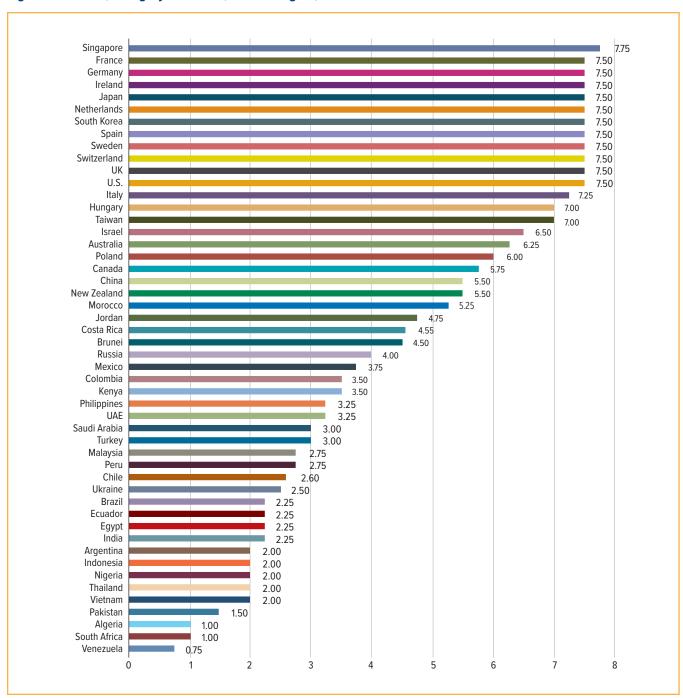
6. INDEX CATEGORY-BY-CATEGORY SCORES

Figure 21: Scores, Category 1: Patents, Related Rights, and Limitations





Category 1: Patents, Related Rights, and Limitations

Figure 21 summarizes the total scores for Category 1. This category measures the strength of an economy's environment for Patents, Related Rights, and Limitations. The category consists of 8 indicators, with a maximum possible score of 8.

The overall results from Category 1 show a clear group of high-performing economies, all with a score of over 6, or 75%, of the maximum available score of 8. In all, 18 of the 50 sampled economies achieve a score of 6 or above in this category. Similar to last year, Singapore is ranked number 1 narrowly ahead of a group of **EU** member states, Switzerland, Japan, South Korea, and the U.S., all of which are tied for 2nd place at a score of 7.5. The U.S. saw a score increase of 0.25 for Category 1 because of policy reforms to its patent opposition regime, with the U.S. Patent and Trade Organization (USPTO) introducing several important changes in 2018. In April, USPTO Director Andre lancu stated that the reform of *inter partes review* (IPR) proceedings was one of the agency's "highest priorities," and it was considering "how and when we institute proceedings, the standards we employ during the proceedings, and how we conduct the overall proceedings. The goal, with whatever action we take, is to increase predictability of appropriatelyscoped claims." Following these remarks, important reforms at the USPTO have been announced that collectively should improve the predictability of the review process. Specifically, these include (1) changing the patent claim construction standard used, moving away from the broadest reasonable interpretation standard to the so-called Phillips standard, which is the claim construction standard used by federal courts since the mid-2000s; (2) a new Trial Practice Guide; and (3) Standard Operating Procedure (SOP) changes. Using the *Phillips* standard will align IPR proceedings with the same claim construction standards that are used in patent infringement proceedings at U.S. district

courts. There will thus no longer be a discrepancy and difference in the claim construction standard used within the Patent Trial and Appeal Board (PTAB) proceedings and that used in the judiciary. The new Trial Practice Guide clarifies the grounds on which a review may be initiated. And the changes to both SOP 1 and SOP 2 seek to streamline how judges are assigned, the composition of panels, and the way precedent-setting opinions are set. Specifically, SOP 2 sets up a Precedential Opinion Panel, headed by the USPTO director. SOP 2 states that this panel "will be used to establish binding agency authority concerning major policy or procedural issues, or other issues of exceptional importance in the limited situations where it is appropriate to create such binding agency authority through adjudication before the Board." These are important changes, and it is hoped that they will provide a greater balance in the U.S. patent opposition system and address the concerns of some industry sectors regarding the unpredictability and uncertainty of the past few years.

In other economies, rights holders continue to face a challenging patenting environment.

In Brazil, there are long-standing issues across the board, with basic patent-related rights not in place and standards of patentability outside of international norms. For instance, through Article 229-C of the Industrial Property Law 9.279 (Lei da Propriedade Industrial), the Brazilian National Health Surveillance Agency (ANVISA) has the right to provide prior consent to biopharmaceutical patents examined by the Brazilian Patent Office (INPI). In effect, this has meant a dual examination of all applications, in turn violating the TRIPS Agreement. As a step in the right direction, the publication of the April 2017 Interagency Ordinance clarified the relationship between ANVISA and INPI in the patent review process. ANVISA will analyze applications in light of public health, and opinions about patentability may be binding on the

INPI only in cases in which ANVISA concludes that a severe public health risk exists as prescribed under Article 4 of the ordinance. In September 2018, this new working arrangement was tested, and the INPI approved a patent for sofosbuvir despite ANVISA's objections. Unfortunately, only a few days after the patent was granted, a Brazilian federal court suspended it based on a lawsuit filed by a coalition led by Marina Silva, one of the leading candidates in the then presidential election. In his judgment, Judge Rolando Valcir Spanholo argued that the INPI failed in its duty to review the patent application within the broader context of the social and economic interests of Brazil and ordered the agency to reassess the application. In an encouraging interview with *IP-Watch* on September 27, 2018, Luiz Otávio Pimentel, head of the INPI, termed the lawsuit as "the most important case in recent years," stressing that the decision to grant a patent for the drug in Brazil over the outcries of activists was purely "a technical decision without interference." While the case remained pending at the time of research, it also remains to be seen how the prior consent issue will be put into practice in other cases. Nonetheless, the larger point persists that patent protection for biopharmaceuticals in Brazil is not generally straightforward or consistent with global norms. On a more positive note, 2018 also saw the introduction and further implementation of measures to bolster the INPI's administrative performance and processing efficiency. This includes measures such as digitizing office documents, simplifying examination procedures, and instituting a telework program for examiners. Brazil has successfully reduced the trademark backlog and industrial design backlog. However, the patent backlog remains a challenge, although INPI aims to reduce the backlog by 30% over the next year. Over the longer term, the INPI plans to hire additional examiners, increase office productivity, and encourage international cooperation through its different PPH agreements to increase its capacity to address the annual demand for the examination of applications.

A notable number of economies saw changes relating to the enforcement of pharmaceutical patents (indicator 4).

On a positive note, both **China** and **Taiwan** are in the process of implementing so-called linkage mechanisms. As a first step in establishing a linkage mechanism, the Chinese FDA issued the "China Marketed Chemical Drug Catalogue," a Chinese version of the American "Orange Book," which contains information on both generic and patented products approved in China. In addition to these steps, China is in the process of amending its patent law and has the opportunity to add the necessary provisions to implement patent linkage. Whether the latest draft amendments include the necessary provisions is unclear. Lack of protection from generic competitors is the main obstacle for life sciences companies willing to enter the Chinese market. In Taiwan, provisions on patent linkage were promulgated by the president at the beginning of 2018. According to the new Article 48 of the Pharmaceutical Affairs Law, the new drug applicant (with consent from the relevant patent holder or exclusive licensee) is required to list patent information with the Ministry of Healthcare and Welfare (MOHW) within 45 days of receiving drug approval. The generic applicant has to declare that the product does not infringe patented drugs and notify the new drug approval holder (and patentee or exclusive licensee) and the MOHW within 20 days of receiving notice that the innovator's marketing approval has been completed for review. The introduction of a linkage system will confirm China and Taiwan's commitment to strengthening their national IP environments for biopharmaceuticals and the life sciences.

Progress was not as even in other economies.

In fact, **Canada** took steps backward when it comes to indicator 4. In Canada, the government amended the relevant secondary legislation, the Patented Medicines (Notice of Compliance) (PMNOC) Regulations, to



comply with Canada's commitments under the CETA. Unfortunately, the amendments have not effectively addressed long-standing deficiencies in Canada's linkage regulations. The old PMNOC procedures did not provide patent holders (a "first person") with a right of appeal, and the judicial proceedings determining the merits of the disputed patent or patents was a summary, not full, process. This limited the rights of the patent holder and availability of the full term of protection. The recent amendments have replaced summary proceedings with the possibility to bring fully fledged judicial actions, but the procedural complexity is likely to result in cases not being resolved before the end of the 24-month stay. Similarly, the issue of so-called Section 8 damages persists. Generic or biosimilar producers are entitled to claim damages when infringement is not found. The approach taken by Canadian courts accounts for a disproportionate, almost punitive, liability exposure to patentees. Specifically, in 2015, the Supreme Court of Canada upheld the verdict in 2 important 2014 Federal Court of Appeal rulings concerning the methodology for determining damages under Section 8 of the PMNOC. These rulings (and their affirmation by the Supreme Court) have established a judicial precedent whereby an innovator drug company could be held to pay damages to multiple manufacturers of a follow-on generic drug product that together exceed the size of a total hypothetical generic market. Under the new amended PMNOC regulations, there is no end for a Section 8 damage period, potentially enabling generic producers to claim undefined and unlimited future losses.

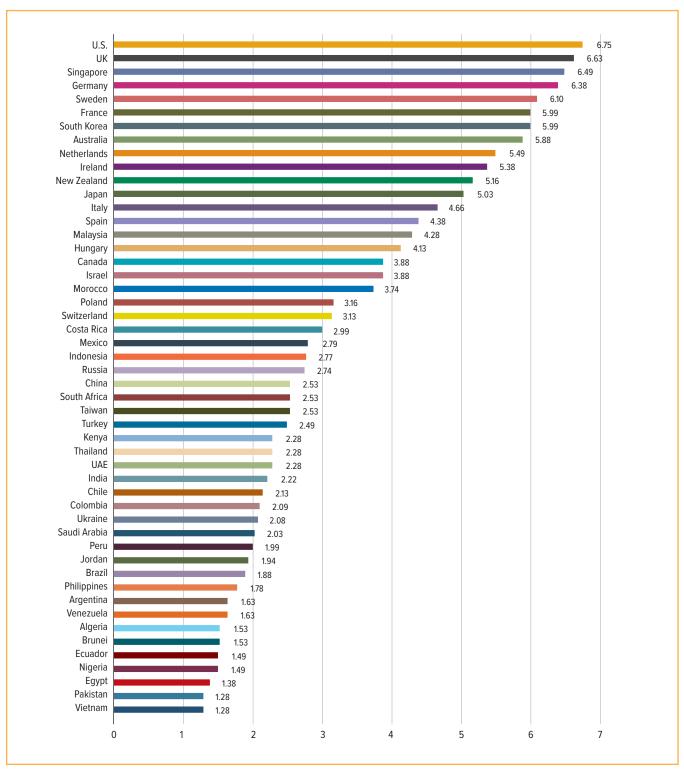
On a positive note, India's score increased on the patent prosecution highway metric (indicator 8) because of the announcement of a pilot patent prosecution highway with Japan. This is a significant step for helping innovators and inventors in both economies. PPH initiatives facilitate increased cooperation between IP offices and represent one of the most tangible ways in which the administration

and functioning of the international IP system can be improved and harmonized, which benefits inventors and rights holders around the world. Up until this announcement, India did not have a functioning PPH with any major IP office, so this is a major step forward and results in a 0.5 increase in the score on this indicator. There was also an indication to amend the Patent Rules, 2003, to allow for expedited examination of applications from participating patent offices.

Category 2: Copyrights, Related Rights, and Limitations

Figure 22 summarizes the total scores for Category 2. This category measures the strength of an economy's environment for Copyrights, Related Rights, and Limitations. The category consists of 7 indicators, with a maximum possible score of 7.

Figure 22: Scores, Category 2: Copyrights, Related Rights, and Limitations





As in years past, the results for Category 2 show how challenging the environment is for creators and copyright holders in the vast majority of sampled economies. 31 of the 50 economies sampled fail to reach 50% of the available score. The situation is particularly dire in relation to online enforcement. Looking at the scores for expeditious injunctivestyle relief and disabling of infringing content online (indicator 11) and availability of frameworks that promote cooperative action against online piracy (indicator 12), it is clear that in a large number of economies creators have limited and often no effective legal recourse to protect their rights online. For both indicators, 36% (18 out of 50) of the sampled economies achieve a score of O. These include Algeria, Brazil, Brunei, Colombia, Ecuador, Jordan, Peru, the Philippines, and the UAE. Overall, very few economies have in place functioning systems for injunctive-style relief or notification mechanisms. Notably, this is not a problem confined to emerging markets.

As has been noted in previous editions, **Switzerland**'s copyright regime is weaker than its otherwise worldclass national IP environment, reflecting legislative weakness as well as concerns over a lack of enforcement. To address these concerns, in November 2017, the Swiss Federal Council (Bundesrat) approved new draft copyright amendments. At the time of research, the Federal Assembly (Schweizer Parlament) was reviewing the amendments. The law is expected to be passed in 2019. While the Swiss government should be commended for finally taking legislative action and addressing a long-standing weakness in its national IP environment, the proposed amendments are quite narrow and only partially address the problem of online infringement in Switzerland. The primary means of enforcement will be through targeting internet hosting service providers that will be obliged to both remove infringing content and keep it off their servers. Specifically, the draft legislation puts in place a requirement for a "stay down" mechanism whereby hosting services must ensure that infringing content

is not made accessible again after a notification of infringement has been made and acted on. But the draft legislation does not include any requirement or option for the disabling of access to illegal content—foreign or Swiss based—under the proposed legislative amendments. It is likely that illegal content that is currently being hosted in Switzerland will simply migrate to another jurisdiction but continue to offer infringing content to Swiss consumers.

Nevertheless, there are examples of economies taking a more active stance on online infringement.

While online infringement remains pervasive, over the past half-decade, Russian authorities have introduced and implemented a range of new laws and regulations to help combat the high levels of online infringement. In 2013, the Russian government passed a number of amendments to the Civil Code Part IV, including a notice and takedown provision regarding the responsibilities of "information intermediaries" with an obligation to act on a notice of infringement from a rights holder. These amendments also included the introduction of interim judicial measures designating the Moscow City Court as the first instance of such application and with the power to issue temporary injunctions. Furthermore, a rights holder could also apply to the Federal Service for Supervision in the Sphere of Telecom, Information Technologies, and Mass Communication (the ROSKOMNADZOR) for the enforcement of these provisions. In 2017, additional legislative changes were introduced to strengthen rights holders' ability to request the disabling of access to infringing material online. Specifically, a number of important amendments were made to the Law on Information, Information Technologies and Information Protection. These amendments included a ban on so-called mirror sites that infringe copyrighted content. Rights holders now have the option of notifying the Ministry of Communications, which has two days to order the hosting provider to disable access to the site. Furthermore, internet mediators (including search

engines) are now obliged to remove links to sites that have been found to host illegal content. These efforts intensified in 2018. Specifically, reports indicate that ROSKOMNADZOR is actively monitoring online infringement and developing a database of infringing content. Internet mediators—including internet service providers (ISPs) and search engines—are required to link to this database. When the database is updated with new infringing sites, mediators are obliged to update their own access-disabling protocols. These efforts have so far been voluntary and have included discussions between rights holders and internet mediators, with potential further legislative action reserved for 2019. More broadly, the authorities have taken action against noncomplying internet mediators through both fines and potential disabling of access to relevant websites and links

Like Russia, China faces enormous challenges regarding online infringement. Still, in 2018, the government instituted a number of positive initiatives and there were a number of positive court decisions against copyright infringers. At the request of the National Copyright Administration of the People's Republic of China, 15 video-sharing online platforms stepped up their enforcement efforts and disabled access to over 570,000 infringing videos, some of which were hosted by overseas servers. In addition, at the request of the China Audio-Video Copyright Association, karaoke owners reportedly banned over 6,000 copyright-infringing songs from their business. Additionally, Lego registered an important victory in a copyright court case against 4 domestic infringers and was awarded USD650,000 in damages by the court.

Both **Singapore** and **Australia** maintained their global leadership in online copyright enforcement. In Australia, 2018 saw the continued use of Section 115a of the Copyright Amendment (Online Infringement) Act 2015, which allows courts to require ISPs to disable access to foreign-hosted sites (or "online locations") whose primary purpose is to infringe copyright. In

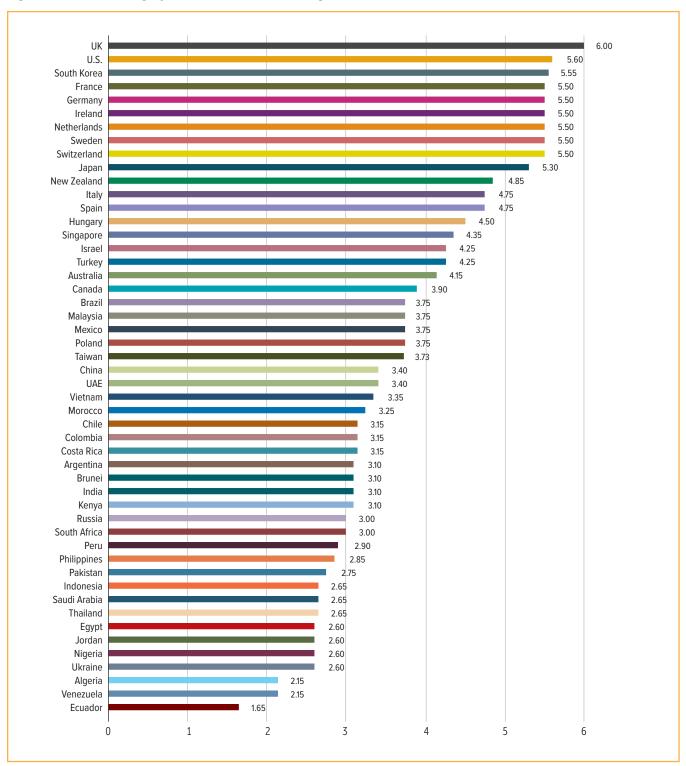
a landmark ruling in *Roadshow Films Pty Limited v Telstra Corporation Limited*, the federal court granted an injunction to disable access to online locations that, unlike websites containing illegal content, provided access to illegal streaming of hundreds of paid TV channels accessible through set-top boxes. Yet, there is still room for improvement. Evidence submitted by the Australian Film & TV Bodies in 2018 in response to a government-initiated public consultation process on the overall effectiveness of Section 115a shows that the average time frame between filing date and judgment is 225 days, significantly long compared with the UK (77 days) and Portugal (27 days).

In 2014, Singapore passed amendments to its Copyright Act strengthening rights holders' recourse mechanisms against online piracy. The purpose of these changes was to provide a more direct mechanism for rights holders against "flagrantly" infringing sites; 2018 saw further developments relating to this law. In May, the High Court ordered internet service providers to disable access to another 53 websites after a new request from the Motion Picture Association of America. In October, the High Court issued a so-called dynamic order whereby rights holders can notify ISPs directly if the targeted infringing sites have taken counter-measures. This greatly reduces the administration of the system and improves the overall effectiveness of the orders. Finally, in November, the High Court issued another order to disable access to internet-based applications providing infringing content to set-top boxes. There has been an explosion in the growth and use of such boxes in Asia, and Singapore in particular.

Category 3: Trademarks, Related Rights, and Limitations

Figure 23 summarizes the total scores for Category 3. This category measures the strength of an economy's environment for Trademarks, Related Rights, and Limitations. The category consists of 6 indicators, with a maximum possible score of 6.

Figure 23: Scores, Category 3: Trademarks, Related Rights, and Limitations



Most economies sampled in the Index offer basic forms of trademark protection. Generally, challenges persist in the enforcement of trademark rights concerning both traditional forms of infringement as well as violations occurring through online merchants and auction sites. As more consumers access and use the internet, online commerce is growing in popularity. In 2017, total e-commerce sales worldwide were estimated at USD2.3 trillion, up by close to 25% from 2016.58 E-merchants and online platforms such as eBay, Amazon, Alibaba, Mercado Libre, and others today account for a growing share of global retail sales. Unfortunately, as online shopping becomes more popular and widespread so too does the proliferation and sale of counterfeit goods. For example, a number of online merchants—including some of the biggest in the world, such as DHGATE. com, Indiamart, and Taobao—are included in the United States Trade Representative's (USTR) annual Notorious Markets Lists. Few economies have in place effective mechanisms to combat the increased sale of counterfeit goods through these online auction houses and merchants. There are private initiatives—such as eBay's Verified Rights Owner Program—in which online merchants have in place measures to combat the sale of counterfeit goods. There are also some examples of jurisdictions where relevant legislation or case law has established an obligation for online merchants to take down IP-infringing material upon notification by a rights holder. For example, in the 2011 case L'Oréal SA and others v eBay International AG and others, Case C-324/09, the European Court of Justice established principles and obligations regarding the E-Commerce Directive and online auction houses. Overall, the mechanisms in place are outweighed by the sheer quantity of counterfeit goods available online. This is particularly the case in Asia. However, in 2018, there were some new positive developments in the region.

Home to the largest online market in the world, **China** has long wrestled with how to address the sale of counterfeit goods online. However, a new E-commerce

Law will enter into force in January 2019. Under the new legislation, e-commerce platforms that fail to take "necessary measures" against infringing goods sold on their website of which "they are or should be aware" will incur a fine of up to CNY2,000,000 (approximately USD300,000). According to examples previously given by the Beijing High Court, this could cover cases where information on infringing products was listed in the main pages of the seller's website or where the price is unreasonably lower than the market price for a well-known product.

Category 4: Trade Secrets and the Protection of Confidential Information

Figure 24 summarizes the total scores for Category 4. This category measures the strength of an economy's environment for Trade Secrets and the Protection of Confidential Information. This category contains one new indicator: Protection of trade secrets (criminal sanctions) (indicator 23). This indicator seeks to measure the existence of legislation that provides criminal sanctions for the misappropriation or improper acquisition, use, or disclosure of trade secrets or confidential business information, and the application of this legislation and effective access to these remedies.

In addition to the protection of trade secrets, this category measures the existence of a regulatory data protection term of protection. In total, the category consists of 3 indicators, with a maximum possible score of 3.

Germany Netherlands 3 3 Sweden 3 Switzerland Japan Italy 2.75 2.75 Spain U.S. 2.75 France 2.5 Ireland New Zealand 2.25 Poland 2.25 UK 2.25 Canada 2.05 Australia 2 Hungary South Korea Singapore 1.75 Taiwan 1.75 Colombia 1.5 Israel 1.3 Costa Rica 1.25 Jordan 1.25 Malaysia 1.25 Mexico 1.25 Morocco 1.25 Saudi Arabia 1.25 Vietnam 1.25 China 1.1 Russia 1.1 Turkey Brazil Chile Ecuador UAE Peru 0.75 Algeria 0.5 Argentina 0.5 Egypt 0.5 India 0.5 Indonesia Kenya 0.5 Pakistan 0.5 Philippines 0.5 South Africa 0.5 Thailand 0.5 Ukraine 0.5 Brunei 0.25 Nigeria 0.25 Venezuela 0.25 3 2 0

Figure 24: Scores, Category 4: Trade Secrets and the Protection of Confidential Information

Many economies do not have specific trade secret legislation in place but instead rely on laws relating to employment contracts and disclosure of confidential information. This gap is pronounced related to criminal sanctions. Competition between nations is increasingly becoming economic and technological in nature and blurring the lines between state actors and corporate entities. This is especially the case in economies that have a heavy and pervasive state involvement in the private sector. Under these circumstances, a given rights holder that has been the victim of trade secret theft is very limited in the type of legal actions it can take. Many economies—including developed OECD members—do not have statutory criminal sanctions in place for the theft and misappropriation of trade secrets. For example, while the Trade Secret Directive sets common minimum standards and a common trade secret definition for all EU member states, it does not include or cover criminal sanctions. The result is that

some member states, such as **Germany** and **Sweden**, have in place fairly robust criminal sanctions against trade secret theft and misappropriation while others do not. Indeed, overall, most economies included in the Index perform poorly on this indicator:

- Of the 50 economies sampled, 32, or 64%, achieve a score of 0.25 or 0.
- Five economies, or 10%, have no relevant legal provisions, and there is no evidence of criminal prosecution taking place.
- Only 7 economies, or 14% of the sample, achieve a score of 1 with relevant trade secret criminal sanctions in place and evidence of prosecution and enforcement.

Figure 25 shows the overall performance on this indicator for all economies included in the Index.

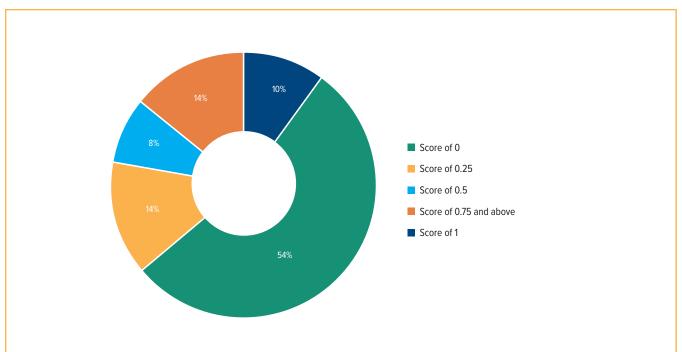


Figure 25: Indicator 23: Protection of trade secrets (criminal sanctions), overall scores, all 50 Index economies

This poor performance is not correlated with stage of economic development. Many high-income OECD members have limited or no criminal sanctions in place relating to trade secrets. For instance, the **UK** does not provide trade secret-specific criminal provisions. Criminal sanctions can be found in other parts of the legal code, such as the Theft Act, Computer Misuse Act, Fraud Act, and Serious Crime Act. However, these are patchwork and contain inherent workarounds or limitations when applied in the context of trade secrets. For example, while the Theft Act criminalizes the stealing of property, relevant case law has established that intangible property (such as trade secrets) does not constitute property for the purposes of the Theft Act. There is also a requirement under the Theft Act to prove the permanent deprivation of property; copying a computer file containing a trade secret would not per se involve the removal of any real property. Similarly, criminal sanctions can be provided under the Fraud Act, such as "fraud by false misrepresentation; fraud by failing to disclose information; and fraud by abuse of position." However, per definition, these acts are prosecutable only if they involve fraud. Criminal charges can also be brought under the Computer Misuse Act, under which it is an offense to gain "unauthorized" access to information contained in a computer. But this, per definition, involves accessing information from a computer and would not apply to theft of physical documents or plans. Policymakers have long recognized this current lacuna in UK criminal law. In 1997, the Law Commission (which conducted an in-depth review of trade secret protection in the UK) found, "At present the criminal law gives no specific protection to trade secrets. In particular, trade secrets cannot, in law, be stolen: they do not constitute 'property' for the purpose of the Theft Act 1968" and recommended that "the unauthorised use or disclosure of a trade secret should, in certain circumstances, be an offence"

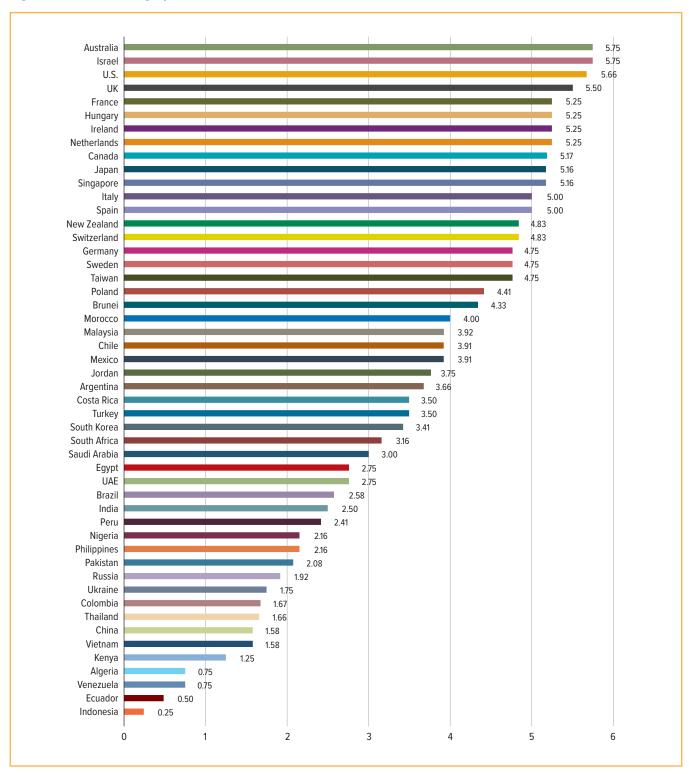
Conversely, other legal jurisdictions take the theft and misappropriation of trade secrets very seriously and have strong criminal sanctions in place. For example, in the **U.S.**, statutory law provides clear and specific criminal sanctions relating to the theft and misappropriation of trade secrets. The 1996 Economic Espionage Act (Chapter 90 of Title 18 of the U.S. Code, "Protection of Trade Secrets") provides criminal sanctions for the theft and misappropriation of trade secrets. The law provides for prison terms of up to 10 years and fines up to USD5 million or 3 times the value of the stolen trade secret to the organization; the 2016 Defend Trade Secrets Act strengthened these fines. There is also strong evidence that federal prosecution of trade secret theft under the Economic Espionage Act has increased under both the Obama and Trump administrations. Domestic legal analysis estimates that under the Obama administration, prosecution of criminal violation of trade secret law grew by approximately 20%: from 7.2 cases per year in 1996–2009 to 8.6 cases per year in 2009–2016. Given increasing rates of global economic integration and the growth of both direct and indirect statesponsored economic and industrial espionage, cases have become more focused on corporate malfeasance involving corporate defenders as well as foreign nationals. The growth in prosecution rates seems largely to have held steady under the first half of the Trump administration's first term, with an estimated 9 new cases prosecuted in 2017.

Likewise, in **Switzerland**, the law provides clear and strong criminal sanctions relating to the theft and misappropriation of trade secrets. Both the Criminal Code and Unfair Competition Act provide for criminal sanctions for certain types of illegal acts pertaining to trade secrets, including the betrayal of trade secrets and industrial espionage. Swiss prosecutors actively pursue cases of alleged industrial espionage and trade secret violation.

Category 5: Commercialization of IP Assets

Figure 26 summarizes the total scores for Category 5. This category measures the strength of an economy's environment for Commercialization of IP Assets. It has been substantially expanded, with 4 new indicators added. (Indicator 25, regulatory and administrative barriers to the commercialization of IP assets, from previous editions has been broken up into 3 new indicators.) The category now consists of 6 indicators with a maximum possible score of 6. The 4 new indicators measure the presence of barriers to and incentives in place for the commercialization and licensing of IP assets, ranging from barriers to technology transfer and registration and disclosure requirements of licensing agreements to direct government intervention in setting licensing terms and the existence of tax incentives for the creation and commercialization of IP assets.

Figure 26: Scores, Category 5: Commercialization of IP Assets



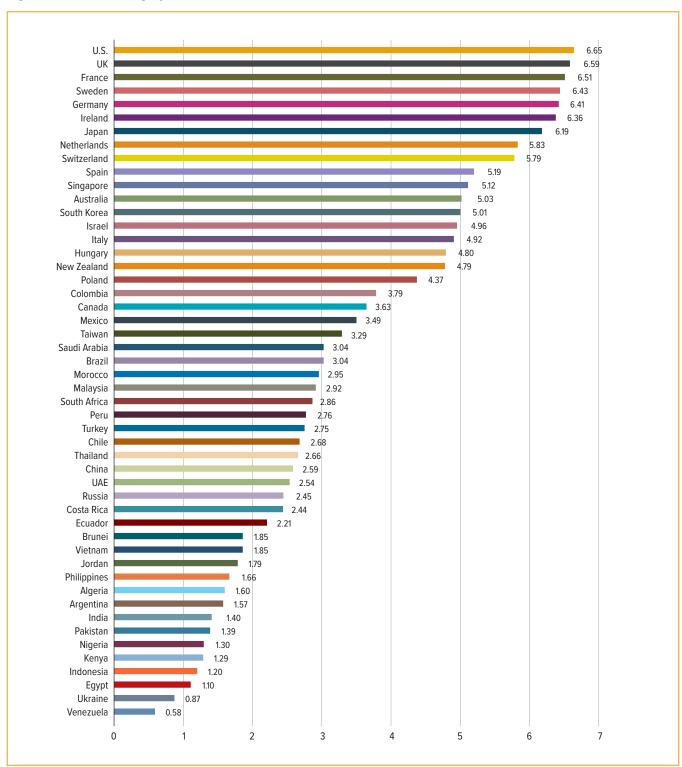
As the top performer in this category, Israel lives up to its moniker of being a "start-up" nation. Because Israel has been a vibrant high-tech hub for many years, its government is committed to fostering domestic high-tech and innovative industries. Israel has an established technology transfer framework, having had nearly 20 tech transfer offices and companies present at its major universities and research institutions for over 50 years. Israeli institutions are consistently included among the top 50 Patent Cooperation Treaty patenting universities worldwide according to WIPO. Israel's technology transfer model is similar to the American Bayh-Dole framework but based on largely independent and corporate-style offices heavily focused on generating royalties and creating new companies. On the whole, this model has been widely successful. Technology transfer offices in Israel are quite active, with an estimated average of 150 new licensing deals, 15 start-ups, and NIS1.5 billion (USD400 million) in royalties per year. Indeed, 2 technology transfer offices in Israel, Yissum (Hebrew University) and Yeda (Weizmann Institute), rank among the top tech transfer offices worldwide. The Israeli example shows that with the right policies in place, even small economies with limited natural resources can become world-class hubs for technological development and activity.

Unfortunately, as detailed in Section 4, many more economies are directly or indirectly introducing policies that make it more difficult to access their respective markets or commercialize IP. This takes place through localization barriers and making access to their respective markets contingent on the sharing of IP and/or proprietary technologies with local entities or imposing restrictions on licensing activity. For example, Algeria, China, Indonesia, Russia, Thailand, and Turkey all make use of and have intensified these efforts over the past few years.

Category 6: Enforcement

Figure 27 summarizes the total scores for Category 6. This category measures an economy's prevalence of IP rights infringement, the criminal and civil legal procedures available to rights holders, and the authority of customs officials to carry out border controls and inspections. The category consists of 7 indicators, with a maximum possible score of 7.

Figure 27: Scores, Category 6: Enforcement

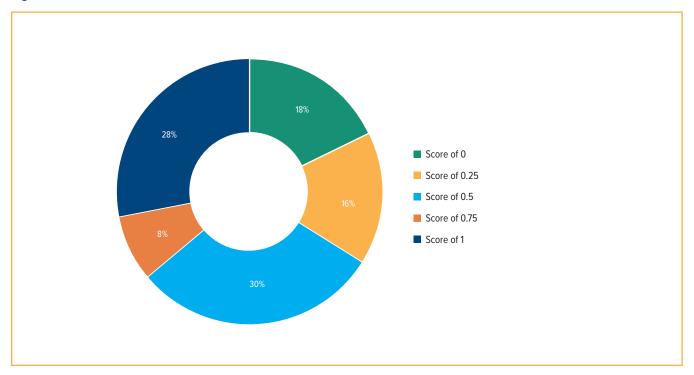


As in years past, a clear majority of the sampled economies in the Index struggle in this category. One area in particular where many economies struggle is effective border measures (indicator 36). In many economies, customs officials are not given *ex officio* powers to seize suspected goods. In some cases in which they do have this power, in practice they do not use it or the power is restricted to only goods that are destined for the domestic market and are not in-transit.

Looking at the overall performance of the 50 sampled economies, 17 fail to achieve a score over 0.25 and 9 economies have a score of 0. Figure 28 shows the overall performance on this indicator.

Despite the overall poor performance on this indicator, there were some positive economy-level developments in 2018.

Figure 28: Indicator 36: Effective border measures, overall scores, all economies





In Malaysia, greater clarity was brought to the rights of Malay customs authorities to act against infringing goods. Under the Trademark Act, the Royal Malaysian Customs Department (RMC) has ex officio powers to act against suspected infringing goods. Act 70(o) states explicitly that "any authorised officer may detain or suspend the release of goods which, based on prima facie evidence that he has acquired, are counterfeit trade mark goods." Unfortunately, this ex officio power does not extend to goods in-transit. In fact, any border enforcement action against goods in-transit has been marred by a high degree of uncertainty. To begin with, Section s70d(8) of the Trademark Act excludes seizure of goods in-transit. There has also been the added dimension of free trade zones and the interaction between the Free Zones Act and relevant IP rights legislation. In many economies—not just Malaysia—goods in-transit and goods passing through free trade zones are generally not subject to detainment and seizure. However, the ruling in a long-running trademark infringement case between Philip Morris and an Egyptian tobacco manufacturer, Philip Morris Brands Sari v Goodness for Import and Export & Ors, may change this precedent. The case dates back to 2011 and the RMC's detainment of a shipment of tobacco products from Vietnam destined for Egypt. The detained shipment of cigarettes branded "Malimbo" bore a striking resemblance to Philip Morris' "Marlboro" brand. After numerous appeals and procedural judgments, the Malaysian High Court has issued a final decision in favor of Philip Morris. The decision placed perpetual mandatory injunctions for the trademark infringement and ordered the RMC to destroy the infringing products at the owner's expense. Most important, from an IP policy perspective, the case provides a strong precedent for the RMC to take action against suspected infringing goods even if they are in-transit. In closing, the judgment stated, "This judgment sends a clear message that Malaysian ports, airports and territory cannot be used to transit goods by any mode which infringe Malaysian registered trade

marks or which constitute the subject matter of a tort of passing off (actionable in Malaysia)."

Likewise, in **Thailand**, new legislation will allow Thai customs officers to more effectively act against suspected infringing goods. Enacted in November 2017, the new Customs Act BE 2560 brought clarity to the customs regime by repealing the previous act dating back to 1926. The new act raised penalties for the importation of counterfeit goods to a maximum of 10 years of imprisonment and/or a fine of up to THB400,000 (approximately USD14,200) and expanded them to in-transit and transshipment goods, as well as "attempting" to import. Since passing the reform, the first seizures of counterfeit goods in-transit was registered in 2018.

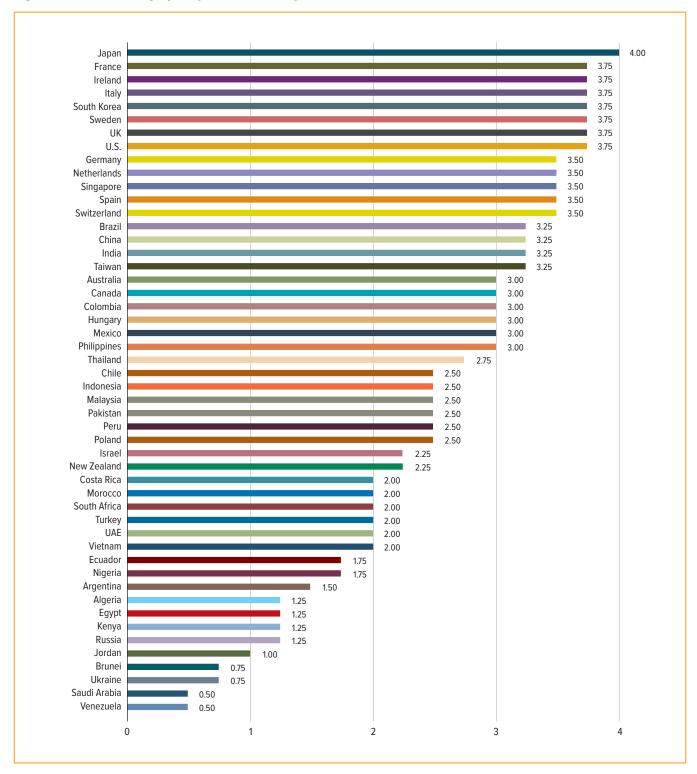
A growing challenge— Enforcing design rights at the border

As the global economy becomes more connected and inter-linked, the spread and availability of counterfeit goods is also increasing. In 2016, the OECD estimated that the international trade in counterfeit and pirated goods represented almost half a trillion USD, the equivalent of 2.5% of global trade. Customs and enforcement data from around the world reveal that a large portion of counterfeit goods are designed goods. This includes different types of clothing and apparel, watches, sunglasses, handbags, and similar accessiories. While many customs authorities have experience dealing with traditional trademark and copyright enforcement—and in many economies offer rights holders the ability to record their rights with national customs authorities—this option is not always available related to design rights. The EU is one of the few jurisdictions where it is possible to file a request for customs action in individual member states as well as all member states specifiying that both registered and unregistered design rights can be protected. As the circulation of counterfeit designed goods shows no signs of abating, more customs jurisdictions should examine their procedures and find ways to more actively recognize and incorporate ways of working with rights holders on enforcing design rights.

Category 7: Systemic Efficiency

Figure 29 summarizes the total scores for Category 7. This category measures an economy's Systemic Efficiency. One new indicator has been added to this category this year: targeted incentives for the creation and use of IP assets for SMEs (indicator 41). This indicator seeks to measure the extent to which a given economy's national IP system provides special incentives for SMEs for the creation, registration, and use of IP assets. Examples of such incentives include fast-track registration procedures, reduced filing fees, and technical assistance targeting SMEs. This category now consists of 4 indicators, with a maximum possible score of 4.

Figure 29: Scores, Category 7: Systemic Efficiency



As in the previous edition, the majority of sampled economies do quite well in this category. Only 12 economies fail to achieve a score of 2 (or 50%) or above. In this respect, many economies are attempting to put in place a strong support system for their national IP environments. Indeed, many economies perform better on this category than in other parts of the Index.

For example, **Kenya**, which otherwise saw its overall score decline this year, saw an increase related to the coordination of IP rights enforcement efforts (indicator 38). In 2018, the government created an Inter-Agency Anti-Illicit Trade Executive Forum as part of its efforts to enhance manufacturing under the president's Big 4 Agenda. The forum brings together public and private actors across all IP-related areas with a broad scope, including enforcement authorities such as customs, police, intelligence services, and the Asset Recovery Agency. The government also created a corresponding Technical Working Group, tasked with devising a National Strategy on Combating Illicit Trade as well as coordinating enforcement of laws to combat illicit trade.

Similarly, **Argentina** introduced positive reforms regarding transparency and stakeholder engagement. In line with the broader efforts led by the Office of the President to promote the greater cross-governmental use of public consultations, the government has created a number of online platforms for engagement and consultation. This includes the platform *Justicia 2020* hosted by the Ministry of Justice, on which the Argentinian Copyright Office and the Ministry of Culture launched a public consultation on copyright reform in 2017. Similarly, the Office of the President runs a platform, *Consulta Publica*, that hosts public consultation on a wide range of topics.

This positive momentum also holds true for this year's new indicator measuring support for SMEs (indicator 41). While **Brazil** and **India** remain in the lower half of the Index's rankings generally, on this indicator they are world leaders. In Brazil, the INPI has a suite of programs

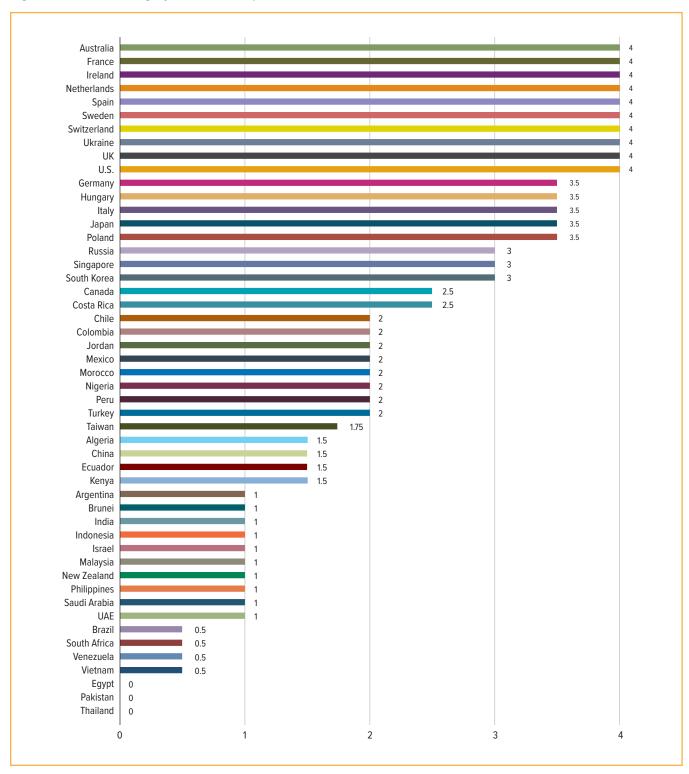
and incentives dedicated to helping SMEs register and use IP assets. Since 2016, the agency has had in place the Micro or Small Entities Examination Prioritization Pilot Project (MPE Patents Pilot Project). The program provides priority review for microenterprises and small businesses and was reauthorized in February 2018 through INPI Resolution No. 211. Furthermore, the INPI also provides technical assistance and advice through its academy program and educational programs. Finally, SMEs and microenterprises are eligible for an up to 60% reduction in filing and processing fees for patents. Likewise, India is one of the Index's leading economies when it comes to providing targeted incentives to SMEs. Expedited review for patent filings, reduced filing fees, and technical assistance are all available to Indian SMEs and start-ups. Under the Startup Standup India initiative, the Office of the Controller General of Patents, Designs, and Trade Marks is running a program called the Scheme for Facilitating Start-Ups Intellectual Property Protection.

There are also examples of traditional Index top performers that performed well on this indicator. For example, in **Japan**, the Japan Patent Office (JPO) provides reduced fees for SMEs and individuals (up to two-thirds of registration costs), priority review (accelerated examination system), and technical assistance. The latter is provided through SME-specific outreach and education programs. This includes the Regional Bureaus of Economy, Trade and Industry, which offers advisory services relating to all aspects of IP rights, including application procedures and registration. There are also designated JPO support staff to help SMEs understand and effectively file new applications.

Category 8: Membership in and Ratification of International Treaties

Figure 30 summarizes the total scores for Category 8. This category measures an economy's Membership in and Ratification of International Treaties. The category consists of 4 indicators, with a maximum possible score of 4.

Figure 30: Scores, Category 8: Membership in and Ratification of International Treaties



Being a contracting party to key international IP treaties is a reflection of a given economy's broader participation in the international IP community and embracing of the highest IP standards. Remarkably, 22 out of the 50 economies sampled fail to achieve a score of 2 (or 50%). 7 economies are not fully contracting parties to any of the treaties included in this category. 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. For example, **Israel**, **New Zealand**, and the **UAE** achieve a score of only 1 out 4.

On a positive note, **India**, which consistently has been at the bottom of this category, acceded to the WIPO Internet Treaties in 2018.