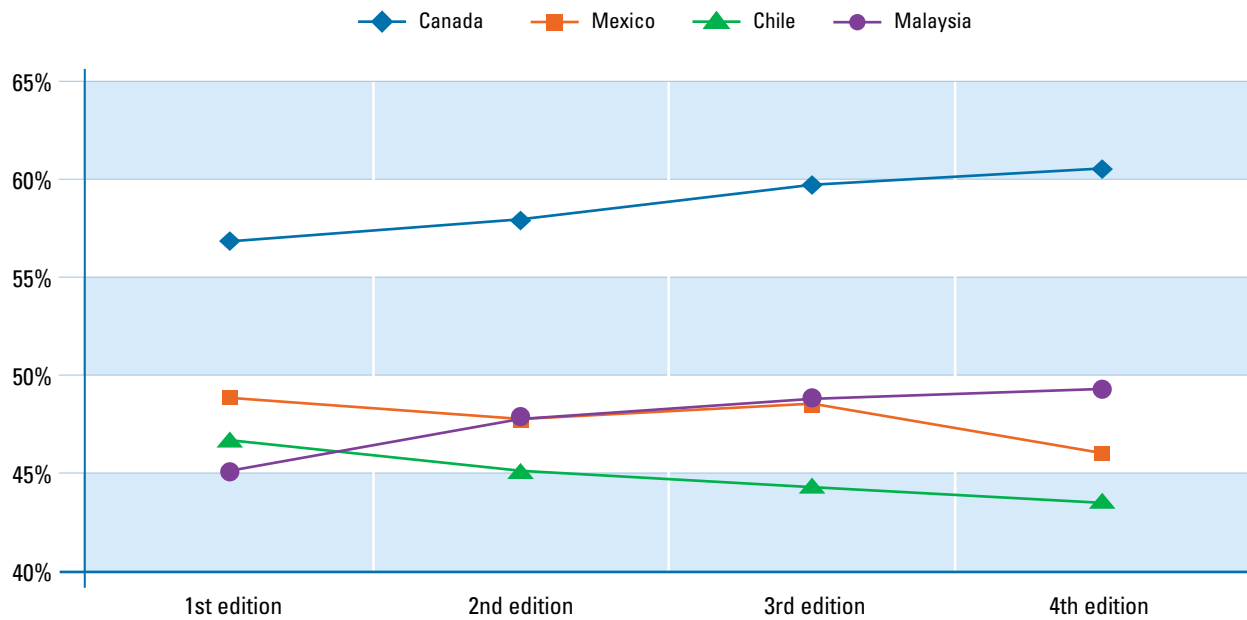
The Original 11 – Tracking Change over Time

Of the 38 economies mapped in the 4th edition of the Index, 11 (Australia, Brazil, Canada, Chile, China, India, Mexico, Malaysia, Russia, United States, and United Kingdom) have been included in every edition.

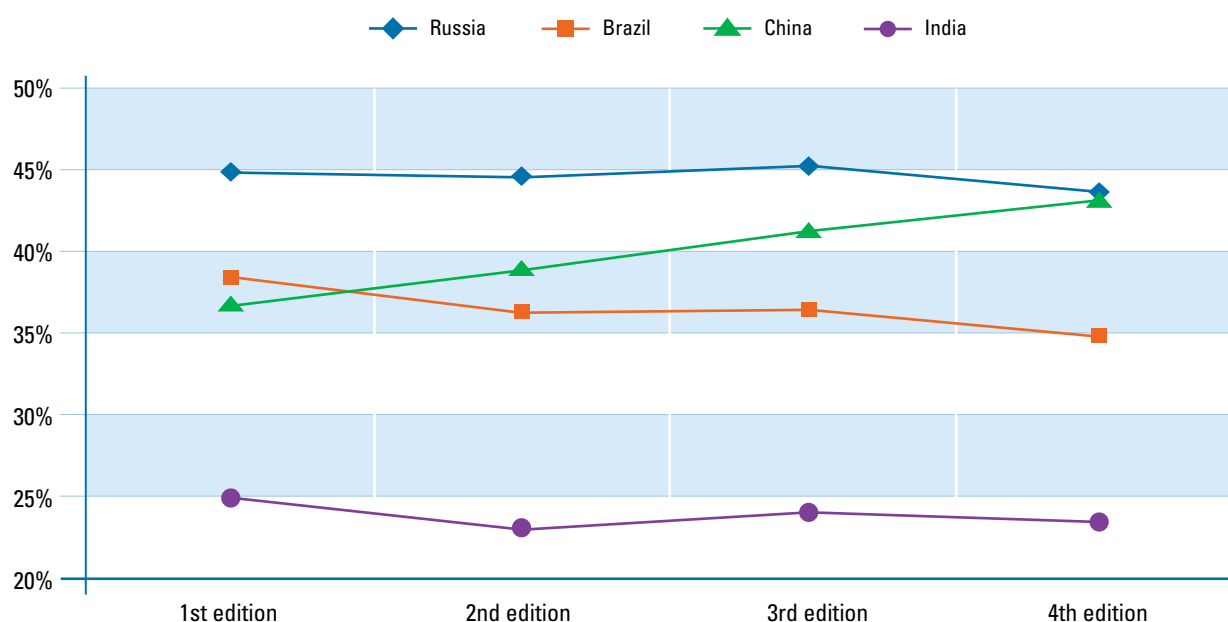
Overall Total Score, Percent Available Score Index, Top 3 Economies from Original 11



Overall Total Score, Percent Available Score Index, Middle 4 Economies from Original 11



Overall Total Score, Percent Available Score Index, Bottom 4 Economies from Original 11



These figures show that a slight majority of economies (6) have seen their overall scores decrease. Yet what stands out most clearly from the results over time for these 11 economies is the diversity of performance regardless of level of economic development or region. There is no clear universal pattern of performance over the course of the 4 editions of the Index. China, for example, while still facing significant challenges in protecting intellectual property, has improved its score year by year since the 1st edition of the Index. In contrast to China, Brazil's score has decreased slightly over the course of the 4 editions, with rights holders continuing to face serious challenges. Similarly, India remains at the bottom of the rankings despite the Index having tripled in size the number of economies sampled since its inception. Likewise, Russia's score has also gone down over the course of the 4 editions.

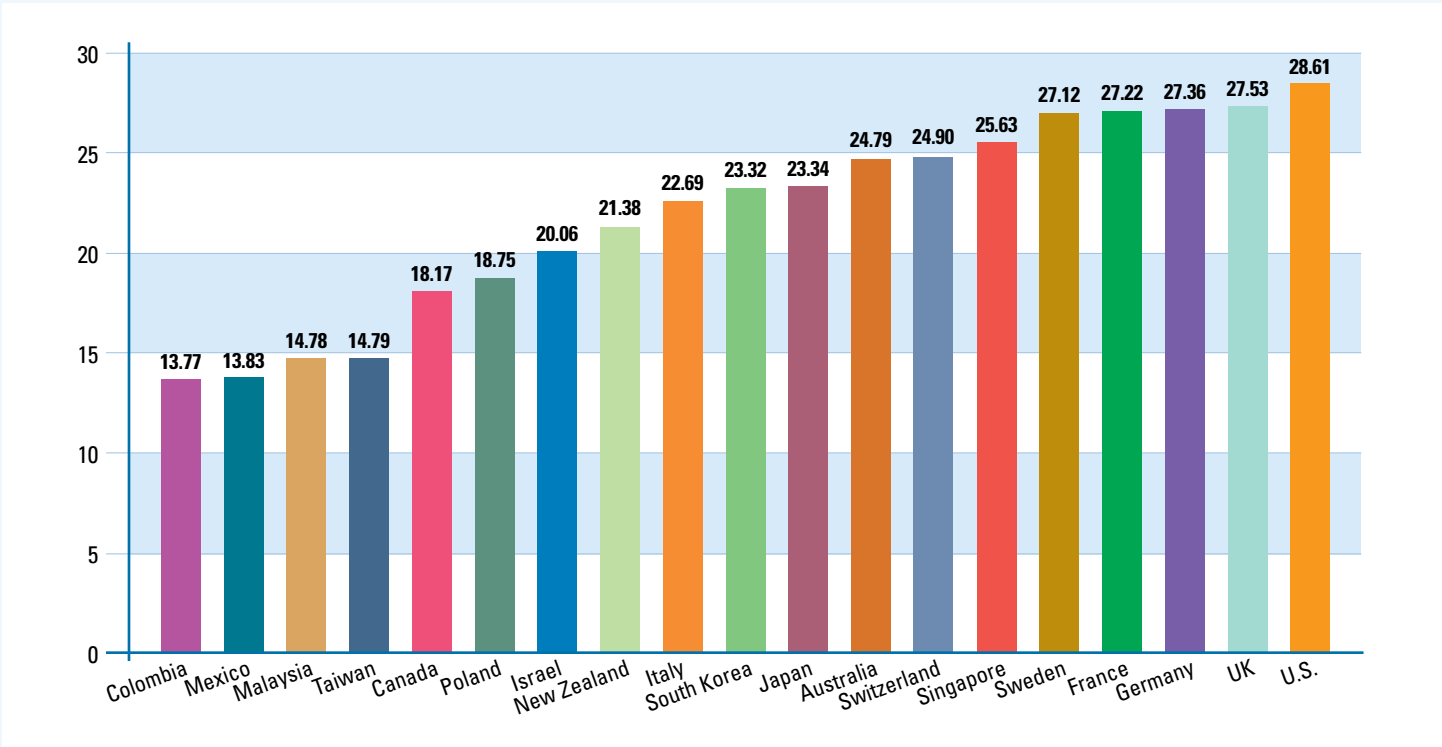
In looking at some other middle-income economies, it is clear that while many economies have seen their score drop, what actually stands out is the significant improvements some have made. For example, Malaysia's score has gone up quite considerably and steadily over the course of the four editions, with positive reforms to its copyright law standing out. Conversely, other middle-income economies have seen their national IP environment weaken or stand still. Both Chile and Mexico, for instance, have both seen their score decrease over the 4 editions.

Regardless of their respective movement over the four editions, the top three economies remain apart relative to the bottom four economies. Between 60 to 70 percentage points separate the top performers from the economies at the bottom, a difference that has not narrowed appreciably over the four

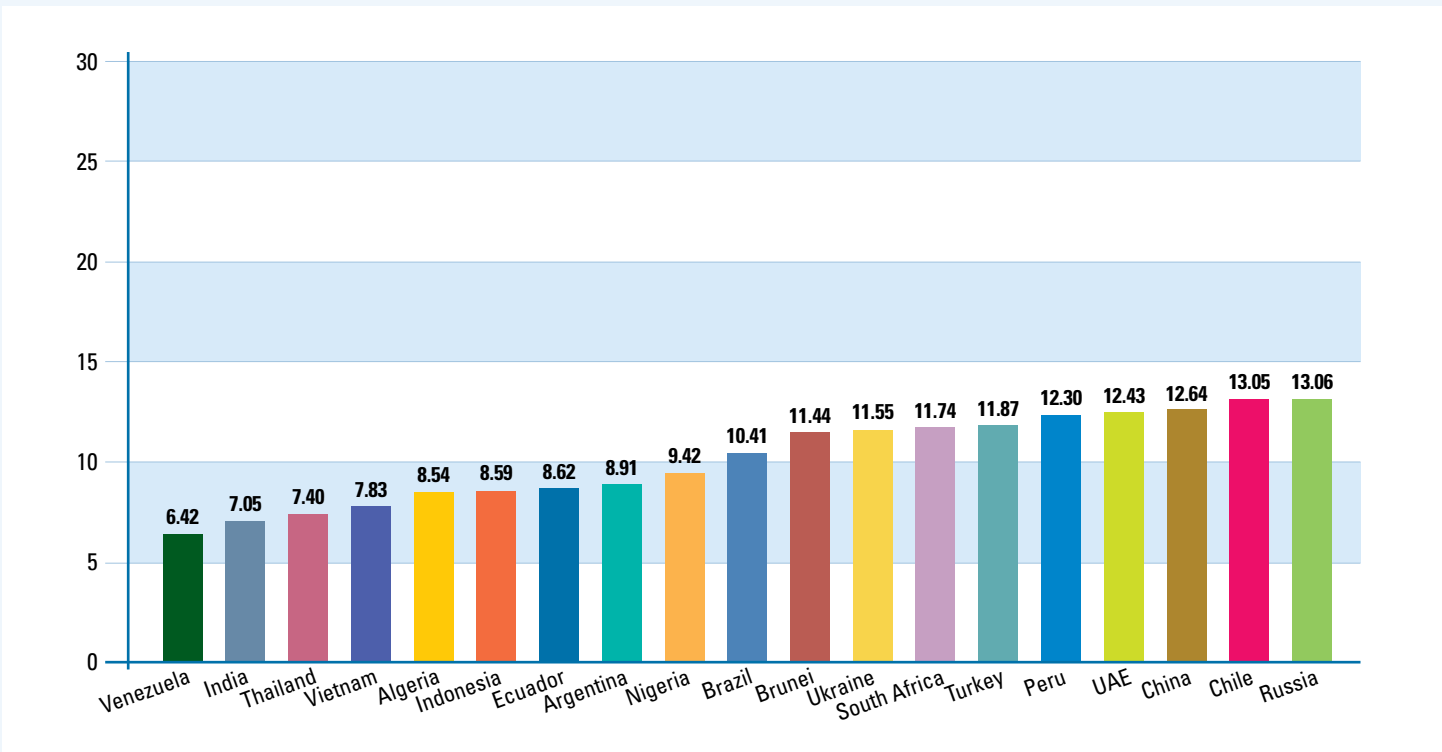
editions of the Index. Even Canada—which has improved its overall score in each edition of the Index—remains an outlier among high-income OECD economies. Despite increasing in each edition of the Index, Canada’s score is still the lowest of all OECD economies and its national IP environment has consistently remained closer to middle-income economies such as Malaysia and Mexico than to top Index performers such as the United States and the United Kingdom.

The Fourth Edition of the Index: Overall Economy Scores

Overall Economy Scores, Top Half



Overall Economy Scores, Bottom Half



Economy Clusters

The overall results of the 4th edition of the Index show how economies are forming distinct clusters or groups of performers within 1.5 to 2 points of each other.

For example, although the United States is still the top-ranked environment, the difference between the its overall score and other economies' scores is not that large. Indeed, the cluster of 5 economies that has formed at the top are separated by less than 1.5 points. The United States, United Kingdom, Germany, France, and Sweden together form a group of top performers, with all economies having advanced, sophisticated national IP environments.

Below these top performers is the trio of Singapore, Switzerland, and Australia, all within 1 point of each other. And while these economies by and large have well-developed and strong national IP environments—Singapore and Switzerland are world leaders in Category 1: Patents, Related Rights, and Limitations—here, too, challenges remain. For instance, online piracy remains a real challenge in Switzerland.

Japan, South Korea, Italy, and New Zealand round out the next group of economies, all separated by less than 2 points. Japan is somewhat of an outlier in this group because for most of the Index's categories, its scores are much closer to the top performers. Japan's low score in Category 6: Membership and Ratification of International Treaties decreases its total score. Italy is a new addition to the Index. And while Italy maintains a strong national IP environment, it faces a number of challenges particularly with regard to levels of copyright piracy.

Israel, Poland, and Canada constitute the final group of high-income OECD economies. As in past editions, Canada remains the OECD economy with the weakest national IP environment and lowest overall score, despite the Index more than tripling the number of

economies sampled over the 4 editions. Israel and Poland are both new economies. Both have benefited from relatively recent reform efforts—Israel with its patent environment in the past two years and Poland more gradually over the past decade as a result of its accession to and membership in the EU. Still, both economies face challenges, particularly with regard to copyright protection.

Next, Taiwan, Malaysia, Mexico, and Colombia are separated by less than 1 point. Mostly middle-income economies (except Taiwan), they show what can be achieved when reforming the national IP environment, as well as illustrate the challenges that remain. Malaysia has fundamentally reformed its copyright environment, culminating in its accession to the World Intellectual Property Organization (WIPO) Internet Treaties in 2014. However, in the Patent indicators, Malaysia's score has remained at the bottom since the first edition of the Index. Meanwhile, Taiwan still faces significant challenges in the enforcement space. Long-term positive reform efforts in Mexico have stalled somewhat in 2015 with the introduction of new localization requirements. And despite the introduction of new statutory damages for trademark infringement, Colombian commitments made under the WIPO Internet Treaties and U.S. Free Trade Agreement (FTA) remains unfulfilled.

Russia, Chile, China, the UAE, and Peru are likewise separated by less than 1 point. This group is a diverse set of economies ranging from wealthy UAE with an estimated 2014 per capita GDP of over USD 44,000 to Peru with a per capita GDP estimate of USD 6,550.² In this group, China has steadily improved its national IP environment. And while there are still substantial challenges—modeling suggests China is the point of departure for the vast majority of physical counterfeit goods in the world—among the BRICS economies, it is clear that China's IP environment has improved the most over the last half decade. In contrast, Russia's IP environment is more of a mixed record. Positive reforms, in areas ranging from protection of trade secrets and damages for patent infringement

to the protection of copyright online, are diminished by intensified mandatory localization efforts. UAE has strengthened its IP environment considerably, particularly as it relates to Category 5: Enforcement, but it continues to lag behind other developed high-income economies overall. Peru's score has gone down this year, primarily owing to efforts to narrow patentability criteria.

The next 4 economies—Turkey, South Africa, Ukraine, and new addition Brunei—are separated by less than 0.5 points. Like the UAE, Brunei's IP environment remains relatively underdeveloped. Important reforms have taken place over the past half decade—including the introduction of a new patent law, establishment of a dedicated IP office, and strengthening of copyright sanctions—but major challenges persist, particularly with regard to enforcement and piracy levels. As has been described in past editions of the Index, Turkey, South Africa, and Ukraine continue to face major challenges in their respective national IP environments. Ukraine remains a central hub for counterfeit goods and while some reform efforts have been put forward in 2015, the political and regional instability is likely to delay any further concrete legislative action. In Turkey and South Africa, localization efforts—current and suggested—continue to bring down the overall scores. Both economies also suffer from relatively high levels of piracy.

Brazil, Nigeria, Argentina, Indonesia, and new additions Ecuador and Algeria constitute the penultimate group of economies, separated by less than 2 points. As noted, Brazil's national IP environment has since the inception of the Index been characterized by relative stagnation and even regression in important aspects. Fundamentally, the Brazilian national IP environment has not changed substantially over the Index's 4 editions. All in all, Brazil's national IP environment remains closer to the state of lower-middle-income economies like Nigeria and Indonesia than more dynamic emerging economies like China and Malaysia. Nigeria's overall

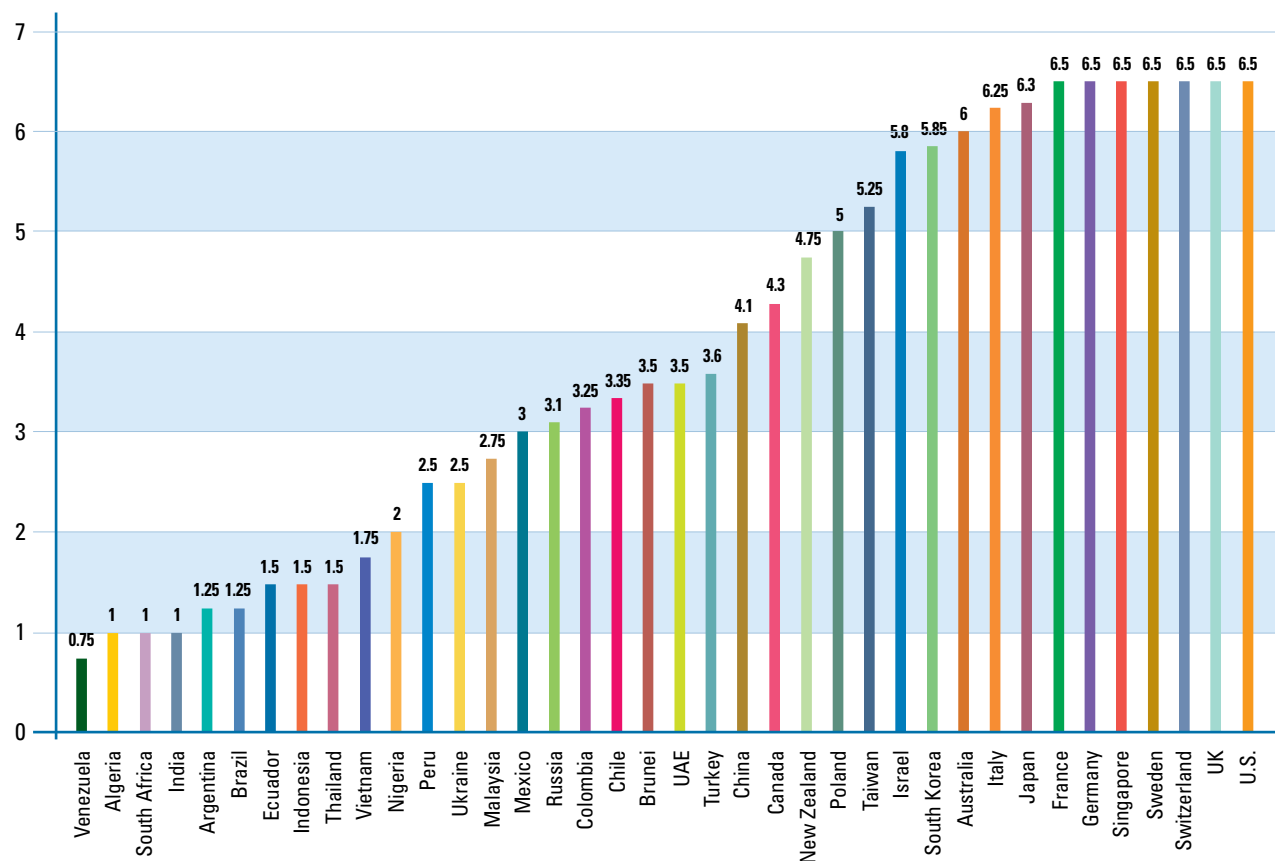
score fell slightly in 2015. Counterfeits remain a significant problem, with challenges in both the legal framework and active enforcement. The IP environment in Argentina remains challenging. No significant positive changes to the IP legal environment or relevant regulations took place in 2015. Algeria and Ecuador are both new additions to the Index and both economies face many challenges. Algeria lacks many fundamental IP laws (particularly with regard to Category 1: Patents, Related Rights, and Limitations) and the enforcement and application of existing legal rights is patchy. Ecuador has in recent years been moving in the opposite direction than most emerging economies and has significantly weakened its national IP environment—its government is an active user of compulsory licenses. In other areas, Ecuador's legal and IP framework remain far outside international norms. Finally, Indonesia has made substantial reform efforts, although overall the environment for IP rights holders remains difficult in some areas, particularly the life sciences, with many fundamental IP rights not offered. For instance, Indonesia reformed its copyright laws and 2015 saw the active application and implementation of a ministerial notification system on online infringement.

At the bottom of the Index, the group of Venezuela, India, Thailand, and Vietnam are separated by less than 1.5 points and together form a distinct group: these economies all have significant weaknesses in the availability and enforcement of IP rights. Venezuela, a new addition to the Index, has the lowest score of all economies, with serious legal and enforcement deficiencies in all Index categories. India remains at the bottom of the Index for the 4th year in a row. Rights holders in Thailand and Vietnam also face fundamental challenges in the availability and enforcement of IP laws. Vietnam's environment is expected to improve significantly as a result of its accession to and full implementation of the TPP agreement.

Category 1: Patents, Related Rights, and Limitations

This category consists of 7 indicators, with a maximum possible score of 7.

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



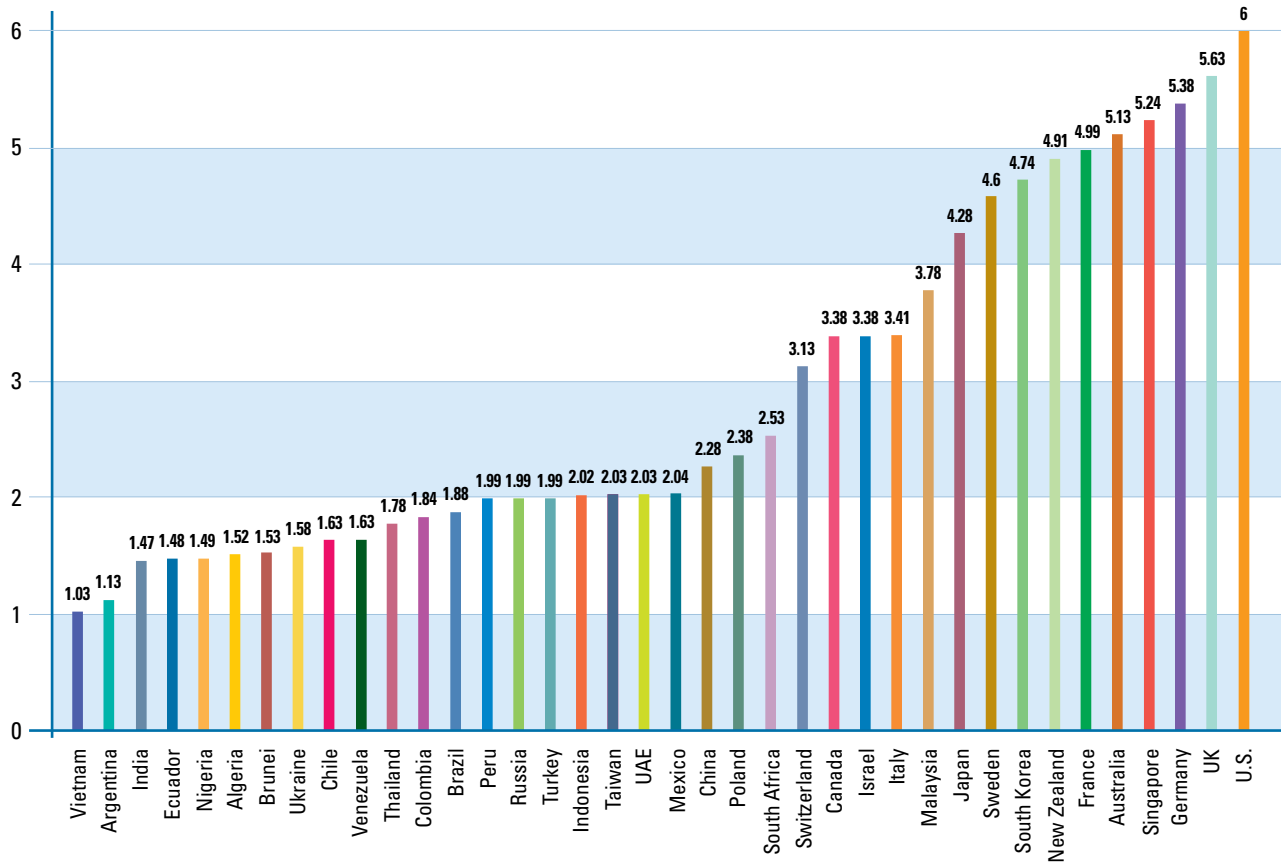
The overall results from Category 1: Patents, Related Rights, and Limitations show a clear group of high-performing economies all with a score of over 5 or 70% of the maximum available score for this category. In all, 13 of the 38 sampled economies achieved a score of 5 or above in this category. While this group is dominated by high-income OECD economies, more broadly a number of middle-income economies do relatively well in this category. For example, China continues to be the highest-ranked middle-income economy in this category and the highest-ranked member of the BRICS. Indeed, when looking at the

BRICS, what stands out is the relative and absolute poor performance of Brazil, India, and South Africa, which are all at the bottom of this category. Of note is that, unlike all other sampled economies in the Index, newcomer Venezuela fails to achieve a full score in indicator 1 as it does not offer a full 20-year term of protection for patents. As in past editions of the Index, Canada's score in this category is the lowest of all developed high-income OECD economies and is closer to that of China, Turkey, the UAE, and Brunei than that of Singapore, the United Kingdom, United States, Japan, and other high performers.

Category 2: Copyrights, Related Rights, and Limitations

This category measures the strength of the environment for copyrights, related rights, and limitations. The category consists of 6 indicators, with a maximum possible score of 6.

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



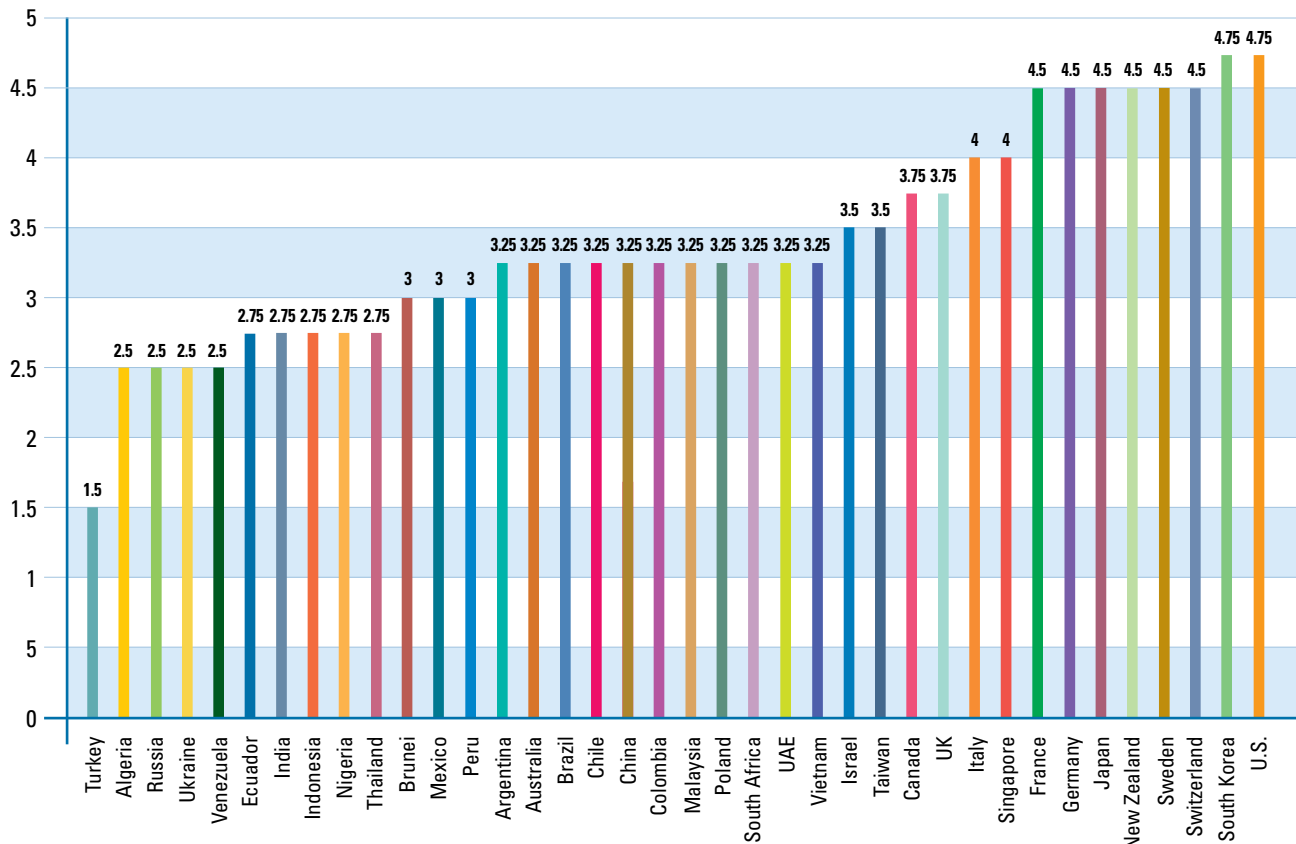
The results for Category 2 show how challenging the environment is for creators and copyright holders in the vast majority of sampled economies. Over 60% of the economies in the Index fail to achieve a score of half or more of the category's maximum available score. And almost 50% of the sampled economies fail to reach just a score of 2 out of 6 or one-third of the maximum available score. Most economies in the Index do not have effective and modern legal

mechanisms to combat online piracy and copyright infringement. Of note is that these difficulties are not concentrated in middle-income and emerging economies. Rather, many high-income and OECD economies—including, for example, new additions Brunei, Italy, Israel, and Sweden as well as the UAE and Switzerland—struggle with protecting copyright and offering rights holders modern and effective remedies.

Category 3: Trademarks, Related Rights, and Limitations

This category consists of 5 trademark indicators, with a maximum possible score of 5.

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



To a greater extent than in other categories, most economies sampled in the Index offer basic forms of trademark protection. Generally, challenges persist in the enforcement of trademark rights with regard to both traditional forms of infringement as well as violations that occur through online merchants and auction sites.

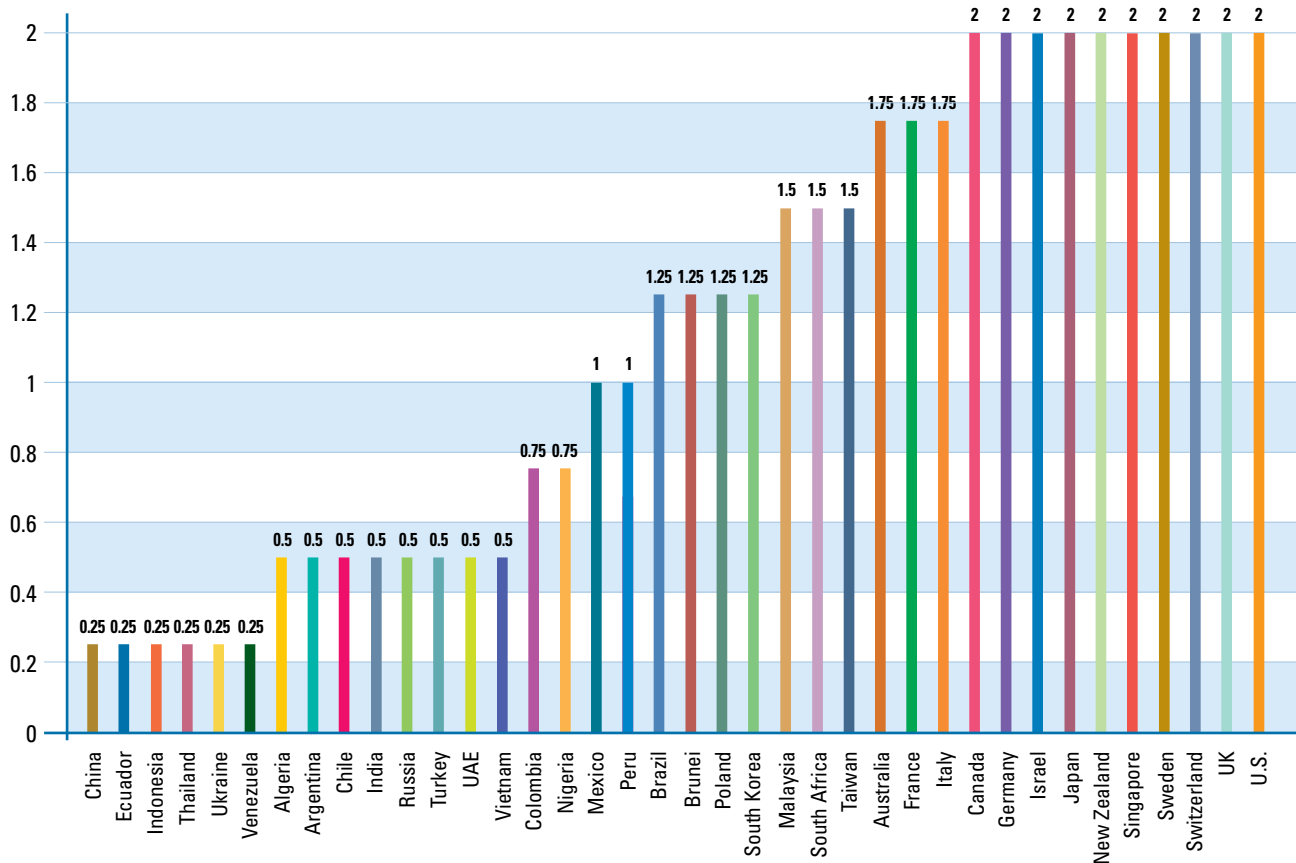
A growing number of economies have introduced or are in the process of imposing “plain” packaging requirements for the intended purpose of promoting public health. A policy of plain or standardized

packaging severely restricts or even eliminates the use of trademarks and the corresponding trade dress on affected products, and it also limits trademark owners’ ability to use their brands, trademarks, and trade dress. As a general matter, such policies, however well intended, have the direct impact of eroding the multifaceted benefits of trademark laws, including corporate accountability and consumer confidence. If broadly applied, plain packaging would be highly detrimental both to IP systems and to well-functioning markets.

Category 4: Trade Secrets and Market Access

This category measures the strength of the environment for trade secrets and market access. The category consists of 2 indicators, with a maximum possible score of 2.

Scores, Category 4: Trade Secrets and Market Access



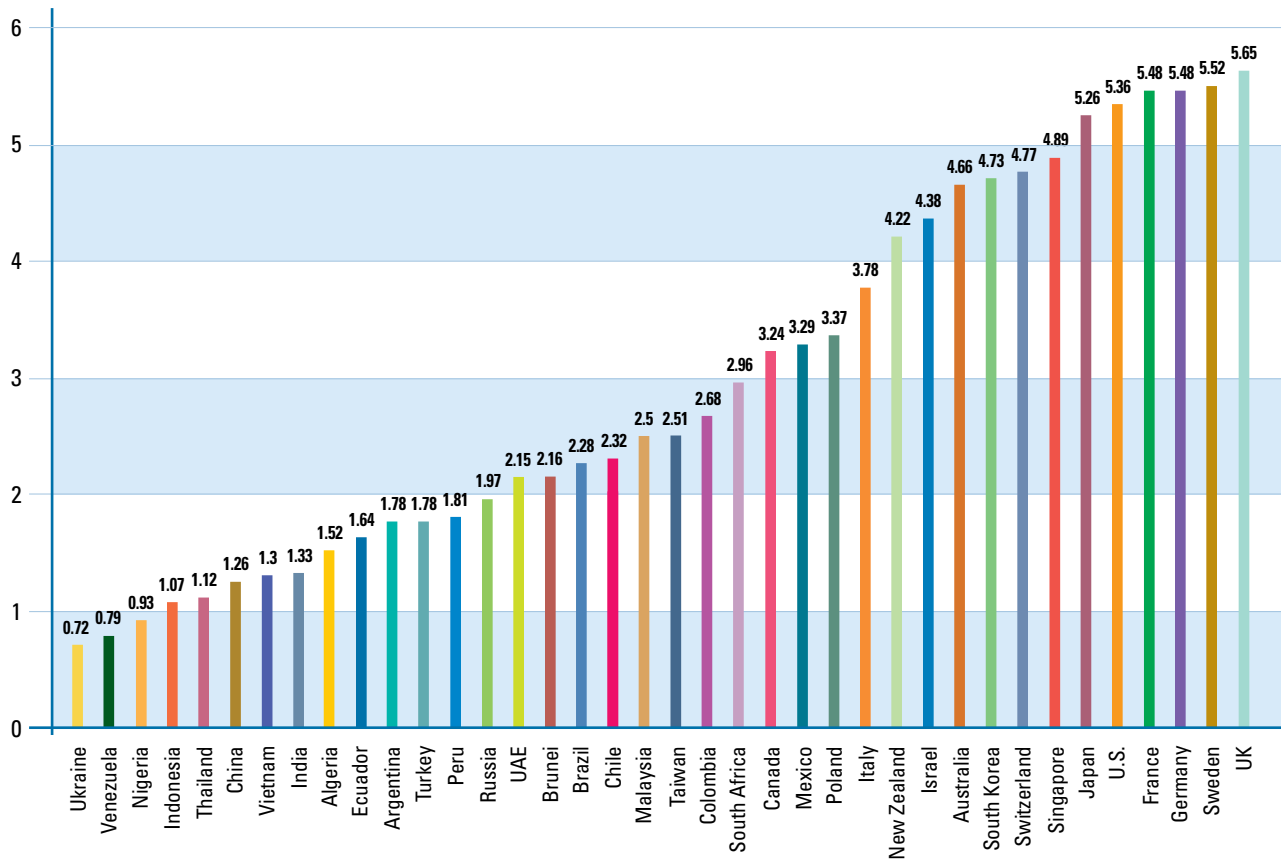
Many more economies are directly or indirectly introducing policies that make access to their respective markets contingent on the sharing of IP or proprietary technologies with local entities. Since indicator 20 (Barriers to Market Access) was introduced in the 2nd edition of the Index, the number of policies has intensified. Economy examples include Brazil, Russia, China, and Indonesia, all of which make use and/or have intensified these efforts in 2015. For example, since the mid-2000s China has introduced and implemented a range of policies that make 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 limits and requirements; and restrictions on investment by foreign entities, without guarantee they will be protected from unauthorized disclosure, duplication, distribution, and use. Russia has also intensified mandatory localization efforts in a policy framework designed to improve domestic technological capacity and innovation in high-tech sectors including biopharmaceuticals.

Category 5: Enforcement

This category measures the prevalence of IP rights infringement, 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 6 indicators, with a maximum possible score of 6.

Scores, Category 5: Enforcement



A majority of the sampled economies struggled in this category. Almost 60% of the 38 economies included in the Index failed to achieve a score of at least half of the maximum available score. All economy scores in this category were affected by the new proprietary Global Measure of Physical Counterfeiting.

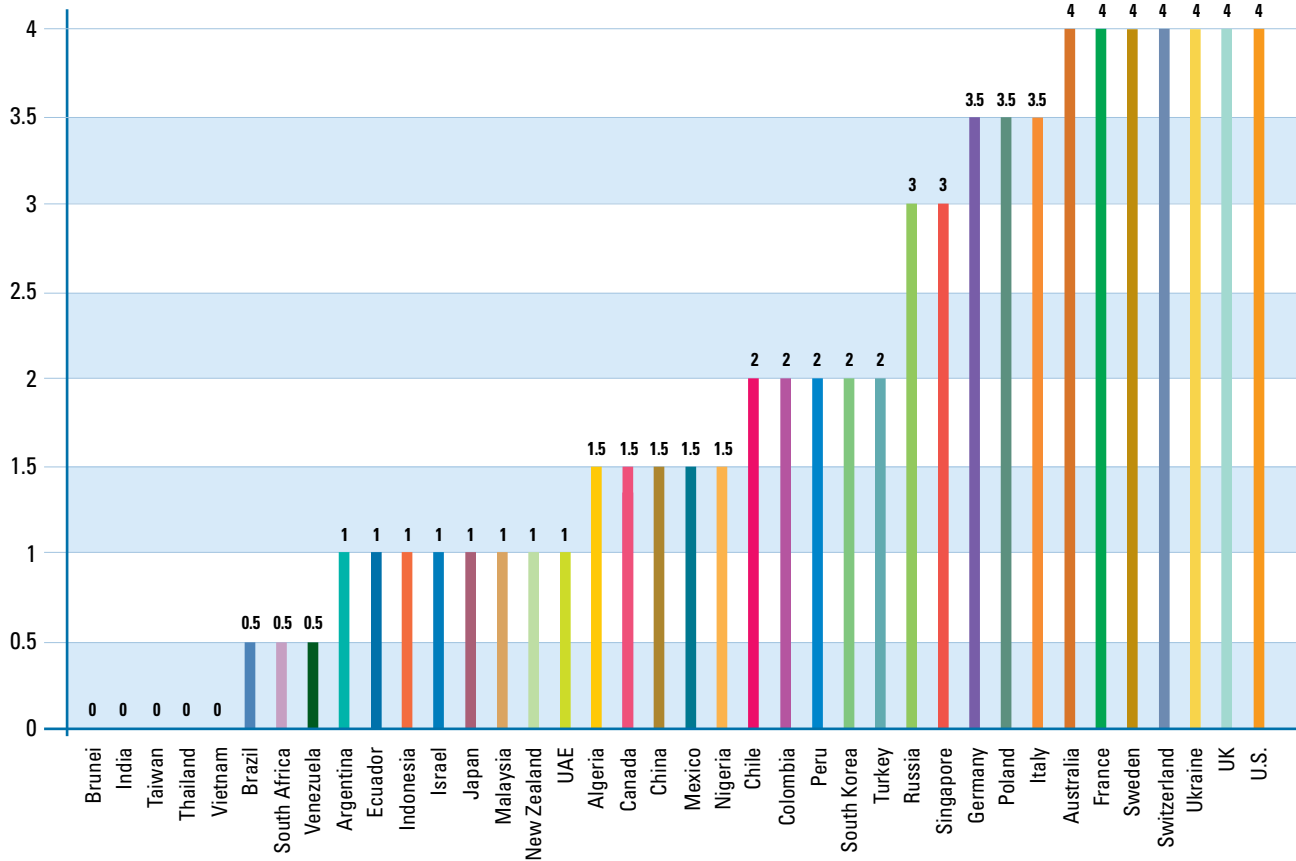
As in past editions, the EU member states perform well in this category, with the United States and

Japan trailing behind. Worth noting is that although Canada again placed outside the top tier of economies, Canada's enforcement score actually increased as a result of the confirmation by the Canadian government that the newly introduced *Combating Counterfeit Products Act* actually confers *ex officio* powers to customs officials.

Category 6: Membership and Ratification of International Treaties

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 4 indicators, with a maximum possible score of 4.

Scores, Category 6: Membership and Ratification of International Treaties



Participation in key international treaties is a reflection of a broader commitment to the international IP community and the highest IP standards. Remarkably, less than half of the 38 economies score at least 50% for this category. Five economies actually score a 0. The lack of participation and membership in international treaties is not limited to emerging or middle-income economies. Quite a few high-income and OECD economies score poorly in this category, including Brunei, Japan, Israel, New Zealand, and the UAE.

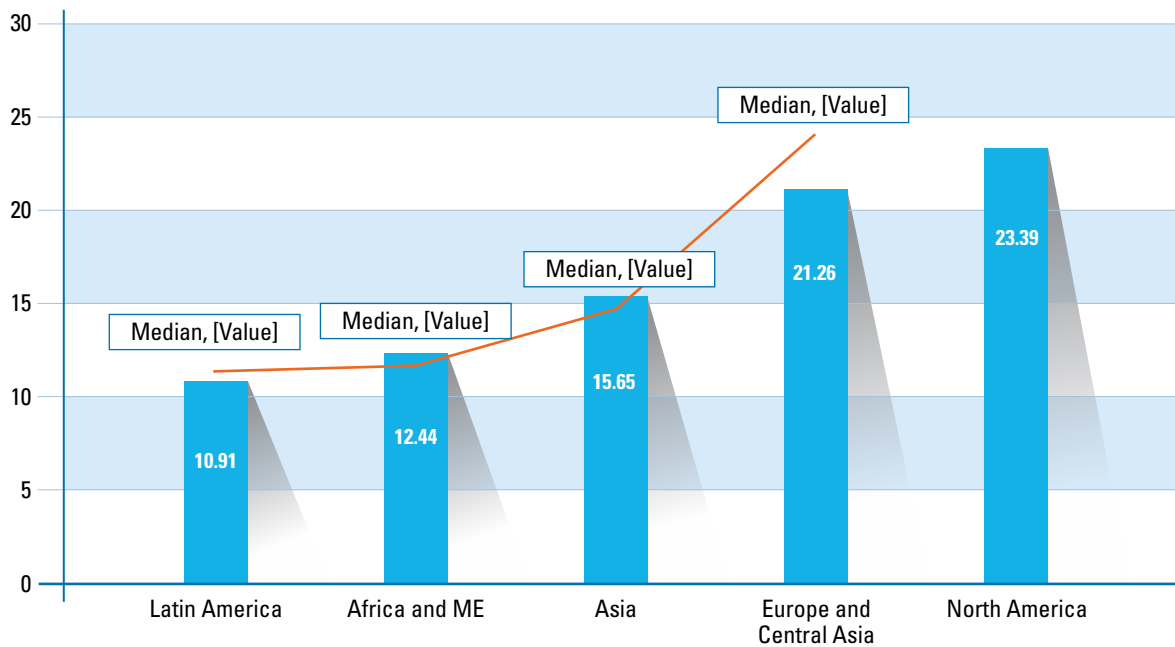
The TPP agreement, which with accession and full implementation will strengthen the national IP environment in virtually all contracting parties (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, and Vietnam), is a major development in this area. Furthermore, a number of other economies sampled in the Index (including Thailand and Indonesia) have stated their intention to eventually join the TPP.

Additional layers of analysis— Comparing economy performance on a regional and sector basis

The increase in the number of economies from 11 in 2012 to 38 this year opens up a wealth of opportunities to compare economies that are geographically close to one another in the same region, at the same

level of economic development, or, in many cases, a combination of the two. The Index has sampled economies from the world's major regions, with particularly strong representation from Latin America, Asia, and Europe and Central Asia. Comparing regional scores makes it possible to see which regions of the world offer the strongest levels of IP protection.

Regional Mean and Median Score, 4th Index Edition



North America and Europe and Central Asia have on average the strongest national IP environments of the 5 regions mapped. Of the regions covered in the Index, Latin America is home to the weakest national IP environments. Yet the large discrepancy between the mean and median score also suggests a wide range of scores in the region. Indeed, of the 8 Latin American economies mapped in the Index,

scores range from a regional high of 13.83 in Mexico to a regional (and Index) low of 6.42 in Venezuela. Similarly, in Asia and Europe and Central Asia, wide discrepancies exist between the top and bottom performers. These range from a regional high of 25.63 (Singapore) for the former and 27.53 (United Kingdom) for the latter to a low of 7.05 (India) and 11.55 (Ukraine), respectively.

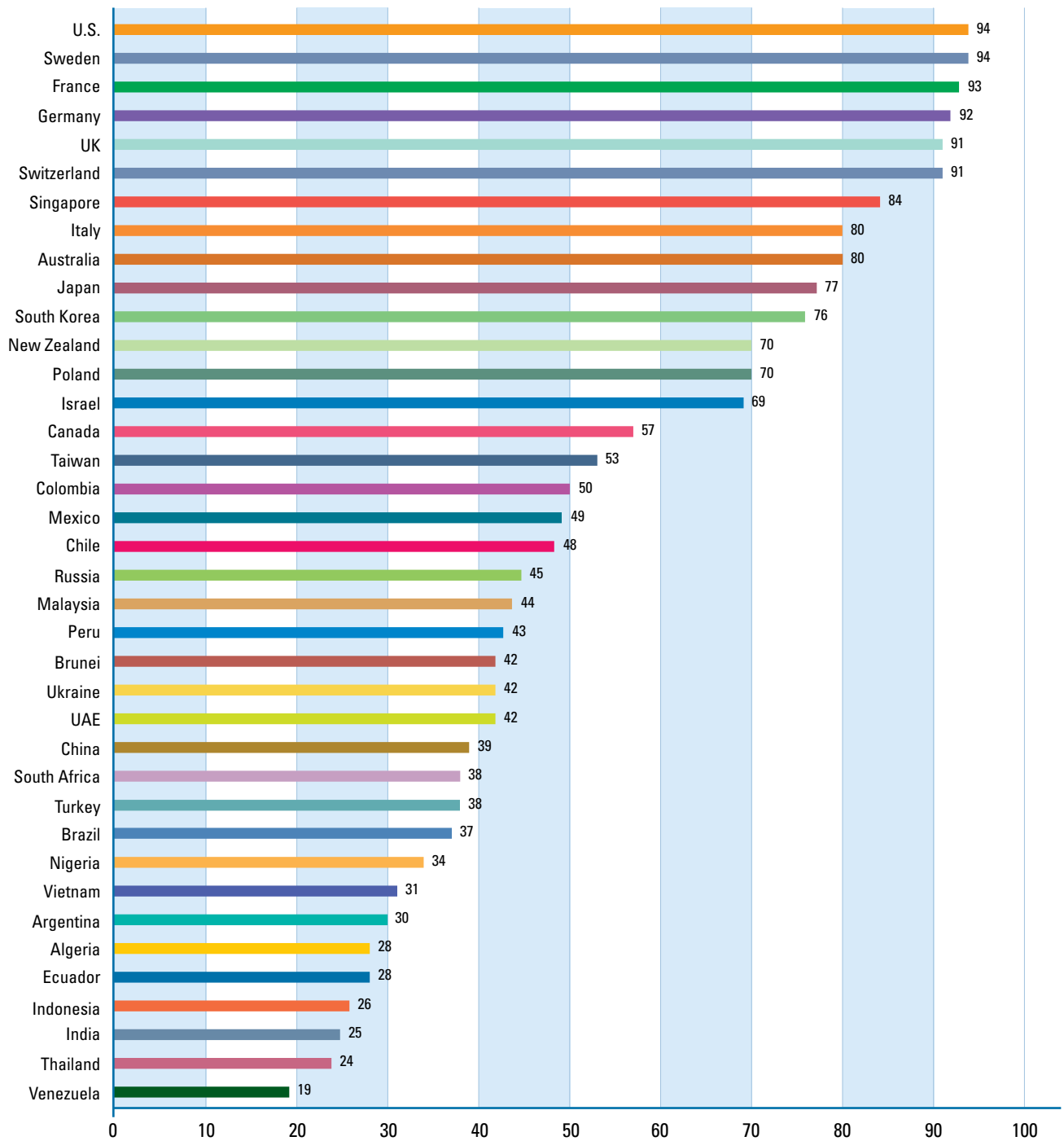
Apart from the broad differences between and within these regions, income level has relatively little bearing on the strength of national IP environment. For example, Colombia, which has an estimated 2014 GDP per capita of USD 7,900, scores 30–40% higher than Argentina and Brazil, which have estimated GDPs per capita of USD 12,568 and USD 11,384, respectively, per the World Bank. This has economic costs. As the preceding section and the accompanying Statistical Annex illustrate, when examining various indicators of economic activity, Colombia tends to have higher outputs than both Brazil and Argentina. Looking at, for example, innovation outputs (Correlation 5 in the Statistical Annex) as measured in the 2015 Global Innovation Index, Colombia is ranked as having approximately the same level of innovative output as measured by the creation of technologies, media, and knowledge-based services and diffusion and use across the economy despite the fact that, measured on a per capita income basis, Colombia has close to 50% less overall economic output. Similarly, when looking at access to capital (Correlation 2 in the Statistical Annex) and, specifically, the attractiveness of a given economy to venture capital and private equity, Colombia again ranked higher than its neighbors.

Understanding sectoral strengths and weaknesses

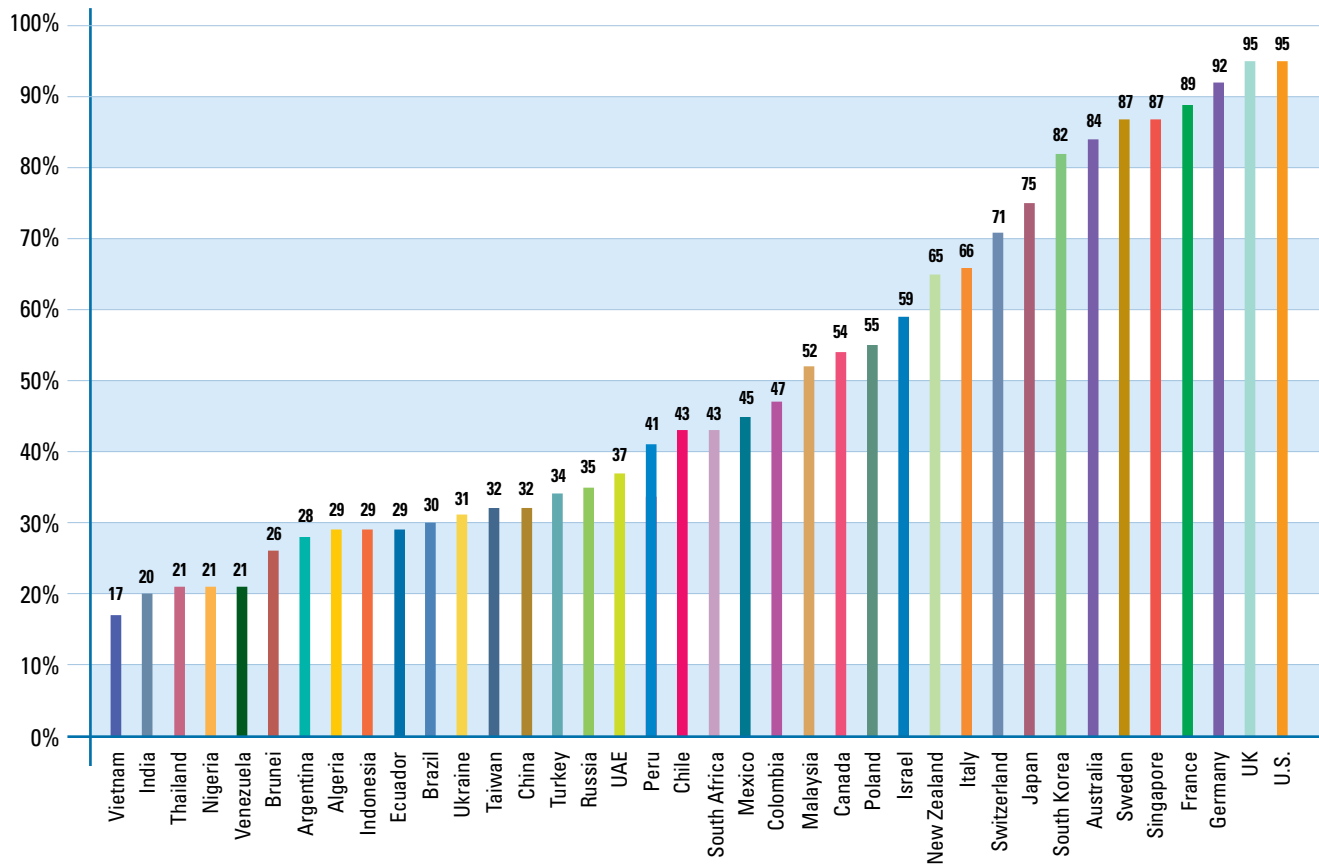
The high number of sector-specific indicators included in the Index allows users to isolate indicators and, in effect, build sub-indices that measure and compare performance in specific industries and sectors. The performance of a given economy in any given category of the Index or sector measured can differ quite significantly from the overall Index score.

The following charts show how the 38 economies scored on indicators for the life sciences and creative content, only 2 of the major innovation-driven growth sectors of the future that most economies are seeking to nurture and develop. Both sectors represent high-tech industries with accompanying knowledge-intensive jobs. The underlying industries of these sectors are also of societal importance with a strong domestic capacity in, for example, the biopharmaceutical or medical device industry which improves access to new technologies and products.

Life Sciences Indicators, Percent of possible available score, Index Fourth Edition³



Creative Content Indicators, Percent of Possible Available Score, Index Fourth Edition⁴

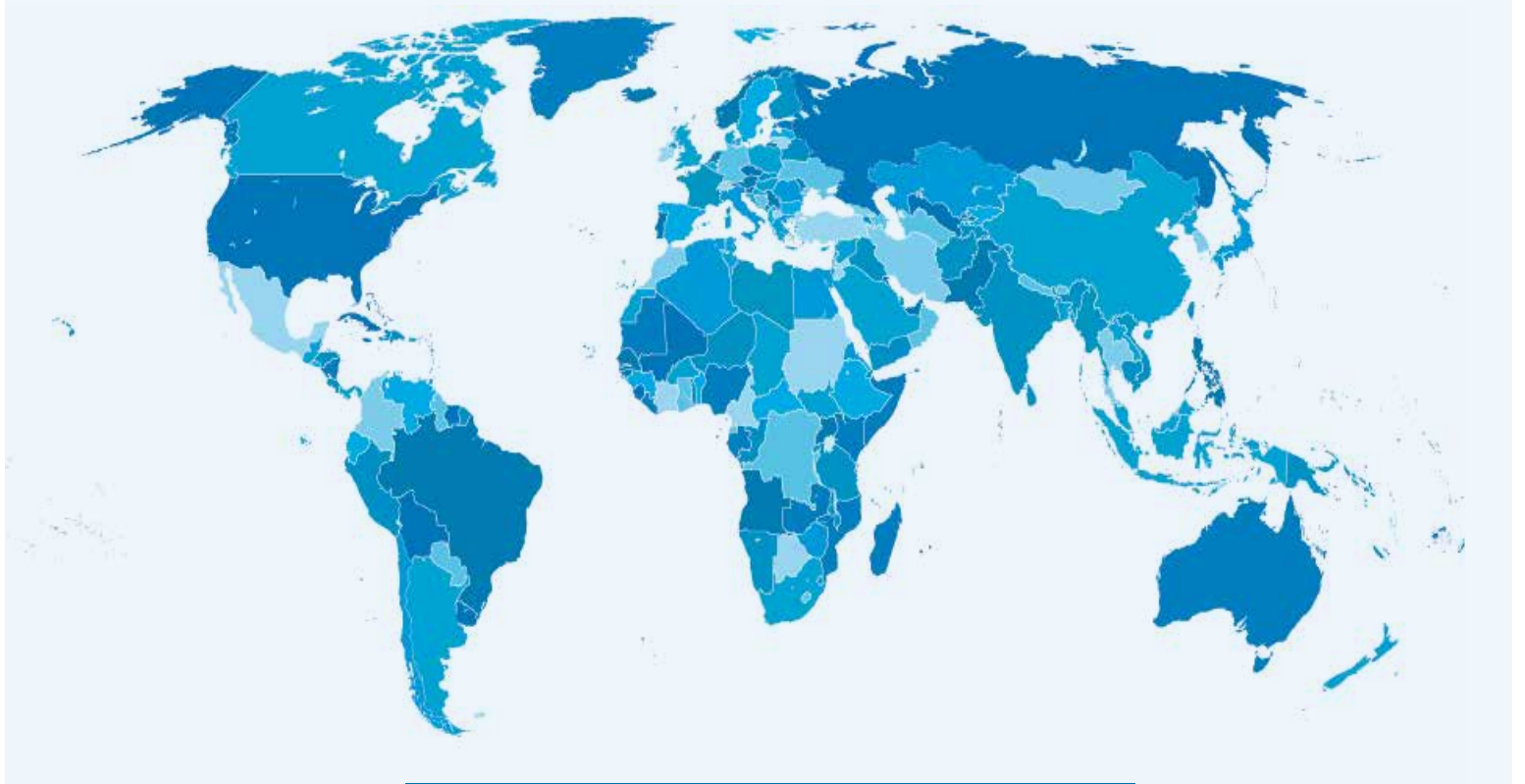


As one would expect, the economies that have the strongest life sciences IP environment are, generally speaking, high-income OECD economies. The United States, Sweden, United Kingdom, France, Germany, Switzerland, and Singapore are also home to some of the most dynamic and innovative life science industries in the world. As Correlation 16 in the Statistical Annex shows, the stronger the

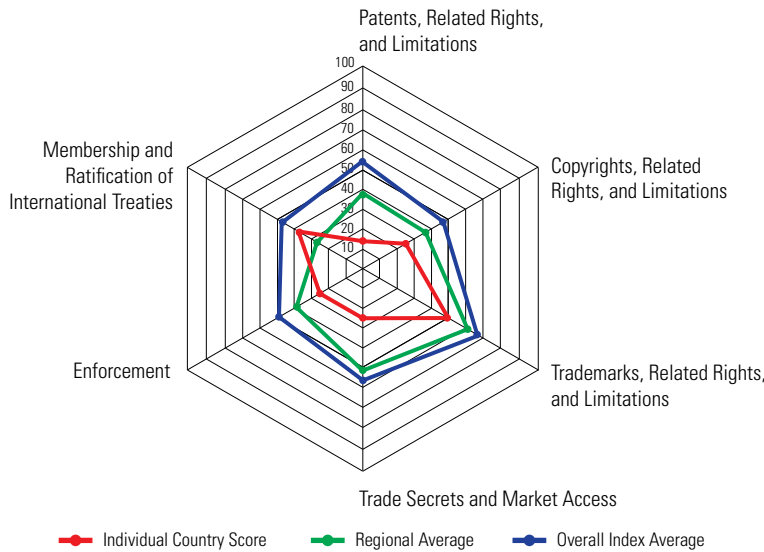
life sciences IP, the more likely a given economy is to see high levels of clinical research and trials. In this sense, isolating the Index indicators for the life sciences provides a very clear roadmap for economies wishing to strengthen and build their life sciences capacity. This result can be seen in one of the new economy additions to the Index, Israel.

For the creative content sector, it is a similar story and quite clear that many of the economies sampled in the Index are not maximizing the potential economic gains from a strong copyright environment that promotes creativity. A clear majority of the Index economies (22) fail to achieve 50% of the available score. As is illustrated by a number of correlations in the accompanying Statistical Annex, economies that do not offer strong protection for the creative content industries tend to see less creative output, fewer theater admissions, and less online creativity. The resulting economic costs are very real. Across the world the creative economy makes up a growing proportion of national economic output and employment with contributions to GDP ranging from 2% to 6% depending on the definitions and sectors studied.⁵ Data from the United Nations Conference on Trade and Development (UNCTAD) valued the total global trade in creative goods and services for 2011 at \$624 billion.⁶ In international trade, the creative economy has matched or outgrown general levels of world GDP in the past decade. Between 2002 and 2011, growth in the trade of creative goods outpaced global economic growth, with creative goods exports averaging annual growth rates of 8.8%.⁷ The creative sector is a growth sector and economies that are not nurturing it and incentivizing creativity are losing out.

Applying the Index: Economy Overviews



Algeria	Indonesia	South Korea
Argentina	Israel	Sweden
Australia	Italy	Switzerland
Brazil	Japan	Taiwan
Brunei	Malaysia	Thailand
Canada	Mexico	Turkey
Chile	New Zealand	Ukraine
China	Nigeria	United Arab Emirates
Colombia	Peru	United Kingdom
Ecuador	Poland	United States
France	Russia	Venezuela
Germany	Singapore	Vietnam
India	South Africa	



Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
<ul style="list-style-type: none"> ✓ Rudimentary legal framework for enforcement of IP rights ✓ Policy makers have made calls for reform efforts 	<ul style="list-style-type: none"> ✗ Key pharmaceutical IP rights missing ✗ No linkage mechanism or ability to enforce pharmaceutical patent rights ✗ High levels of piracy—estimated software piracy rate of 85% ✗ Major holes in legal framework for enforcing copyrights ✗ Difficult localization policies in place



Patents, Related Rights, and Limitations

- Algeria does not have in place a dedicated enforcement and resolution mechanism at the regulatory and market approval level.
- Algeria does not provide for patent term restoration for pharmaceutical products, and there is currently no regulatory data protection term for submitted clinical research and data as part of a marketing approval application.



Copyrights, Related Rights, and Limitations

- Algeria provides a relatively basic framework for the protection and enforcement of copyright online. However, the copyright enforcement environment is very difficult, with exceedingly high levels of counterfeit content in circulation.



Trade Secrets and Market Access

- Algeria has a number of localization policies in place that indirectly subject a rights holder to the sharing of their IP in order to effectively access the Algerian market.



Enforcement

- Basic civil remedies, damages, and criminal remedies are all in place in the relevant copyright, patent, and trademark laws. However, the actual enforcement, availability, and application of these laws is difficult.

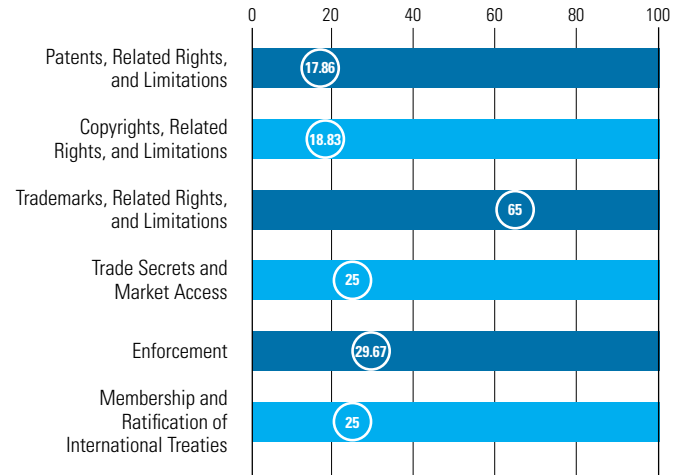
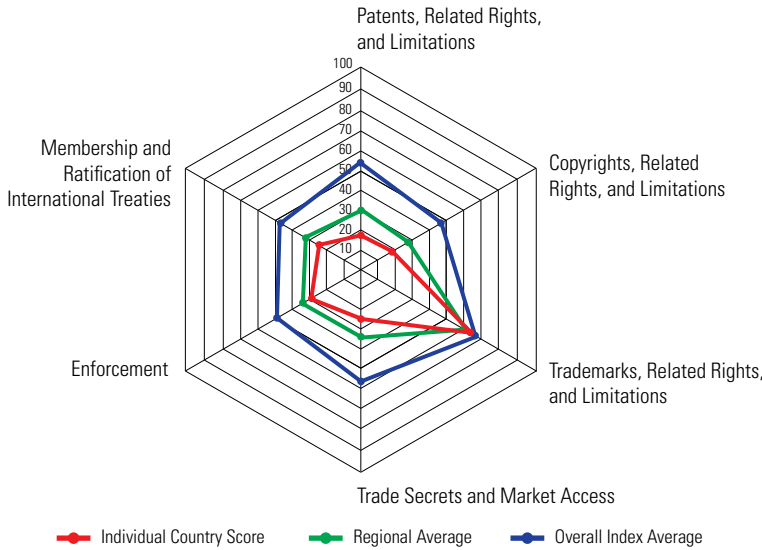


Membership and Ratification of International Treaties

- Algeria has not ratified the Patent Law Treaty, is not party to the Singapore Treaty on the Law of Trademarks, and has not concluded an FTA with substantial IP provisions. Algeria has signed and ratified the WIPO Internet Treaties.

Argentina

Total Score: 8.91 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
<ul style="list-style-type: none"> ✓ Fairly strong trademark legal framework present, including protection for unregistered marks ✓ Elemental legal framework for enforcement of IP rights ✓ Signatory to WIPO Internet Treaties 	<ul style="list-style-type: none"> ✗ Key pharmaceutical IP rights missing ✗ Overly broad compulsory license framework ✗ Extensive patent backlogs ✗ Major holes in legal framework for enforcing copyrights ✗ Lacks Internet service provider (ISP) liability/notice and takedown system ✗ Relatively high rates of counterfeiting ✗ Judicial procedure slow and court decisions non-transparent/non-deterrent



Patents, Related Rights, and Limitations

- Process and method of treatment patent claims rarely meet the industrial application requirement of Argentina's strict patent law, and are difficult to defend in the courts.
- Argentina does not have an effective patent enforcement and resolution mechanism. Rights holders are typically unable to obtain injunctive relief in a timely manner.



Copyrights, Related Rights, and Limitations

- Argentina provides general exclusive rights for authors and creators, but with no clear reference in the law to copyrights in the online environment. Digital piracy is a major threat to copyright industries, and software piracy is prevalent.
- No specific legislation is in place for ISP liability relating to online piracy; no notice and takedown requirements are in place. A draft bill addressing ISP liability submitted to the Argentine Congress in March 2013 provides only a partial solution.



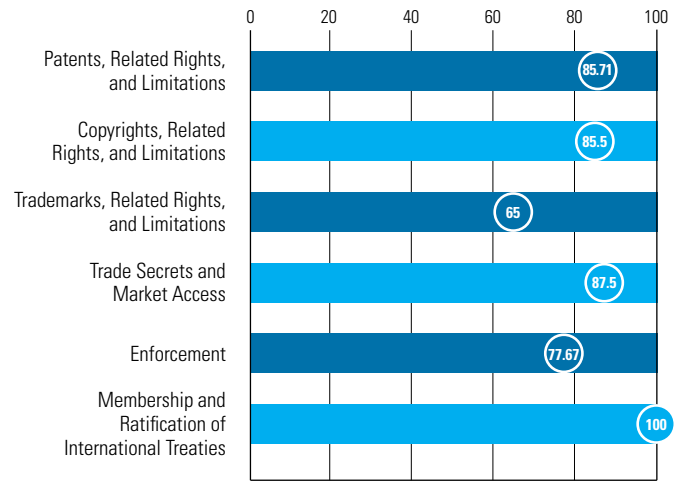
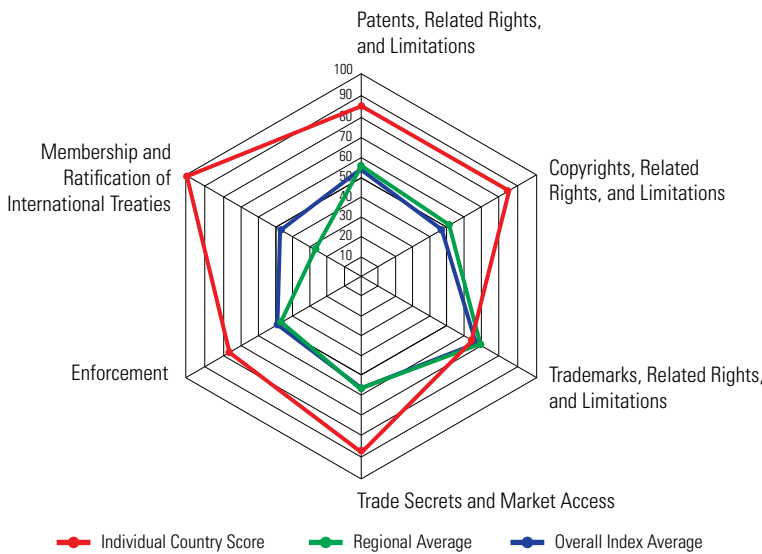
Enforcement

- Argentina's criminal enforcement regime suffers from non-deterrent or laggard judgments, with courts often assigning the minimum penalties provided for in the law; not including penalties in the judgment; or postponing the judgment.



Membership 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, nor concluded any major FTA since joining the TRIPS agreement.



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Patent term restoration for pharmaceutical products
- ✓ New notice + notice mechanism and graduated warning system in place
- ✓ Scope of limitations and exceptions to copyrights and related rights
- ✓ Digital rights management legislation
- ✓ Relatively low counterfeiting and piracy rates

Key Areas of Weakness

- ✗ Limited scope of patentability for biotech inventions
- ✗ Lack of clarity on patentability of computer-implemented inventions (CIIs)
- ✗ Restrictions on the use of brands, trademarks, and trade dress in packaging
- ✗ Insufficient criminal penalties
- ✗ Lack of *ex officio* authority for customs officials



Patents, Related Rights, and Limitations

- In 2015, the Australian High Court reversed the 2014 ruling of the Federal Court that had upheld the patentability of isolated genetic material in *D'Arcy v. Myriad Genetics*. This decision weakens the patentability of biotechnology and diagnostic-related inventions in a manner similar to the United States.
- Recent case law suggests the patent office is tightening software patentability for CII beyond the current requirement of producing a physical effect.



Copyrights, Related Rights, and Limitations

- 2015 Copyright Act amendments introduce a new website blocking mechanism that fills a gap in existing law related to foreign-hosted websites. Consequently, rights holders may receive injunctions regarding websites or "online locations" whose "primary purpose" is to infringe or facilitate copyright infringement.
- Certain government departments and bodies have not implemented software licensing in a comprehensive manner.



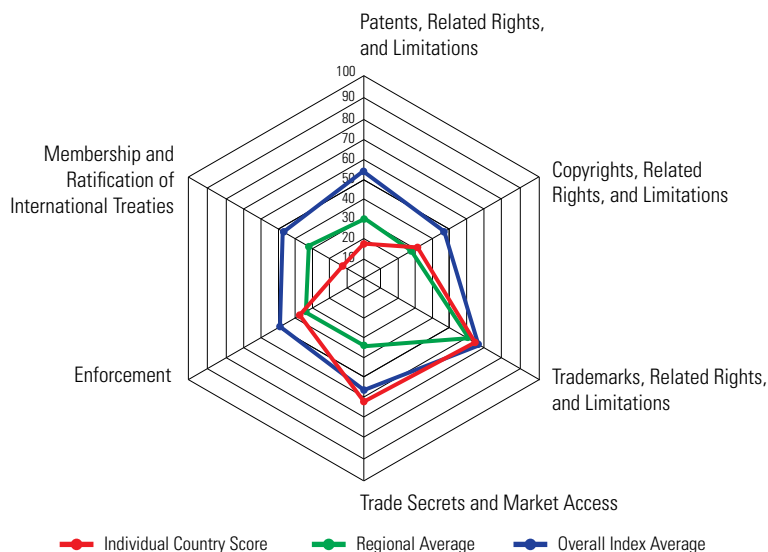
Enforcement

- 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.



Membership and Ratification of International Treaties

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



Strengths and Weaknesses

Key Areas of Strength

- ✓ Basic IP framework introduced in mid-1990s includes 20-year patent protection
- ✓ 10-year minimum term of patent protection in place for administrative delays
- ✓ *Ex officio* powers granted to customs officials under the Patent and Trademark Act

Key Areas of Weakness

- ✗ Localization requirements and forced sharing of technology for biopharmaceutical production intensified in 2014/15
- ✗ Patentability barriers still in place through ANVISA review of pharmaceutical applicants—confirmed in 2015 court cases
- ✗ Regulatory data protection not available for human-use products
- ✗ Patent term restoration not available
- ✗ Low rate of membership or ratification of international IP treaties



Patents, Related Rights, and Limitations

- The Brazilian National Health Surveillance Agency (ANVISA) continues to exercise prior consent on pharmaceutical patents under examination by the Brazilian Intellectual Property Office (INPI). This dual examination requirement is in violation of TRIPS. In 2015, the Federal District Court in Rio de Janeiro ruled that ANVISA was permitted to review pharmaceutical patents and the insertion of ANVISA into the review process was an essential element of safeguarding public health.
- Brazil does not provide patent term restoration for pharmaceutical products, and RDP is available only for fertilizers, agrochemical products, and pharmaceuticals for veterinary use.



Trade Secrets and Market Access

- Brazilian foreign investment policies emphasize local content requirements and local production. Many of these policies target the sharing of IP and technology transfer.



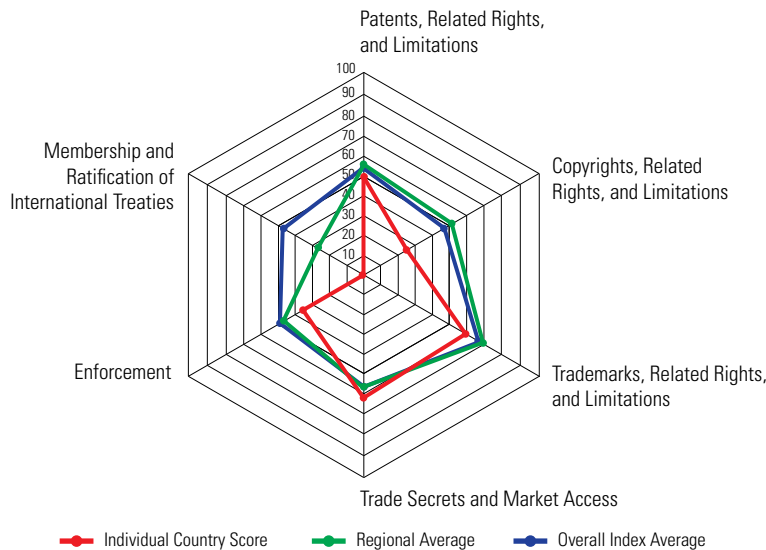
Membership and Ratification of International Treaties

- Brazil is not a contracting party to the WIPO Internet Treaties or the Singapore Treaty on the Law of Trademarks, and it has not 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.



Copyrights, Related Rights, and Limitations

- A new industry-led online antipiracy campaign called “click original” was launched by a coalition of some of the largest content and brand owners in Brazil and globally.



Strengths and Weaknesses

Key Areas of Strength

- ✓ Major IP reforms in past few years including establishing a dedicated IP Office (BruIPO)
- ✓ New Patents Order introduced (2011)
- ✓ Copyright Amendments (2013) increase penalties (including fines and prison sentences) for copyright infringement
- ✓ Stronger enforcement against physical counterfeiting since 2012
- ✓ Removed from the Office of the U.S. Trade Representative's (USTR) Special 301 Report

Key Areas of Weakness

- ✗ Life sciences IP rights lacking
- ✗ Regulatory data protection not available
- ✗ Over-broad compulsory license framework
- ✗ Limited framework to address online piracy and circumvention devices
- ✗ No notice and takedown system for copyright or trademarks
- ✗ Slow judicial procedures and lack of IP-related case law and prosecutions
- ✗ Weak border enforcement measures with no *ex officio* authority in place
- ✗ Not a contracting party to any of the major international IP treaties referenced in the Index



Patents, Related Rights, and Limitations

- Brunei's 2011 Patent Order introduced provides for the protection of patents, including software and CII if they meet the general patentability requirements.
- The 2011 Patents Order includes a very broad government-use provision for which there are no clearly defined parameters and limited recourse for rights holders.
- Brunei does not provide regulatory data protection for biopharmaceutical test data and no restoration of patent term lost to regulatory delays.



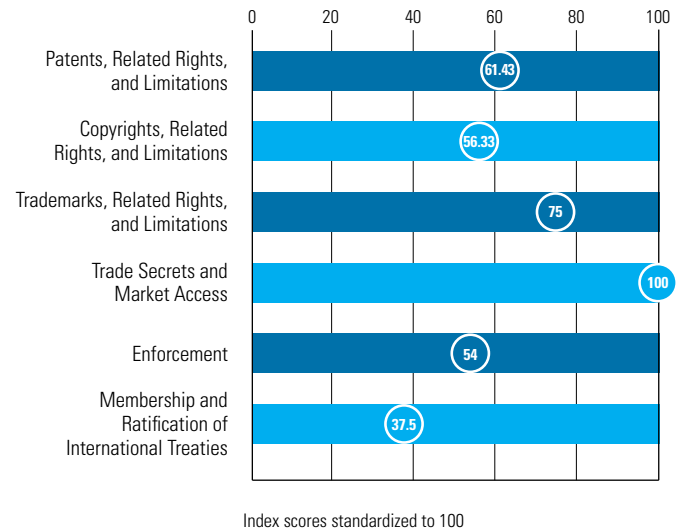
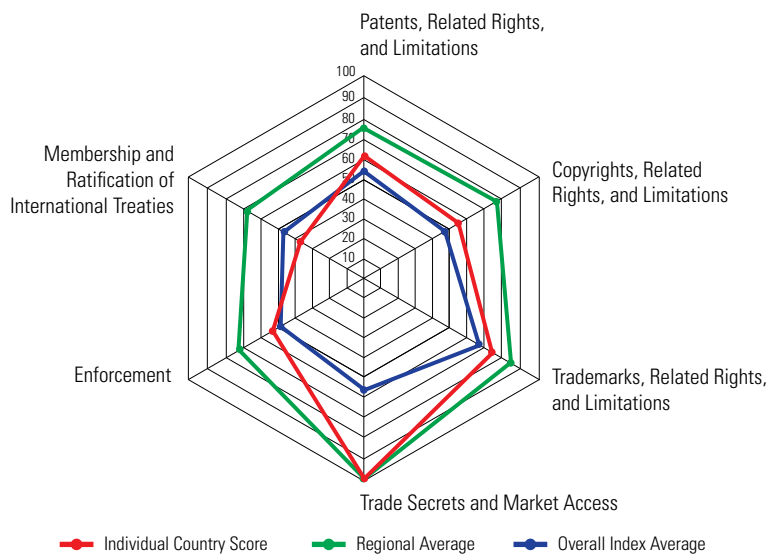
Enforcement

- The Patents Order, Trade Marks Law, and Copyright Order allow for damages, seizure, and injunctions, but enforcement and judicial remedies are a challenge.
- While the government has increased penalties under the Copyright Act, criminal enforcement against IP infringement is in its early stages and remains rare.
- Customs officials do not have clear *ex officio* authority to act against goods suspected of IP infringement.



Copyrights, Related Rights, and Limitations

- Brunei does not have a notice and takedown system to address online copyright violation, and there is no evidence of cooperation between ISPs and rights holders.
- Brunei has committed to implementing and encouraging government use of licensed software; however, there is no evidence of a clear government policy or auditing.



Strengths and Weaknesses

Key Areas of Strength

- ✓ New 70-year copyright term of protection introduced in 2015
- ✓ New border controls provide *ex officio* authority to Canadian customs officials
- ✓ Clear patentability of CII
- ✓ Implementation of CETA and TPP likely to introduce reforms

Key Areas of Weakness

- ✗ Onerous patentability requirements, particularly for life sciences
- ✗ Deficient enforcement and resolution for Pharmaceutical-related patents
- ✗ Patent term restoration not available
- ✗ No takedown mechanism in ISP notification system



Patents, Related Rights, and Limitations

- In the last decade, Canadian courts have established a standard of utility that diverges from international standards embodied in TRIPS and the Patent Cooperation Treaty.
- Existing regulations do not provide patent holders with an effective right of appeal.
- Bill C-17 (“Vanessa’s Law”) allows 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.



Copyrights, Related Rights, and Limitations

- Canada provides a 70-year term of copyright for sound recordings.



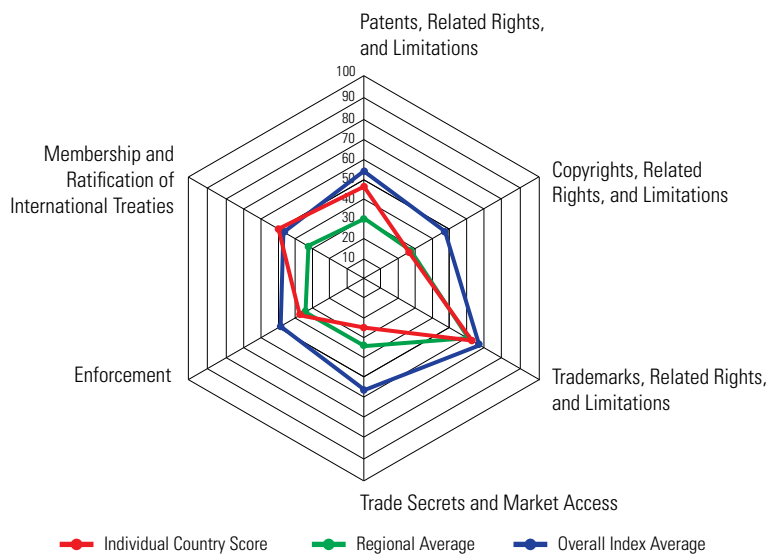
Enforcement

- The Canadian government clarified that customs officers have *ex officio* authority under Bill C-8. Unfortunately, the new legislation did not extend to counterfeit goods in transit, which, provided they are not destined for the Canadian market, can continue to pass through Canadian customs largely unimpeded.



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 but has not yet ratified the Patent Law Treaty and is not a contracting party to the Singapore Treaty on the Law of Trademarks. Canada is also one of the negotiating partners to the TPP.



Strengths and Weaknesses

Key Areas of Strength

- ✓ Legislation provides for fair and transparent use of compulsory licensing
- ✓ Legal measures provide necessary exclusive rights to copyright holders and voluntary notification system
- ✓ Civil and procedural remedies in legislation

Key Areas of Weakness

- ✗ Patentability of pharmaceutical inventions
- ✗ Absence of an effective pharmaceutical-related patent enforcement and resolution mechanism
- ✗ Gaps in regulation governing data protection
- ✗ Lack of sufficient framework to promote action against online piracy
- ✗ Weak trade secret protection



Patents, Related Rights, and Limitations

- Chile is undertaking reforms that would reportedly strengthen the enforcement of pharmaceutical patents, as well as the ability to obtain injunctions.



Copyrights, Related Rights, and Limitations

- The content industry annually loses about 35% in revenues to piracy in Chile, including illegal streaming and satellite signal piracy and retransmission.
- Chile's notice and takedown procedure does not meet the requirements of its FTA with the United States. ISPs are only required to remove infringing content upon having "effective knowledge." However, a voluntary system was recently introduced under which ISPs are to forward notices from rights holders to suspected infringers.



Trade Secrets and 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.

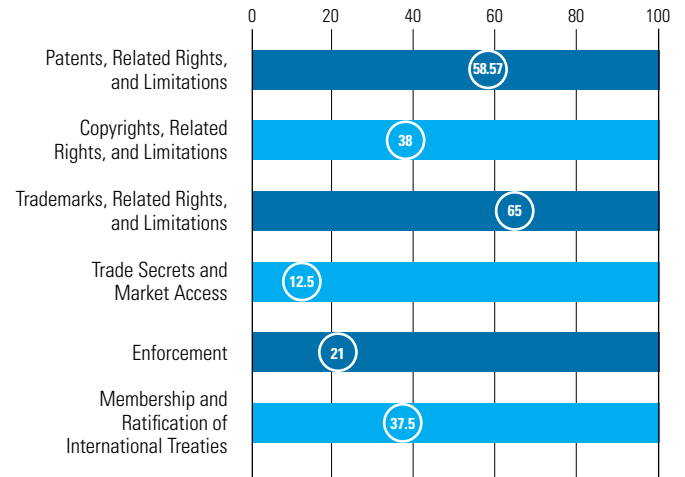
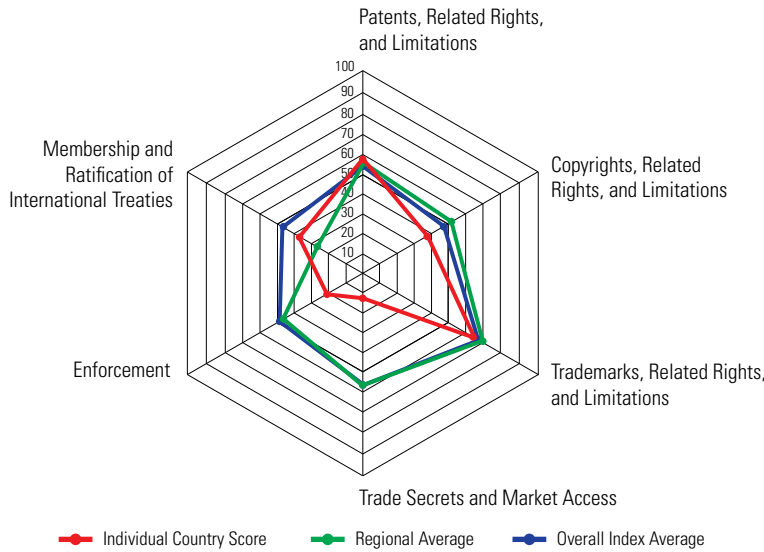


Enforcement

- Existing law provides criminal penalties for IP rights infringement, though they are quite low. Prosecution is hindered by gaps in statute and lack of resources.
- Law No. 19,912 gives customs officials *ex officio* authority to detain goods entering Chile, but after five days a formal seizure order is needed to retain the goods.

China

Total Score: 12.64 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
<ul style="list-style-type: none"> ✓ New trademark law makes improvements to registration and enforcement ✓ Proposed patent and copyright law amendments (if adopted) extend protection and strengthen enforcement ✓ Improved availability of damages and penalties for patent and copyright infringement ✓ New dedicated IP Courts in Beijing/Shanghai/Guangzhou ✓ Launch of nationwide enforcement campaigns against counterfeiting and piracy activities in specific sectors 	<ul style="list-style-type: none"> ✗ Growing online counterfeiting ✗ Serious bad faith trademark problems ✗ Uncertainty surrounding patenting and enforcement of biotech inventions ✗ Actual trade secret theft remains high and legislation has not been updated ✗ Policies requiring sharing of know-how in exchange for market access ✗ Inconsistent criminal prosecution against counterfeiters in many industry sectors ✗ Non-transparent Anti-Monopoly Law (AML) investigations against foreign companies



Patents, Related Rights, and Limitations

- Draft amendments to China's Patent law would bring China's patent framework in line with international standards in some respects, while in others would represent steps backward including an expansion of administrative enforcement.
- China lacks effective patent linkage, regulatory data protection, and limits on the submission of post-filing data for the pharmaceutical and biotechnology field.



Copyrights, Related Rights, and Limitations

- An important district court in Beijing endorsed the copyrightability of live sports broadcast, raising the hope of stronger protection in this area.



Trademarks, Related Rights, and Limitations

- Some brand owners are still facing significant challenges in invalidating bad faith trademarks and also being subject to lawsuits filed by bad faith trademark owners.



Trade Secrets and Market Access

- China has implemented a range of policies making access to the Chinese market conditional on the sharing of technology and IP with domestic entities.
- New rules governing the abuse of IP under the Anti-Monopoly Law widen the basis for forced sharing of IP for multinational companies operating in China.

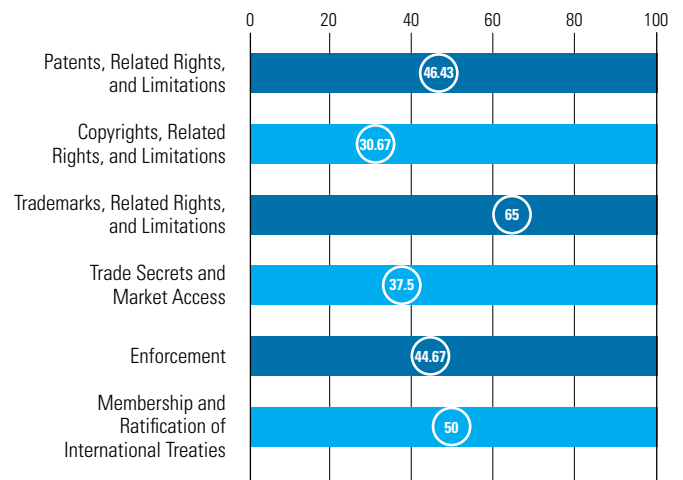
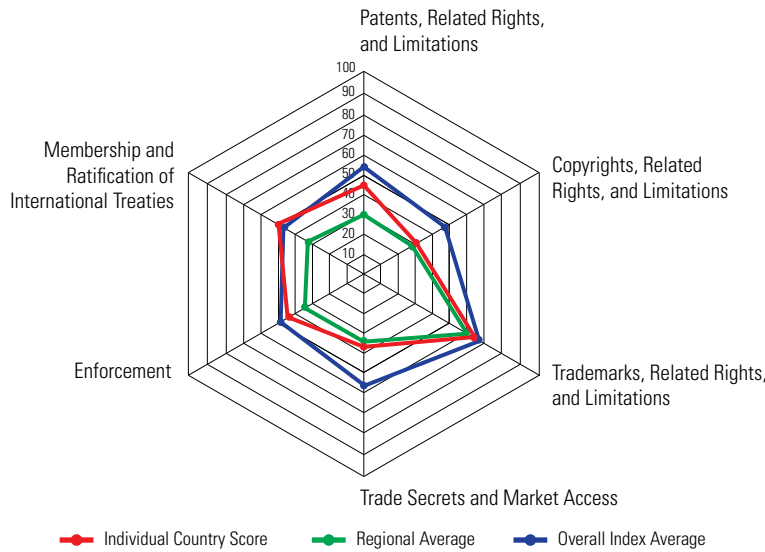


Enforcement

- Some improvements to the enforcement environment include operation of 3 IP Courts, greater resources, stronger penalties, promotion of injunctive relief and wider ability to use evidence.

Colombia

Total Score: 13.77 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
<ul style="list-style-type: none"> ✓ 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 ✓ Statutory damages in place for trademark infringement ✓ Border measures relating to <i>ex officio</i> authority and in-transit detention by customs officials 	<ul style="list-style-type: none"> ✗ Key pharmaceutical IP rights weakness ✗ Uncertainty in RDP for biologics ✗ Failure to implement FTA provisions relating to notice and takedown, digital rights management (DRM), or statutory damages for copyright infringement ✗ Lack of clarity on copyright exceptions ✗ Weak prosecution for online copyright ✗ Gaps in legal protection for unregistered marks ✗ Trademark infringement redress ✗ High digital and physical piracy rates ✗ Inadequate prosecution and non-deterrent sentencing



Patents, Related Rights, and Limitations

- While patent office guidelines provide criteria for approval of software patents, legal analysis indicates that in most cases, the patent office denies software patents.
- A five-year period of regulatory data protection is available for pharmaceuticals and agrochemicals. The application of regulatory data protection to biologics is uncertain.



Copyrights, Related Rights, and Limitations

- Colombia has not met obligations in its free trade agreement with the United States, including protection against anti-circumvention of technological protection measures (TPMs).
- Piracy of audiovisual content is a major problem. Local industry estimates that about 50% of cable TV services are accessed illegally or in an unauthorized manner.



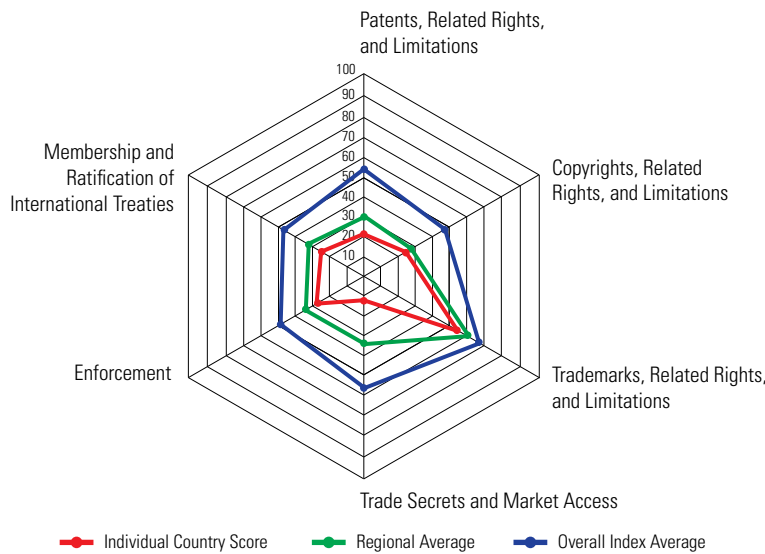
Enforcement

- Despite steps to increase penalties for trademark violations, counterfeit goods distribution at borders and through shopping areas like San Andresitos remains a major and growing concern. Online piracy and software piracy remain high.
- Decree 2264 introduces statutory damages for trademark infringement. However, statutory damages for copyright infringement are still not available.



Membership and Ratification of International Treaties

- Colombia belongs to the WIPO Internet Treaties, but not the Patent Law Treaty or the Singapore Treaty on the Law of Trademarks. Colombia has concluded the U.S.-Colombia TPA, with substantial IP provisions.



Strengths and Weaknesses

Key Areas of Strength

- ✓ Rudimentary IP system in place
- ✓ Legal framework in place for *ex officio* action to be taken by customs against infringing goods both intended for the domestic market and in transit
- ✓ Signed and acceded to WIPO Internet Treaties

Key Areas of Weakness

- ✗ History of issuing compulsory licenses (CLs) and stated public use of CLs as a tool for technical economic development
- ✗ Limited framework for protection of life science IP
- ✗ Decriminalization of copyright infringement completely outside international standards and treaty obligations
- ✗ High levels of piracy
- ✗ Limited participation in international IP treaties



Patents, Related Rights, and Limitations

- Administrative and technical barriers to patenting include high patent fees.
- Since 2010, Ecuador has been an active user of compulsory licensing for biopharmaceutical products. Nine licenses have been granted since 2010 and 12 more are being considered. These licenses have been issued on the basis of being a cost containment mechanism and the policy of encouraging domestic innovation.
- Article 191 of the Intellectual Property Law provides a basis for the protection of submitted biopharmaceutical test data. However, no term of protection is specified in this legislation and rights holders report that *de facto* protection of data is limited.



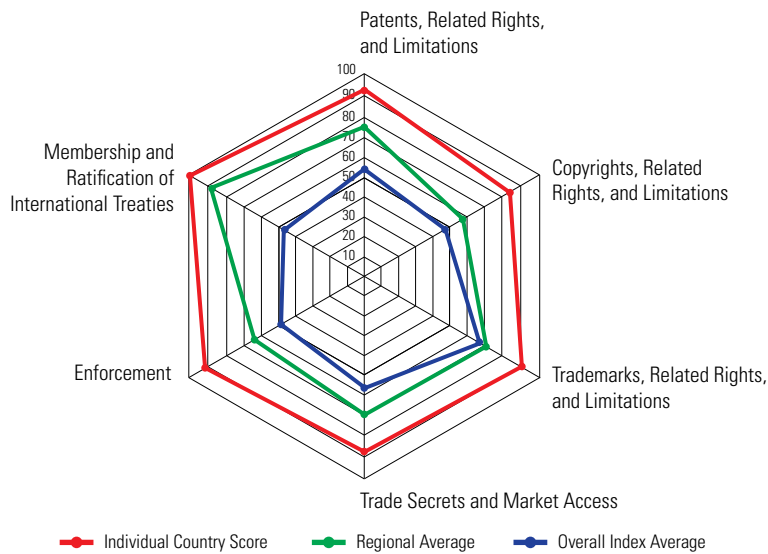
Enforcement

- The IP enforcement environment is difficult. Amendments to the Intellectual Property Law removed criminal penalties and sanctions for copyright infringement. As a result, Ecuador's IP enforcement environment stands firmly outside international standards. While mechanisms for civil and administrative enforcement remain available, rights holders face significant challenges accessing them.



Copyrights, Related Rights, and Limitations

- Ecuador has a high rate of software piracy—68% of total software as estimated by the BSA | The Software Alliance (BSA) in its latest survey.



Strengths and Weaknesses

Key Areas of Strength

- ✓ New plan to combat online piracy launched by Ministry of Culture and Communication in 2015
- ✓ Strong and sophisticated national IP environment
- ✓ Sector-specific IP rights such as regulatory data protection and patent term restoration in place
- ✓ Effective trademark protection
- ✓ Strong civil remedies and criminal penalties in place
- ✓ Commitment to and implementation of international treaties

Key Areas of Weakness

- ✗ Despite a slight drop in a recent BSA survey, high levels of software piracy persist in comparison to other high-income OECD economies
- ✗ The French Parliament passed a bill introducing plain package legislation late in December 2015. At the time of research, the new legislation was set to receive final assent and be implemented in the first half of 2016



Patents, Related Rights, and Limitations

- France provides for sophisticated patent rights, including an adequate patentability and regulatory data protection term.



Copyrights, Related Rights, and Limitations

- The graduated response scheme, introduced in 2009 has—despite evidence that it's early tougher measures had a positive impact on music sales—been significantly reduced with regard to both the agency's legal mandate and staffing. Online piracy is pervasive, with an estimated 10 million French users accessing illegal content.
- France introduced a number of policies to streamline the reporting, monitoring, and enforcement against pirated material and promote a digital online music market.



Trademarks, Related Rights, and Limitations

- In 2015, the EU passed a new EU Trademarks Directive. The new Directive harmonizes existing rules and regulations, streamlining, for example, opposition and cancellation actions as well as the classification of eligible goods and services.



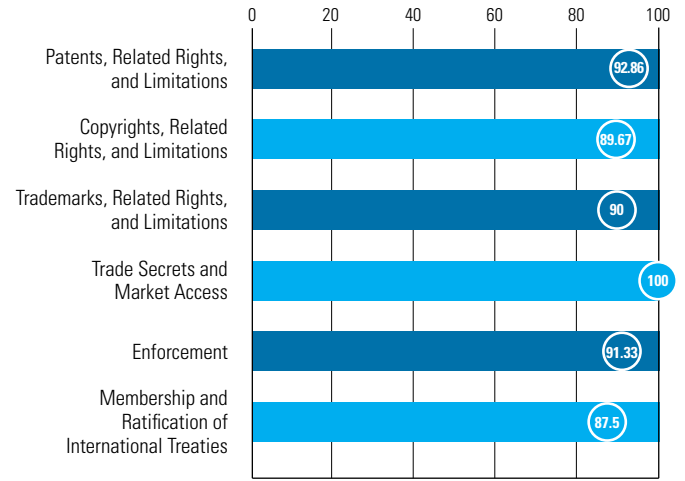
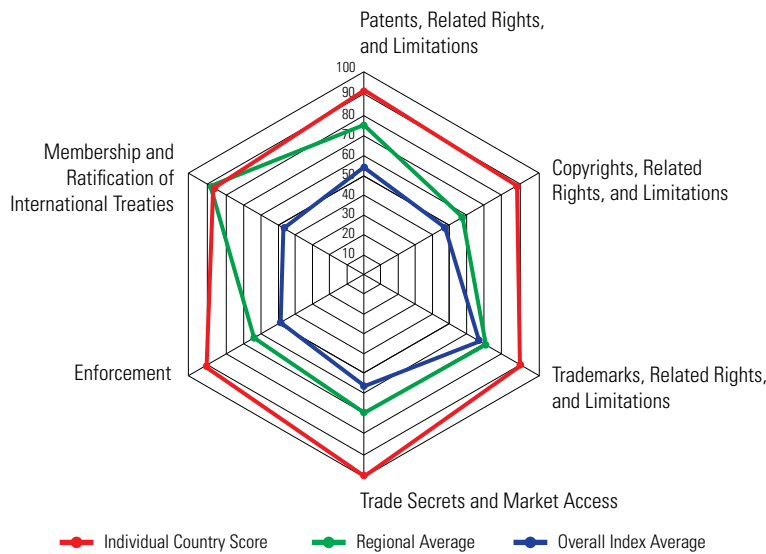
Enforcement

- France has high levels of software piracy relative to other high-income economies.



Membership and Ratification of International Treaties

- France has signed and acceded to all of the international treaties included in the Index. Furthermore, The EU has agreed in principle on a major trade agreement with Canada and is in negotiations with the United States on a trade agreement.



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Advanced and sophisticated national IP environment
- ✓ Sector-specific IP rights such as regulatory data protection and patent term restoration are in place
- ✓ Broad online copyright protection
- ✓ Legal measures are in place to address unauthorized use of trademarks

Key Areas of Weakness

- ✗ Damages awards historically not very high
- ✗ Patent Law Treaty signed but not ratified



Patents, Related Rights, and Limitations

- Germany provides for sophisticated patent rights, including an adequate patentability and regulatory data protection term.
- Recent case law in Germany has opened up questions of interpretation and varying levels of protection for pharmaceutical patents with regard to second-use claims.



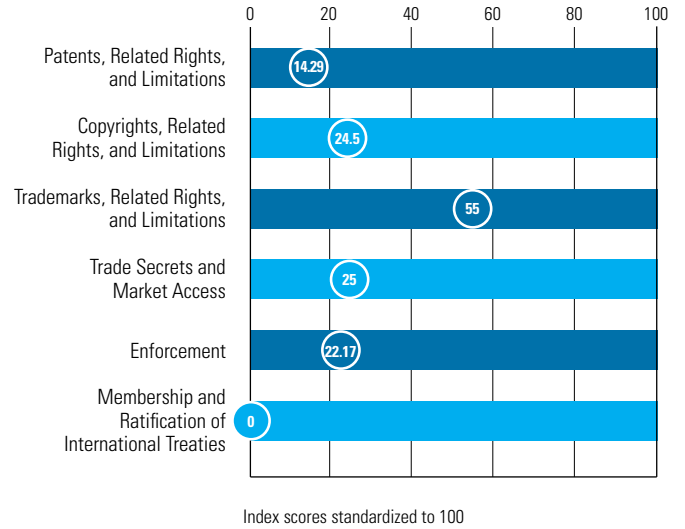
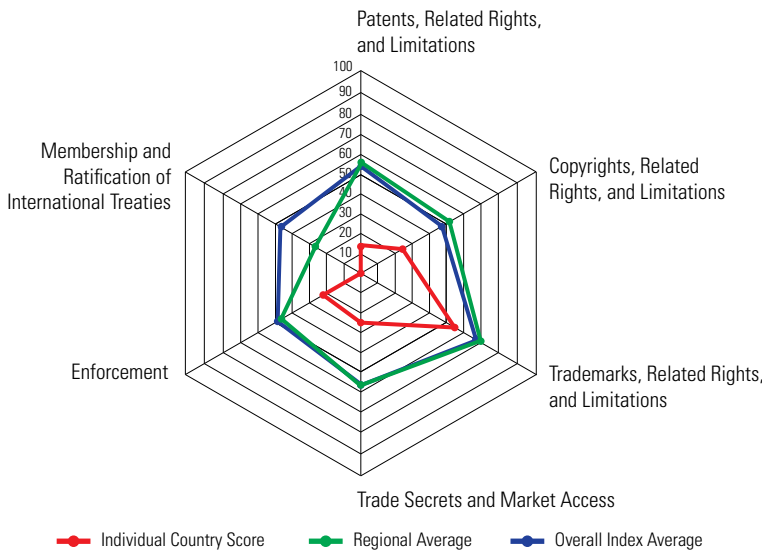
Membership and Ratification of International Treaties

- Germany has signed and acceded to all of the international treaties included in the Index save for the Patent Law Treaty, which Germany has signed but not acceded to. The EU has agreed in principle on a major trade agreement with Canada and is in negotiations with the United States on a trade agreement.



Copyrights, Related Rights, and Limitations

- The German Ministry for Culture and Media is looking into reforming the existing copyright framework, which should ensure modern, effective protection for rights holders online.
- Germany is home to the only member of European Parliament hailing from the Pirate Party, an anti-copyright political group.



Strengths and Weaknesses

Key Areas of Strength

- ✓ The government of India continued to make positive statements during 2015 on the need to introduce a strong IP environment
- ✓ *Ex officio* powers introduced in 2007 for the deputy and assistant commissioners of customs

Key Areas of Weakness

- ✗ Patentability requirements outside international standards; confirmed in 2015 Controller General rulings
- ✗ Regulatory data protection and patent term restoration not available
- ✗ History of compulsory licensing for commercial, nonemergency situations
- ✗ Court ruling on notice and takedown for copyright-infringing content limits already unclear system and laws
- ✗ Poor application and enforcement of civil remedies and criminal penalties
- ✗ Not a contracting party to any of the major IP treaties referenced in the Index



Patents, Related Rights, and Limitations

- Indian patent law adds an additional patentability requirement beyond the required novelty, inventive step, and industrial applicability requirements. Section 3(d) of the Indian Patent Act adds a "fourth hurdle" with regard to inventive step and enhanced efficacy limiting patentability of pharmaceutical inventions and chemical compounds.
- The environment for protecting computer-related inventions (CRIs) remains uncertain. Although the government of India released guidelines on CRIs in August 2015, it has suspended the implementation of the guidelines.
- Indian compulsory licensing legislation and the continued consideration of such licenses for biopharmaceuticals outside of public emergencies is one of the primary reasons India's IP regime continues to be an international outlier.



Copyrights, Related Rights, and Limitations

- Indian law is not clear as to the availability and requirements of a notice and takedown system. Any enforcement that requires a court order is not practical or would not provide for the expeditious removal of infringing content.

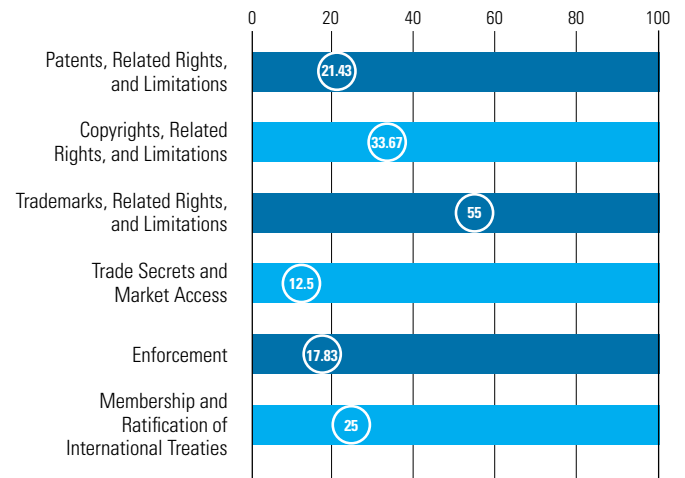
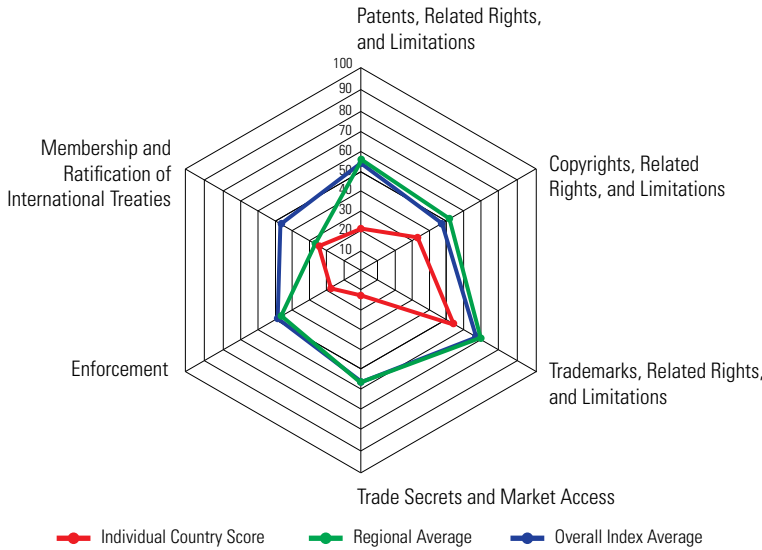


Membership and Ratification of International Treaties

- India is not a contracting party to any of the international treaties included in the Index, nor has India concluded an FTA with substantial IP provisions since acceding to the TRIPS Agreement.

Indonesia

Total Score: 8.59 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ New notification system being implemented and used and infringing websites being blocked by local rights holders
- ✓ Basic IP framework in place including 20-year patent term of protection
- ✓ FTA obligation for legal government software
- ✓ Major auction sites provide notice and takedown for online counterfeiting

Key Areas of Weakness

- ✗ Draft 2015 patent law includes localization provisions and technology transfer of all patented products
- ✗ Persistent high levels of piracy
- ✗ History of pharmaceutical compulsory licensing
- ✗ No patent term restoration or regulatory data protection available
- ✗ Limited protection for unregistered marks
- ✗ Market access conditional on local manufacturing requirement or licensing IP



Patents, Related Rights, and Limitations

- The 2001 Indonesian Patent Law does not allow for second- or medical-use patents, and published, official guidelines are not in place. Nevertheless, practice notes and experience by local legal practitioners suggest that “Swiss-style” claims are allowed.
- The draft patent law seems to mandate local manufacturing of all patented products, and require use of patented product or process to support domestic employment, investment, and technology transfer.
- Since the mid-2000s, Indonesia has issued nine “government use” licenses on existing patents primarily for hepatitis and HIV drugs. The manner in which these licenses were issued appears to contradict Article 31 of the TRIPS Agreement.

- Copyright piracy (both physical and online) remains a serious challenge; however, legislative and regulatory steps by Indonesian authorities and their continued enforcement and application have been significant.



Trademarks, Related Rights, and Limitations

- The protection of trademarks is a challenge. Physical counterfeiting is rife; the legal framework is rudimentary; and enforcement action is limited.
- Local analysis suggests Indonesia’s first-to-file system has been widely abused by local operators, who have registered internationally well-known marks. The draft Trademark Law currently under consideration does not improve the existing framework, providing only minimal reference to well-known marks.



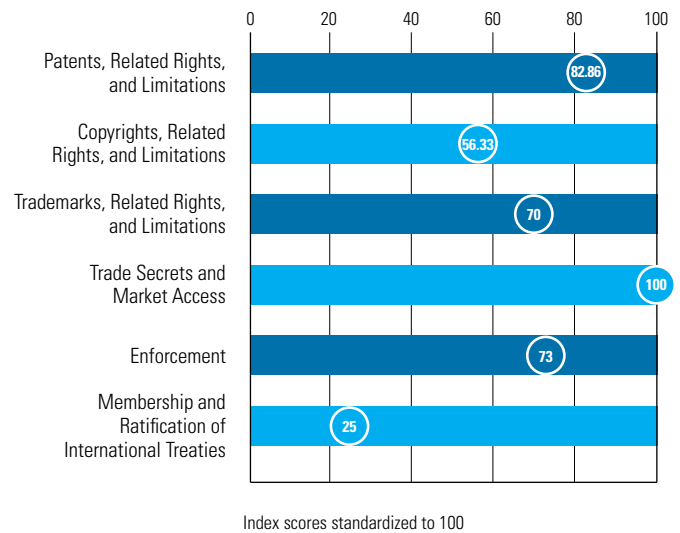
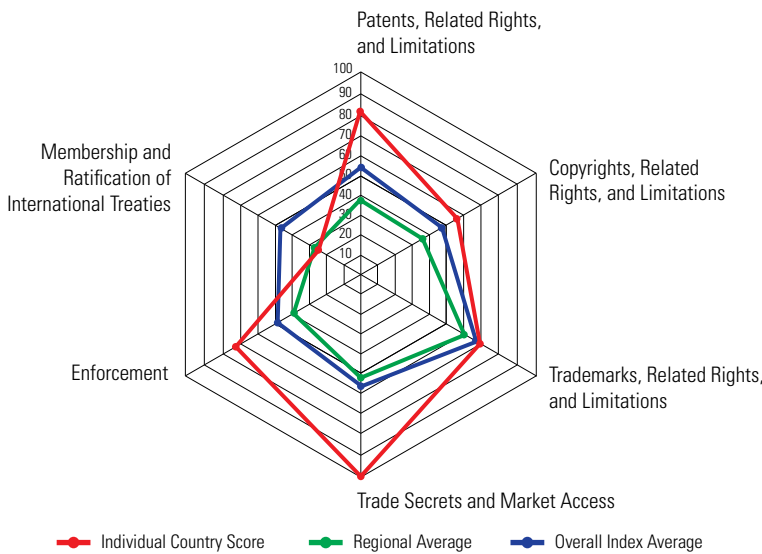
Copyrights, Related Rights, and Limitations

- The July 2015 implementing regulations for the 2014 Copyright Act established an online notification system enabling rights holders to file a notice of infringement and request the blocking of alleged infringing websites.



Membership and Ratification of International Treaties

- Indonesia is not a party to the Patent Law Treaty or the Singapore Treaty on the Law of Trademarks, nor has it concluded an FTA with substantial IP provisions since acceding to TRIPS. Indonesia is a party to the WIPO Internet Treaties.



Strengths and Weaknesses

Key Areas of Strength

- ✓ 2014 life sciences IP rights reform efforts have considerably strengthened Israel's IP environment
- ✓ Strong protection for CII's
- ✓ *Ex officio* customs authority and strong customs agency

Key Areas of Weakness

- ✗ Online copyright framework lacking—limited notice and takedown and no DRM laws
- ✗ Accession to international IP-specific treaties and FTAs lacking



Patents, Related Rights, and Limitations

- Beginning in the mid-2000s, the Israeli Patent Office reduced the number of CII patents issued and altered its interpretation of the relevant patent laws. In 2012, this policy was reversed and a new interpretation was issued; as a result, CII patents are now widely available and approved.
- In 2014, the Israeli Knesset amended the Patent Act, introducing a five-year maximum term of restoration.
- Article 47(D) to the Pharmacists Ordinance provides a term of protection for submitted clinical research data of 6.5 years if the first marketing approval of the product was received in any recognized economy, or 6 years if the first marketing approval of said product was received in Israel. However, this protection is currently not available to biological or large molecule entities.



Enforcement

- Israeli law and case law provide clear *ex officio* authority to Customs officials. Local legal reports suggest that Customs officials will take action against suspected goods that are in transit to the Palestinian territories. However, it is not clear from existing guidelines, case law, or practice that Israeli Customs would take action against suspected goods that are in transit to another destination.



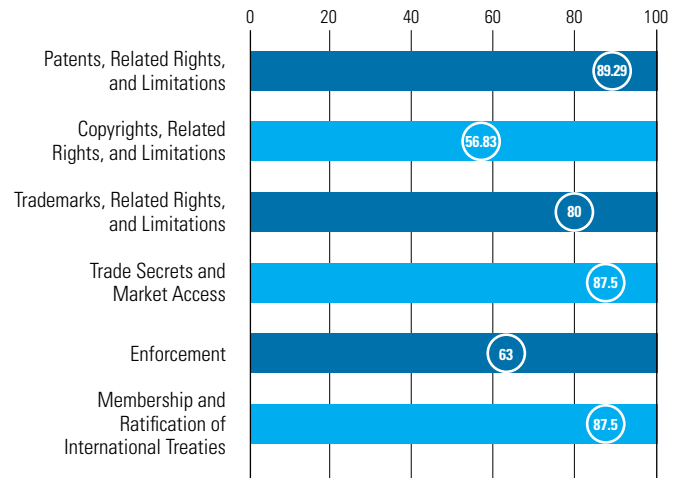
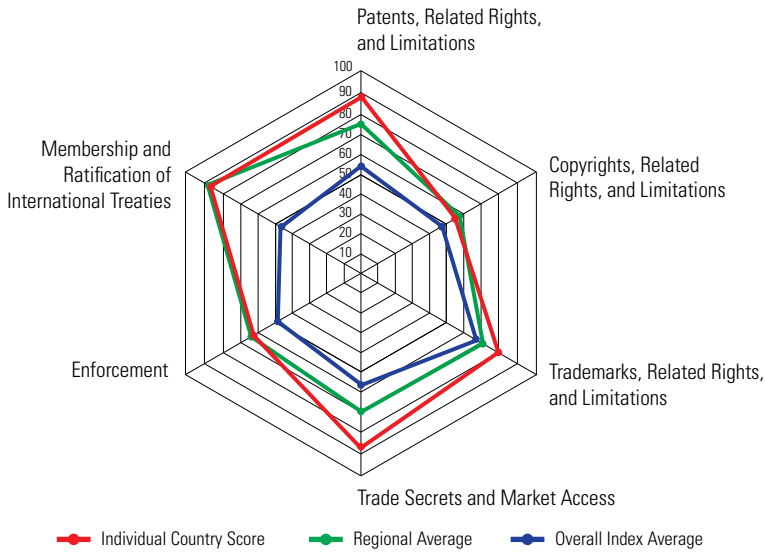
Membership and Ratification of International Treaties

- Israel has not ratified the WIPO Internet Treaties or Patent Law Treaty, it is not party to the Singapore Treaty on the Law of Trademarks, and it has not concluded an FTA with substantial IP provisions since it acceded to TRIPS.



Copyrights, Related Rights, and Limitations

- Israeli industry figures published in 2011 suggested that approximately 95% of online music and 50% of film was pirated. Currently, no specific legal framework is in place with regard to notice and takedown mechanisms or other administrative or regulatory mechanisms to effectively enforce copyright and related rights in the online environment.
- Israel does not have in place relevant TPM or DRM legislation.



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Fairly advanced national IP environment
- ✓ Application of patent requirements; sector-specific IP rights in place, e.g., RDP, patent term restoration
- ✓ Implementation of policies requiring the use of licensed software in public agencies
- ✓ Protection for trademarks, including well-known marks
- ✓ Protection for trade secrets

Key Areas of Weakness

- ✗ Lack of a voluntary notice and takedown mechanism
- ✗ Gaps in implementation of limitations on exceptions for copyrights
- ✗ Relatively high level of physical counterfeiting and online piracy in comparison with other high-income economies
- ✗ Significant delays and lack of expertise vis-à-vis IP rights within judicial system



Patents, Related Rights, and Limitations

- Italian law provides for patentability of inventions in the field of technology, biotechnology, and biopharmaceutical space. However, courts have denied patents on intermediate chemical products, such as active pharmaceutical ingredients.



Trademarks, Related Rights, and Limitations

- The Italian Industrial Code provides general exclusive rights to trademark holders, protected at both the administrative and judicial levels.
- Despite high rates of counterfeiting, recent case law indicates that remedies are generally available for standard trademark violations when cases are brought.



Copyrights, Related Rights, and Limitations

- Copyright piracy remains a major problem, with wide access to illegal cyberlockers and linking sites operated outside Italy. Estimates from the Sturza Institute place music piracy at about 50% and film piracy at just under 40%. Enforcement generally lags behind other European economies due to data privacy restrictions that limit prosecution of peer-to-peer (P2P) file-sharing and delays in litigation.
- Italy has a partial ISP liability system for copyright infringement, but it does not mandate a voluntary notice and takedown system with liability for ISPs that do not respond to rights holder independently of administrative intervention.



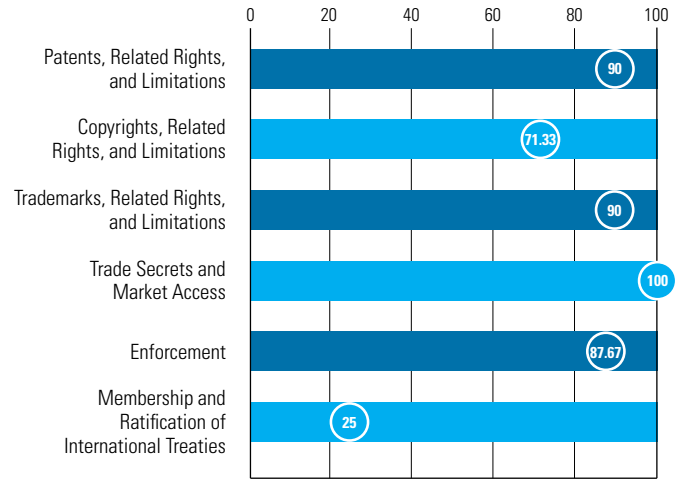
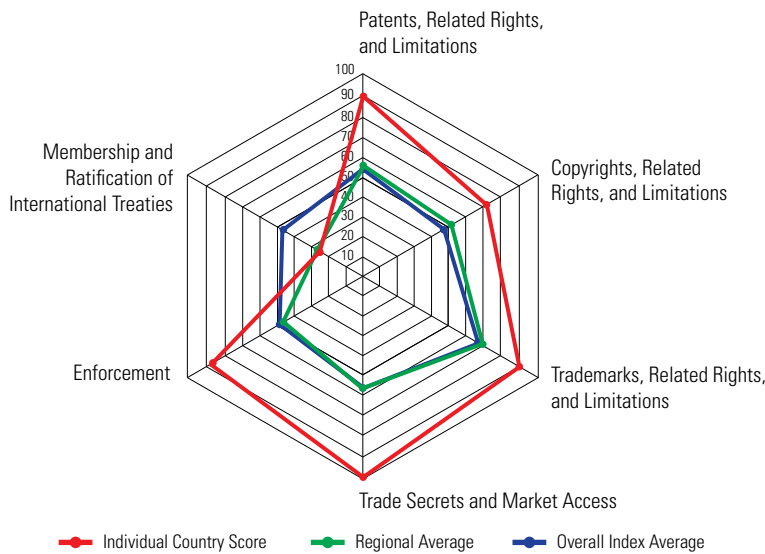
Enforcement

- Enforcement through the judicial system is a major problem in Italy, making injunctions difficult to obtain, particularly for noncommercial-scale infringement.
- Even among the economy's specialized IP Courts, judicial proceedings entail substantial delays, lack of expertise, and procedural hurdles.



Membership and Ratification of International Treaties

- Italy has signed and acceded to all of the international treaties in the Index, except for the Patent Law Treaty, which Italy has signed but not acceded to.



Index scores standardized to 100

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 CIIIs
- ✓ 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 present relating to online counterfeit sales
- ✓ *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



Copyrights, Related Rights, and Limitations

- The Manga-Anime Guardians Project initiative continued into 2015. This public-private partnership aims to reduce the availability of illegal content of Anime and Manga materials as well as raise awareness and link consumers to legitimate sources.
- In 2015, the Japanese National Police Agency increased enforcement efforts against copyright infringers.



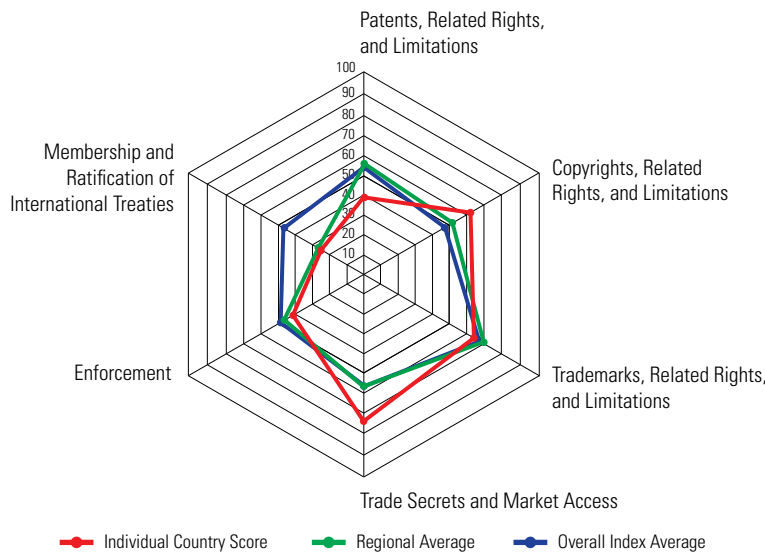
Membership and Ratification of International Treaties

- Japan is not a contracting party to the Patent Law Treaty or the Singapore Treaty on the Law of Trademarks. Japan is a signatory and has ratified the WIPO Internet Treaties. Japan is also one of the negotiating parties to the Trans-Pacific Partnership.



Enforcement

- The results of the Japanese Patent Office's annual counterfeiting survey revealed a slight increase in the number of companies that have suffered losses due to counterfeiting (up to 22%); the majority of these losses (60%) occurred online. The survey also found that the vast majority of companies (67%) that have suffered losses had done so in China.



Strengths and Weaknesses

Key Areas of Strength

- ✓ Strong package of copyright reforms passed in 2012—broadly in line with international best practices
- ✓ Five-year RDP term in place
- ✓ Accession to TPP would increase score and strengthen national IP environment

Key Areas of Weakness

- ✗ Despite intensifying efforts, high levels of counterfeiting, software, and music piracy occur
- ✗ *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



Patents, Related Rights, and Limitations

- Malaysia does not currently allow patent term restoration for pharmaceutical products. While the agreed text of the TPP contains very clear requirements that contracting parties make available a term of patent restoration for unreasonable delays, the Malaysian Deputy Health Minister Datuk Seri Dr Hilmi Yahaya stated that regulatory delays in Malaysia were within international norms, thus precluding the need for any restoration period.
- Malaysia introduced a 5-year term of RDP protection in 2011. However, 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. Since its introduction in 2011, the average effective term of protection has been just over 43 months, i.e., about 3.5 years for the 10 products that have been granted data exclusivity, which is considerably lower than the statutory term of 5 years.



Enforcement

- Malaysian customs officials are explicitly granted *ex officio* powers through Section 70 of the Trademark Act. However, practice and evidence from the legal community suggests that these powers are not being used to their full effect.
- Data from Europol and the European Commission in 2015 *Situation Report on Counterfeiting in the European Union* described Malaysia as a source economy for counterfeit consumer and luxury goods entering the EU.

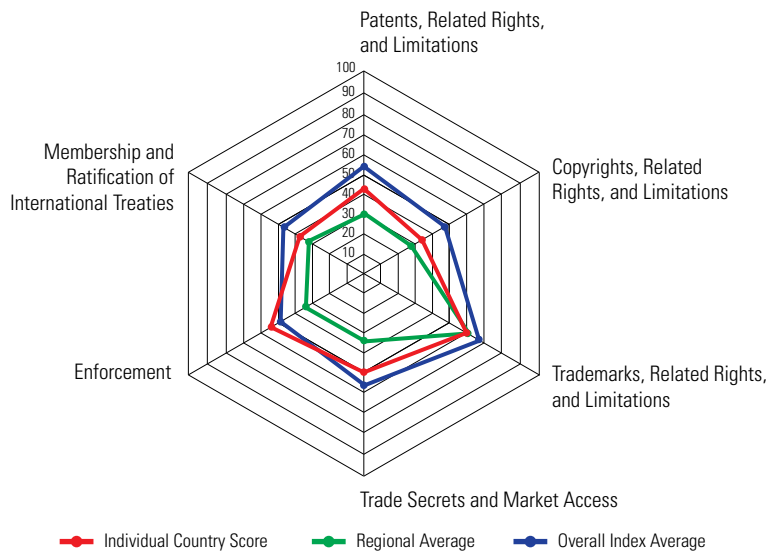


Membership and Ratification of International Treaties

- In 2014, Malaysia acceded to the WIPO Internet Treaties. However, Malaysia has not signed, ratified, or acceded to any of the other international treaties included in the Index. Malaysia is one of the negotiating parties to the TPP. The accession by Malaysia to this treaty and adoption of the IP standards enshrined within the TPP would significantly strengthen Malaysia's national IP environment.

Mexico

Total Score: 13.83 out of 30



Strengths and Weaknesses

Key Areas of Strength

- ✓ Fair and transparent use of compulsory licensing
- ✓ Validation of digital copyright in 2014 amendments to broadcast retransmission rules
- ✓ Use of licensed software in government agencies
- ✓ Pre-established damages for copyright infringement
- ✓ Recent efforts to streamline and harmonize the criminal justice system
- ✓ Signatory to WIPO Internet Treaties

Key Areas of Weakness

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



Patents, Related Rights, and Limitations

- The biopharmaceutical industry reports major challenges with the enforcement of patents in Mexico, including inconsistent recognition of formulation patents when approving follow-on products and substantial delays at both the administrative and judicial levels, which hinders rights holders' ability to secure damages effectively.
- In a positive step, a Mexican court ruled that notification of patent holders and their ability to be heard during the market authorization process (and not only after) is a constitutional right and should have a legal basis within the Linkage Regulation.
- In June 2012, COFEPRIS published guidelines providing up to five years' protection against the use of undisclosed test data for the purpose of marketing approval. However, the effective application of the guidelines remains an ongoing concern.

- Piracy remains a major challenge. The Attorney General estimates that in 2015 the industries will lose over USD 750 million to piracy and counterfeit.



Trademarks, Related Rights, and Limitations

- The Industrial Property Law establishes the exclusive right to use a mark upon registration. 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 apply for be awarded registration prior to such action.



Enforcement

- Statute outlines standard penalties for criminal infringement. In practice, prosecution and sentencing is rare and non-deterrent.



Copyrights, Related Rights, and Limitations

- No major movement occurred on amendments to the Copyright Law toward a graduated user warning system and ISP liability for online copyright infringement.

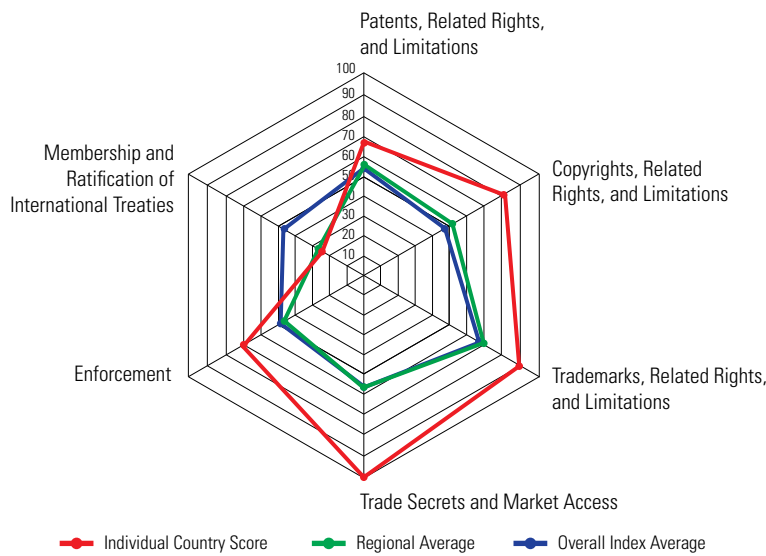


Membership and Ratification of International Treaties

- Mexico is a party to the WIPO Internet Treaties and the Patent Law Treaty. Mexico has signed, but not ratified, the Singapore Treaty on the Law of Trademarks.

New Zealand

Total Score: 21.38 out of 30



Strengths and Weaknesses

Key Areas of Strength

- ✓ TPP agreement will bring in patent term restoration for biopharmaceuticals
- ✓ TPP will introduce an eight-year term of protection for biologics
- ✓ Copyright (Infringing File Sharing) Amendment Act and corresponding regulation provides a relatively strong framework against online piracy
- ✓ Legislation and common law provide protection for unregistered marks
- ✓ Exclusive rights for trademarks are in place and generally enforced

Key Areas of Weakness

- ✗ Practical availability of remedies under Copyright (Infringing File Sharing) Amendment Act in doubt—rights holders concerned over high cost of action
- ✗ No *ex officio* powers for customs officials



Patents, Related Rights, and Limitations

- New Zealand does not offer patent term restoration for pharmaceuticals. However, the agreed text of the TPP contains very clear requirements that contracting parties make available a term of patent restoration for unreasonable delays.
- Section 23B of the Medicines Act provides protection for submitted clinical test data for a period of five years. The agreed text of the TPP contains very clear requirements that contracting parties make available a minimum period of eight years' protection for submitted clinical data for biologics as part of a market registration application. This would mean an increase in the current RDP term for biologics in New Zealand by three years.



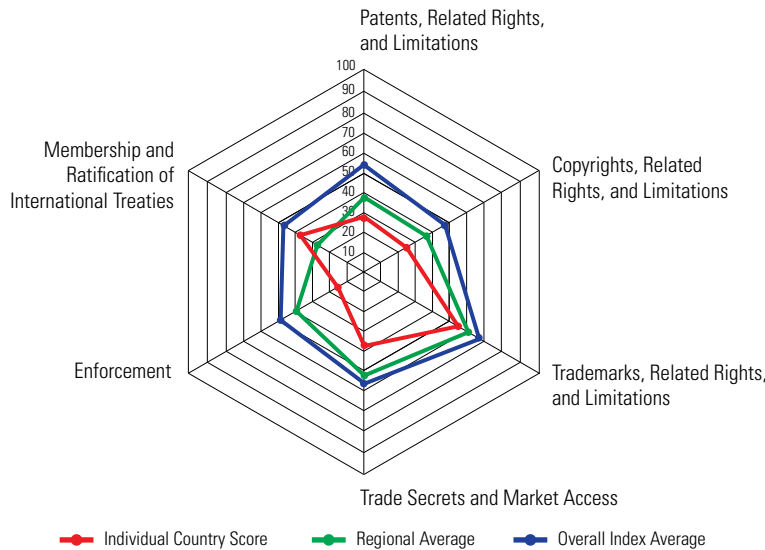
Copyrights, Related Rights, and Limitations

- In 2011, New Zealand introduced a graduated response scheme through the Copyright (Infringing File Sharing) Amendment Act, which introduced a mechanism whereby rights holders can notify Internet protocol address providers (IPAPs) about a suspected infringement; IPAPs are then obliged to pass on a "Detection Notice" directly to the account holder/suspected infringer. However, the overall effectiveness of the legislation is being questioned due to the cost of submitting a notice, which has *de facto* reduced the capability of rights holders to work through the regime.



Membership and Ratification of International Treaties

- New Zealand is not a contracting party to the Patent Law Treaty or the WIPO Internet Treaties. New Zealand is a signatory to and has ratified the Singapore Treaty on the Law of Trademarks. New Zealand is one of the negotiating parties to the TPP.



Strengths and Weaknesses

Key Areas of Strength

- ✓ New Cybercrime Law strengthens protection for trademarks
- ✓ Potential use of relevant provisions of the Cybercrime Law in lieu of specific and comprehensive DRM legislation

Key Areas of Weakness

- ✗ No patent term restoration or regulatory data protection for biopharmaceuticals
- ✗ Rudimentary digital copyright regime
- ✗ High rates of software piracy
- ✗ Limited and sporadic enforcement of trademarks
- ✗ High rates of counterfeit goods
- ✗ Low participation in international IP treaties

© Copyrights, Related Rights, and Limitations

- Nigeria does not have in place TPM or DRM legislation outlawing the use, sale, manufacture, and distribution of circumvention devices.
- In 2015, President Jonathan signed the Cybercrime Bill into law. Although it is unclear the extent to which this law would apply within a copyright context, Part III of the law does contain fairly robust, if rudimentary and non-copyright-specific, language making it an offense to use or make available any “devices primarily designed to overcome security measures in any computer, computer system or network.”

TM Trademarks, Related Rights, and Limitations

- Nigeria has in place a basic framework for the protection of registered and unregistered trademarks through the Trademarks Act. The Cybercrime Bill also strengthens the existing legal framework for trademarks.
- Despite these positive legislative steps, rights holders in Nigeria continue to face significant challenges to the enforcement of their IP rights, and the availability of counterfeit medicines remains a serious problem.

⚖ Enforcement

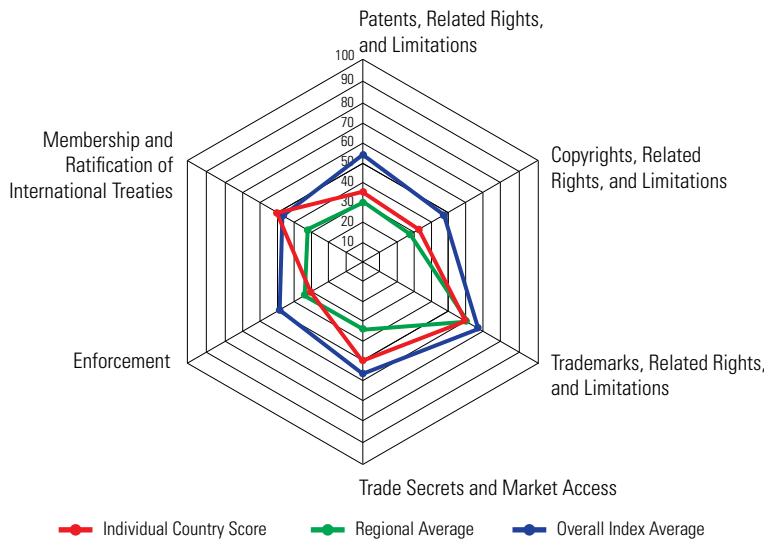
- The number of counterfeit goods entering Nigeria from abroad, while already high, has increased substantially in recent years, with an estimated 200% increase in the volume of substandard goods over the past four years.
- While the Nigerian Copyright Commission has, through Section 38 of the Copyright Act, granted its inspectors broad law enforcement powers including that of *ex officio* seizure, detention, and arrest, border officials do not have *ex officio* powers.

⚖ Membership and Ratification of International Treaties

- Nigeria is not a contracting party to the Singapore Treaty on the Law of Trademarks and 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 it is a signatory of and has ratified the Patent Law Treaty.

Peru

Total Score: 12.30 out of 30



Strengths and Weaknesses

Key Areas of Strength

- ✓ Basic 20-year patent term of protection in place
- ✓ Basic exclusive rights for copyright in place
- ✓ Government campaigns directed toward reducing enterprise-level software piracy
- ✓ Basic legal framework for trademark enforcement
- ✓ *Ex officio* and in-transit customs detainment provided for in legislation

Key Areas of Weakness

- ✗ No patent examination process
- ✗ Pharmaceutical and CII patentability very limited
- ✗ No patent term restoration; RDP for biologics
- ✗ Lack of effective pharmaceutical-related patent enforcement and resolution mechanism
- ✗ Rudimentary digital copyright regime
- ✗ No notice and takedown
- ✗ High rates of counterfeiting
- ✗ Weak enforcement environment



Patents, Related Rights, and Limitations

- Patent applications must meet the requirements of novelty, inventiveness, and susceptibility to industrial application. However, there is little clarity as to the protection of biotechnologically derived pharmaceutical products. Peru does not consider treatment methods patentable, and the Andean Court of Justice has barred the second-use medical patents within Andean Community member economies.
- The U.S.-Peru Trade Promotion Agreement (USPTPA), requires that patent holders are made aware of potentially infringing biopharmaceutical applications prior to market authorization. Peru does not provide an effective patent enforcement system or address existing challenges in relation to the ability to secure timely relief.
- Peru has not implemented patent term restoration as required by the USPTPA.



Copyrights, Related Rights, and Limitations

- Peru has failed to make provisions for the notice and takedown of infringing content online, despite its obligation to do so in the USPTPA.



Trademarks, Related Rights, and Limitations

- Peru has a basic framework in place for protecting registered trademarks and well-known marks. There is a lack of clarity on the distinction between well-known marks, famous marks, and marks with a reputation, and the protection afforded to them.



Trade Secrets and Market Access

- Peruvian law provides for limited trade secret protection in the unfair competition law. To date, no noted criminal enforcement of trade secrets violation has taken place.



Enforcement

- Peru has made efforts to strengthen enforcement within a limited legal framework.
- Peru provides for both *ex officio* and in-transit custom measures, but struggles with widespread availability of counterfeit and pirated goods.

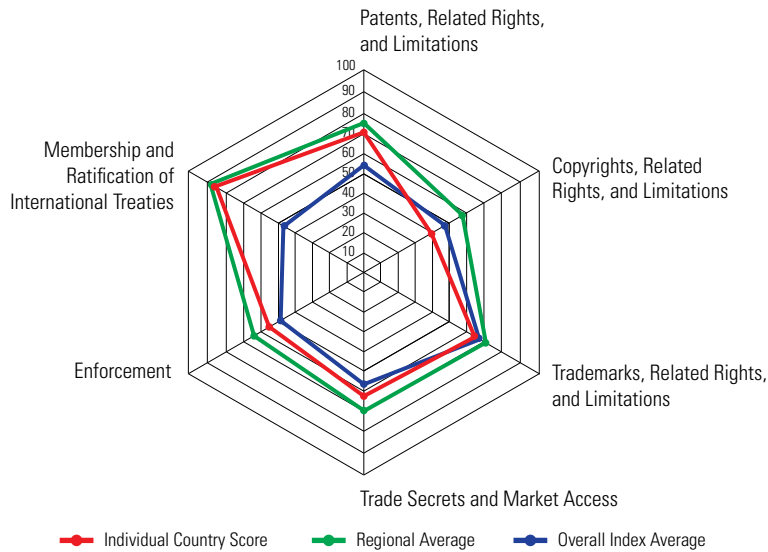


Membership and Ratification of International Treaties

- Peru is a party to the WIPO Internet Treaties. The USPTPA includes substantial IP provisions, but non-accession to the Patent Law Treaty violates that Agreement.

Poland

Total Score: 18.75 out of 30



Strengths and Weaknesses

Key Areas of Strength

- ✓ Significant effort to strengthen legal framework for IP protection over the past 15–20 years
- ✓ Patentability framework fairly in line with EU standards (with exceptions)
- ✓ Certain sector-specific IP rights available (e.g., RDP, patent term extension)
- ✓ Moderate licensing of software by public agencies
- ✓ Police efforts to combat online piracy

Key Areas of Weakness

- ✗ Gaps in legal basis for third-party/ISP liability for copyright infringement
- ✗ Overly broad limitations and exceptions for copyright
- ✗ Fairly weak enforcement of IP infringement (with some exceptions)
- ✗ Relatively high levels of physical counterfeiting and online piracy in comparison with other high-income economies
- ✗ Judicial enforcement sluggish, with lack of attention to cases of IP infringement and generally non-deterrent penalties



Patents, Related Rights, and Limitations

- Biotechnology patents are available in certain areas, but generally the Polish Patent Office (PPO) takes a slightly more restrictive approach to patenting biotech materials and diagnostic methods compared with other economies.
- Despite Polish Supreme Court rulings to the contrary, computer programs continue to be excluded from patentability, and the PPO has traditionally rejected software patents, even those that are approved by the European Patent Office.



Copyrights, Related Rights, and Limitations

- Online piracy is a significant challenge in Poland, at 75% of total Internet usage.
- Furthermore, legal and institutional factors that inhibit protecting copyrights in Poland include the weak legal basis for intermediary or ISP liability for infringing content, the extremely broad private-use exception, and the absence of penalties for downloading on a personal scale.



Trademarks, Related Rights, and Limitations

- Cybersquatting continues to be a pervasive problem in Poland.
- Poland has a relatively high level of counterfeit goods compared with other EU economies, as both a source and a destination economy. Government reports suggest increasing prevalence of counterfeit medicines.



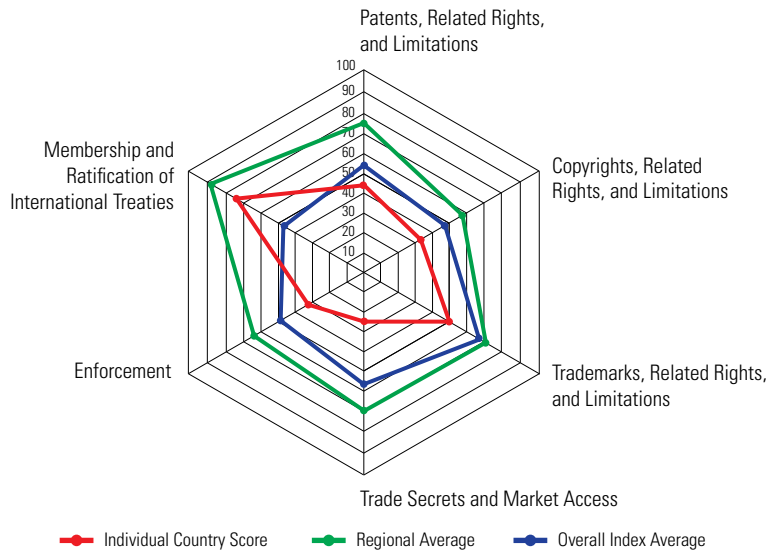
Enforcement

- Though Polish IP law provides for criminal penalties for infringement, these are considered to be too low or limited in scope.



Membership and Ratification of International Treaties

- Poland has signed and acceded to all of the international treaties included in the Index, except for the Patent Law Treaty.



Strengths and Weaknesses

Key Areas of Strength

- ✓ A 2015 extension of the 2013 online piracy amendments to cover all forms of content (except photography)
- ✓ Contracting party to all international treaties included in the Index
- ✓ Six-year regulatory data protection term introduced in 2010
- ✓ *Ex officio* powers for customs officials

Key Areas of Weakness

- ✗ Increasingly punitive localization requirements targeting specific sectors including life sciences
- ✗ Regulatory data protection still not implemented
- ✗ Limited DRM legislation
- ✗ High levels of online and physical piracy
- ✗ Poor application and enforcement of civil remedies and criminal penalties



Patents, Related Rights, and Limitations

- Russia has committed to implementing an RDP term of six years. However, a lack of progress remains in implementing this commitment and developing a fully functioning form of RDP and has been compounded by uncertainty in the interpretation of the existing legal framework by the Russian judiciary.



Copyrights, Related Rights, and Limitations

- Over the past two years, Russia has introduced and implemented a range of new laws and regulations to help combat the economy's high level of online infringement. The 2013 amendments to the Civil Code Part IV included a notice and takedown provision with regard to the responsibilities of "information intermediaries," an obligation to act on a notice of infringement from a rights holder, and the introduction of interim judicial measures.
- In 2015, new amendments entered into force that have expanded the applicability of the 2013 amendments to a broader set of copyrighted material, with the notable exception of photographic images, which have been excluded.



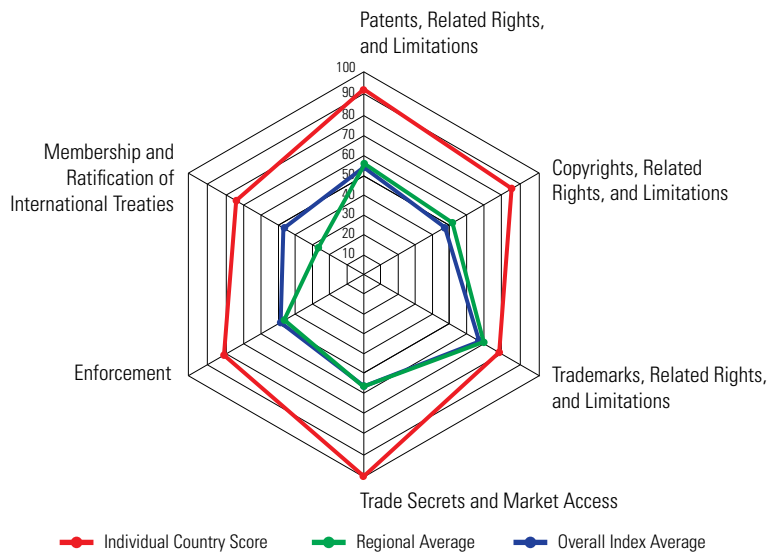
Trade Secrets and Market Access

- The Strategy for Innovative Development of the Russian Federation 2020 (2020 Strategy), introduced in 2011, includes policies that aim to localize the R&D and manufacture of these technologies. A significant focus of Russia's biopharmaceutical policies has been on attempting to localize biopharmaceutical research and innovation.
- In 2015, new regulations with regard to the compilation of drug registration dossiers favor local manufacturing. Additionally, import restrictions on foreign-produced biopharmaceutical products have also been proposed by the Russian government as has a redefinition of local manufacturing.



Membership and Ratification of International Treaties

- Russia is a contracting party and has signed and acceded to all of the international treaties included in the Index. However, full implementation and enforcement of the obligations enshrined in these treaties is lacking.



Strengths and Weaknesses

Key Areas of Strength

- ✓ Advanced national IP framework in place
- ✓ Life sciences IP rights in place and available
- ✓ Patent-enforcement legal framework adequate and generally applied
- ✓ Copyright framework strengthened in past few years
- ✓ Legal framework provides for protection of unregistered marks
- ✓ *Ex officio* authority in place for customs officials

Key Areas of Weakness

- ✗ Although dropping, still relatively high rates of software piracy as surveyed by BSA 2014
- ✗ Limits on *ex officio* powers with regard to in-transit seizure



Copyrights, Related Rights, and Limitations

- In 2014, Singapore passed amendments to its Copyright Act that strengthened rights holders' recourse mechanisms against online piracy by providing 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." A number of indicators suggest that online piracy in Singapore has fallen in the past year. Industry reports on music sales show that after four consecutive years of falls, the music market in Singapore grew by close to 5% in 2015. Increased sales of digital music and streaming services were drivers of this growth.



Enforcement

- Under the Trade Marks Act, Trade Marks (Border Enforcement Measures) Rules, and Copyright Act Singapore's border officials have *ex officio* authority to act against suspected goods. However, this power is limited to goods bound for Singapore or, if in transit, the goods are consigned to a person with a physical or commercial presence in Singapore.

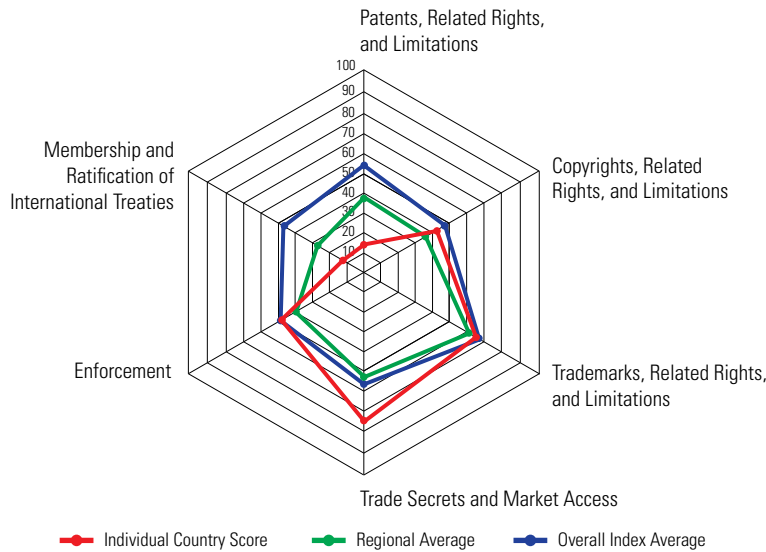


Membership and Ratification of International Treaties

- Singapore is a contracting party to the Singapore Treaty on the Law of Trademarks and the WIPO Internet Treaties. The U.S.-Singapore FTA includes substantial provisions on IP rights. However, Singapore is not a contracting party to the Patent Law Treaty. Singapore is a negotiating party to the TPP Agreement.

South Africa

Total Score: 11.74 out of 30



Strengths and Weaknesses

Key Areas of Strength

- ✓ Draft copyright amendments would provide greater clarity on copyright exceptions
- ✓ Copyright amendments contain strong provisions for the protection of DRM/TPM; correspond to existing Electronic Communications and Transaction Act (ECTA) framework but defined within a specific copyright context
- ✓ Basic IP framework in place

Key Areas of Weakness

- ✗ Uncertainty over localization requirements and sector-specific National Industrial Participation Programme (NIP)
- ✗ Weak protection for patents and related rights
- ✗ Life sciences IP rights not in place
- ✗ High levels of copyright piracy
- ✗ High level of counterfeit goods



Copyrights, Related Rights, and Limitations

- Online infringement of copyrighted material is a growing problem. A 2015 survey of information technology professionals and frequent Internet users found that 55% of users had accessed pirated content over the past 12 months. While South Africa does not currently have a comprehensive online copyright framework in place, proposed measures would strengthen the legal framework.
- The proposed amendments also introduce a system of “fair use” exceptions to copyright under Section 12A in the draft legislation, which incorporates standards that are used and enforced around the world, most notably in the United States.

- Similarly, in 2014 the Department of Science and Technology adopted a new bio-economy strategy document targeting the life sciences sector, with a view to increasing the local manufacture of active pharmaceutical ingredients, vaccines, and biologics.
- More generally, the NIP provides that foreign suppliers that are awarded government contracts sign an obligation agreement within a month of signing the contract with the procurement entity, where they commit to economic activities in South Africa.



Trade Secrets and Market Access

- The South African government has been increasing the number and scope of localization policies in place over the past few years. For example, draft regulations published in 2015 by the Independent Communications Authority of South Africa as well as the draft amendments to the Copyright Act would strengthen these requirements, imposing South African content quotas of up to 80% from already existing high levels (40%).

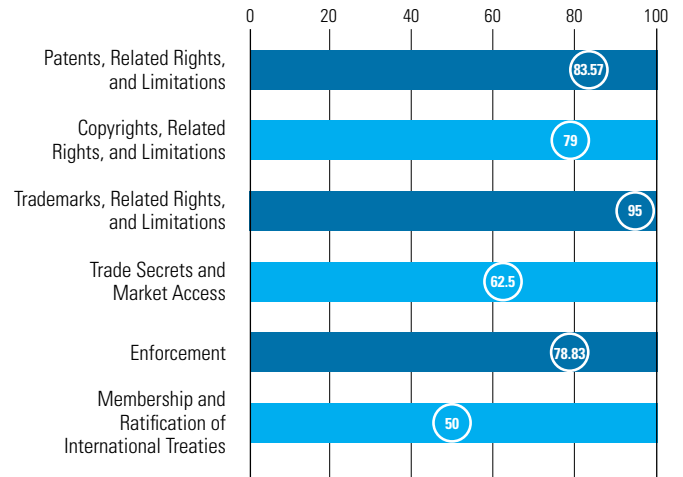
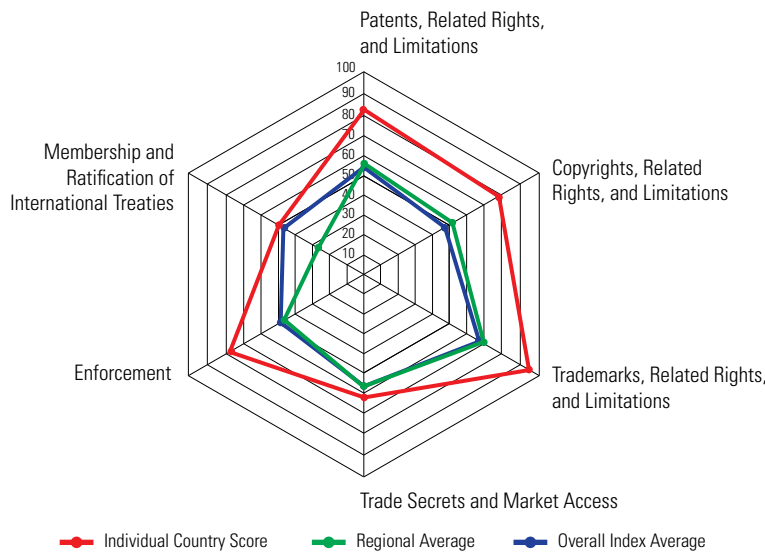


Membership and Ratification of International Treaties

- South Africa is not 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

Total Score: 23.32 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Partial fulfillment of U.S. FTA commitments in regard to IP protection of biologics and pharmaceuticals (though gaps remain)
- ✓ Patentability of CIIIs
- ✓ Fairly strong online copyright regime
- ✓ Relatively robust legal framework and enforcement of trademark protections
- ✓ Enforcement environment rapidly progressing

Key Areas of Weakness

- ✗ Significant negligence toward requirements regarding software licensing in government agencies
- ✗ Holes in trade secret protection
- ✗ Standard-setting rules provide for forced sharing of IP
- ✗ Gaps in application of adequate damages
- ✗ Membership in key international treaties on patents and trademarks lacking



Patents, Related Rights, and Limitations

- The Patent Act provides for standard patentability requirements, including novelty, inventive step, and industrial applicability, which are typically applied in practice.
- Patent amendments that entered into force in 2015 streamline the patenting process, including the ability to set the filing date based on the date of PCT application. These amendments raised South Korea's score for this indicator by 0.25.
- The Korean Pharmaceutical Affairs Act amended the patent linkage system to satisfy commitments under the U.S.-Korea FTA (KORUS). The amendments, which were approved in 2015, clarify the scope of the patent linkage regime and introduce a stay on generic sales of nine months in case of an infringement dispute.
- Draft amendments to the National Health Insurance Act (not approved at the time of research) could weaken the new system by requiring innovators to provide the 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).



Trade Secrets and Market Access

- Korea provides fairly standard protection against unauthorized disclosure and use of trade secrets. Significant challenges exist regarding leaks of sensitive commercial information by authorities and, in some cases, subsequent industrial espionage.
- In late 2014, amendments to the Guidelines for Review of Unreasonable Exercise of Intellectual Property Rights came into force. The amendments create the potential for forced sharing of IP, and, as such, a serious intrusion into the ability of rights holders—both international and local leading innovators—to use their IP rights.



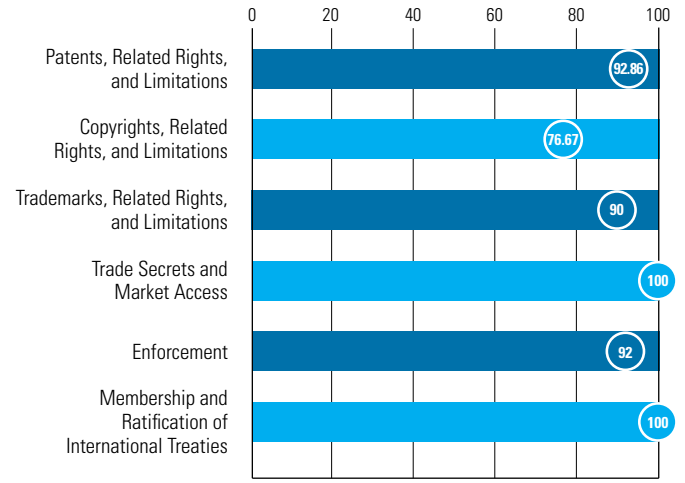
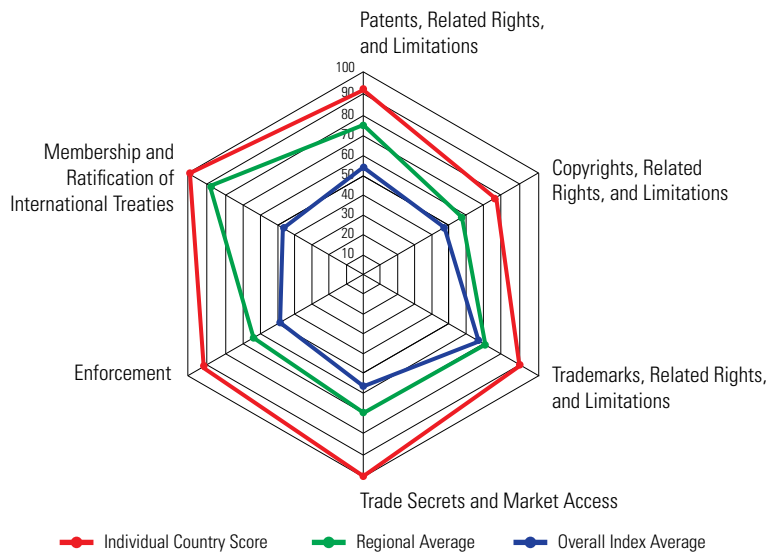
Membership and Ratification of International Treaties

- South Korea is not a 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 concluded the KORUS, which includes substantial provisions on IP rights.



Copyrights, Related Rights, and Limitations

- Government-wide policies require agencies and public institutions to use properly licensed software and monitor implementation on an agency-specific basis. Evidence suggests a lack of implementation, decreasing South Korea's score for this indicator.



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Advanced national IP environment
- ✓ Life science IP rights in place
- ✓ Strong enforcement and guidelines on use of licensed software in government agencies
- ✓ Improved enforcement activities against copyright infringement

Key Areas of Weakness

- ✗ Lack of clarity in legal framework with regard to online copyright infringement
- ✗ Limited cooperation and disabling of access to infringing materials by ISPs



Copyrights, Related Rights, and Limitations

- Levels of piracy have traditionally been high in Sweden, far outpacing its European neighbors.
- Sweden has also become known as a host for websites that provide access to illegal content; however, Swedish authorities have begun to take more forceful action against these purveyors of IP theft over the past few years.
- A study by Swedish economists suggests that overall music sales increased by over 35% after the introduction of the Intellectual Property Rights Enforcement Directive.
- The Swedish government has in place clear and strict guidelines with regard to information and communication technology (ICT) procurement including software, and the government actively audits and inspects agency and departmental use of proprietary software.

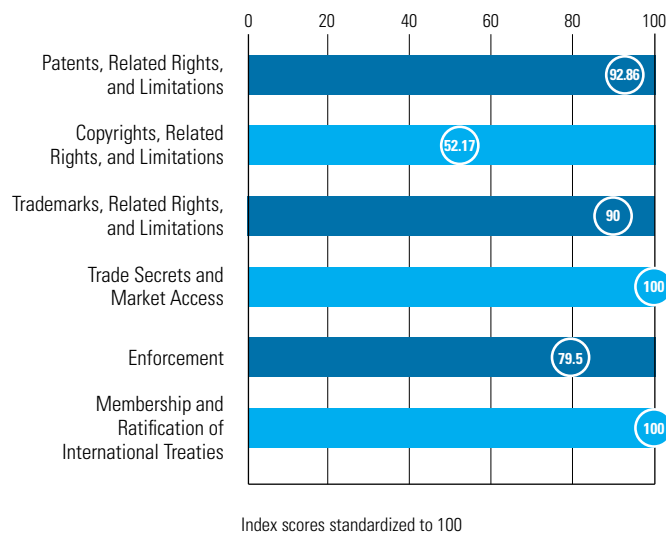
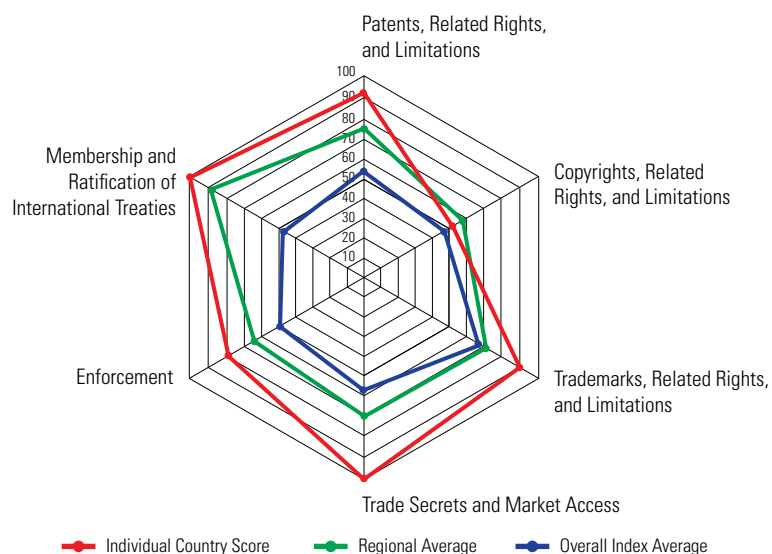


Membership and Ratification of International Treaties

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

Switzerland

Total Score: 24.90 out of 30



Strengths and Weaknesses

Key Areas of Strength

- ✓ Advanced national IP environment
- ✓ Application of patent requirements
- ✓ Life science IP rights in place
- ✓ Nondiscrimination/nonrestriction on the use of brands in packaging
- ✓ Strong protection for trademarks

Key Areas of Weakness

- ✗ Overly broad interpretation of limitations and exceptions for copyright
- ✗ Crucial gap in enforcement and prosecution of online copyright infringement



Patents, Related Rights, and Limitations

- Although not measured as part of the Index, Switzerland introduced a host of proposed tax reforms in 2015 that are expected to have a positive impact on its national IP environment. These reforms would seek to create a “patent box” and introduce new tax incentives at the cantonal (provincial) level. The proposed reforms would increase the incentives for innovation and improve Switzerland’s already strong national IP environment as it relates to patents, related rights, and limitations.



Membership and Ratification of International Treaties

- Switzerland has signed and acceded to all the international treaties included in the Index.

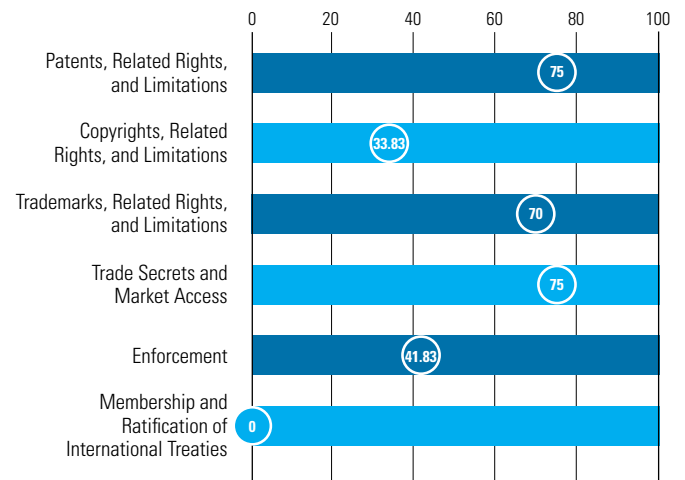
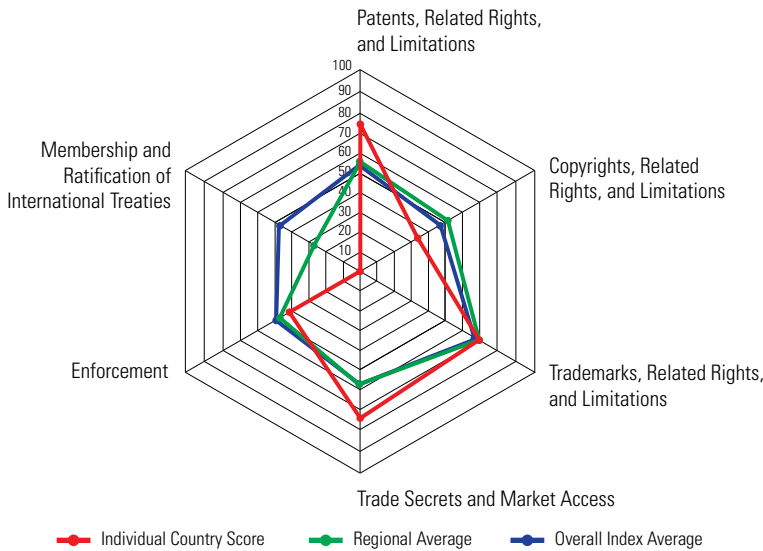


Copyrights, Related Rights, and Limitations

- The copyright regime in Switzerland—particularly with regard to online piracy—is weaker than Switzerland’s otherwise world-class national IP environment.
- Recent legal proceedings in Switzerland show that clarity is lacking as to the extent to which information about illegal file sharers can be collected and the manner in which rights holders can protect their content through, for example, the issuing of warning letters.

Taiwan

Total Score: 14.79 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Basic 20-year patent term of protection in place
- ✓ Significant efforts to speed up patent review process
- ✓ Basic exclusive rights for copyright in place
- ✓ Digital copyright reform ongoing
- ✓ Streamlining of judicial proceedings through new e-filing system

Key Areas of Weakness

- ✗ CIIIs' patentability very limited
- ✗ No patent term restoration or effective regulatory data protection
- ✗ Major holes in digital copyright regime
- ✗ DRM lacking in practice
- ✗ High rates of software piracy
- ✗ Protection for unregistered well-known marks only partially provided
- ✗ Weak enforcement environment



Patents, Related Rights, and Limitations

- Taiwan generally adheres to international patentability standards. However, several subject matters are excluded from patentability, including methods of treatment and new indications, with significant limitations on patenting of biological compounds.
- Taiwan has entered into a Patent Prosecution Highway agreement to cut down processing time. In 2015, Taiwan continued to make progress in this area.
- TIPO grants patents for software and computer-implemented inventions that are linked to a technical process or feature.



Copyrights, Related Rights, and Limitations

- Digital and online piracy is a major problem. A 2014 survey put online piracy rates at close to 75%, despite a fairly wide reported awareness of its illegality and impact.
- Online enforcement has been stymied by lack of resources compounded by measures that appear to restrict actions by authorities in online investigations.
- Taiwan protects against circumvention of technological protection mechanisms as well as possessing, distributing, or importing circumvention devices or any unauthorized copy of a work that involves circumvention of electronic information.



Trademarks, Related Rights, and Limitations

- The 2015 amendments to the Fair Trade Act significantly weakened the legal basis for protection of such unregistered well-known marks (though protection is still afforded under the Trademark Act). In addition, the amendments weaken the remedies under the law available to unregistered well-known marks by limiting these to civil remedies only (the previous version also provided criminal as well as administrative remedies).
- Registered well-known marks are protected, but authorities take a varied approach to determining whether a mark is well known.



Enforcement

- Taiwanese law provides for civil remedies and criminal penalties, but cases face significant delays. A new e-filing system may speed up proceedings.

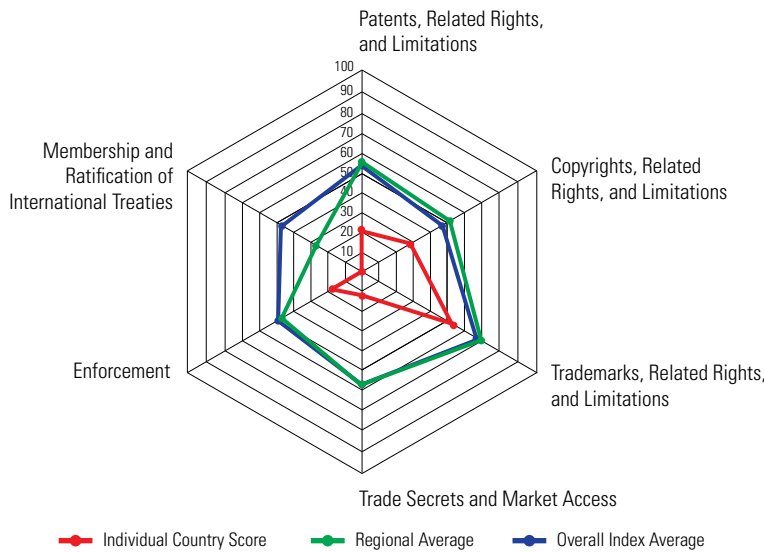


Membership and Ratification of International Treaties

- Taiwan is not party to the WIPO Internet Treaties, the Singapore Treaty on the Law of Trademarks, or the Patent Law Treaty. Taiwan has not signed any post-TRIPS FTA that includes substantial provisions on IP rights.

Thailand

Total Score: 7.4 out of 30



Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
<ul style="list-style-type: none"> ✓ Basic patentability framework ✓ Basic exclusive rights in place for copyright ✓ Partial protection against TPM circumvention (though with important remaining gaps) ✓ Administrative notice and takedown mechanism for sale of counterfeit goods recently introduced ✓ Elemental legal framework for enforcement of IP rights 	<ul style="list-style-type: none"> ✗ Holes in patentability ✗ History of compulsory licenses violating TRIPS ✗ Ineffective regulation of RDP ✗ New copyright regime remains fragmented and incomplete ✗ Limited framework for legal rights of trademarks ✗ Very high physical counterfeiting rates ✗ IP rights enforcement lacking in terms of delays and effective action ✗ New loopholes diluting customs enforcement



Patents, Related Rights, and Limitations

- The patent law provides specifically that novelty will only be destroyed by an invention widely known or used in the domestic area prior to the patent application's filing. The law further provides for a standard of worldwide novelty; however Thailand lacks the level of high technology needed to apply this standard and it is unclear how effective the consideration of international prior art is in Thailand.



Copyrights, Related Rights, and Limitations

- New measures penalize camcording in public venues, introduce liability for ISPs, and create a kind of notice and takedown system, albeit with severe limitations.
- Unauthorized access to and retransmission of pay TV and satellite programming as well as unlicensed public performance of copyrighted works remain major challenges.
- Penalties for circumventing TPMs fall short of Thailand's obligations in the WIPO copyright treaties since acts of circumvention include only those in which users are aware they are infringing TPMs. Additionally, the penalties only apply to actual circumvention—rather than the sale or distribution of circumvention devices.



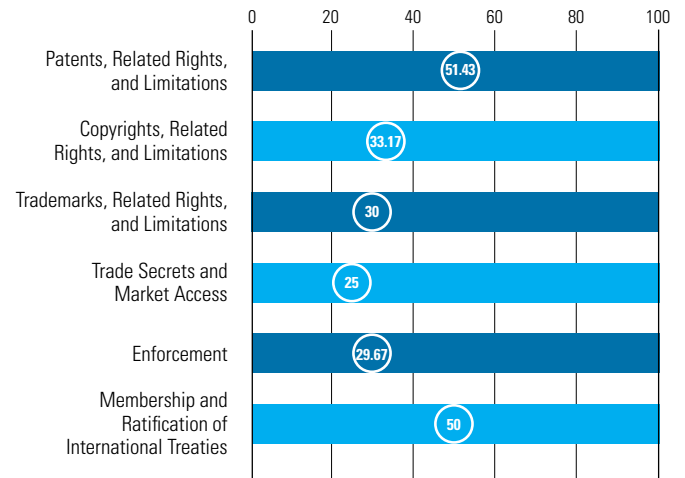
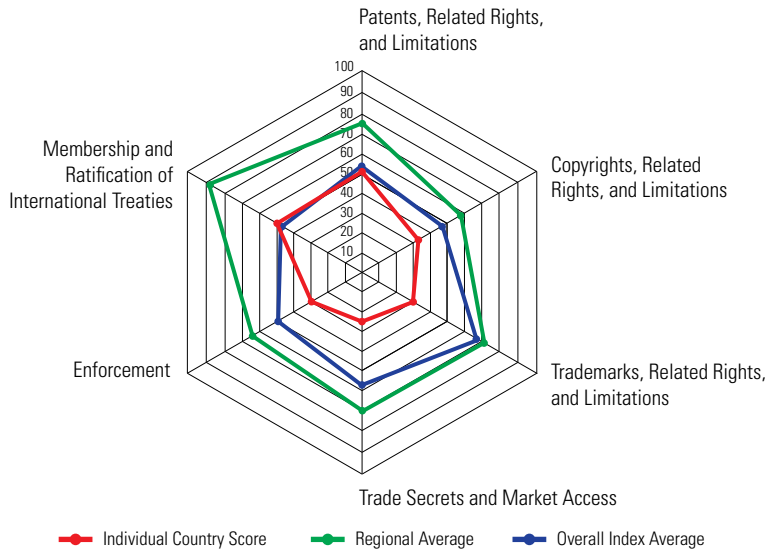
Enforcement

- New measures introduce preliminary injunctions against infringing actions taking place on computer systems and create punitive damages for intentional infringement aimed at wide public use.
- Customs Act No.21 BE 2557 (2014), which was enacted in March 2015, includes imported IP-infringing goods as those that should be checked and detained if necessary. However, a major loophole appears to exist vis-à-vis transshipped goods, since only suspected "illicit" goods in transit are to be seized, and under Thai IP law, illicit (or infringing) goods are only those that are imported, not transshipped.



Membership 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, nor has Thailand signed any post-TRIPS FTA that includes substantial provisions on IP rights.



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ 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, with a slight increase in protection on the ground
- ✓ Basic legal framework for IP rights enforcement
- ✓ Increase in anti-counterfeiting campaigns, especially pharmaceuticals

Key Areas of Weakness

- ✗ Weak regulatory data protection
- ✗ 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



Patents, Related Rights, and Limitations

- Measures under discussion would introduce post-grant opposition, create an ability to amend a patent after grant decision, bring substantive examination, and seek to reduce bad-faith filings of patents.



Copyrights, Related Rights, and Limitations

- The legal framework grants general exclusive rights, including rights for hosting and online content, but fails to adequately address foreign-hosted infringing material or repeat offenders.



Trademarks, Related Rights, and Limitations

- It is very difficult to successfully obtain protection for unregistered well-known marks given that the expense and evidentiary burden of proving a mark is sufficiently well known in Turkey.



Enforcement

- About 60% of the almost USD 11 billion counterfeit and pirated market in Turkey is estimated to be produced domestically. Under the Anti-Smuggling Law, police have *ex officio* authority to raid suspected production or commercial sites (which is not necessarily available for trademark offenses), which has resulted in heightened levels of raids and seizures of smuggled goods.

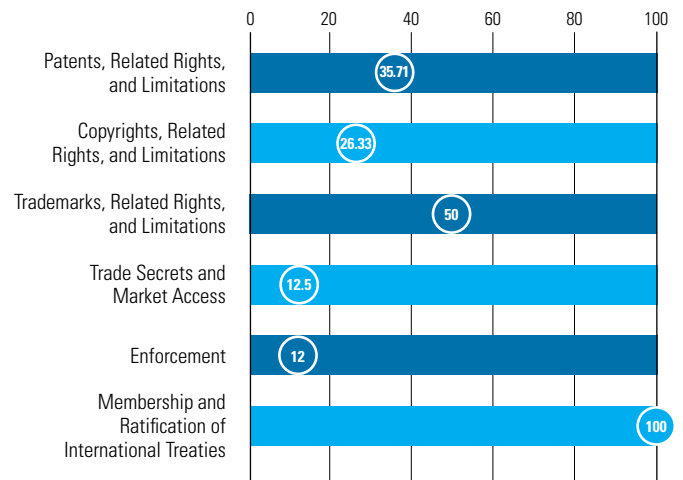
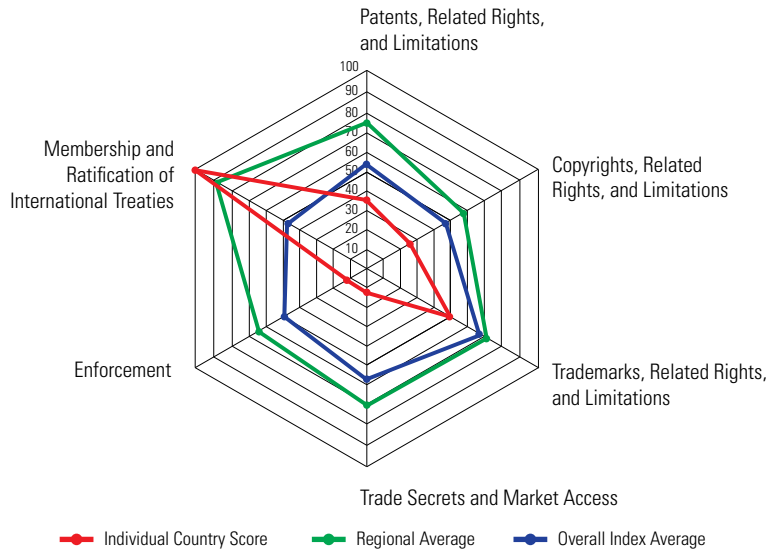


Membership and Ratification of International Treaties

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

Ukraine

Total Score: 11.55 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Contracting party to all international treaties included in the Index and FTA with substantial IP provisions
- ✓ Patent term restoration for pharmaceuticals available
- ✓ Proposed notice and takedown regime approximating international standards (depending on final version)

Key Areas of Weakness

- ✗ Weak and ambiguous compulsory licensing framework
- ✗ Lack of application of regulatory data protection
- ✗ Broad copyright exceptions applied
- ✗ Failure to curb government use of illegal software
- ✗ Little administrative or judicial action against online piracy and counterfeiting
- ✗ High rates of piracy and counterfeiting
- ✗ Extremely poor enforcement environment



Patents, Related Rights, and Limitations

- Draft laws would introduce, among other elements, a legal basis for post-grant opposition of design patents and legal action; if passed, the measure introduces an indirect form of industrial applicability testing for certain types of patents that has previously been missing from the patent examination process in Ukraine.

- Ukraine suffers from rampant counterfeiting, with a wide number of counterfeit products openly sold on the market. In 2015, the situation continued to worsen, particularly in regard to medicines. Evidence exists of serious, large-scale counterfeit drug production in Ukraine.



Copyrights, Related Rights, and Limitations

- Ukraine lacks effective action against online piracy, including a notice and takedown mechanism and third-party or intermediary liability. However, measures being considered would provide for notice and takedown.



Enforcement

- The Customs Code provides clear *ex officio* authority to customs officials, but it is hardly used. 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 made only minor seizures over the past several years.



Trademarks, Related Rights, and Limitations

- Ukraine provides for a basic legal framework that promotes protection of trademarks, though a major gap in the legislation is the lack of clarity in relation to protection of famous trademarks against dilution.

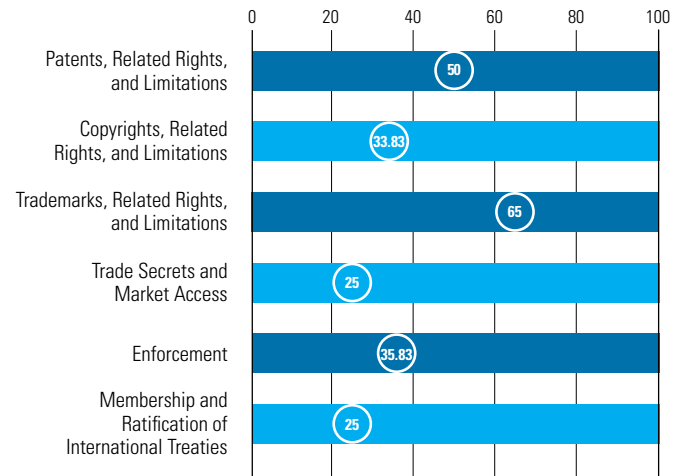
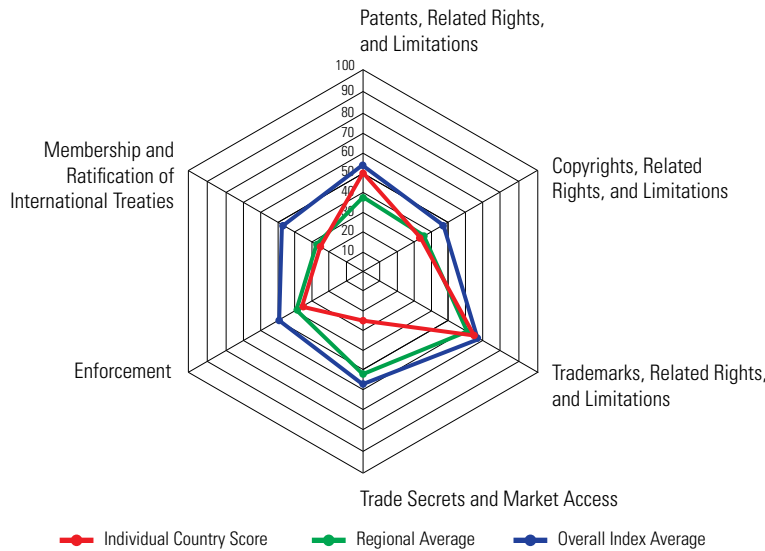


Membership and Ratification of International Treaties

- Ukraine is a member of all of the treaties covered in the Index and, as such, its score is high in this category.

United Arab Emirates

Total Score: 12.43 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Relatively effective pharmaceutical patent linkage system
- ✓ Exclusive rights for trademarks
- ✓ Trade secret regime improving
- ✓ Legal framework for enforcement of IP rights present, with fairly strong application, the key exceptions being digital copyright and counterfeits
- ✓ Rise in antipiracy initiatives and application of fines and seizures of infringing products
- ✓ Substantial trademark reform in advanced stages

Key Areas of Weakness

- ✗ Patentability framework lacking, including for methods, biologics, CIIIs, and patent backlogs
- ✗ No patent term restoration or regulatory data protection for pharmaceuticals
- ✗ Rudimentary copyright regime fails to address growing piracy
- ✗ Lack of collection society framework
- ✗ Increase in circumvention devices
- ✗ High levels of software piracy
- ✗ Uncertainty on treatment of prior use for trademarks
- ✗ Gaps in border controls
- ✗ *Ex officio* action for IP rights is weak and lacking transparency
- ✗ Not a party to key international treaties



Patents, Related Rights, and Limitations

- The UAE provides for the standard patentability requirements of novelty, inventive step, and industrial application, yet significant restrictions affect methods used in business, software, and medical treatment, as well as biologic products.



Copyrights, Related Rights, and Limitations

- New measures have been initiated to combat piracy through educational campaigns, the creation of an Anti-Piracy Coalition involving local and international industry participants, and an increase in raids to confiscate counterfeit goods.
- Nevertheless, government estimates that TV piracy still costs the content and broadcaster/satellite providers industry AED 1.8 billion (USD 500 million) annually.



Trademark

- The registration of trademarks has been on a "first to file" basis, with little consideration of oppositions relying on the concept of prior use of a trademark.



Trade Secrets and Market Access

- Localization requirements potentially force sharing of IP with local entities, including local ownership requirements in order to import products from abroad and measures that offer a price advantage for domestic products.



Enforcement

- Existing law does not provide for the confiscation of in-transit goods or *ex officio* action by customs authorities.

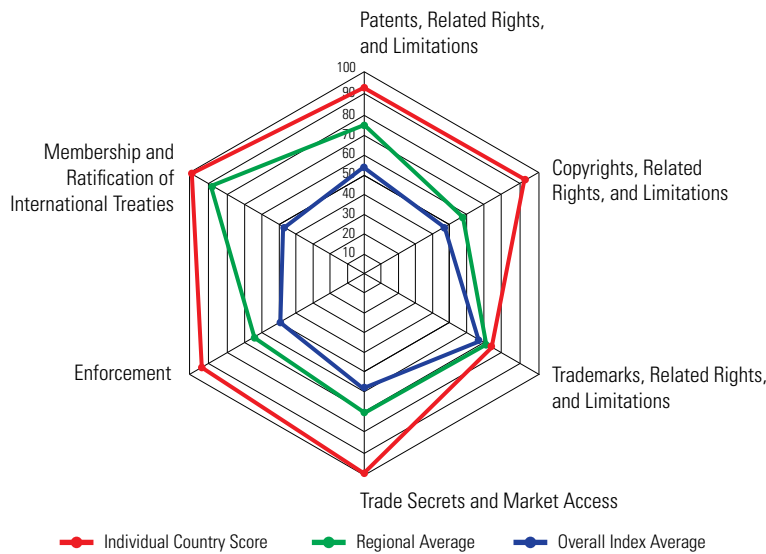


Membership and Ratification of International Treaties

- The UAE is not 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

Total Score: 27.53 out of 30



Strengths and Weaknesses

Key Areas of Strength

- ✓ Strong enforcement environment highlighted by work of specialist crime unit and cross-industry and government cooperation
- ✓ Highly advanced and sophisticated national IP environment
- ✓ 2015 education and enforcement campaign against online piracy
- ✓ Commitment to and implementation of international treaties
- ✓ Consistent, effective, and innovative border protection against counterfeited and pirated goods

Key Areas of Weakness

- ✗ Plain packaging regulations published and introduced
- ✗ Relatively high level of software piracy in comparison to other high-income economies



Patents, Related Rights, and Limitations

- In 2013, the United Kingdom introduced a new “patent box” tax regime with the view of encouraging investment in IP-intensive industries and exploitation of existing IP. This tax break encourages companies in the United Kingdom to commercialize their intellectual property by only being charged a 10% tax rate on any income resulting from that IP. Evidence suggests that the tax incentives had a positive effect, particularly in the life sciences sector.



Enforcement

- The latest *IP Crime Report*, published by the Intellectual Property Office, shows that while counterfeiting and piracy are still a significant challenge to the British economy and to UK consumers, cross-industry and government efforts are bearing fruit.
- Since 2013, the United Kingdom has established a specialist IP crime unit within the City of London police department. A major part of this unit’s work is acting against online sales of counterfeit physical goods and it has set a gold standard for IP enforcement more globally.



Copyrights, Related Rights, and Limitations

- The Creative Content UK initiative, which was introduced in 2015, consists of an extensive UK government-backed education program and a direct consumer infringement notification system.
- The British High Court overturned a new personal copy exception, noting the lack of compensation and limited evidence that damage to rights holders would be minimal.

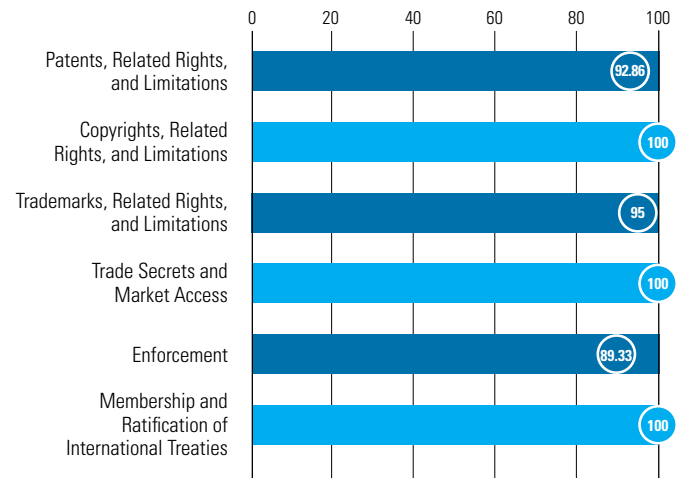
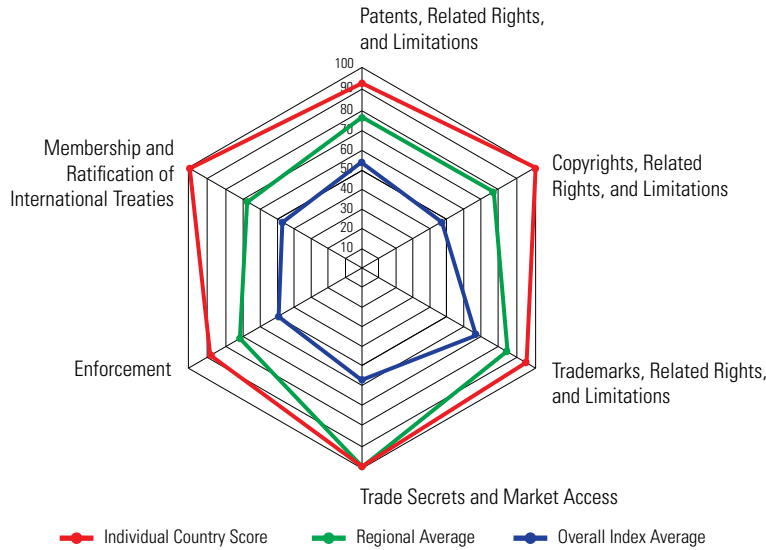


Membership and Ratification of International Treaties

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

United States

Total Score: 28.61 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
<ul style="list-style-type: none"> ✓ Pharmaceutical-related patent enforcement and resolution mechanism in place ✓ Court decisions generally set appropriate boundaries on copyright exceptions ✓ DRM legislation in place ✓ Effective protection of trade secrets ✓ Generally deterrent civil remedies and criminal penalties ✓ Commitment to and implementation of international treaties 	<ul style="list-style-type: none"> ✗ Inconsistent enforcement against counterfeit and pirated goods, especially online ✗ Increasingly narrow interpretation of patentability of biotech inventions and CIIIs ✗ Ambiguity concerning ISP obligation to respond to trademark notice of infringement ✗ Concerns over border officials' ability to share information with rights holders and newer methods of export



Patents, Related Rights, and Limitations

- Recent court decisions confirm and extend the increasingly narrow approach taken by the U.S. Patent and Trademark Office (USPTO) to patentability, affecting biotechnology and diagnostic-related subject matter, business methods, and computing.



Trade Secrets and Market Access

- A new trade secrets bill, the Defend Trade Secrets Act of 2015, introduced in both the U.S. House and Senate, would expand statutory powers to include private right of action for civil trade secret misappropriation claims in federal court. Available remedies would include injunctions and seizure of trade secrets.



Copyrights, Related Rights, and Limitations

- In 2015, online auction platforms, including Etsy.com, called for the introduction of Digital Millennium Copyright Act (DMCA)-style legislation for trademarks that would transfer liability for infringement on online platforms from intermediaries to individual sellers as long as intermediaries cooperate with an established notice and takedown mechanism.



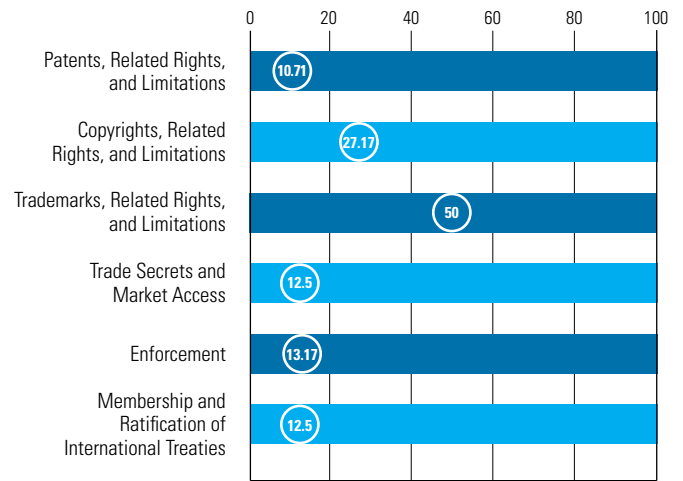
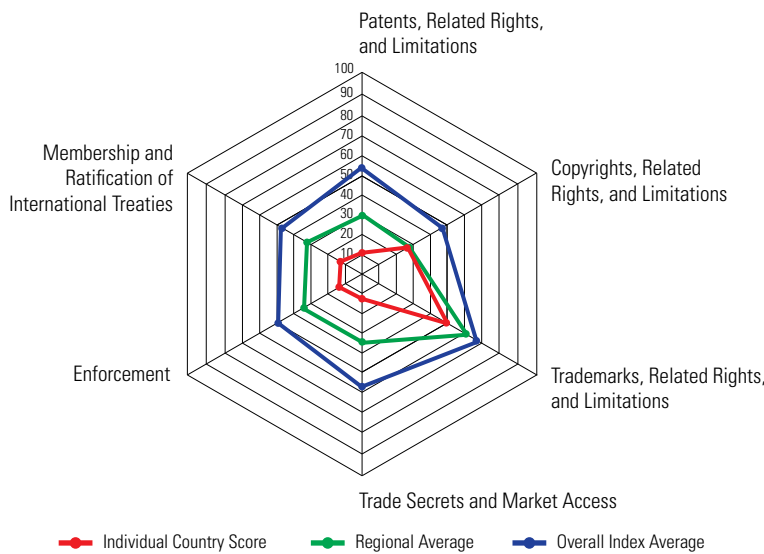
Enforcement

- The Trade Facilitation and Trade Enforcement Act (S.1269 and H.R.644) includes provisions that direct customs officials to increase and speed up information sharing with rights holders to aid in identifying infringing goods as well as confirm their authority to seize infringing goods (even if they have not been officially registered) and notify rights holders.



Membership and Ratification of International Treaties

- The United States is a contracting party and has signed and ratified all of the international treaties covered in the Index, as well as several FTAs with substantive IP provisions, such as KORUS. The United States is a negotiating party to the TPP.



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength	Key Areas of Weakness
<ul style="list-style-type: none"> ✓ Basic copyright and trademark frameworks in place ✓ Dedicated anti-counterfeiting effort (though still very little action) ✓ Fairly balanced copyright penalties available under the law ✓ Signatory to WIPO Internet Treaties 	<ul style="list-style-type: none"> ✗ Very weak patent framework ✗ Sector-specific patents IP rights unavailable ✗ No effective copyright notice and takedown mechanism ✗ Major holes in exceptions to copyrights and DRM framework ✗ Legislation does not directly address unregistered marks, little recognition of well-known marks ✗ Poor enforcement; penalties insufficient or draconian; administrative inaction



Patents, Related Rights, and Limitations

- The standard term of protection for patents is 10 years in Venezuela. In violation of Article 27 of the TRIPS Agreement, chemical preparations, use of natural substances, second use, and new forms of pharmaceutical inventions are specifically excluded from patentability in Venezuela. The Venezuelan Autonomous Intellectual Property Service has not issued a patent since at least 2007, and by some counts, since 2000.



Copyrights, Related Rights, and Limitations

- No specific provisions address rights relevant to digital exploitation of works. Moreover, Venezuelan laws do not establish the liability of intermediaries or ISPs specifically in the context of IP infringement.



Trade Secrets and Market Access

- Rights of trademark holders are not well defined in the Industrial Property Law, which does not explicitly prohibit the registration of marks that are similar or identical to marks determined to be well known.



Enforcement

- While civil and criminal remedies are available for IP infringement, penalties are considered to be nondeterrent and disproportionate to the infringing acts, being either very weak or extremely severe. No specific police forces or courts are dedicated to IP infringement cases.

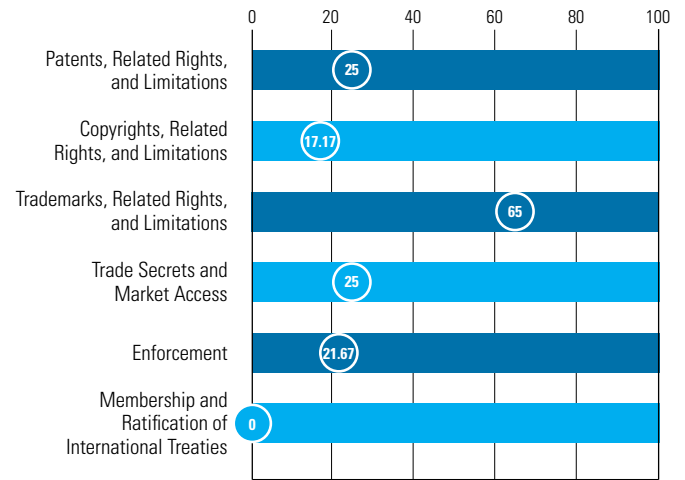
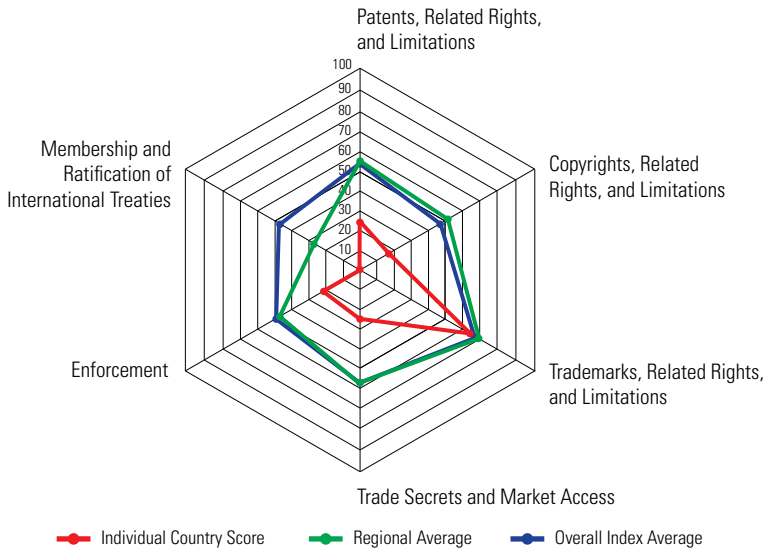


Membership and Ratification of International Treaties

- Venezuela scores 0.5 in its participation in and ratification of international treaties. It has signed but not ratified the WIPO Internet Treaties, but it is not a contracting party to the Singapore Treaty on the Law of Trademarks or the Patent Law Treaty. Moreover, it has not signed an FTA including a substantive IP chapter.

Vietnam

Total Score: 7.83 out of 30



Index scores standardized to 100

Strengths and Weaknesses

Key Areas of Strength

- ✓ Basic patentability framework
- ✓ Basic exclusive rights for copyrights and trademarks
- ✓ 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
- ✓ Agreement of EU-Vietnam FTA
- ✓ International partnerships aimed at trademark reform

Key Areas of Weakness

- ✗ Challenging patent enforcement environment with inadequate patent linkage mechanism
- ✗ 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



Patents, Related Rights, and Limitations

- Vietnam does not have in place a patent linkage mechanism that allows for adequate time to resolve patent disputes before granting a generic registration.



Copyrights, Related Rights, and Limitations

- ISPs (including social media networks) are required to issue warnings to infringing users, however, volume is still highly disproportionate to the scale of piracy, especially in relation to commercial-scale infringing sites.



Trademarks, Related Rights, and Limitations

- The Intellectual Property Law provides protection for well-known marks that are widely known throughout the Vietnamese territory. Trademark squatting is increasingly a problem in Vietnam. Given the scale of the problem, it is difficult to obtain adequate relief, and the large majority of bad faith registration cases are never brought or heard.



Enforcement

- The enforcement environment remains challenging in Vietnam, though some positive developments are taking place. Discussion on introduction of special IP judges is also in progress.



Membership and Ratification of International Treaties

- Vietnam scores 0 in its participation in and ratification of international treaties. Upon signature and ratification of the TPP and an agreement with the EU, Vietnam's score for this indicator will rise.

Abbreviations

CETA	Comprehensive Economic and Trade Agreement
CIIs	Computer-implemented inventions
DRM	Digital rights management
FDI	Foreign direct investment
FTA	Free trade agreement
GIPC	U.S. Chamber of Commerce’s Global Intellectual Property Center
ICT	Information and communication technology
IP	Intellectual property
ISP	Internet service provider
OECD	Organisation for Economic Co-operation and Development
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
UNCTAD	United Nations Conference on Trade and Development
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

Methodology, Sources, and Indicators Explained

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 that any proprietary software used on government ICT systems should be licensed software
Category 3: Trademarks, Related Rights, and Limitations
14. Trademarks term of protection (renewal periods)
15. Nondiscrimination/nonrestrictions 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 the 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

Sources

Scoring in the Index is based on both qualitative and quantitative evidence. 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 available and accessible to all. The following is an outline of the different types of sources used.

Government

- 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

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

International Institutions and Third Parties

- 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 nongovernmental organizations and consumer organizations.

Academic

- Academic journals; and
- Legal journals.

News

News sources include:

- Newspapers;
- News websites; and
- Trade press.

Indicators Explained

This section explains how each indicator in the 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.⁸ 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 CII. 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) the issuing should not apply to patented innovations that have not yet reached the market; (3) in the case of biopharmaceutical products, the use of compulsory licensing under the framework of TRIPS provisions on public health should not be for commercial purposes, such as for price negotiations or in support of domestic industries; and (4) adequate and well-defined recourse mechanisms should be in place for parties affected by the issuing of the license. This is a binary indicator.
6. **Patent term restoration for pharmaceutical products** – Measured by the current baseline rate of five years used in the United States and EU. This protection is aimed at restoring 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 EU for new biopharmaceutical products containing new active ingredients regardless of molecular size and/or complexity.⁹ 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).¹⁰ 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 economies have (1) passed primary and/or secondary legislation relating to DRM and technological protection measures and (2) applied this legislation. This is a mixed indicator.
13. **Clear implementation of policies and guidelines requiring that any proprietary software used on government ICT systems should be licensed software** – Measured by the extent to which (1) policies and guidelines are in place that stipulate 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. **Nondiscrimination/nonrestrictions on the use of brands in packaging of different products** – Measured by the extent to which different national laws and regulations do not unreasonably limit the rights holder from using or putting his brand, trademark, or corresponding trade dress on the package of his products, thereby curtailing his 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 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) that 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 the 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.¹¹

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 the existence of (1) 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 intellectual property and know-how with a local/domestic entity. This is measured by the extent to which (1) existing laws and procedures do not make market access contingent on the sharing/disclosure of intellectual property and know-how, and (2) the application of such laws or in the absence of such laws the existence of *de facto* practices and standards 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. **Counterfeiting/piracy rates** – Measured by estimated rates of general trade-related physical counterfeiting.¹² This is a numerical indicator.
22. **Software piracy rates** – Measured by rates of software piracy. This is a numerical indicator.¹³
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.¹⁴ 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

- i The IESE and EMYLON Business Schools' Venture Capital and Private Equity Country Attractiveness Index measures economies' attractiveness to VC and PE funding by examining a range of factors including the capital market, taxation environment, investor protection, entrepreneurial culture, and deal opportunities. See: Groh, A., Liechtenstein, H., Lieser, K., Biesinger, M. (2015). *The Venture Capital and Private Equity Country Attractiveness Index: 2015 Annual*. IESE Business School and EMYLON Business School; GIPC, 2016.
- ii ILOSTAT data not available for Brunei, India, Nigeria, and Taiwan. Source: International Labor Organization ILOSTAT Database, Employment Distribution by Occupation, ISCO-88 Categories 1, 2, and 3 (2015); GIPC (2016).
- iii Clinical trial intensity is measured as the gross number of clinical trials to date per economy, as registered in the *clinicaltrials.gov* database, standardized per million population. Source: National Institutes of Health, *Clinicaltrials.gov*, Index (2016).
- 1 World Bank, GDP Ranking 2014 (September 2015 update), World Development Indicators, The World Bank (2014).
- 2 World Bank GDP per capita (current US\$): <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
- 3 The Index contains 12 indicators that are directly relevant to the life sciences sector.
- 4 The Index contains 14 indicators that are directly relevant to the creative content sector.
- 5 UNCTAD. (2010). Creative Economy Report 2010, pp. 28–31.
- 6 UNCTAD. (2013). "Trade in creative products reached new peak in 2011, UNCTAD figures show," May 15, 2013, (accessed August 2013).
http://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=498&Sitemap_x0020_Taxonomy=UNCTAD%20Home;#1385;#International Trade and Commodities;#1547;#Creative Economy Programme;#1851;#Services, development and trade;#1856;#UNCTAD GSF 2013
- 7 UNCTAD Statistics Growth Rates of Creative Goods Exports and Imports, Annual, 2002–2011 (accessed August 2013).
- 8 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."
- 9 Half (0.5) of the available score is based on the term available for biologics or large molecule compounds. If a country's relevant legislation/regulation—either *de jure* or *de facto*—does not cover such compounds, then the maximum score that can be achieved in this indicator is 0.5. The baseline numerical term used is that by the EU of 10 years (8+2) of marketing exclusivity.
- 10 The Berne three-step test generally requires that limitations and exceptions to copyrights (1) should be confined to special cases, (2) do not conflict with a normal exploitation of the work, and (3) do not unreasonably prejudice the legitimate interests of the rights holder. (TRIPS Agreement, Article 13.)
- 11 Examples of voluntary and industry-based standards include those standards and policies used in the United States and elsewhere by providers such as eBay. The latter has a system in place—the Verified Rights Owner Program—that allows rights holders to protect their intellectual property through a process of notification and takedown in which eBay is notified of the infringement and promptly removes the material from its website. Full details of the system are available at <http://pages.ebay.com/vero/intro/index.html>.

- 12 The source used for this indicator is the Global Measure of Physical Counterfeiting. The measure has been developed by the U.S. Chamber of Commerce and Pugatch Consilium to provide a new global measure of physical trade-related counterfeiting. It provides a total and per economy estimate for each of the 38 economies included in the Index of rates of physical trade-related counterfeiting. The full details of the building of the model, methodology, sources used, and an assessment of the wider threat of physical counterfeiting is provided in the report *Measuring the Magnitude of Global Physical Counterfeiting*, available on the GIPC and U.S. Chamber of Commerce's website.
- 13 Software piracy rates compiled by the BSA (2014 being the latest survey).
- 14 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.



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

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



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

Professor Meir Pugatch, Managing Director and Founder

Prof. Pugatch founded Pugatch Consilium in 2008. He specializes in intellectual property policy, management and exploitation of knowledge assets, technology transfer, market access, pharmacoeconomics and political economy of public health systems. He has extensive experience in economic and statistical modeling and indexing, valuation of assets and design of licensing agreements, and providing strategic advice to international institutions, multinational corporations, and SMEs from all sectors of the knowledge economy. In addition to his work at Pugatch Consilium, he is 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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