

COVERING 98% OF WORLD GROSS DOMESTIC PRODUCT AND 93% OF WORLD POPULATION



2018

INTERNATIONAL PROPERTY RIGHTS INDEX

Executive Summary



DR. SARY LEVY-CARCIENTE
Author, 2018 Hernando de Soto Fellow

LORENZO MONTANARI
Editor

With Contributions by: Dr. Maryan Zablotskyy, Sneha Pradhan, Muhammad Adli Amirullah, Yuya Watase, Jessica Canada Wellman & Jasson Urbach, Dr. Barbara Kolm

2018 IPRI – EXECUTIVE SUMMARY

The International Property Rights Index (IPRI) is the flagship publication of the Property Rights Alliance (PRA), an organization based in Washington, D.C., dedicated to the promotion of property rights around the world. In 2007, PRA instituted the Hernando de Soto Fellowship for the purpose of developing the IPRI. Since then, the yearly IPRI edition has served as a barometer for the status of property rights, ranking strength and protection of both physical and intellectual property rights in countries around the world.

During 2018, PRA worked to compile case studies with 113 think tanks and policy organizations in 72 countries involved in research, policy development, education, and promotion of property rights in their countries.

Property rights protections are a key indicator of a government's commitment to the values and principles of individual liberty. A robust system dedicated to the enforcement of property rights propels economies forward. Property rights are a linchpin for the prosperity of societies and their ability to address present and future challenges. As a result, this year the index has added an E-society dimension to evaluate its correlation with the IPRI.

The IPRI is built up from 10 factors and gathered under three components: Legal and Political Environment (LP), Physical Property Rights (PPR), and Intellectual Property Rights (IPR). The overall grading scale of the IPRI is [0 – 10], where 10 is the highest value for a property rights system and 0 is the lowest value. This same interpretative logic is applied to all three components.

The 2018 edition covers 97.52% of world GDP and 93.05% of world population.

I. RESULTS

The 2018 IPRI ranks 125 countries from around the world (Fig. 1) and is determined by the availability of sufficient data.

On average, the complete sample yielded an IPRI score of 5.7406. The Legal and Political Environment remained the weakest component (5.2159), followed by Intellectual Property Rights (5.5419), while Physical Property Rights emerged as the strongest one (6.4641). This year we found an overall improvement of the IPRI (+1.89%) and of its components (LP+0.87%, PPR+3.82%, and IPR+0.71%).

Finland leads the 2018-IPRI with an overall score of 8.6924 and has the highest score in IPR (8.8295). New Zealand ranks second (8.6322) even though it leads the LP (9.0127) and the PPR (8.8742) component. Next come Switzerland (8.6183), Norway (8.4504), Singapore (8.4049), Sweden (8.3970), Australia (8.3295), Netherlands (8.3252), Luxembourg (8.2978), Canada (8.2947), Japan (8.2315), Denmark (8.1640), United Kingdom (8.1413), United States of America (8.1243), and Austria (8.0050). The top 15 countries for the 2017 and 2018-IPRI stayed the same, albeit with a slightly different lineup (Fig. 2).

At the bottom we find Haiti (2.7339), Rep. of Yemen (2.7925), Bolivarian Rep. of Venezuela (2.975), and Bangladesh (3.3658). After evaluating the IPRI components, we found the following bottom countries:

- LP: Rep. of Yemen (1.4925), Bolivarian Rep. of Venezuela (1.6035), and Democratic Rep. of Congo (1.8879).
- PPR: Haiti (1.3268), Bangladesh (3.8479), and Mauritania (4.2648).
- IPR: Rep. of Yemen (1.9149), Bolivarian Rep. of Venezuela (2.5951), and Bangladesh (2.7401).

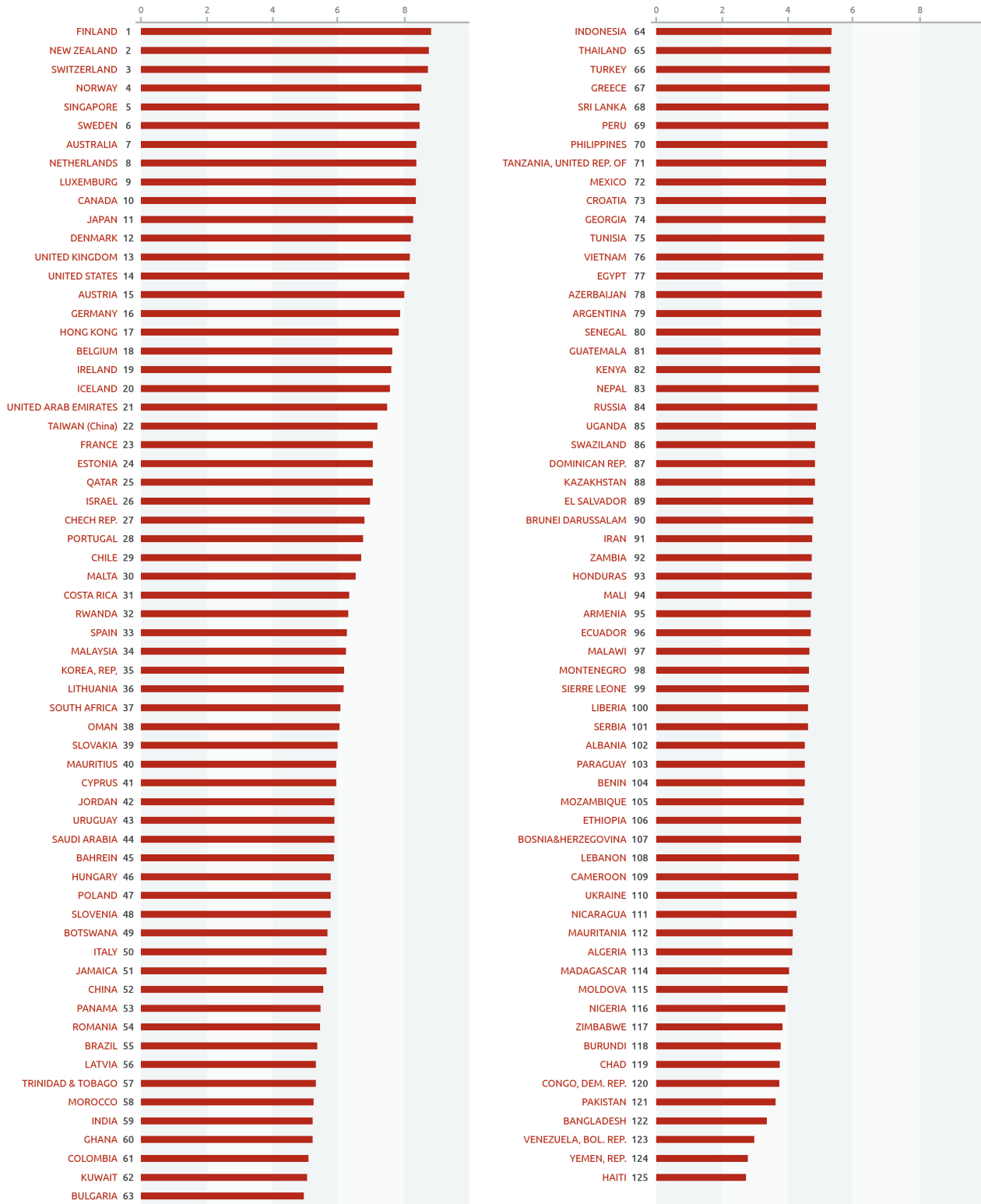


FIGURE 1. 2018 IPRI: IPRI World Rankings

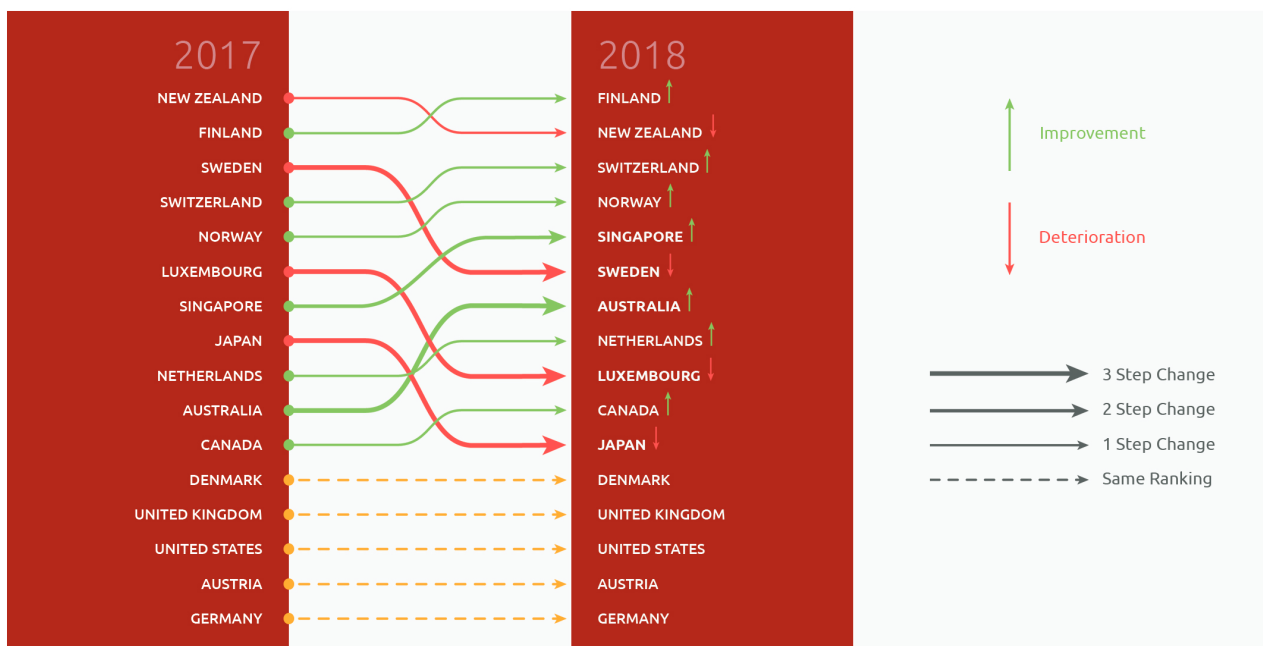


FIGURE 2. IPRI 2018 vs. IPRI 2017: Ranking Change of Top Countries

II. IPRI GROUPS

Countries were organized according to certain relevant criteria (geographical regions, income levels, degree of development, and participation in regional integration agreements). For each group, the IPRI score and its components were calculated. Group averages improved compared to their 2017 scores. However, there are mixed results in the different components.

According to the IPRI regional classification North America (8.21) and Western Europe (7.61) got the top positions, while Africa (4.77) and Latin America & the Caribbean (5.12) were at the bottom. The most relevant improvement occurred in Central and Eastern Europe and Central Asia (+0.47). Using the World Bank’s geographical classification, Oceania lead the group (8.48), followed by the European Union (7.20) and North America (6.91). The highest improvement was shown by the rest of Europe (+0.49) followed by South America (+0.20).

This year IPRI scores mirrored their country ranking according to the World Bank’s income classification. Last year the low-income countries had higher IPRI scores than the lower-middle-income countries. This year the highest improvement is shown by the upper-middle-income group (+0.24) and the most significant decrease happened in low income countries (-0.13).

Organized according to the IMF’s Regional and Development classification system, all groups improved in their IPRI score with the exception of Sub-Saharan Africa (0.043). The three top groups continue to be Advanced Economies, Middle East North Africa (MENA) & Pakistan, and Emerging & Developing Asia. This year, Emerging & Developing Europe surpassed Latin America & the Caribbean, and Sub-Saharan countries. The Commonwealth of Independent States (CIS) remained at the bottom.

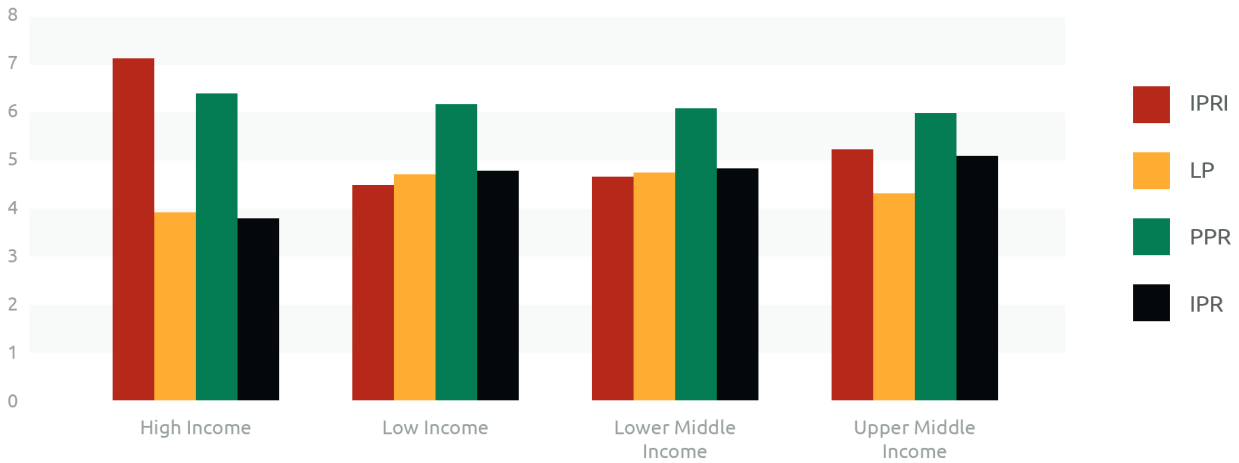


FIGURE 3. 2018 IPRI and Components: Income Groups Score

III. IPRI and POPULATION

The IPRI attempts to convey the status of property rights protections available to individuals. However, when organized by country, there is an inherent demographic bias that must be adjusted for population. This year’s sample of 125 countries has a population of 6.8 billion people; 66.50% of world population (71.47% sample population) live in 71 countries with an IPRI between [4.5-6.4], more specifically, 45.53% of world population (48.93% of sample population) live in 28 countries with a middle range of this index, (between [5.5-6.4]). On the two extremes, we find that 13% of the population (or 13.98% sample population) enjoys higher levels of property rights protection in 33 countries [6.5-9.4]; and 13.54% of world population (14.56% sample population) live in 21 countries with lower levels of property rights [2.5-4.4]. (Fig. 4 & 5).

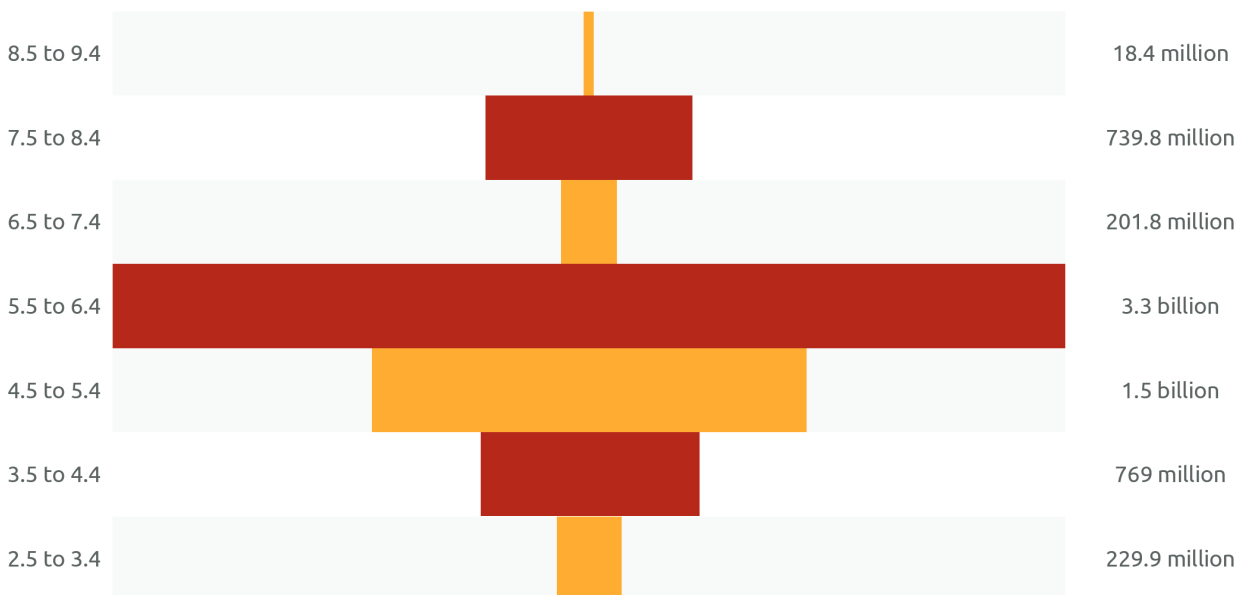


FIGURE 4. 2018 IPRI and Population

IV. IPRI and GENDER

Gender Equality (GE) is a goal in itself; simultaneously its relevance has been demonstrated through fostering development. The GE score was calculated on a scale of [0-10], using five indicators. This measure allowed us to extend the standard IPRI index, giving rise to the IPRI-GE, on a scale of [0-12].

The IPRI-GE shows results for 121 of 125 countries included in the 2018-IPRI. As an average, they show a GE score of 7.458 which is higher (2.68%) than last year's (7.438). We found that Inheritance Practices and Women's Access to Land Ownership are the two items with lower scores.

The average 2018 IPRI-GE score is 7.228 showing a slight but persistent improvement of 1.6%.

Finland leads the IPRI-GE (10.69), followed by New Zealand (10.63), Switzerland (10.51), Norway (10.45), Sweden (10.39), Australia (10.33), Netherlands (10.32), Luxembourg (10.30), Canada (10.29), Japan (10.22), Denmark (10.16), U.S.A. (10.12), and Austria (10.00). All of them are very close in their score values and over 10. In a score range of [10-9] we find Singapore, Germany, U.K., Belgium, Ireland, Iceland, Hong Kong, France, Estonia, and Israel.

According to the IMF's Regional and Development criteria, Advanced Economies (9.40) lead IPRI-GE scores followed by Emerging and Developing Europe (7.123), Latin America & the Caribbean (6.786), Emerging and Developing Asia (6.443), CIS (6.3857), MENA & Pakistan (6.173), and ending with Sub-Saharan Africa (5.885). The Commonwealth of Independent States have a higher GE score (8.422), but the IPRI pulls down their IPRI-GE. A similar situation happens with Latin America & the Caribbean, and Emerging and Developing Europe; while the opposite happens with MENA & Pakistan (GE=4.377), Sub-Saharan Africa (GE=5.45), and Emerging and Developing Asia (GE=5.952), where the GE score is low (Fig. 5).

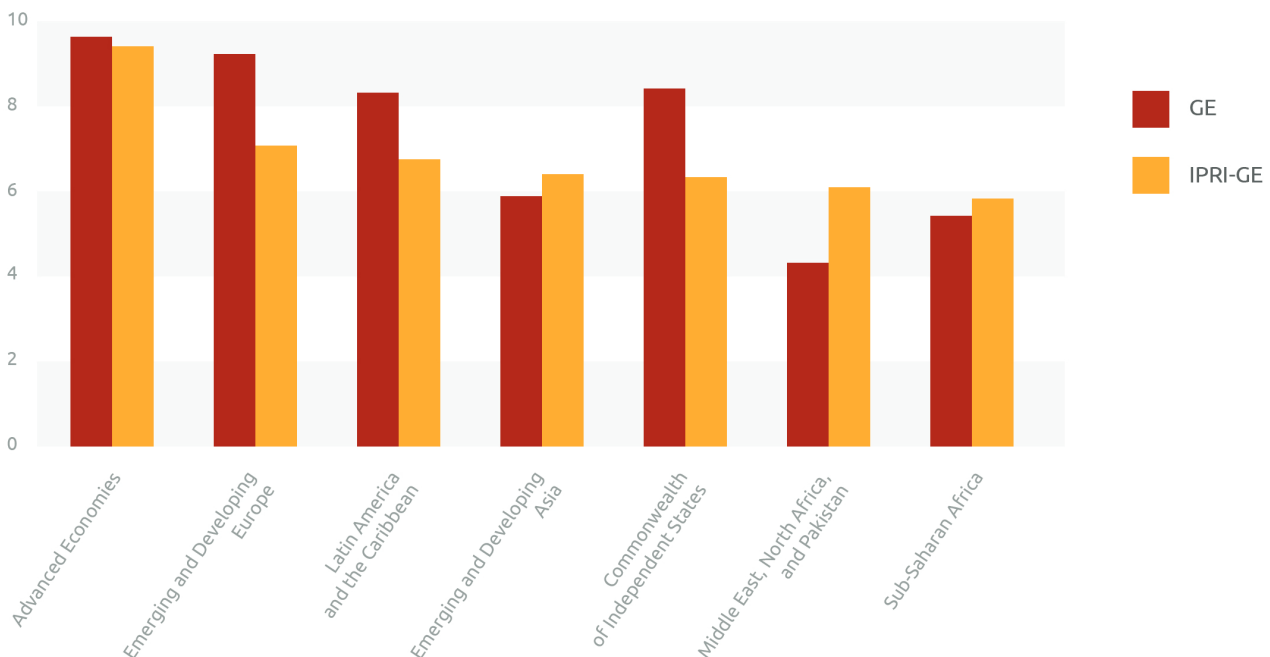


FIGURE 5. IPRI-GE: Regional and Development Criteria (IMF)

V. DEVELOPMENT AND 21ST CENTURY DISRUPTIONS

Using extensive literature reporting positive interactions associated with property rights, we analyzed different dimensions of development (Economic Outcomes; Freedom; Social Capital) and the ability to accomplish future challenges (E-Society). We calculated their correlations with the IPRI and its components, and most of the correlations found were significant and strong (Fig. 6).

| | Pearson's Correlation Coefficients | IPRI | LP | PPR | IPR |
|---------------------|---|--------------|-------|-------|-------|
| Economic Outcomes | GDP per capita * GINI | 0.833 | 0.814 | 0.668 | 0.807 |
| | Economic Complexity | 0.735 | 0.678 | 0.648 | 0.739 |
| | Global Entrepreneurship, GEI | 0.904 | 0.885 | 0.779 | 0.835 |
| | Fragile State Index, FSI | 0.863 | 0.890 | 0.705 | 0.773 |
| | Net Investment in non-Financial Assets per capita | 0.528 | 0.532 | 0.483 | 0.464 |
| | Gross Capital Formation per capita | 0.756 | 0.750 | 0.623 | 0.705 |
| Freedom | Index of Economic Freedom, IEF | 0.818 | 0.823 | 0.752 | 0.690 |
| | Economic Freedom of the World, EFW | 0.722 | 0.728 | 0.679 | 0.598 |
| | Human Freedom Index, HFI | 0.782 | 0.807 | 0.614 | 0.718 |
| | Political Development Index (World Electoral Freedom) | 0.864 | 0.877 | 0.696 | 0.794 |
| Social Capital | Social Capital (Prosperity Index) | 0.705 | 0.688 | 0.625 | 0.661 |
| | Civic Activism | 0.842 | 0.812 | 0.696 | 0.823 |
| | Interpersonal Safety and Trust | 0.708 | 0.722 | 0.676 | 0.600 |
| | Corruption Perception Index, CPI | 0.936 | 0.973 | 0.746 | 0.844 |
| E-Society | E-government Index | 0.794 | 0.784 | 0.714 | 0.700 |
| | E-Participation Index | 0.684 | 0.650 | 0.649 | 0.605 |
| | Network Readiness Index | 0.900 | 0.877 | 0.833 | 0.802 |
| | Global Connectivity Index | 0.893 | 0.855 | 0.775 | 0.883 |
| | Telecommunication Infrastructure Index, TII | 0.807 | 0.804 | 0.707 | 0.717 |
| | ICT Development Index, IDI | 0.776 | 0.781 | 0.675 | 0.681 |
| | Online Service Index, OSI | 0.712 | 0.688 | 0.655 | 0.632 |
| | Global Open Data Index, GODI | 0.651 | 0.610 | 0.555 | 0.666 |
| Open Data Barometer | 0.735 | 0.681 | 0.609 | 0.749 | |

FIGURE 6. Pearson's Correlation Coefficients

Of all the items in the economic dimension, the entrepreneurial environment was the one with the highest correlations, reinforcing its role as a building block of innovation, investment, production and economic growth. On average, countries in the top quintile of IPRI scores show a per capita income almost 20 times that of countries in the bottom quintile (Fig. 7).

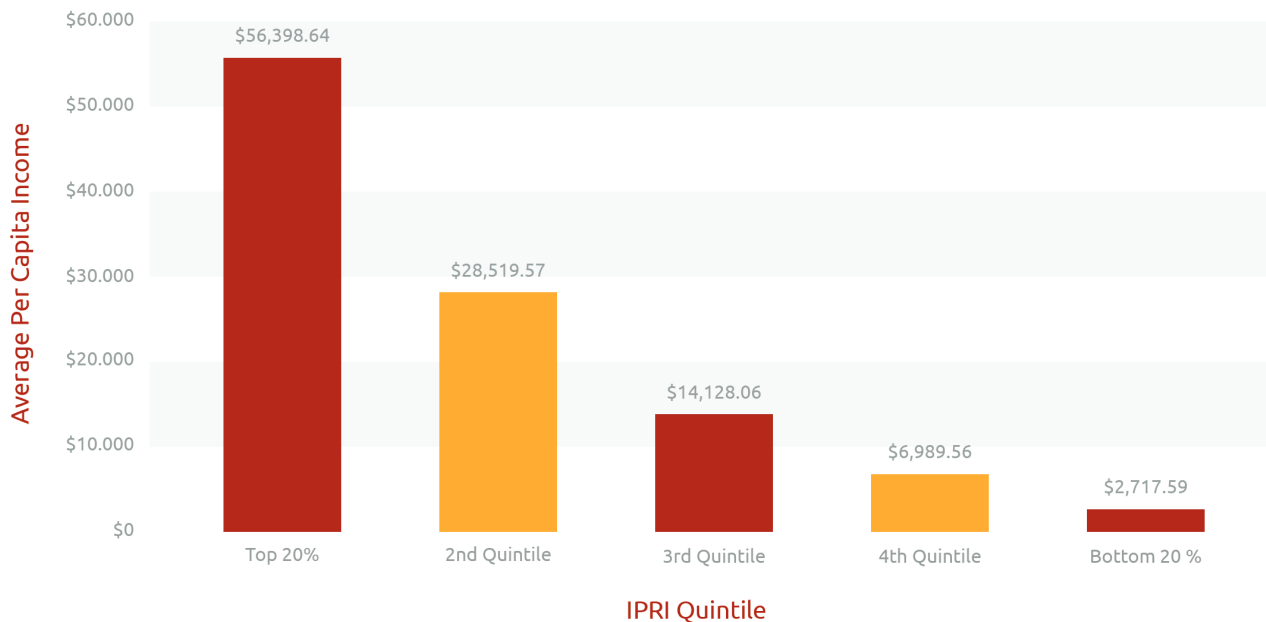


FIGURE 7. Average Per Capita Income by IPRI Quintiles

The strongest Pearson's coefficient found in the freedom dimension was with the Political Development Index of World Electoral Freedom. Under the social capital dimension, Corruption Perception Index (CPI) had the strongest correlation (.93) and also was the greatest of all the variables included in the study. All the E-society indices showed very high correlations with IPRI, giving us support for the importance of property rights to prepare societies for 21st century disruptions. The highest correlations were found with infrastructure and the propensity to exploit the global digital economy.

VI. IPRI CLUSTERS

A cluster analysis was performed for all the 125 countries, according to their values in LP, PPR, IPR, and illustrative variables (used for correlations) with the aim of grouping similar countries (Fig. 8).

The analysis showed that three clusters were sufficient to explain the grouping of countries. Each cluster represents more than just a grouping by variables directly associated with property rights; they are groups with common characteristics within them and with different features between clusters, which confirms the consistency of the IPRI and the relevance of property rights systems influencing societies.

This year we found a slight movement to the right showing an overall improvement. The cluster's structure is similar to the previous edition, with these notable exceptions:

- (+) Israel moved from cluster 2 to cluster 3.
- (+) Bulgaria, Cyprus, Latvia, Romania, and Turkey moved from cluster 1 to cluster 2.
- (-) Greece, Guatemala, México, Sri Lanka, and Uganda moved from cluster 2 to cluster 1.

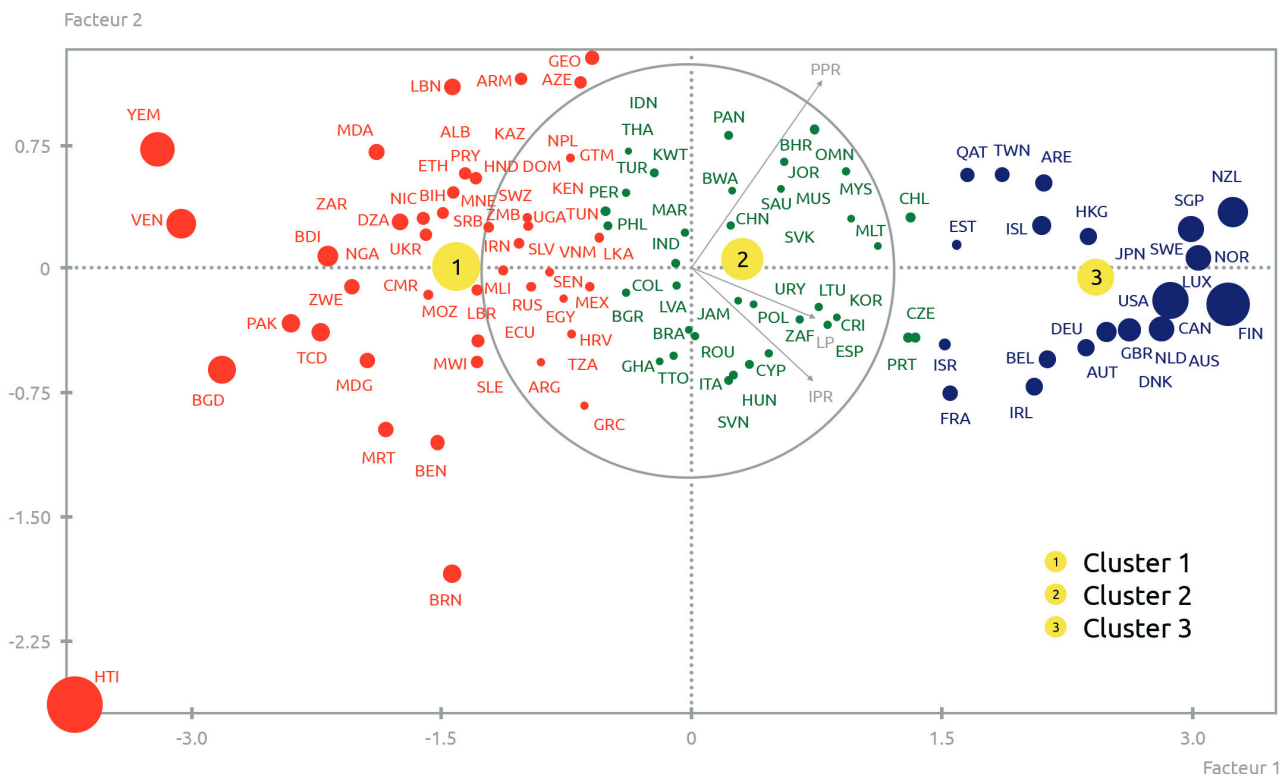


FIGURE 8. Clusters' Members & Centroids

2018 CASE STUDY ABSTRACTS

Farmland Trade Ban in Ukraine. How to Stop the Biggest Property Rights Violation in Europe

By Dr. Maryan Zablostkyy, Ukrainian Economic Freedoms Foundation (Ukraine)

This research focuses on the prohibition on buying and selling agricultural land in Ukraine. Very few countries such as Cuba, North Korea, Venezuela, and South Sudan have similar restrictions. The ban on buying and selling agricultural land in Ukraine, Europe's biggest country by area, is probably the biggest European property rights violation in terms of the number of people impacted. It is also one of the most bizarre cases that shows extremes of politics, foreign aid, public opinion, and the black market. Around 50% of Ukrainian territory is covered by a land sale ban, which relates to agricultural land only. However, the rest of Ukraine's territory can, for the most part, be sold freely. Eighty percent of the public are against the lifting of the ban, including the majority of the 7 million owners. Still, only a few percent agree with a hypothetical ban on their own land plot. The biggest politicians that support the ban have at one time proposed legislation to cancel the ban. Foreign aid by governmental and intergovernmental organizations to lift the ban has largely been ineffective or embezzled.

At the same time, agricultural business thrives due to cheap rent caused by the ban. In the end, it's the owners of the land that are left with the biggest economic losses. The research discusses these odd circumstances that still leave Ukraine as the only country with an agricultural land sale ban in Europe.

Contemporary Land Issues in the Federal Democratic Republic of Nepal

By Sneha Pradhan, Samriddhi Foundation (Nepal)

The signing of the historic Comprehensive Peace Accord with its commitment to scientific land reform marked the end of Nepal's decade-long armed conflict, fueled primarily by chronic land issues. Eleven years later, the struggle for equitable land rights and governance still persists. Haphazard urban sprawl resulting in squatter settlements and food security threatens to plague the country. Moreover, problems of landlessness including fake landlessness are on-going. Unfortunately, natural disasters like earthquakes, landslides, and floods have further exacerbated such challenges. On the women's rights front, progressive policies have emerged; yet implementation has been deplorably weak. Only 19% of women own just 5% of Nepal's total land. Although steps in the right direction have been taken by digitizing land administration, progress has been slow. The amalgam of traditional and modern registration processes, lack of a fully integrated land database, power tussle amongst land revenue and survey offices, and a missing research wing in the land information department have contributed to inefficiencies in land governance. As Nepal advances from its newly promulgated constitution and navigates its transition to a federal regime, it has the opportunity to accelerate its efforts in administering effective land reform and management by taking advantage of this momentum.

Digital Piracy in Malaysia

By Muhammad Adli Amirullah, Institute for Democracy and Economic Affairs (Malaysia)

Violating intellectual property by pirating computer software, books, music CDs, and videos is increasingly becoming a major concern for both industry practitioners and the government. For instance in Malaysia, the software piracy rates are 53% which cost around USD456 million. With the growth of the internet, piracy is becoming even more prevalent; copying of intellectual property is becoming easier to do and harder to prevent. There are three theoretical perspectives on the causes of digital piracy which are moral development, equity theory, and moral intensity. These factors, combined with limited options for enforcement contribute to digital piracy. This results in reduced sales and profits of rights holders and, since potential returns are lower, demotivates new inventors to innovate. However, some studies have argued that digital piracy actually has the potential to strengthen demand for the original digital goods through product sampling and strong network effects. This research paper will explore the theoretical, practical, and policy perspectives of digital piracy in Malaysia and examine the consequences for the Malaysian economy.

Property Rights Reform:

The Secret to Japan's Exceptional Post World War II Recovery

By Yuya Watase, Pacific Alliance Institute (Japan)

Establishment of private property rights in modern Japan was carried out in the Meiji era by enforcement of the land private property system. The Japanese government changed the tax system from paying with crop yield to the system of paying taxes in cash. This change led to establishing a private property system in Japan and the beginning of liberty and a people's rights movement seeking political participation by taxpayers. Under the influence of this movement, although subject to restrictions by law, protection of private property was specified in the Constitution of the Empire of Japan. The private property system of the Empire of Japan had

been gradually restricted by totalitarian ideology; but the idea of private property and thoughts of liberty were rediscovered in Japan after World War II. The reason why Japan was able to achieve economic recovery rapidly after World War II stems from the idea of private property. Additionally, liberty began to once again dominate Japanese society, leading to a political shift.

Pursuing Property Titles for Low Income Households in South Africa

By Jessica Canada Wellman & Jasson Urbach, Free Market Foundation (South Africa)

The Free Market Foundation's Khaya Lam (My House) Land Reform Project, secures property rights for South Africans who were previously denied this fundamental right. The Peruvian economist, Hernando de Soto, explained in his internationally best-selling book, *The Mystery of Capital*, that throughout the world, the poor may have wealth in land but it is "dead capital". Because they do not have title to it, land cannot be used as collateral to raise capital for expanding their home, funding a start-up business, educating their children, or any other beneficial purpose. Worse, it can lock people into unemployment because they are unable to move to where employment is available without losing their house. The FMF's Khaya Lam Land Reform Project aims to turn capital that has been "dead" since 1913 into "dynamic capital" by empowering individuals with a valuable asset – full, unambiguous title to the home in which they live.

A Special Case Study From an Economic School on Property Rights: Intellectual Property Rights From the Austrian School of Economics

By Dr. Barbara Kolm, Austrian Economics Center (Austria)

Intellectual property rights are often seen as one of the most contentious issues in classical liberal circles, especially when discussed in the tradition of the Austrian School of Economics. Even its key thinkers were divided on the issue; with Hayek (Tucker & Kinsella, 2013) and Boehm-Bawerk (Kinsella, 2013) skeptical of the concept; Rothbard (1962) having been in favor only of copyright, but not patents; while Mises seemed more open to the idea, as Bien Grieses (2004) argues. However, while the "issue of intellectual property rights represents a scission within the ranks of libertarianism," it is "a disagreement not so much about fundamental principles as about how they apply" (D'Amato, 2014). Indeed, intellectual property rights are essential to a free market economy, to secure individual liberty, and to create wealth. Thus, the Austrian School of Economics should follow in the footsteps of classical liberals like Adam Smith, Milton Friedman, Ayn Rand, and the Founding Fathers of the U.S., who in the Constitution granted Congress the right "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries" (1789). The Austrian method starts with the a priori axiom that humans act, and that they act rationally in the sense that they try to better a certain situation or factor by their action (Mises, 1949). In this sense, it seems natural that the individual should retain the results of his or her action – regardless whether it is positive or negative. However, this is not only true with material resources, but as much for immaterial goods, namely ideas and innovations. To have a functioning market economy which fosters growth and accumulates wealth, an individual must have the assurance that his ideas are secure and that they may not be stolen – and thereby, his rightful property cannot be violated by others. The positive effects of this have been evident: for instance, the World Intellectual Property Organization has found that in both the United States and European Union, IP-intensive industries support tens of millions of jobs and contribute trillions of dollars to annual GDP. Thus, intellectual property rights not only safeguard individual freedom, but also make room for new innovations and increase wealth. Retaining these rights is essential from an Austrian view. After all, Hayek's famous work on creation of knowledge in society provides additional support of the theory.